



**Midwestern University**



**Course Catalog 2025-2026**

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This catalog is published for the convenience of students at Midwestern University (MWU). It is intended to be effective as of June 1, 2025. Midwestern University reserves the right to make changes in any or all specifications contained herein and to apply such revision to registered and accepted students as well as to new admissions. No contractual rights between Midwestern University and any student are intended and none may be deemed to be created by issuance of this catalog.

Midwestern University is not responsible for loss of or damage to a student's personal property on premises owned or operated by the University, regardless of cause.

# Welcome Letter

I welcome you to our Glendale Campus and your new academic community. The students of Midwestern University represent a dynamic group of individuals who share a passion for learning, a personal drive that prepares them for a long and successful professional healthcare career, and a commitment to excellence. Midwestern University is a special place and our students are active participants within the campus and external community.

It is our philosophy that students learn within our team environment by studying and sharing experiences with peers while being mentored and coached by our faculty and staff. At Midwestern University, the commitment to excellence in education is the ultimate goal of mine and the entire University Leadership Team, which takes a personal interest in the quality of education while providing a safe and secure environment in which to live and learn.

What makes us special? Our foundation is the dedicated faculty and staff who work diligently to provide you with outstanding educational opportunities. We believe in a continuum of education that begins as you enter Midwestern and never ends. It is our mission to provide you with the best education to prepare you to serve in your chosen career.

Midwestern University makes a commitment to its students that they will be intellectually prepared to serve the community as healthcare professionals who have the skills, ability, and leadership to meet the changing demands of healthcare. I am proud to say that our students and alumni reflect the positive human values we believe are essential within the changing healthcare environment in order to make a significant contribution to society. Our students care about their patients as well as their colleagues and families.

Midwestern University provides you with dedicated faculty who excel in teaching, research, and service. The University exists to preserve, extend, and transmit knowledge and deepen understanding of the health and well being of the human person. Our tradition of excellence is based on a long legacy of dedicated teachers and professionals who have demanded academic excellence and respect for the dignity of the whole person.

Our colleges are known for their innovation and excellence in education. As a student within the Arizona College of Osteopathic Medicine, the College of Pharmacy, Glendale Campus, the College of Health Sciences, the College of Graduate Studies, the College of Dental Medicine-Arizona, the Arizona College of Podiatric Medicine, the Arizona College of Optometry, or the College of Veterinary Medicine, I know you will find our values and beliefs to be consistent. We are one academic community working together to provide you with an outstanding education.

I welcome you to this dynamic academic community. I hope you will find your days on the Glendale Campus of Midwestern University to be intellectually challenging and personally rewarding.

Joshua C. Baker, O.D., M.S.  
*Interim President and Chief Executive Officer*

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- Adrienne Wassell  
*Controller*

## Mission

Midwestern University's historical and sustaining philosophy dedicates the institution and its resources to the highest standards of academic excellence to meet the educational needs of the healthcare community.

## Vision

Midwestern University will provide a safe and healthy environment that challenges its faculty, staff, and students to:

- Promote and maintain the osteopathic philosophy
- Nourish intellectual creativity and foster the critical thinking and communication skills that stimulate personal growth and engender professional development
- Support the teaching, scholarly activity, and service capabilities of the University
- Respect, appreciate, and acknowledge the achievements of all members of the academic community
- Embrace cultural and social diversity in the academic community and the community-at-large

## History

*Midwestern University: A Legacy of Growth and Development*

Midwestern University has a proud and impressive history. Founded in 1900 as the American College of Osteopathic Medicine and Surgery by J. Martin Littlejohn, Ph.D., D.O., M.D. (1865-1947), the organization was incorporated in Chicago, Illinois, to train physicians in a not-for-profit environment.

Dr. Littlejohn hired talented faculty that enabled the College to establish a reputation as a leader in medical education, research, and clinical practice. The early faculty mentored their students in the art

and science of osteopathic medicine while teaching surgery, principles and practices of osteopathy, anatomy, and basic science. The growth of our osteopathic college is intertwined with that of the osteopathic medical profession itself. Ever since 1874 when a country doctor, Andrew Taylor Still, announced his new theory of osteopathy and began the first college in 1892, the profession has grown in reputation and acceptance around the country and many international settings.

Today, Midwestern University is still governed by the strong principles of the founding administration and faculty. We are an independent, not-for-profit corporation organized primarily to provide graduate, and postgraduate education in the health sciences. We are dedicated to the education and development of our students, faculty, and staff in an environment that encourages learning and personal development.

From the earliest days of our founding college, the development of the University has been impressive. The vision of the University leadership is to serve the needs of society by developing the healthcare team of tomorrow, while students learn the art and science of the health professions within a safe and secure campus environment.

The Downers Grove, Illinois Campus was purchased in 1986, and the Chicago College of Osteopathic Medicine (CCOM) moved from its prior home in Hyde Park, Illinois, to this western suburb. Following the relocation of the College, the Board of Trustees voted to begin the development of new academic programs within the health sciences. The College of Pharmacy, Downers Grove (CPDG) began in 1991, the College of Health Sciences (CHS) in 1992, the College of Dental Medicine - Illinois (CDMI) in 2009, the Chicago College of Optometry (CCO) in 2014, and the College of Graduate Studies (CGS) in 2018. In 1993, the Board of Trustees unanimously approved a single, educational mission for the institution, and Midwestern University emerged. Today the Downers Grove Campus, located on 133 acres, has 19 buildings that include academic classrooms, laboratories, a state-of-the-art library and auditorium building, science building, student commons, student support services building, recreation center, and student housing. The University also opened the Midwestern University Multispecialty Clinic in 2013.

The Glendale, Arizona Campus was founded in 1995 when the Board of Trustees approved the purchase of land and the building of this new campus. The Arizona College of Osteopathic Medicine (AZCOM) began in 1995, the College of Health Sciences in 1996, the College of Pharmacy-Glendale (CPG) in 1998, the College of Dental Medicine (CDMA) in 2006, the Arizona College of Optometry (AZCOPT) in 2008, the College of Veterinary Medicine (CVM) in 2012, the College of Graduate Studies (CGS) in 2018, and the Arizona College of Podiatric Medicine (AZCPM) in 2020. The campus has seen rapid growth in the number of buildings, academic programs, faculty, staff, and students. Today the Glendale Campus, located on 174 acres, has 50 buildings that provide for academic classrooms, state- of-the-art educational and research laboratories, medical library, student commons, auditorium, recreation center, student housing, a Multispecialty Clinic, the Dental Institute, the Eye Institute, the Animal Health Institute, and the Therapy Institute, .

Midwestern University has developed strong partnerships with healthcare providers and facilities around the country to aid in the education of students in all of its academic programs. The history of the institution is reflected in the many alumni who have successful careers and a deep affection for their college and University. The Administration and the Board of Trustees are dedicated to fulfilling our mission of excellence and service. We remain committed to our tradition of providing quality health care education. We are educating tomorrow's healthcare team.

## Accreditation

Midwestern University is accredited by the Higher Learning Commission (230 South LaSalle Street, Suite 7-500, Chicago, IL 60604-1411; 800/621-7440; [www.hlcommission.org](http://www.hlcommission.org))

Please refer to the specific college sections of this catalog for further information on program and professional accreditation.

Midwestern University is an institutional participant in the SARA Initiative; <https://nc-sara.org/>

# Articulation Agreements

Midwestern University has agreements with Arizona State University, Arizona Christian University, Aurora University, Grand Canyon University and Greenville University. In addition to these articulation agreements, college-specific agreements are included in the college subsections of the Catalog

# Conferral of Degrees

The Arizona State Board for Private Postsecondary Education has approved all current degree programs at Midwestern University's Glendale campus. All degrees are conferred by the authority granted by this Board.

# Educational Equity Statement

Midwestern University maintains a policy of nondiscrimination for all students regardless of race; color; religion; creed; national origin or ancestry; ethnicity; sex (including pregnancy); gender (including gender expression, gender identity; and sexual orientation); marital status; age; disability; citizenship; past, current, or prospective service in the uniformed services; genetic information; or any other protected classes recognized by state or local laws, or any other characteristic protected under applicable federal, state, or local laws.

# Right to Change Requirements

This Catalog is not a complete statement of all applicable procedures, policies, rules, and/or regulations. Midwestern University reserves the right to change the Catalog or any University policies or procedures from time to time. Those changes include, but are not limited to, changes to the calendar; admission and degree requirements; fees; procedures, policies, and/or regulations; course offerings, contents, formats, delivery methods and modalities, and other pedagogical methods; programs, including objectives and mission and vision statements; academic schedules and scheduling; class schedules and scheduling; offering patterns; events; class offerings and availability (including cancelling scheduled classes); events; and other academic activities. The University may change, modify, or alter, with or without notice, any information contained in the Catalog, Student Handbook, or other issued materials or information at its sole discretion. Students are responsible for understanding all requirements of the University, making themselves aware of any changes, and conforming to those changes. Tuition and fees are set regardless of any change made by Midwestern University.

# Facilities

The 174-acre Glendale Campus boasts a scenic location situated 15 miles outside of downtown Phoenix.

Facilities on the campus include:

- Cactus Wren Hall containing multiuse classrooms, anatomy lab, multipurpose lab, speech-language pathology classroom and conference rooms (78,000 sq ft).
- Sahuaro Hall, with lecture halls and laboratory classrooms boasting the finest in educational equipment and medical resources (64,850 sq ft).
- Cholla Hall, with two lecture auditoria, modern pharmacy laboratories, multi-use classrooms, and a computer lab (37,976 sq ft).
- Ocotillo Hall, with cutting-edge nurse anesthesia and cardiovascular practice labs, classrooms, and a 600-seat dividable auditorium (40,000 sq ft).
- Agave Hall, with state-of-the-art anatomy and osteopathic manipulative medicine labs, as well as several multi-purpose spaces (40,000 sq ft). The Agave building also houses the Clinical Skills & Simulation Center which offers human and technology based simulation models for MWU students to practice clinical skills; features 19 clinical and 6 specialty exam rooms, a mock OR/ER, scrub room and student testing/faculty observation areas with high-resolution video.

- Glendale Hall, featuring classrooms, faculty offices, physical therapy and occupational therapy labs, podiatry learning center, optometry laboratories, dental simulation lab and student testing center (130,000 sq. ft.).
- Foothills Science Center, which houses faculty research facilities (26,765 sq ft).
- The Dr. Arthur G. Dobbelaere Science Hall facility houses administrative offices, two teaching labs, classrooms, and laboratory spaces for the College of Graduate Studies.
- 2,600-seat Auditorium with classroom space for lectures and large campus events (40,000 sq ft).
- Recreation & Wellness Hall, with gymnasium and exercise facilities, and special rooms for music, crafts, and dance/aerobics (26,135 sq ft).
- Four Barrel Student Center buildings, which are home to University departments including Admissions, Financial Aid, Development and Relations, Communications, Human Resources, Information Technology, Campus Security, and the Stagecoach Dining Hall. Student amenities include lounges, game room, and outdoor basketball courts and a sand volleyball court.
- Comprehensive medical library with computer resources and study rooms.
- Chanen Interfaith Chapel, with space for personal reflection, student organizations and special events.
- The Midwestern University Multispecialty Clinic, offering comprehensive family medical treatment in six specialty areas, including Family Medicine, Foot and Ankle Services, Osteopathic Manipulative Medicine and Pharmacy Services.
- The Midwestern University Therapy Institute offers therapeutic specialty services for the entire family in several disciplines, including Physical Therapy, Occupational Therapy, Clinical Psychology, Low Vision Rehabilitation, Sports Vision Performance Training, Vision Therapy, and Speech-Language Pathology.
- The Midwestern University Dental and Eye Institutes, providing community dental and eye care and experiential education for our students.
- The Animal Health Institute, a complex of community veterinary facilities including the Companion Animal Clinic, the Large Animal Center, and the
- Necropsy and Pathology Center, providing healthcare and services for animals of all sizes and types.

## Housing

### Student Apartment Complex

The apartment complex consists of studios and one- and two-bedroom apartments that feature ample study and living space; kitchen with range, oven, and refrigerator; wireless Internet; and cable television. The complex also has a swimming pool, volleyball court, sand play area for children, picnic and barbecue areas for residents and their guests.

For further information regarding on campus housing on the Glendale Campus, students may contact the Director of Residence Life at 623/572-3848 or the Office of Student Services at 623/572-3210.

## Americans with Disabilities Act Policy

Midwestern University makes reasonable accommodations for the physical and mental limitations of students, faculty and staff to the extent that such accommodation does not impose an undue hardship on the conduct of its business. The University's planning includes reasonable physical accommodation to the special needs of disabled individuals and disabled veterans, including access to the buildings, utilization of the restroom facilities, and mobility requirements within building and parking locations.

Disabled students' rights are protected under Section 504 of the Rehabilitation Act of 1973 and the Americans With Disabilities Act of 1990 (ADA). It is the policy of Midwestern University to ensure that no qualified student with a disability is excluded from participation in or subjected to discrimination in any University program, activity, or event.

# Criminal Background Checks

Due to growing nationwide concerns regarding the suitability of today's healthcare professionals, many hospitals, healthcare systems, clinics, physician offices, or pharmacies providing healthcare services require disclosure of an individual's criminal history. In addition, many state statutes also require disclosure of an individual's criminal history in order to apply for certain health professional certificates, registrations, and licenses. Existence of a criminal history may subject an individual to denial of an initial application for a certificate, registration, or license to practice in a clinical setting or result in the revocation or suspension of an existing certificate, registration, or license. In response to this growing trend, Midwestern University requires students to submit to criminal background checks.

It is the policy of Midwestern University that all accepted students must submit to a criminal background check prior to matriculation. In addition, students who remain enrolled must submit to a criminal background check as needed to remain eligible for continued participation and/or to participate in clinical rotations. A criminal background check may necessitate one or more of the following: 1) a standard criminal background check conducted through an approved background check agency, 2) a fingerprint background check conducted by an approved agency, in which the prints are submitted to both State Police and the FBI database and/or 3) an International Police Clearance. The procedure utilized to conduct the background check will be based upon the individual's residency status, country of origin, time in residence in the United States and specific program requirements. In accordance with the laws of the State of Illinois, CCOM students are required to undergo fingerprinting as part of the criminal background check process. Students in other programs may also be required to undergo fingerprinting. The criminal background check involves obtaining an authorization from a matriculating or current student that allows the University to obtain the student's individual criminal history. The results of the background check are reviewed by the Dean of Students to determine whether or not there is a record of misdemeanor and/or felony convictions. If there is a positive record, the Dean of Students will inform the appropriate College Dean so the University can make a determination whether the criminal history will negatively impact the student's admission status or ability to complete the practical training/rotation requirements of the degree program. Criminal background checks are conducted through the Office of Student Services as part of the initial student matriculation process and on an as-needed basis thereafter while a student is actively enrolled at Midwestern University.

1. All matriculating students must complete the Criminal Background Release and Consent Form to conduct the criminal background check. All newly admitted students who have submitted a matriculation deposit are provided with access to a copy of the University policy and the Criminal Background Release and Consent Form. By going to [Midwestern University](#) and selecting MWUNET, the student can complete the Consent Form, which can be found under the Student Services Tab on the portal. The Policy can be accessed by logging into the Student Handbook under the Resource section and selecting 'Criminal Background Check Policy'.
  - a. Incoming pharmacy, optometry, veterinary medicine, dental, and osteopathic medicine students will complete a criminal background check through the appropriate application agency (AACOMAS, ADEA, CASPA, OptomCAS, PharmCAS, PTCAS, or VMCAS). The results of those background checks will be forwarded to Midwestern University.
  - b. Incoming international students must complete an International Police Clearance, either under the guidance of Midwestern University or their application agency. If the international student has also resided in the United States within the seven year period prior to matriculation, the student must also complete a criminal background check. The International Police Clearance must be initiated by the student according to the guidelines of the country from which the Clearance is required.
  - c. An incoming student, who is a US citizen or a permanent resident, will be required to complete an international police check if the student has not resided in the US within the seven year period prior to matriculation.
  - d. Incoming students must complete the criminal background check requirement prior to matriculation. For students who are admitted close to their matriculation date, or for students whose situation may necessitate an extension, the criminal background check must be completed by the end of the first month of the first quarter of enrollment for their

program. Failure to complete the background check within the stated timeframe jeopardizes their continued enrollment, and the student may be required to take a mandatory leave of absence.

2. The Office of Student Services will contract with a professional service to conduct the criminal background check.
3. The Dean of Students will review all criminal background reports and determine whether or not a misdemeanor or felony conviction record exists. If a felony or misdemeanor conviction exists, the Dean of Students will conduct a criminal background investigation. The investigation may include any of the following components:
  - a. Request for additional detailed information about the positive criminal background check report. This may entail one or more meetings with the student.
  - b. Collection of additional data, e.g., Federal Bureau of Investigation fingerprints and report, concerning the positive criminal background check report. Following the criminal background investigation, the Dean of Students, in consultation with the College Dean (or their designees), will determine whether or not the student should be disqualified from matriculation or continued enrollment. A record of criminal activity will not automatically disqualify a student from enrollment or continued enrollment. The University will consider such factors as (but not limited to) the nature of the crime, the age of the individual at the time the crime was committed, length of time since the criminal activity, any fines, sanctions or convictions, the nature of the clinical program and the relatedness of the conviction, and whether the University will be able to provide appropriate professional clinical training to the student. Students who are permitted to matriculate with a positive criminal background check are required to sign a waiver stating the student's understanding of the possible negative impact of the student's background check on their education, postgraduate training and licensure.
4. Failure to disclose criminal activity or material misrepresentation of information by an incoming student is deemed to be falsification of the application and may result in denial of admission, matriculation and/or dismissal from the program and University. Failure to disclose criminal activity or material misrepresentation of information by an enrolled student is deemed to be a violation of the student Code of Conduct and may result in dismissal from the program and University. Incoming and enrolled students must disclose any criminal activity, including misdemeanor or felony charges/convictions to the College Dean and the Dean of Students.
5. Failure of the student to present appropriate forms to the Office of Student Services for the purpose of conducting criminal background checks when requested will bar the student from initial matriculation and/or continued enrollment.
6. Students with a positive criminal background check are individually responsible for checking the licensing and certification requirements in any state where the student is interested in participating in a postgraduate residency training to determine whether or not their criminal background will be a barrier to participation.
7. Students are required to disclose to the Dean of Students and appropriate College Dean any arrests, criminal charges, or convictions against them during their entire period of enrollment as a student at Midwestern University. Disclosure must be made immediately after the incident that resulted in charges so the University can assess the impact of the incident on the student's academic progression. Such arrests, criminal charges, or convictions may negatively impact a student's ability to obtain and/or complete clinical rotations or preceptorships, post-graduate residency placement or licensure.
8. Midwestern University does not guarantee clinical rotations, post-graduate residency placement or licensure for students who have a positive criminal history. Clinical rotation placement, post-graduate residency placement, and licensure are governed by separate entities who use their own specific set of standards that may be different than those used by Midwestern University. In such cases, the University confidentially shares information about the student's positive criminal history with potential preceptors and practice site representatives as necessary and on a need-to-know basis. This may include releasing a copy of the original criminal background check report for review. This gives the preceptor and site representatives an opportunity to decide whether the student is acceptable to the site. For this reason, scheduling and completion of practical training/rotations and graduation may be delayed. In some instances, it will not be possible to arrange for



practical training/rotations at specific sites. Under these circumstances, the college/program will work with the student to find a possible clinical rotation site that will accept a student with a positive criminal background check.

- a. If this information is known by the University prior to the student's matriculation, the Academic Dean (or their designee) will meet with the potential student to discuss the consequences of the positive criminal background investigation on the student's ability to complete degree requirements, post-graduate residency placement and licensure so that appropriate action can be taken.
  - b. If this information is known by the University after the student's matriculation, the College Dean (or their designee) will meet with the student to discuss the consequences of the positive criminal background investigation on the student's ability to start/resume practical training/rotations and the student's ability to graduate, secure a post- graduate residency and obtain licensure so that appropriate action can be taken.
9. Records concerning a student's positive criminal background check are stored in a confidential file in the Office of Student Services.
  10. In the event that a student is assigned to a practical training/rotation site that requires a copy of the original criminal background check report prior to a student's placement at the site, the student's criminal background check report and cover letter will be scanned into an encrypted password protected PDF file. The encrypted PDF file will be forwarded via email to the rotation site coordinator.

## Harassment/Unlawful Discrimination

Midwestern University believes in the dignity and worth of its students, faculty, staff, interns, and residents and therefore maintains a policy of nondiscrimination for all students, faculty and staff regardless of race, color, gender, gender identity, sex, sexual orientation, religion, national origin, ethnic origin, disability, status as a veteran, marital status, pregnancy status, or age. Any form of unlawful discrimination or harassment that has the effect of substantially interfering with the individual's performance or creates an intimidating, hostile, or offensive learning/working environment is not tolerated by the University.

This policy/procedure establishes a protocol whereby those who believe they have been discriminated against or harassed may obtain redress promptly and equitably through formal and informal procedures of the University. This policy applies to all members of the University community, each of whom is expected to report promptly complaints about violations. Students found to be in violation of this policy shall be subject to disciplinary action, which may include, but is not limited to, disciplinary warning, disciplinary probation, suspension, or dismissal. No action shall be taken against anyone who submits a complaint that the student believes to be valid - regardless of the outcome of the investigation; however, any person found to be intentionally dishonest in making the allegations or to have made them maliciously is subject to University discipline.

### Definitions

*Unlawful Discrimination:* Unlawful discrimination refers to unfair or unequal treatment of an individual or group based on protected status, such as race, color, gender, gender identity, sex, sexual orientation, religion, national origin, ethnic origin, disability, status as a veteran, marital status, pregnancy status, age or other protected group status as defined by law.

*Harassment:* Harassment includes all unwelcome conduct (whether verbal, physical, visual or written) based on an individual's protected status, such as race, color, gender, gender identity, sex, sexual orientation, religion, national origin, ethnic origin, disability, status as a veteran, marital status, pregnancy status, age, or other protected group status as defined by law. Among the types of conduct prohibited by this policy are teasing, jokes, slurs, epithets, and negative stereotyping based on another person's protected status. Even where the conduct is not sufficiently severe or pervasive to rise to the level of a legal violation, Midwestern University discourages any such conduct in the workplace and/or any of our related educational settings and reserves the right to take remedial action for all conduct it deems inappropriate.

## Complaint Process

### *Informal Complaint Resolution*

Any member of the Midwestern University community may seek advice, or information, on matters related to harassment without having to lodge a formal complaint. Students who feel they are being harassed, or are uncertain as to whether what is experienced is harassment, are encouraged to talk to the Dean of Students. The complaining party (the "complainant"), will be informed as to the options available under this policy, including upgrading the informal complaint to a formal written complaint (see below #1). At the complainant's request, steps will be taken to resolve the complaint informally. The aim of the informal resolution process is to ensure that the alleged offending behavior ceases and that the matter is resolved promptly. The name of the complainant will be held in confidence during the informal resolution process, unless and until the complainant agrees that additional people must be informed in order to facilitate a solution. The Dean of Students will have the discretion to determine when the situation warrants notification of an alleged offender. If deemed advisable, constructive, confidential informal discussion to increase awareness will be undertaken with the person alleged to have violated this harassment policy. An informal complaint may also be elevated to a formal complaint by the Dean of Students because of the severity of the factual allegations made by the complainant or because of the frequency of allegations against the alleged offender (see section below).

### *Formal Complaint Resolution*

Prior to any formal action, a formal complaint must be reduced to writing, identifying both the complainant and the alleged offender.

1. After a complaint has been reduced to writing, an investigation of the alleged harassment will be initiated by the Dean of Students, if possible, within 3 working days. For complaints against faculty, staff, administrators and preceptors, the Dean of Students and the Director of Human Resources will initiate a joint, formal investigation of the allegations, with the right to interview other parties in relation to the complaint in order to conduct a fair and thorough investigation.
2. The investigation will include, at a minimum, an interview with the complainant. The alleged offender will be interviewed if it is determined that the allegations, if true, would constitute a violation of this policy. The alleged offender will then be informed of the nature of the allegations, the identity of the complainant and the facts surrounding the allegations, and will be afforded a full opportunity to respond to the allegations. Any other person who may have information regarding the alleged harassment may also be interviewed.
3. Notes and documentation of all interviews relating to the investigation will be maintained. All matters related to the investigation shall remain confidential to the extent permitted by law, provided it does not interfere with Midwestern University's ability to investigate or take corrective action.
4. The Dean of Students will report the student findings to the College Dean/Department or Division Head/Program Director of the alleged offender for disposition typically within 10 working days of the receipt of the written complaint. For incidents involving faculty, staff, administrators and preceptors, the findings will be reported to the Vice President of Human Resources and Organizational Development, as well as the College Dean/Department or Division Head/Program Director when applicable.
5. The report shall include the allegation, the investigative process, the persuasiveness of the evidence, and the credibility of the witnesses. The report shall arrive at one of the following three findings based upon the preponderance-of-the-evidence standard (i.e., that it is more likely than not that harassment/unlawful discrimination occurred):
  - a. Harassment/unlawful discrimination has occurred;
  - b. Harassment/unlawful discrimination did not occur; or
  - c. There is inconclusive evidence as to whether harassment/unlawful discrimination occurred.
6. Upon review, the College Dean/Department or Division Head/Program Director or Vice President of Human Resources and Organizational Development responsible for receiving the report will recommend or take appropriate disciplinary action, if applicable.
7. Notification of the findings and disposition as recommended by the College Dean/Department or Division Head/Program Director or Vice President of Human Resources and Organizational Development shall be provided, confidentially, in writing, to both the complainant and the alleged offender.

8. The complainant or the alleged offender may appeal the decision of the College Dean/ Department or Division Head/Program Director or Vice President of Human Resources and Organizational Development or Dean of Students.
9. All complaints and associated resolutions will be kept on file in the Office of the President in accordance to HLC accreditation requirements and in the Office of the Dean of Students when complaints/resolutions involve students.

## Appeal by a Student

1. A student's request for appeal must be submitted in writing to the President within 14 calendar days of the date of notification of findings. The President can designate the appropriate Vice President, Chief Academic Officer to review the case.
2. The appeal shall proceed according to the procedures stated in section 1 of the Student Handbook.

## Protection Against Retaliation

Midwestern University shall not in any way retaliate against any individual who informally or formally complains of harassment. Retaliation is a serious violation of this harassment policy. Any person found to have retaliated against another individual for reporting harassment will be subject to disciplinary action up to and including dismissal.

# Sexual Misconduct

The University is committed to ensuring the safety and security of all its members. Sexual misconduct is a serious violation of the standards set by the University community since it creates an atmosphere of distrust and inequality and will not be tolerated. Sexual misconduct includes sexual harassment, sexual abuse, sexual assault or rape, domestic violence, dating violence, and stalking. This policy/procedure establishes a protocol whereby those who believe they have been subjected to sexual misconduct may obtain redress promptly and equitably through the policies and procedures of the University.

This policy applies to all members of the University community, regardless of position/status, gender or sexual orientation. Each member of the University community is expected to report promptly complaints about violations. Any student found to be in violation of this policy shall be subject to disciplinary action, which may include, but is not limited to, disciplinary warning, disciplinary probation, suspension, or dismissal. Any action taken by the University is independent of actions taken by external law enforcement agencies.

## No Retaliation Statement

No action shall be taken against anyone who submits a complaint that the complainant believes to be valid regardless of the outcome of the investigation; however, any person found to be intentionally dishonest in making the allegations or to have made them maliciously is subject to University discipline.

## Title IX

Title IX of the Educational Amendments of 1972 prohibits sexual discrimination. Sexual harassment and sexual violence are considered forms of sexual discrimination, and are therefore violations of Title IX. Violations of the University Sexual Misconduct Policy must be reported to the Title IX Coordinator (Dr. Shannon Sesterhenn, Dean of Students).

## Confidentiality

Employees of the University, including Resident Advisors in Housing, are required to report incidents of sexual misconduct to the Title IX Coordinator regardless of whether the student reporting the violation requests confidentiality. Campus counselors are not required to report, without the student's consent, incidents of sexual misconduct to the school in a way that identifies the student (Office of Civil Rights) and therefore can be approached in confidence. Nonetheless, Midwestern University will make every

effort to maintain the confidentiality of the student reporting the violation. However, requests for complete confidentiality may hamper the ability of the University to fully respond to the incident and restrict the University's ability to pursue disciplinary action. Furthermore, the University may determine that its requirement to provide a safe, non-hostile, and nondiscriminatory environment for all students supersedes the confidentiality request of the student reporting the violation. Evaluations of requests for confidentiality will be made by the Title IX Coordinator.

## Illinois - Sexual Misconduct Definitions

### *Consent*

Consent is freely given agreement to the act of sexual penetration or sexual conduct in question. Lack of verbal or physical resistance or submission by the victim resulting from the use of force or threat of force by the accused shall not constitute consent. Silence is not consent. The absence of refusal is not consent. The manner of dress of the victim at the time of the offense shall not constitute consent. A person who initially consents to sexual penetration or sexual conduct is not deemed to have consented to any sexual penetration or sexual conduct that occurs after the person withdraws consent during the course of that sexual penetration or sexual conduct. An individual who is impaired due to alcohol or drug ingestion cannot give consent.

### *Dating Violence*

Dating violence means violence by a person who has been in a romantic or intimate relationship with the victim. Whether there was such relationship will be gauged by its length, type, and frequency of interaction.

### *Domestic Violence*

Domestic violence includes asserted violent misdemeanor and felony offenses committed by the victim's current or former spouse, current or former cohabitant, person similarly situated under domestic or family violence law, or anyone else protected under domestic or family violence law.

### *Force or threat of force*

Force or threat of force means the use of force or violence or the threat of force or violence, including, but not limited to: (1) when the accused threatens to use force or violence on the victim or on any other person, and the victim under the circumstances reasonably believes that the accused has the ability to execute that threat; or (2) when the accused overcomes the victim by use of superior strength or size, physical restraint, or physical confinement.

### *Sexual Abuse*

A person commits criminal sexual abuse if that person: (1) commits an act of sexual conduct by the use of force or threat of force; or (2) commits an act of sexual conduct and knows that the victim is unable to understand the nature of the act or is unable to give knowing consent.

### *Sexual Assault*

Sexual assault is:

An act of sexual penetration under the use or threat of force; or

An act of sexual penetration where the accused knows that the victim is unable to understand the nature of the act or is unable to give knowing consent; or

An act of sexual penetration in which the accused delivers (by injection, inhalation, ingestion, transfer of possession, or any other means) any controlled substance to the victim without the victim's consent or by threat or deception for other than medical purpose; or

An act of sexual penetration on a victim under the age of consent by Illinois definition.

### *Sexual Conduct*

Sexual conduct means any knowing touching or fondling by the victim or the accused, either directly or through clothing, of the sex organs, anus, or breast of the victim or the accused or any part of the body of a child under 13 years of age or any transfer or transmission of semen by the accused upon any part of the clothed or unclothed body of the victim, for the purpose of sexual gratification or arousal of the victim or the accused.

### *Sexual Harassment*

Sexual harassment is a form of harassment that may involve the behavior of a person of either sex against a person of the opposite or same sex, and occurs when such behavior constitutes unwelcome sexual advances, unwelcome requests for sexual favors, and other unwelcome verbal or physical behavior of a sexual nature where:

1. Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's education or employment;
2. Submission to or rejection of such conduct by an individual is used as the basis for academic or employment decisions affecting the individual's welfare; or
3. Such conduct has the purpose or effect of substantially interfering with an individual's welfare, academic or work performance, or creates an intimidating, hostile, offensive, or demeaning education or work environment.

### *Sexual Penetration*

Sexual penetration means any contact, however slight, between the sex organ or anus of one person and an object or the sex organ, mouth, or anus of another person, or any intrusion, however slight, of any part of the body of one person or of any animal or object into the sex organ or anus of another person, including, but not limited to, cunnilingus, fellatio, or anal penetration. Evidence of emission of semen is not required to prove sexual penetration.

### *Stalking*

A person commits stalking when the person knowingly engages in a course of conduct directed at a specific person, and the person knows or should know that this course of conduct would cause a reasonable person to: (1) fear for the person's safety or the safety of a third person; or (2) suffer other emotional distress.

## Arizona - Sexual Misconduct Definitions

### *Domestic Violence*

Domestic violence means any act which is a dangerous crime against children as defined in section 13-705

(dangerous crimes against children) or an offense defined in section 13-1201 through 13-1204 (endangerment, threatening or intimidating, assault, aggravated assault); 13-1302 through 13-1304 (custodial interference, unlawful imprisonment, kidnapping); 13-1502 through 13-1504 (criminal trespass in the third, second and first degree); 13-1602 (criminal damage); 13-2810 (interfering with judicial proceedings); 13-2904, subsection A, paragraph 1, 2, 3 or 6 (disorderly conduct); 13-2916 (use of telephone to terrify, intimidate, threaten, harass, annoy or offend); 13-2921 (harassment); 13-2921.01 (aggravated harassment); 13-2923 (stalking); 13-3019 (surreptitious photographing, videotaping, filming or digitally recording or viewing); 13-3601.02 (aggravated domestic violence ); 13-3623 (child or vulnerable adult abuse), if any of the following applies:

1. The relationship between the victim and the defendant is one of marriage or former marriage or of persons residing or having resided in the same household.
2. The victim and the defendant have a child in common.
3. The victim or the defendant is pregnant by the other party.
4. The victim is related to the defendant or the defendant's spouse by blood or court order as a parent, grandparent, child, grandchild, brother or sister or by marriage as a parent-in-law, grandparent-in-law, stepparent, step-grandparent, stepchild, step-grandchild, brother-in-law or sister-in-law.
5. The victim is a child who resides or has resided in the same household as the defendant and is related by blood to a former spouse of the defendant or to a person who resides or who has resided in the same household as the defendant.

### *Oral Sexual Contact*

Oral sexual contact means oral contact with the penis, vulva, or anus.

### *Sexual Abuse*

A person commits sexual abuse by intentionally or knowingly engaging in sexual contact with any person who is 15 or more years of age without consent of that person or with any person who is under 15 years of age if the sexual contact involves only the female breast.

### *Sexual Assault*

A person commits sexual assault by intentionally or knowingly engaging in sexual intercourse or oral sexual contact with any person without consent of such person.

### *Sexual Conduct*

Sexual contact means any direct or indirect touching, fondling or manipulating of any part of the genitals, anus or female breast by any part of the body or by any object or causing a person to engage in such contact.

### *Sexual Harassment*

Sexual harassment is a form of harassment that may involve the behavior of a person of either sex against a person of the opposite or same sex, and occurs when such behavior constitutes unwelcome sexual advances, unwelcome requests for sexual favors, and other unwelcome verbal or physical behavior of a sexual nature where:

1. Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's education or employment;
2. Submission to or rejection of such conduct by an individual is used as the basis for academic or employment decisions affecting the individual's welfare; or
3. Such conduct has the purpose or effect of substantially interfering with an individual's welfare, academic or work performance, or creates an intimidating, hostile, offensive, or demeaning education or work environment.

### *Sexual Intercourse*

Sexual intercourse means penetration into the penis, vulva, or anus by any part of the body or by any object or masturbatory contact with the penis or vulva.

### *Stalking*

A person commits stalking if the person intentionally or knowingly engages in a course of conduct that is directed toward another person and if that conduct either: 1) Would cause a reasonable person to fear for the person's safety or the safety of that person's immediate family member and that person in fact fears for the person's safety or the safety of that person's immediate family member 2) Would cause a reasonable person to fear death of that person or that person's immediate family member and that person in fact fears death of that person or that person's immediate family member.

### *Without Consent*

Without consent includes any of the following: 1) the victim is coerced by the immediate use or threatened use of force against a person or property. 2) The victim is incapable of consent by reason of mental disorder, mental defect, drugs, alcohol, sleep or any other similar impairment of cognition and such condition is known or should have reasonably been known to the defendant. For purposes of this subdivision, "mental defect" means the victim is unable to comprehend the distinctively sexual nature of the conduct or is incapable of understanding or exercising the right to refuse to engage in the conduct with another. 3) The victim is intentionally deceived as to the nature of the act. 4) The victim is intentionally deceived to erroneously believe that the person is the victim's spouse.

## Reporting Sexual Misconduct

All complaints will result in a formal investigation with a subsequent resolution. Students reporting violations have the right to file complaints with external law enforcement agencies as well as the University. University and law enforcement investigations will usually be conducted independently and simultaneously. The University standard for determining the validity of a complaint is the 'preponderance of evidence' standard. Investigations of student complaints that involve another student or students will be undertaken by the Title IX coordinator; however, investigations involving



student complaints against a Midwestern University employee(s) or employee(s) complaints against a student are undertaken jointly by the Title IX Coordinator and the Vice President of Human Resources and Organizational Development. Student complaints concerning non-sexual harassment and unlawful discrimination are governed under the Student Handbook's section on Harassment and Unlawful Discrimination, which can be found in the Policies Section of the Student Handbook. Students who are charged with sexual misconduct are in violation of the University's "Code of Responsibilities and Rights of the Students of Midwestern University" as stated in Appendix 1 and of the University's "Bylaws and Regulations of the Code of Responsibilities and Rights of the Student of Midwestern University" as stated in Appendix 2 of the Student Handbook and can be disciplined under the judicial proceedings stated in Appendix 2, Section 2 of the Student Judicial System. Disciplinary sanctions imposed by the University on students may include, but are not limited to, disciplinary warning, disciplinary probation, suspension, or dismissal. Students charged with violations may also be prosecuted under Illinois or Arizona criminal statutes. Employees will be disciplined according to University Human Resources guidelines.

## Procedure

### *Initiating an investigation of sexual misconduct*

To institute proceedings regarding allegations of sexual misconduct, the following procedures shall be followed:

1. Nature of the act and related circumstances are to be reported in written detail and submitted to:
  - a. The involved student(s) or employee(s),
  - b. The appropriate College Dean, and
  - c. The Dean of Students.
2. The written statement must include the name of the involved student or employee, the name and status of the reporting person, and the nature of the alleged act. The confidentiality of the student reporting the violation will be maintained if possible. The written statement may be sent to the involved student via the University email/mail system or delivered in person. Should a student so involved refuse or fail to accept delivery of the statement after a bona fide attempt is made to deliver, the requirement of notification will be considered to have been met. All correspondence related to the proceedings is considered to be confidential material. Correspondence to employees will be handled via the Department of Human Resources.
3. Temporary suspension: Should a student action be of such a nature that it is felt that the student must be relieved of the student right to attend Midwestern University, the student may be temporarily suspended from the college on recommendation of the Dean of Students. Any temporary suspension may continue until such time as the issue in dispute is resolved under the process outlined below. Suspension of employees will be handled by the Department of Human Resources.

### *Resolution of conduct matter*

Any issue concerning student conduct will be resolved by utilizing the Office of the Title IX Coordinator. The Title IX Coordinator is authorized to receive complaints regarding sexual misconduct, conduct investigations and determine the validity of the charges. The Title IX Coordinator also makes recommendations regarding appropriate disciplinary action to the applicable College Dean. The Dean of Students has been assigned this role to ensure consistent and fair resolution of student conduct issues. In sexual misconduct cases involving a student(s) and an employee(s) of the University, the investigation will be jointly conducted by the Title IX Coordinator and the Vice President of Human Resources and Organizational Development. Complaints against vendors will be conducted by the Title IX Coordinator in the same fashion as a student complaint.

### *Method of resolution*

1. Upon receipt of the written complaint lodged against the student, the Title IX Coordinator will set a time to meet with the student charged with the violation regarding the issue. The interview will preferably be conducted in person, although a phone interview is acceptable if the student is at a distant location. The Title IX Coordinator has the right to interview other parties in relation to the

incident to determine the validity of the complaint. The student filing the complaint will also be interviewed. Both the student filing the complaint and the accused student have the right to have an advisor present during all meetings/interviews/proceedings.

2. After interviewing the student accused of the violation, the student filing the complaint and other involved persons, the Title IX Coordinator will render a decision regarding the validity of the complaint. The validity will be based upon whether it was more likely than not that the incident occurred (preponderance of the evidence standard). If the complaint is deemed valid, the Title IX Coordinator will recommend disciplinary action for the accused student (s) to the appropriate College Dean. The College Dean will be notified of the recommendation within 5 school days of the aforementioned interview unless prevented by extenuating circumstances. A copy of the Title IX Coordinator's investigation into the complaint, including all supporting evidence, will be submitted to the Office of the President in Glendale and the Office of Accreditation in Downers Grove.
3. In a joint investigation with Human Resources, a copy of the investigation and all supporting evidence will be submitted to the Vice President of Human Resources and Organizational Development. If the complaint is determined to be valid and the perpetrator is an employee, the Human Resources Department will impose the appropriate sanction per HR policy. If the complaint is determined to be valid, and the perpetrator is a student, the process outlined above in subsection (b) in which the appropriate College Dean determines sanctions will be followed. A copy of the joint investigation into the complaint, including all supporting evidence, will also be submitted to the Office of the President in Glendale and the Office of Accreditation in Downers Grove.
4. Typically, within 5 school days after receiving the recommendation of the Title IX Coordinator, the Academic Dean will notify the accused student(s) in writing of the Dean's decision including, if applicable, any disciplinary action. Any disciplinary action must conform to Appendix 1, Section Five of the Code of Responsibilities and Rights of Students of Midwestern University. A copy of the College Dean's decision must be sent to the Title IX Coordinator and the Office of the President in Glendale and the Office of Accreditation in Downers Grove for inclusion in the student's disciplinary file. The student or employee reporting the violation will also be notified, in writing, of the outcome of the investigation.
5. In a joint investigation with the Department of Human Resources, the Vice President of Human Resources and Organizational Development will notify the accused employee in writing of disciplinary action. The student reporting the violation will also be notified, in writing, of the outcome of the investigation.
6. If the student/employee does not accept the decision of the College Dean/Vice President of Human Resources and Organizational Development, the student/employee may appeal to the University President within 5 school days of notification of College Dean/Vice President's decision, by submitting a written statement containing the basis and reasons for the appeal including all relevant facts. The University President will request a copy of the Title IX Coordinator's findings and decision, as well as all relevant information from the investigation. Meetings with the University President will be audio recorded with the permission of the student. The student may request a copy of the recording. The President will act upon the appeal by (a) confirming the original decision, (b) altering any penalties imposed, or (c) requesting the student/employee, the Coordinator, and/or the applicable College Dean/Vice President of Human Resources and Organizational Development to submit additional information prior to rendering a decision. Both the student/employee reporting the incident and the accused student/employee have the right of appeal utilizing the guidelines listed above. Both the student/employee reporting the violation and the accused student/employee must be notified of the outcome of the appeal in writing.
7. The final decision rests with the University President. A copy of the University President's decision must be sent to the College Dean, Title IX Coordinator and the Office of the President in Glendale, and the Office of Accreditation in Downers Grove for inclusion in the student's disciplinary file.

Record keeping in conduct matters Records of the above proceedings shall be kept in accordance with the following guidelines:

1. All records related to disciplinary investigations/actions are secured in the Office of the Title IX Coordinator.

2. All records related to disciplinary appeals are secured in the Office of the President.
3. All records related to disciplinary investigations/actions/appeals are maintained in perpetuity.
4. A student may see any and all records related to the student's disciplinary investigation/action/appeal in accordance with the college regulations concerning inspection of records as spelled out in Guidelines for Access to and Disclosure of Educational Records Maintained by Midwestern University. The identity of the student reporting the violation will be redacted, if the reporting student has requested confidentiality.
5. All documentation related to disciplinary investigations/actions/appeals are kept on file in the Office of the President in Glendale and Office of Accreditation in Downers Grove in accordance with the Higher Learning Commission requirements.
6. The University will disclose to the alleged victim of a crime of violence, or a non-forcible sex offense, the results of any disciplinary hearing conducted by the University against the student who is the alleged perpetrator of the crime or offense upon written request. If the alleged victim is deceased as a result of the crime or offense, the University will provide the results of the disciplinary hearing to the victim's next of kin, if so requested.

## Procedures for Reporting a Sexual Assault on Campus

Any student who is involved in or witnesses a sexual assault should contact Campus Security immediately (Downers Grove, dial 630/515-7111; Glendale dial 623/572-3201). Students have the option to notify law enforcement authorities, including local police, and the option to be assisted by campus authorities in notifying such authorities. It is extremely important to preserve any evidence related to the crime as may be necessary to provide proof of the assault. The student should not bathe or shower, use the restroom, change clothes, comb hair, clean up the crime scene or move or touch anything the offender may have touched. If Campus Security is contacted in an emergency, they will notify the police and the Title IX Coordinator. The Manager of Residence Life will also be notified if emergencies occur within campus housing. The following is a list of emergency campus telephone numbers.

### ***Downers Grove Campus***

Resource	Number
Security	630/515-7111
Police	911
Resident Assistant on Duty	630/515-7111 Reached through Security
Dean of Students	630/515-6470

### ***Glendale Campus***

Resource	Number
Security	623/572-3201
Police	911
Resident Assistant on Duty	408-258-3247
Dean of Students	623/572-3210

## Counseling Services for Sexual Assault Victims and Witnesses

The University has counseling services for students who are victims of or have witnessed an act of sexual misconduct (including sexual assault, attempted sexual assault, sexual abuse, dating violence, domestic violence, or stalking). Student victims of an alleged act of sexual misconduct have options for requesting a change in academic situations and on-campus residence arrangements if such requests are reasonably available. In addition to seeking assistance from the Title IX Coordinator, students may also seek assistance from the following University personnel or outside resources:

### **In Illinois: University Personnel**

Resource	Number
Title IX Coordinator	630/515-6470
Manager of Residence Life	630/971-6400
Title IX Assistant Coordinator	630/515-7142
Wellness and Recreation Center Personnel	630/515-7441
Student Counselor	630/515-7145

### ***Community Resources***

Resource	Number
DuPage County- 24-Hour Crisis Hotline	630/627-1700
Family Shelter Service Hotline	630/469-5650
Northwest Center Against Sexual Assault 24-Hour Hotline	888/802-8890
<b>Mutual Ground Hotlines</b>	
24-Hour Sexual Assault Hotline	630/897-8383
24-Hour Domestic Violence Hotline	630/897-0080
Y.W.C.A.R.E.S. (South Suburban YWCA)	708/754-0486

### **In Arizona: University Personnel**

Resource	Number
Title IX Coordinator	623/572-3357
Manager of Residence Life	623/572-3848
Title IX Associate Coordinator	623/572-3366
Title IX Assistant Coordinator	623/572-3213
Office of Student Services	623/572-3210
Student Counselor	623/572-3844

### ***Community Resources***

Resource	Number
Glendale Family Advocacy Center	623/930-3720
Domestic Violence Hotline	623/930-3030
Maricopa Crisis Hotline	1-800-631-1314

## **Sexual Misconduct Education and Awareness**

Midwestern University provides educational programming that consists of primary prevention and awareness programs for all incoming students and new employees and ongoing awareness and prevention campaigns for students, faculty, and staff that:

1. Identifies sexual misconduct which includes sexual harassment, sexual abuse, sexual assault or rape, domestic violence, dating violence, and stalking as prohibited conduct;
2. Defines what behavior constitutes sexual harassment, sexual abuse, sexual assault or rape, domestic violence, dating violence and stalking;
3. Defines consent to sexual activity under University policy and state regulations;
4. Covers information on reporting sexual violence, assisting victims and survivors of sexual violence, and preventing sexual violence through bystander training;
5. Explains rights of accuser and accused, including the right to file reports with external law enforcement agencies and the right to an advisor.

# Academic Policies

The following academic policies apply to all students who matriculate during the academic year of this catalog publication. These policies will apply throughout the entire time a student is enrolled. In the event that these policies need to be revised as the result of new accreditation requirements, mandates by the United States Department of Education, or other unforeseen circumstances, students will be notified in writing prior to the effective date of the new policy.

Faculty and students should also refer to the college/program Academic Policy section for additional policies that apply to students enrolled in a specific college/program.

## Attendance

The policy for class attendance is determined by each course director/coordinator. Students should refer to their course syllabus for additional attendance requirements. Students are expected to satisfy these attendance requirements in order to receive course credit.

Midwestern University encourages 100% attendance by students at all course-related sessions, lectures, laboratories, and clinical assignments. Each course director/coordinator has the prerogative to establish individual attendance requirements and policies. Unless a department's/division's policy differs, class attendance is mandatory for all students for the first session of each course in each quarter as well as on the first day of class after scheduled vacations. There is also a mandatory attendance policy for all students during clerkship/preceptorship and experiential rotations. If illness, a personal emergency, personal incapacitation, or other exceptional problem of a serious nature causes a student to be absent from a rotation or a session requiring mandatory attendance, the student must immediately notify the department/division or program responsible for the course and follow stated course policies and procedures. Unexcused absences during mandatory attendance sessions may result in course failure. Refer to specific course policies and procedures for course attendance requirements set forth by each department/division, program, or college.

## Class Rank

Class rank is calculated annually on July 1 for continuing students, one month before and one month after the official program/college graduation date for graduating students. Class rank may be accessed through the [student's portal](#) using the "academic rank" option under the "academic services" tab.

## Classroom Visitation

Each faculty member has the responsibility and authority to determine who, in addition to the enrolled students, may visit the faculty member's classes. Anyone wishing to visit a class must request permission from the course director, the Department Chair/Program Director/Division Director or Head, and the faculty member who is presenting the lecture.

## Classroom/Exam Etiquette

In order to maintain an appropriate classroom environment that is most conducive to teaching and learning, students are expected to behave in a manner that is not disruptive or disrespectful to any person and that does not adversely affect teaching or learning of any person. If cell phones need to be turned on during classroom time, then they must be set to the vibrate mode. All calls must be made/received outside of the classroom as this type of activity is disruptive to the teaching/learning environment and is disrespectful to others in the classroom. Students who do not abide by this policy may be asked to leave the classroom. Abuse of this policy could result in disciplinary procedures.

Children are not typically allowed in the classroom. Students who have an unforeseen temporary need to bring a child into the classroom must receive prior approval from the lecturer.

Students must abide by the policies and procedures of the University Testing Center when taking examinations or other assessments therein. Students must abide by the procedures of the college or department/division/program when taking examinations or other assessments on campus outside of the University Testing Center.

## Closed Meeting Policy

All students enrolled in Midwestern University's academic programs are considered graduate students. As such, the University holds the student accountable for the student's actions and decisions. During the student's enrollment any and all required meetings with faculty committees, faculty, or University/college administrators, are closed to only the involved student. All invited or voluntary formal or informal meetings, telephone discussions, or conference calls with faculty committees, faculty or University/college administrators are closed to only the involved student.

## Course Auditing

A course auditor is a listener in a course. A course auditor should attend all lectures and may participate in class discussion to the extent permitted by the instructor. A course auditor is not allowed to take quizzes, examinations, or proficiency assessments; does not attend post-examination reviews; and does not complete or submit any graded assignments. A course auditor does not participate in labs, except as approved by the Dean.

The Student Promotions/Academic Review Committee recommend course auditor status. Course auditor status and any specific activities that an auditor may participate in must be approved by the Dean or their designee. Once approval is received by the Registrar, the student is registered for the course as an auditor and the student's name appears on the course roster. An auditing student may be administratively withdrawn from a course when, in the judgment of the course director/coordinator, the student's attendance record justifies such action.

Academic credit is not issued to audited courses, and there is no possibility to change the course status from audit to full credit.

Students enrolled less than full-time are charged 25% of the tuition costs to audit a course.

## Course Credit Policy

Midwestern University has defined course credits across all colleges and programs.

A quarter is typically 9-12 weeks long.

The following contact times are assigned for every one credit hour in a course based on the specific type of learning activity independent of course length:

- Lecture: 10 hours of lecture (where each lecture hour is 50 minutes in duration) and 20 hours of student study time outside for the classroom
- Laboratory: 20-40 hours of contact time
- Case discussion, interactive group problem-solving, recitation or workshop: 20 hours of contact time
- Other activities: 30 hours of contact time
- Online or distance education: 30 hours of student work. Student work includes reading, research, online discussion, instruction, assigned group discussion, and preparation of papers or presentations.

Experiential education or rotation credits are determined by different formulae depending on the college or program.

- For AZCOM, CCOM, CPDG, CPG, CDMA, CDMI, CVM, AZCOPT, CCO: Each week of full time experiential education (equivalent to 40 hours of instruction) is equivalent to 1.5 credits.



- For AZCPM, CHS and CGS: Each week of full-time experiential education (equivalent to 40 hours of instruction) is equivalent to 1 credit.

If approved, some colleges or programs may allow the inclusion of full-time student participation on Midwestern University - sanctioned mission trips as experiential education or rotation time. In this case, the course credit policy for experiential education or rotations applies. The minimum amount of credit per mission trip that can be applied to a stand-alone course is 0.5 credit hours.

The Curriculum Committee of the College approves the number of credits hours for all courses including those utilizing alternative delivery methods. The determination/assignment of credit hours should reflect the overall educational content of the course and the academically engaged time required to achieve the desired outcome for the typical student. Academically engaged time may be measured by the type, quantity, and required level of mastery of the course content.

## Course Prerequisites

Prerequisites for courses may be established by the college/department/program that administers the course. Prerequisites are recommended to the Curriculum Committee for approval and are listed with the course description in the University Catalog.

On a case-by-case basis, prerequisites may be waived upon recommendation of the college/program Promotions, Academic Progress/Review, or Student Promotion and Graduation Committee; and with the approval of the Department Chair that delivers the course, and Program Director, Associate Dean or Dean of the college. In case of a conflict, the ultimate decision will be made by the Dean of the college.

## Final Course Grades Due

All course directors or course coordinators must submit to the Registrar the final grades for students by the end of the day on the Tuesday following final exam week each quarter.

## Grade Appeals Policy

### **Appeal of Non-Failing Course Grades**

A student who wishes to appeal a non-failing course grade must make the appeal to the course director within one week following posting of the grade. The course director must act upon the student's appeal within one week following receipt of that appeal. A narrative explaining the basis of the appeal must accompany the request. An appeal must be based on one of the following premises:

1. Factual errors in course assessment tools
2. Mathematical error in calculating the final grade
3. Bias

If the appeal is denied, the student has the right to appeal the decision to the course director's immediate supervisor within one week of receipt of the course director's denial. The course director's immediate supervisor should notify the student of the decision within one week following receipt of the student's reappeal. The decision of the course director's supervisor is final.

### **Appeal of Course Grades Subject to Academic Review**

A student whose academic progress will be subject to review by the student's Promotion/Academic Review Committee and who wishes to appeal a grade must do so in an expedited manner prior to the scheduled meeting of the Committee. In this case, an appeal of a didactic course grade must be submitted within one business day following posting of the grade and must be based on one of the premises stated above. The course director must act on this appeal within one business day. If the appeal is denied, the student has the right to appeal the decision to the course director's immediate

supervisor. The course director's immediate supervisor should notify the student of a decision within one business day following receipt of the student's reappeal. The decision of the course director's immediate supervisor is final.

An appeal of a failing clinical clerkship or rotation grade must be submitted within two business days after a grade for rotation is posted. The course director must act on this appeal within two business days of receipt of the grade appeal. If the appeal is denied, the student has the right to appeal this decision to the course director's immediate supervisor. The course director's immediate supervisor should notify the student of a decision within two business days following receipt of the student's reappeal. The decision of the course director's immediate supervisor is final. Any extension of the time for student appeal or course director's decision must be approved by the College Dean. The student is responsible for notifying the chair of the Promotion/Academic Review Committee that a grade appeal has been filed prior to the meeting of the Committee.

All appeals and decisions must be communicated in written form.

## Graduation Walk-Through Policy

A walk-through candidate is defined as a student who has not satisfied academic requirements for a particular degree, but will complete all academic requirements for the degree within one quarter immediately following the official scheduled end of the academic program for the candidate's class.

All degree candidates for graduation and graduation walk-through candidates must be approved sequentially by the College/Program faculty, College Dean, Faculty Senate, President, and Board of Trustees.

A walk-through candidate must submit an official request to participate in a graduation ceremony and the request must be approved by the Dean a minimum of four weeks prior to the ceremony.

The Dean may grant late submission of a Walk-Through Request due to unforeseen circumstances.

A graduation walk-through candidate will not receive a diploma until the candidate has successfully completed all academic requirements for graduation.

## Incomplete Grades

The grade (I) incomplete may be assigned by a course director when a student's work is of passing quality but is incomplete, or if a student qualifies for reexamination. It is the responsibility of the student to formally request an extension from the course instructor. By assigning an I (incomplete) grade, it is implied an instructor agrees that the student has a valid reason and should be given additional time to complete required coursework. To resolve an incomplete grade, an instructor will resubmit the new grade online. All incomplete grades must be resolved within 10 calendar days from the end of final examinations for the quarter. In the case of courses ending prior to final examination week, it is the obligation of the course director to monitor the use and resolution of the incomplete grade with notice to the Registrar. If an incomplete grade remains beyond the 10 calendar days, it is automatically converted to a grade of (F) failing by the Registrar, which signifies failure of the course.

## In-Progress Grade

An in-progress (IP) grade may be assigned when extenuating circumstances make it necessary to extend the grade completion period past 10 days (e.g., illness, family death). Authorization by the Dean is required, and the completion period should not typically exceed one quarter with notification of the Registrar.

## Last Day to Add/Drop Courses

The last day that a student may add or drop a course is Friday of the first week of the course. To add or drop any course after the course begins, a student must complete a course add/drop request which is located on the [student portal](#).

Students are able to submit "add" requests for most electives, but assistance from an academic advisor, Program Director or College Dean is required to add core courses and restricted electives. Any course "add" request submitted on behalf of a student, must first be approved by the student before it is forwarded for final approval and Registrar processing. The status of approvals and final processing can be tracked online.

Courses dropped after the first Friday of the week in which the course starts may be recorded as "W" (Withdrawal), or "WF" (Withdrawal/Failing). Grades will be noted on the transcript in accordance with the college guidelines stated in the catalog.

## Leave of Absence

There are two types of leaves of absence: mandatory and voluntary. A student may be put on a mandatory leave of absence for academic, medical, or administrative reasons. Alternatively, a student may voluntarily request to take a leave of absence for bereavement, jury duty, maternity leave, medical reasons, military duty, or other personal reasons.

Midwestern University students requesting a leave of absence must comply with the following:

1. Make an appointment with the Program Director/College Dean to discuss the leave of absence.
2. A student must provide written notification and documentation, if applicable, to the Program Director/College Dean stating the reason for the leave of absence from Midwestern University. If approved, the College Dean will conditionally approve a leave of absence until all clearances are obtained.
3. The student must receive clearance of the student's leave of absence from the Midwestern University departments on the [online.midwestern.edu](http://online.midwestern.edu) leave system within seven calendar days from the date of the College Dean's approval. This time frame will allow offices such as Student Financial Services and the Registrar to process the leave of absence, prepare the required financial aid exit, and calculate the return of unearned Federal Title IV aid and all other aid, as appropriate.
4. Upon submission of all completed documentation and adherence to all clearance procedures, the College Dean will provide an official letter granting a leave of absence to the student.

The student is withdrawn from all courses if the leave of absence is granted in the midst of an academic quarter. Once the College Dean conditionally approves the leave, the Department Chairs/Program Director/course directors receive an automated electronic notification of the student's withdrawal. A grade of "W" (Withdrawal) or "WF" (Withdrawal/Failing) appears on the official transcript. The course director is responsible for submitting the correct grade. Students on the approved leave are obligated to pay their premium for long-term disability insurance.

All leaves of absence are granted for specific periods of time. Typically, a single leave of absence will not exceed 12 months, and consecutive or multiple interrupted leaves of absence will not exceed 18 months. At a minimum of 30 days prior to the end of the leave period, the student is required to submit written notification to the College Dean and Registrar of an intention to return. If the leave of absence was granted for medical reasons, a letter must be provided to the College Dean from the treating physician verifying that the student is both physically and mentally capable of resuming the academic program prior to registering for classes. To request an extension of a leave of absence, a student must resubmit another written notification as described above. If an individual fails to return to Midwestern University at the agreed-upon date, the student is considered to have withdrawn from the University and must reapply for admission. Leaves of absence can only be initiated through the Office of the Dean.

Students on leaves of absence are ineligible to run for or hold student organizational/club/class offices and are not permitted to work for the University.

## Bereavement Leave

Students may request a short-term leave of absence due to death of a member of the student's immediate family. The student should follow the Leave of Absence policy. Students who find it difficult to come to campus during this time to arrange a leave in person should contact the College Dean immediately to make leave arrangements. The duration of the leave shall usually be up to 5 consecutive working days. The immediate family includes any of the following persons: mother, father, spouse/domestic partner, son/daughter (including stepchildren and foster children), brothers, sisters, grandparents, grandchildren, spouse's parents/grandparents, or such persons who have reared the student.

## Jury Duty

Students who have been requested to appear for jury duty and cannot do so while attending classes and/or clinical rotations may bring the original jury duty request to the Office of Dean or the Office of Student Services. The College Dean or Dean of Students will give the student a letter requesting that the student be excused from jury duty. Students should be aware that individual counties/states may not excuse them from jury duty even if a letter is submitted.

## Maternity Leave

Enrolled students who become pregnant can request a leave of absence for maternity reasons. The request must be in writing and sent to the College Dean; however, prior to officially requesting a maternity leave, pregnant students must contact the Office of the Dean to discuss how a leave will affect their progress in the academic program and to review options available to them. The amount of leave time granted depends largely on the personal needs of the student and the timing of the birth within the academic program. In addition, students must inform the Office of the Dean of their intentions to return to classes at least one month prior to the end of the leave of absence period. A final decision is reached after careful consideration is given to personal and professional circumstances.

## Medical Leave

Enrolled students who become seriously ill can request a leave of absence for medical reasons. The request must be in writing and sent to the College Dean; however, prior to officially requesting a medical leave the student must contact the Office of the Dean to discuss how a leave will affect their progress in the academic program and to review options available to them. The amount of leave time depends on the severity of the illness. All medical leaves require documentation from a physician/specialist, including a diagnosis and a statement as to why the student cannot continue with the student's coursework. Additional documentation from the physician/specialist that the student is medically capable of returning to classes must be submitted to the College Dean at least one month prior to the end of the leave of absence period. Approval for the medical leave of absence, as well as the ability to return to classes, is reached by the College Dean after careful consideration is given to the supportive medical documentation and to personal and professional circumstances.

## Military Leave

Midwestern University is committed to supporting students called to active military duty. Students called to such duty will be considered on military leave. Students called to active duty should immediately notify the College Dean and provide their pertinent call-up papers. Students returning to Midwestern University from active duty will be eligible for reinstatement as full-time Midwestern University students once the individuals have notified the College Dean and have supplied any pertinent military papers requested by the College Dean.

Students called to active military duty will be entitled to receive refunds of tuition and fees if the withdrawal is prior to the sixth week of the quarter. After the tenth week, students will receive both grades and credit hours for courses in which they earned a passing grade.

Preclinical students with less than two-thirds of assignments/exams completed will be encouraged to restart the courses once they return. Departments, however, will have the prerogative to make special arrangements. Clinical students returning to Midwestern University will be reinstated as closely as possible to the previous point of progress in the clinical experience. The point of entry and order of clinical rotations for the clinical student will be determined by the College Dean and by the Program Director or Department Head/Chair. No additional tuition will be due from students for the resumption of any "incompletes" for work that they started before leaving for active military duty. Tuition charges for students restarting classes or for subsequent academic quarters will be set at the tuition rates in effect at the time the student returns from military duty. The College Dean will provide leadership to facilitate the re-entry of students into their programs as close as possible to the point when they were called to active military duty. The Dean of Students will provide leadership to facilitate student programming to address issues of stress and personal crisis and assist students in need of counseling because of a call-up.

## Reexamination (Retest)

Reexamination occurs when the student fails a course, but qualifies for a reexamination. It is the prerogative of the course director to offer or not offer a reexamination for a course failure and to determine the eligibility criteria for a reexamination. If a course director has a reexamination policy, it must be stated in the course syllabus.

If a student qualifies for a reexamination, a grade of "I" must be submitted to the Registrar at the end of the quarter. The reexamination must be completed within 10 calendar days starting from the last day of final examinations for the quarter. If the student passes the reexamination, the grade of "I" will be converted to the minimum passing grade of the college/program. If the student fails the reexamination, the grade of "I" will be converted to a grade of "F".

## Registrar

The [Registrar](#) maintains, prepares, and verifies all academic records, grades, and transcripts. The main number of the Office of the Registrar is 630/515-7600 (Downers Grove Campus) and 623/572-3325 (Glendale Campus).

## Registration

Registration is done automatically for all students by the University Registrar. Exceptions to this rule include students registering for special schedules (extended course of study) and electives. Students registering for special schedules should contact the Office of the College Dean, Office of the CHS Program Director or Office of the CGS Program Director, if applicable, for assistance.

## Religious Accommodations

Midwestern University colleges, programs, and course directors/coordinators will make a good faith effort to provide reasonable accommodations to students with sincerely held religious beliefs upon request, unless the accommodation would create an undue hardship for the college/program. A student's request for reasonable religious accommodations, including requests for time off from or rescheduling of school activities, is justified when all of the following criteria are met:

- A request MUST be submitted in advance. The student must submit a written request for a religious accommodation to a college/program administrator (specifically, the Assistant or Associate Dean of the college, or the Program Director of the College of Health Sciences or College of Graduate Studies) prior to the start of the academic year for the student's academic program AND not less than 30 calendar days in advance of the requested absence day(s).

- For newly admitted students only, the written request for a religious accommodation must be submitted not less than 30 days in advance of the requested absence day(s).
- The request must be submitted on a Religious Absence Request Form, which is available from the Office of the Dean/Office of the Program Director or by accessing the student portal at [online.midwestern.edu/login/academic services/university/college forms](http://online.midwestern.edu/login/academic%20services/university/college%20forms). Text message or e-mail requests are unacceptable.
- The request should include all of the requested dates for time off from courses or rotations for religious accommodation for the academic year.

The college/program will protect the requesting student's privacy in evaluating and implementing the accommodation requested to the extent possible. However, following the receipt of the request, the college/program will discuss the accommodation request as necessary with the student, and with the appropriate course directors/coordinators. Following consultation with the course directors/coordinators, a decision on the request will be provided in writing by the college/program to the requesting student typically within two weeks of receipt of the request.

## **Definitions**

### *Religious accommodation*

A religious accommodation is a change in work or school schedule or environment, or in the way tasks or assignments are customarily done, to enable a student to participate in the individual's religious practice or belief without causing undue hardship to the college/program faculty who are administering the course.

### *Religious practice or belief*

A sincerely held practice or observance that includes moral or ethical beliefs as to what is right or wrong, most commonly in the context of the cause, nature, and purpose of the universe. Religion includes not only traditional, organized religions, but also religious beliefs that are new, uncommon, not part of a formal religious institution, or section, or only subscribed to by a small number of people. Social, political, or economic philosophies, as well as mere personal preferences, are not considered to be religious beliefs.

### *Undue hardship*

An undue hardship on the college/program occurs when significant difficulty and expense arises based on the resources and circumstances of the college/program in relation to the cost or difficulty of providing an accommodation. Undue hardship may include financial difficulty in providing an accommodation or accommodations that are unduly expensive, substantial, disruptive, or that fundamentally alter academic requirements, or the nature or operation of the how the college/program administers the course.

## **Retake of a Course**

A retake may be offered when formal repetition of an entire course or a portion of the course is required due to (1) course failure, or (2) in the College of Health Sciences or College of Graduate Studies when a "C" letter grade has been earned and the student is on academic probation or placed in an extended program, or (3) in the Arizona College of Optometry or Chicago College of Optometry when a student is placed on an extended program and required to repeat courses that would serve to enhance the mastery of optometry knowledge, skills techniques, and concepts that are deemed critical for success in the Doctor of Optometry curriculum. A course may be retaken when any of the following occur:

1. No reexamination is offered by the department.
2. The student has failed the reexamination.
3. The student fails to meet eligibility criteria for reexamination, if offered by the course director.

It is the decision of the Student Promotion and Graduation/Preclinical Promotions/Clinical Promotions/Academic Review Committee of each college/program to recommend a retake of a course. The committee, in conjunction with the approval of the Department Chair, Program Director and/or course



coordinator, will determine the nature of the retake and the timeframe for completion of the repeated course. The course may be repeated at Midwestern University or at an outside institution, if offered. The options for repeating a course at Midwestern University may include a directed readings remedial course with examination, repeating the course in its entirety the next academic year, or taking a specially designed course that contains the appropriate student work hours needed to meet the credit hours of the failed course. The repeat course must be completed in a regularly scheduled quarter. In either case, the student must be registered for the course and will be charged a flat rate of \$1,500 per quarter for retake courses, individually or in aggregate, that total one to five credit hours and \$3,000 per quarter for retake courses, individually or in aggregate, that total six credits or more. The College Dean or Program Director will issue a Course Retake Plan Letter to the student specifying the courses included in the Course Retake Plan. Only the courses in the Course Retake Plan Letter qualify for the retake tuition rate. Retake courses may be taken with additional non-retake courses during the same quarter. Applicable tuition rates will be applied to non-retake courses. A student will not be charged more than the full-time per quarter tuition rate during any quarter, except in the instance of course overload situations, including while completing a retake course or courses.

A course at an outside institution that is eligible as a replacement for the course that the student failed at Midwestern University, must be approved by the department or program that offers the course at Midwestern University as a satisfactory replacement for the failed course. A student must earn a minimum grade of "C" (not C-) in a replacement course completed at an outside institution and submit an official transcript to the Dean/Program Director in order to apply the credit toward the degree requirements of the college or program. Students are responsible for all costs associated with repeating a failed course at another institution.

When a student retakes a course, the maximum grade that can be earned is determined by the College and this policy is included in the College's subsection of the Catalog.

When a student repeats a course, the course is entered twice in the permanent record (transcript) of the student. Consistent with the College's policy on the maximum grade that can be earned for a course retake, the grade earned each time is recorded, but only the most recent grade is used in the computation of the student's cumulative grade point average.

## Retention of Tests or Written Assignments

Instructors will retain examinations or written assignments not returned to students for a period of one quarter after course completion. After that time, materials are destroyed.

## Transcripts and Duplicate Diplomas

The University releases transcripts and duplicate diplomas upon receipt of a request from a student or graduate. All requests should be submitted through [Parchment](#). When ordering, search for **Midwestern University**; Glendale, AZ and Downers Grove, IL share a Parchment account.

1. No phone requests are honored.
2. Allow one week for processing.
3. There is no charge for a transcript release for Midwestern University students prior to graduation; however, graduates and transferring students are required to pay a nominal amount per official transcript release.
4. Individuals who are no longer students at Midwestern University are charged the same rate as an alum.
5. Accounts that have been placed 'on hold' due to a balance owed will be reviewed to determine if the transcripts and / or diploma will be released.
6. Transcripts and diplomas will not be issued for any student or alum who has not completed a financial aid exit interview, if aid was borrowed while attending Midwestern University.

## Travel and Lodging for Clinical Education/Fieldwork

It is the student's responsibility to assure that the student has made appropriate arrangements for lodging and transportation to/from clinical education/rotation/fieldwork sites throughout the curriculum. The University does not generally provide for the cost of transportation and lodging. Travel arrangements are the sole responsibility of the students. Students are not considered an agent or an employee of the University and are not insured for any accidents or mishaps that may occur during any traveling that is done as part of the student's professional program. Students are usually responsible for all expenses associated with clinical education, such as transportation, meals, housing, professional attire, laboratory fees, etc.

## Withdrawal

### Withdrawal from One or More Courses

Any student who wishes to withdraw from one or more courses must first discuss the consequences of this decision with the student's course director(s) and/or advisor, and then submit a course [add/drop request](#). No course may be dropped after the last day of instruction for the course or during the final examination period. Withdrawal requests must be approved by the Program Director, if applicable, and the College Dean. Approval for withdrawal from a required course is granted only for extraordinary circumstances. Students should be aware that withdrawal from a required course may result in a significant extension of the student's professional program and may alter financial aid assistance. Approved course withdrawals are graded according to the following policy:

Time at Which Course Withdrawal is Approved By the Dean	Course Grade at the Time of Withdrawal	Action
Prior to and including the first Friday of the course	N/A	No grade- course does not appear on the transcript
After the first Friday and up to 50% of the course duration is completed	N/A	W
Greater than 50% of the course duration is completed or up to and including the last day of instruction	Passing	W
	Failing	WF

When a student earns a W or WF grade in an elective course, the student is not required to repeat that specific elective course.

The course director is responsible for submitting the correct grade or grade notation when a student has received approval by the course director, Program Director, if applicable, and the College Dean.

### Withdrawal from the College/University

The decision to withdraw from the University is a serious matter. Any student who withdraws from a college or a program is dropped from the rolls of the University. As such, if the individual decides at some later date to reenter the program, the student must reapply for admission and, if accepted, assume the status of a new student.

Students contemplating withdrawal must inform the Program Director, if applicable, and the College Dean of the decision to voluntarily withdraw and voluntarily relinquish the student's position in the program. The student must contact the Office of the Dean and must complete the appropriate clearance procedures. The withdrawal process includes the clearing of all financial obligations of MWU (including the mailroom, clinical education, library, security, housing, etc.) and a financial aid exit interview. If the withdrawal occurs before the completion of a course, the student must complete a course add/drop request which is located on the [student portal](#). The student will receive one of the following grades: "W" (Withdrawal) or "WF" (Withdrawal/Failing). If the student completes the course before withdrawing, a final grade will be assigned. Following completion of these withdrawal procedures, the designation "Withdrawal" will be placed in the student's permanent record. The

designation "Unofficial Withdrawal" is placed in the permanent record of any student who withdraws from the program without complying with the above procedures. For more information, see the Financial Aid sections on Notification of Withdrawal and Tuition Refund Policies.

# Admissions

Prospective students interested in enrolling in any college of Midwestern University should contact the Office of Admissions at either the Downers Grove or the Glendale campuses to request admissions information and application materials. For specific admission standards of the respective colleges, refer to the appropriate college sections of the catalog.

Office of Admissions	Office of Admissions
<b>Midwestern University</b> 555 31st Street Downers Grove, IL 60515 630/515-7200 800/458-6253 <a href="mailto:AdmissIL@midwestern.edu">AdmissIL@midwestern.edu</a>	<b>Midwestern University</b> 19555 North 59th Avenue Glendale, AZ 85308 623/572-3275 888/247-9277 <a href="mailto:AdmissAZ@midwestern.edu">AdmissAZ@midwestern.edu</a>

## Admission Deferment

Deferments are only considered under extreme circumstances in which a physical illness or medical condition of the applicant or their immediate family member, or military service precludes the student from beginning classes at the start of the academic year.

To initiate the deferred admissions process, a student must:

- Submit their deposit monies by the deposit deadline date designated in the matriculation agreement.
- Submit a request for deferment in writing to the Program Director and/or College Dean a minimum of 60 days prior to the start of classes. For deferments requests related to physical illness, the request must be accompanied by a letter(s) from a physician(s) documenting the conditions that prevent the student from beginning their full time studies.

Once all appropriate documentation has been received, requests to defer an offer of admission will be reviewed by the Program Director and/or College Dean on a case-by-case basis. The College Dean will respond to a written request with a letter to the student detailing the specific conditions associated with the deferment including the start and end dates of the approved deferment period. The Dean is also responsible for notifying the Director of Admissions of the decision as soon as possible regarding the deferment request.

To end an approved admission deferment, the student must:

- Provide a written letter to the College Dean in which the student states an intent to end the deferment and to begin classes. This letter must be received by the College Dean a minimum of 90 days prior to the start of classes.
- Provide a letter from a physician(s) stating the student can begin full time studies, if the deferment was granted because of physical illness or medical conditions of the student or the student's immediate family member. The letter must be submitted to the Dean at least 90 days prior to the start of classes.

Students that have been granted a deferment are not required to re-apply.

## Articulation Agreement Between Midwestern University Programs

At the time of application, students enrolled in a Midwestern University program are guaranteed an admission interview with another Midwestern University program if the student:

1. Is in good standing in the academic program in which the student is currently enrolled or has completed the program within the last 12 months prior to the application and does not have any pending misconduct charges against the student;
2. Meets all admission requirements for the professional program of interest;
3. Completed a minimum of one full-time quarter of study with a minimum Midwestern University grade point average that is equal to or greater than the required GPA for the prospective program. (See admissions section of Program for GPA requirements)
4. Achieves a score on the professional entrance exam that is not less than one standard deviation below the mean score for students who matriculated into the professional degree program in the previous year.

Note: Students must meet all application deadlines for the professional program of interest. A guaranteed interview does not guarantee admission into the professional program.

## International Applicants

An international student must complete a minimum of 30 semester hours of coursework from a regionally accredited college or university in the United States, or from a recognized post-secondary Canadian institution that uses English as its primary language of instruction and documentation. Of the 30 semester hours, 15 hours must be in the sciences, 6 hours in non-remedial English composition, and 3 hours in speech/public speaking.

Applicants who wish to receive credit for prerequisite coursework completed outside the U.S. or at a Canadian institution that does not use English as its primary language of instruction and documentation must submit an official, detailed, course-by-course evaluation obtained from one of the following evaluation services:

- Education Credential Evaluators (ECE): 414/289-3400 ([www.ece.org](http://www.ece.org))
- World Education Service (WES): 800/361-3106 ([www.wes.org](http://www.wes.org))
- Josef Silny & Associates International Education Consultants: 305/273-1616 (<https://worldwidetranscripts.com/partners/josef-silny-associates/>)

International applicants who do not provide documentation of acceptable U.S. or Canadian course/degree equivalency will not receive credit, and will be required to complete all prerequisite courses at an accredited college or university in the United States, or at a recognized post-secondary institution in Canada that uses English as its primary language of instruction and documentation.

For clarification about recognized post-secondary institutions in Canada that use English as a primary language of instruction and documentation, international applicants should contact the Midwestern University Office of Admissions.

## Matriculation Process

The matriculation process begins after applicants receive notification of their acceptance. To complete the matriculation process, applicants must:

1. Submit the matriculation agreement and required deposit monies by the date designated in the matriculation agreement. Deposits are applied towards the first quarter's tuition.
2. Submit official final transcripts from all colleges attended post-high school by the deadline of two weeks (14 days) prior to the first day of classes. Students who are accepted to MWU less than one month prior to the first day of classes will have 30 calendar days from the date of their acceptance to submit all official transcripts to the Office of Admissions. Any special circumstances or requests for exceptions to this policy must be sent to and approved by the Office of the Dean. Students who fail to submit all official final transcripts by the stated deadline may jeopardize acceptance or continued enrollment in the college.
3. Submit completed medical files documenting completion of a physical exam, immunizations, tuberculosis and titer blood testing as instructed by the Office of Student Services and detailed in the Student Handbook.

4. Meet the Technical Standards for the College.
5. Submit proof of medical and disability insurance coverage. Students may select either a plan offered by an MWU-approved carrier or a comparable plan offered by an outside carrier of their choice, as determined by the Office of Student Services. Insurance must be maintained throughout the entire period of enrollment.
6. Submit additional documents as requested by the Office of Admissions or college.
7. All deposited international matriculants requesting the Form I-20 to obtain an F-1 student visa or entry into the country (Canadian citizens), or who are not U.S. citizens/ permanent residents/ eligible non-citizens must prepay the full annual tuition, and in some cases, other mandatory program fees 45 days before the first day of class. Continuing students will pay on a per-quarter basis by the scheduled due dates. Designated school officials (DSOs) also must collect documentation of the student's financial ability to pay, for at least the first year of their program, before issuing a Form I-20, "Certificate of Eligibility for Nonimmigrant Student Status."
8. Submit a signed Credit Policy Statement.
9. Authorize and pass the MWU criminal background check and/or fingerprinting background check as required by the specific College/Program.
10. Submit a signed MWU Drug-Free Workplace and Substance Abuse Policy Statement.

Applicants who fail to satisfy these matriculation requirements or who omit or falsify information required on official admission documents automatically forfeit their seat in the program. Any individual accepted for admission to the college/program who does not comply with stated timelines for submission of all required materials will be notified by the college/program regarding missing materials and the potential forfeiture of the individual's seat.

## Student Services

The mission of the Office of Student Services is to offer a broad range of services in the arena outside the formal boundaries of the classroom that support, enhance, nurture, and promote the growth and development of Midwestern University students by contributing to their professional, cultural, social, intellectual, physical, and emotional well being. It is within the mission of the Office of Student Services to promote awareness, understanding, and acceptance of all individuals in a diverse world society and to promote a sense of respect, appreciation, and community among the colleges that can be carried on throughout students' professional lives.

The Office of Student Services on the Glendale campus is composed of the Dean of Students, Associate and Assistant Dean, Student Activities, Residence Life, Academic Support, Disability Services, Student Counseling, and the Wellness and Recreation Hall (Rec Center) and Campus Recreation. The Office of Student Services supports all colleges and interacts with students to develop and support programs and services that enrich students' experiences on campus. Examples of these programs include: MWU Student Government, MWU Tutoring Program, accommodations for documented qualifying disabilities, student social and recreational activities, orientation, academic counseling, stress and time management seminars, multicultural and diversity programming, crisis intervention and personal counseling, intramural sports and other developmental activities. The Office of Student Services, housed in the Barrel III Student Center, has an open-door policy and is available to students on a continuing basis offering the support, advice, and encouragement needed to meet students' concerns and challenges.

## New Student Orientation

Orientation programs are planned each year to welcome and facilitate the integration of new students into each of the colleges of the University. In addition, students are provided with opportunities to interact socially with peers, meet faculty, administration and staff members, learn about University services available on campus and develop a sense of belonging to the University community and individual college communities. New Student Orientation is mandatory for all matriculating students.

## Student Government

Student government provides a forum for discussing and resolving student concerns, initiating recognition of new student organizations, and conducting reviews of existing student organizations. Student government functions at two levels: (1) the University and (2) the College. The following is a brief description of how student government functions at both levels.

### *University Level*

All students are represented through a campus-wide Student Senate. The Student Senate is composed of representatives from AZCOM, AZCOPT, AZCPM, CDMA, CHS, CGS, CPG and CVM. The members of the Executive Board are the Speaker of the Student Senate, the Vice Speaker, and the Secretary. Meeting every month, the Student Senate provides a mechanism for governance of campus-wide activities and functions. It also provides a vehicle for the exchange of ideas and perceptions concerning student issues that cross college lines.

The Student Senate is required to develop and publish bylaws that describe: (1) the name of the Senate, (2) purpose, (3) objectives of the Senate, (4) operation and relationship with the college student councils, (5) membership and procedures for the election of officers/liaisons and their terms of office, (6) duties of Senate members, (7) meeting schedules, (8) parliamentary procedure, (9) procedural considerations (quorums, role of individual class officers, etc.), and (10) adoption and amendment procedures.

### *College Level*

Individual college student councils/student government associations function to provide governance for student issues related to the individual colleges, as well as conducting all class and college-wide elections. Adoption of bylaws governing the individual college student council/student government association is at the discretion of the elected/appointed officers of the council/association. College student councils/student government associations are encouraged to adopt bylaws that are consistent with the bylaws of the governing bodies of the other colleges.

Individual college student councils/student government associations are required to develop and publish bylaws that describe: (1) the name of the student council/student government association, (2) purpose, (3) objectives of the council/association, (4) operation and relationship with other college student councils/student government associations, (5) membership and procedures for the election of officers/representatives and their terms of offices, (6) duties of student council/student government association members, (7) meeting schedules, (8) parliamentary procedure, (9) procedural considerations (quorums, role of individual class officers, etc.), and (10) adoption and amendment procedures.

## Student Organizations

Student organizations are recognized by the Student Senate, respective student councils/student government associations, and the Dean of Students. Students interested in obtaining more information about existing organizations or having any questions concerning how to apply for membership should contact the president(s) of the respective organization(s). A listing and description of each organization is found in the Student Handbook.

## Student Counseling

On-campus Student Counselors are available to help students effectively deal with many issues through individual, couples, and family counseling. Counseling by the Student Counselors is subsidized through student activity fees and is provided free of charge to all students of Midwestern University. Based on an assessment by a Counselor, it may be necessary at times to utilize alternate resources for specialized interventions. Referrals will be made to an appropriate specialist; however, these referrals may or may not be covered under the student's health plan. Under these circumstances, the student is required to meet expenses not covered under their health plan. Additionally, Academic Live Care is available to all students as a mental health resource.

## Academic Support

Midwestern University offers multiple opportunities to students for academic support, including peer lecture review and tutoring services coordinated through Student Services and the individual colleges/programs, and the services of a Learning Specialist. Academic support is designed to enhance test-taking skills, modify study habits, and/or focus on critical material and content.

## Disability Services

It is the policy of Midwestern University to ensure that no qualified student with a disability is excluded from participation in or subject to discrimination in any University program, activity, or event. Midwestern University makes reasonable accommodations for the physical and mental limitations of students with documented qualified disabilities.

## Student Health

As deemed appropriate for the protection of students and patients and in accordance with our clinical affiliation agreements, Midwestern University requires that all students possess health insurance and submit documented proof of immunity against certain diseases during their enrollment.

Students can find full service primary care at Midwestern's Family Practice Clinic at the Multispecialty Clinic. Care includes physicals, annual wellness checks, treatment for acute illnesses and injuries, and management of chronic diseases. Midwestern's student health requirements for immunizations, titers, and TB testing are available at the Family Practice Clinic for students who are established patients.

## Wellness and Recreation Hall

Committed to the concept of "wellness," Midwestern University encourages students to utilize the Wellness and Recreation Center (Rec Center). These facilities include rooms for dance/aerobics, weight training, music, crafts, racquet ball, as well as volleyball and basketball in a full sized gymnasium. There are also outdoor basketball courts and sand volleyball courts on campus. Additionally, students may participate in on-campus intramural sporting activities that are sponsored by the University, including flag football, volleyball, soccer, basketball, softball, and ping-pong tournaments. Group activities such as cycling, running, hiking, martial arts, and yoga also occur on a regular basis.

## On-Campus Housing

On-campus housing is available to students on a first-come, first-served basis. Please contact the Office of Student Services at [AZStudentServices@midwestern.edu](mailto:AZStudentServices@midwestern.edu) for information.

# Student Financial Services

## Introduction

The Office of Student Financial Services provides students with information about federal, state, and private sources of financial assistance; helps students coordinate the financial aid application and renewal processes; and assists students in making informed decisions about financing the students' education. The Office of Student Financial Services is also responsible for the billing and collection of all tuition, fees, and institutional charges owed for each quarter.

Midwestern University (MWU) has a very strong commitment to financial literacy through the "Sensible Strategies" program. While many students make substantial, long term financial obligations for professional education, we are committed to assisting our students to become informed consumers through a variety of student-focused programs and events.

### Financial Aid Disclosure

Changes in federal, state and/or university policies could affect the Office of Student Financial Services' information printed in this catalog. MWU reserves the right to make changes in any or all information contained therein and to apply such revision accordingly.

## Contact Information

Students may contact the Office of Student Financial Services by phone or email below, Monday through Friday between the hours of 8:00 AM and 4:30 PM (CST/ MST).

Downers Grove, IL	Glendale, AZ
Dr. Arthur G. Dobbelaere Support Services Hall, Suite 103 555 31st Street Downers Grove, IL 60515 630/515-6101 <a href="mailto:ilfinaid@midwestern.edu">ilfinaid@midwestern.edu</a>	Barrel III, Suite 400 19555 North 59th Avenue Glendale, AZ 85308 623/572-3321 <a href="mailto:azfinaid@midwestern.edu">azfinaid@midwestern.edu</a>

## General Eligibility Requirements

Students seeking financial aid must meet general eligibility requirements regarding citizenship, financial need, and satisfactory academic progress.

Students who are currently in default and have not made satisfactory loan repayments or owe a refund on a Title IV program do NOT qualify for federal aid until resolution has been made.

## Financial Aid

The Office of Student Financial Services awards various types of financial aid including scholarships, Federal Work-Study, and loans (federal, institutional, and private).

### Scholarships

MWU has a variety of scholarships available. Please check the Student Financial Services [scholarships webpage](#) for a list of available scholarships.

### Federal Work-Study

Federal Work-Study (FWS) is available to eligible applicants who apply and demonstrate financial need by completing a FAFSA for the applicable award year. Qualifying students may work on-campus or off-campus for community service activities. A contract must be in place prior to working at off-campus locations. The Office of Student Financial Services determines the total amount that can be awarded to students annually, based on availability of allocated funding. Students may not begin FWS employment without approval from Student Financial Services.

### Federal Student Loans

[Direct Unsubsidized Loan](#): Graduate students enrolled at least half-time in a degree seeking program may borrow up to \$20,500 per academic year with an aggregate maximum of \$138,500. Students enrolled in the osteopathic medicine, veterinary medicine, dental medicine, optometry, podiatry, clinical psychology and pharmacy programs are eligible for higher annual loan amounts and may borrow the aggregate loan maximum of \$224,000.

[Direct Graduate PLUS Loan](#): Graduate students enrolled at least half- time in a degree seeking program may borrow up to the annual cost of attendance minus other aid.

Information on current interest rates, loan fees and repayment plans for Federal Direct Loans is available at: <https://studentaid.gov/understand-aid/types/loans/interest-rates>



### *WICHE's Professional Student Exchange Program (PSEP)*

The Arizona Colleges of Osteopathic Medicine, Optometry, Dental Medicine, Pharmacy, Veterinary Medicine, and the College of Health Sciences Physician Assistant, Occupational Therapy, Physical Therapy, and Podiatric Medicine participate in the PSEP administered by the Western Interstate Commission for Higher Education (WICHE), under which legal residents of western states without a public professional school in these fields may receive funding to help with tuition costs. To be eligible, students must contact the WICHE Certifying Officer in the applicant's state of legal residence for the program application. The number of students supported by each state for each field depends upon state appropriations. For addresses of state certifying officers, go to <https://www.wiche.edu/psep/cert-off> or write to:

WICHE Professional Student Exchange Program  
3035 Center Green Drive  
Suite 200  
Boulder, CO 80301-2204  
303/541-0200  
<https://www.wiche.edu>

### *Dentistry, Optometry, Podiatry, Pharmacy, and Veterinary*

Health Professions Student Loan (HPSL): Graduate students enrolled full time in a degree-seeking program may qualify for funding. Priority consideration is given to third and fourth-year students with exceptional financial need based on both student and parent income. HPSL is administered by the Department of Health and Human Services. Award amounts are determined according to the number of applicants and availability of funds. HPSL is a subsidized loan with a 5% fixed interest rate and a 12-month grace period before interest accumulates.

### *Osteopathic Medicine Program*

Primary Care Loan (PCL): Priority consideration is given to certain third or fourth-year students with exceptional financial need who are committed to practicing primary care medicine. This loan offers a one-year grace period and a residency deferment of up to four years. The interest rate is fixed at 5%. Students must agree to enter and complete a residency training program in primary care medicine not later than four years after the date on which they graduate. Students must also agree to practice primary care medicine through the date on which the loan is repaid in full. Students must be enrolled full-time to receive PCL funding.

AZCOM Loan: This institutional loan program is available to third and fourth-year AZCOM students. Loan amounts and the availability of funding vary each year. Interest will accrue at 5% per annum immediately after graduation unless the student enters an approved internship/residency. Repayment begins 6 months after graduation, unless the student enters into an approved internship/residency.

### *Other Resources*

Many lenders offer private loans to students as an alternative to federal financial aid. Such loans are not subject to federal student loan regulations. Terms of repayment, including interest rates, vary by loan. Lenders perform a credit check and determine a loan applicant's creditworthiness before approving these loans.

### *Financial Aid for Repeat Courses*

Students repeating a previously passed course may be eligible to receive federal financial aid for the repeated course. Federal regulations define "passed" as any grade higher than an "F," regardless of program policy requiring a higher qualitative grade.

Students repeating a failed course(s) may be eligible for federal aid to cover the cost associated with the repeat of the failure(s) as long as Satisfactory Academic Progress standards (SAP) are met. Those ineligible for federal aid may qualify for private loans. Students should contact the Office of Student Financial Services to determine eligibility.

### Living Expense Loan Refund

Students who borrow additional loan funds for living expenses will receive quarterly refunds to cover housing, food, transportation, books, supplies, and/or personal expenses. Students are obligated to budget appropriately to ensure living expenses are covered monthly.

Through MWU's comprehensive "Sensible Strategies" program, Student Financial Services provides a variety of resources to assist students with important money management skills; these include budgeting, credit cards, managing credit, money management for couples, and our innovative financial literacy tools. Please visit the Financial Services - Sensible Strategies webpage for information on programs, events, and helpful resources.

### Website Information for Financial Aid

Additional information regarding scholarships, loan programs, tuition due dates, and the Financial Wellness - Sensible Strategies program can be accessed on the [Student Financial Services](#) webpage.

## Veterans' Educational Benefits

Midwestern University is approved by the Arizona State Approving Agency to certify enrollment for veteran education benefits under approved programs. Students eligible for veteran education benefits are required to provide official military transcripts to the Office of the Registrar. All prior education and training will be evaluated and transfer credit will be granted, as appropriate.

In accordance with Title 38 US Code 3679(e) Midwestern University adopts the following additional provisions for a student who is entitled to educational assistance under chapter 31, Vocational Rehabilitation and Employment, or chapter 33, Post-9/11 GI Bill® benefits while payment to the institution is pending from the VA. If such payments or disbursements under Chapter 31 or 33 are delayed, Midwestern University will not:

- Impose any penalty or late fee;
- Deny the student access to classes, libraries, or other institutional facilities, or
- Require the student to secure alternative or additional funding up to the amounts covered by Chapter 31 or 33.

To qualify for this provision, students may be required to submit to the Office of the Registrar no later than the first day of class:

- A Certificate of Eligibility (COE) for entitlement under chapter 31 or 33;
- A "Statement of Benefits" from the Department of Veterans Affairs' (VA) website – eBenefits, or a VAF 28-1905 form for chapter 31 authorization purposes;
- A written request to use such entitlement;
- Provide additional information necessary to properly certify the enrollment for benefits.

For more information go to the Office of the Registrar at: <https://www.midwestern.edu/admissions/paying-college/veterans-educational-benefits>

Students may also contact the Office of the Registrar by email at [azregistrar@midwestern.edu](mailto:azregistrar@midwestern.edu) or call 623-572-3325.

Office of the Registrar  
Barrel III, Suite 400  
19555 N. 59th Avenue  
Glendale, AZ 85308

## Applying for Financial Aid

### *Cost of Attendance Budget*

Each class has an established Cost of Attendance (COA) budget designed to cover students' educational and living expenses; funding is only allowed within the parameters of the start/end dates of the academic year. The standard COA for each class, developed in accordance with federal guidelines, allows for a reasonable standard of living for a single student in the community. Each year the major components of the budget are reviewed and modified, when necessary, based on changes in costs. To help verify the allowable expenses and amounts included in budgets remain reasonable, the Office of Student Financial Services will periodically survey students to gather information about 'actual' expenses incurred.

Representative expense categories in every budget include:

- Tuition and Fees
- Books, course materials, supplies
- Living expenses for housing and food
- Transportation
- Personal expenses including insurance

Some programs may include technology, equipment, or other required fees. In all instances, federal regulations govern what is allowable in the budgets.

While many students find it necessary to borrow to pay for higher education, we highly encourage students to live as modestly as possible to minimize loan debt. Minimizing debt while in school can lead to financial freedom down the road and lower repayment after graduation. The staff in Student Financial Services are always available to discuss any questions surrounding budgeting within the COA limits.

### *Online Application Process*

The online financial aid application and instructions are updated annually and is available to all enrolled students. Newly accepted students who have paid the matriculation deposit will have additional access to other relevant financial aid resources in Canvas on the student portal.

## Glendale - Annual Tuition and Fees

Please Note: *Programs with an academic summer trailer will be subject to the tuition increase for the summer quarter.*

Program	Tuition
Arizona College of Optometry <sup>1</sup>	\$50,037
Arizona College of Osteopathic Medicine <sup>2</sup>	\$82,672
Arizona College of Podiatric Medicine <sup>3</sup>	\$52,663
College of Dental Medicine - Arizona <sup>4</sup>	\$93,098
College of Graduate Studies, Biomedical Sciences, Master of Arts	\$36,772
College of Graduate Studies, Biomedical Sciences, Master of Biomedical Science	\$46,522
College of Graduate Studies, Master of Science in Precision Medicine (per credit hour)	\$944
College of Graduate Studies, Precision Medicine Certificate (per credit hour)	\$944
College of Graduate Studies, Master of Public Health (per credit hour)	\$944
College of Health Sciences, Cardiovascular Science <sup>5</sup>	\$50,836
College of Health Sciences, Clinical Psychology	\$43,165

<b>Program</b>	<b>Tuition</b>
College of Health Sciences, Doctor of Nurse Anesthesia Practice - Completion	\$32,694
College of Health Sciences, Doctor of Nurse Anesthesia Practice - Entry Level	\$55,102
College of Health Sciences, Doctor of Nursing Practice	\$16,801
College of Health Sciences, Master Science Nursing Adult-Gerontology	\$15,680
College of Health Sciences, Master Science Nursing Leadership	\$13,203
College of Health Sciences, Occupational Therapy	\$50,836
College of Health Sciences, Physical Therapy	\$48,490
College of Health Sciences, Physician Assistant Studies <sup>6</sup>	\$67,433
College of Health Sciences, Speech Language Pathology <sup>7</sup>	\$49,203
College of Pharmacy, Glendale Campus	\$72,056
College of Veterinary Medicine	\$74,652

Tuition and fees are subject to change annually.

All programs have a student services fee billed quarterly. More information regarding the student services fee can be located in the Student Handbook. Additional fees may be assessed, including disability insurance or other charges as determined by each College. Course retakes will be charged in accordance with the Retake policy in the Academic Policies section of the catalog.

Additional fees assessed by Program:

<sup>1</sup>Arizona College of Optometry (First year only):

- Equipment Fee - \$4,500
- Diagnostic Set - \$1,130

<sup>2</sup>Arizona College of Osteopathic Medicine (First year only):

- Diagnostic Kit - \$675

<sup>3</sup>Arizona College of Podiatric Medicine (First year only):

- Technology Fee - \$1,567
- Surgical Instrument Fee - \$685

<sup>4</sup>College of Dental Medicine - Arizona:

- Technology Fee - First Year Only - \$1,567
- Supply Fee - All Years - \$6,144
- Instrument Rental Fee - All Years - \$2,835
- Simulation Laboratory and Clinic Fee - All Years - \$7,378

<sup>5</sup>Cardiovascular Science (First year only):

- Technology Fee - \$1,398
- Taskstream Software - \$100

<sup>6</sup>College of Health Sciences - Physician Assistant (First year only):

- Physical Diagnosis & Therapeutic Skills Kit - \$780

<sup>7</sup>College of Health Sciences - Speech Language Pathology (First year only):

- Simucase - web-based simulation program - \$145
- Calipso Software - \$100

### Annual Tuition

The annual tuition is based on full-time enrollment and is divided by the number of quarters in the academic year. Students exceeding the maximum prescribed course load will pay Course Overload charges. Students who are extended will be charged for each additional quarter of enrollment. Students completing their clinical rotations will not be assessed tuition based on a per credit hour rate, however, will be charged a fixed tuition amount each quarter based on the annual tuition of the program. Students in the Nurse Leadership or Adult Gerontology programs will be assessed tuition based on the annual rate divided by the number of quarters in the academic year.

Students are encouraged to pay all tuition and fees via Midwestern's secure [website](#).

### Add/Drop Period

Charges will be reassessed accordingly for courses adjusted within the add/drop period depending on the student's revised enrollment status (i.e., full-time, half-time, less than half-time, etc.). Please note, that if all courses are dropped and a student is determined to be withdrawn for the entire quarter, tuition and fees will be assessed based upon guidelines stated in the MWU Refund Policy: Return of Title IV and VII Funds.

### Partial Course Load

Students registered for courses that total fewer than 12 credit hours per quarter are considered to have a partial course load. In such circumstances, tuition is charged on a per-credit-hour basis. The tuition rate for each quarter is calculated based on the current quarterly full-time tuition divided by the standard full-time credit hours of the program the student is enrolled in for the respective quarter enrolled. The per-credit-hour rate is multiplied by the enrolled credit hours to equal the tuition charge for the quarter.

### Course Overload

Students registered for more courses than the prescribed schedule in a given quarter are considered registered for a course overload. Students must receive prior approval from the College Dean. Tuition is billed for the additional courses as follows:

- Course overloads are billed the annual tuition rate plus an additional per-credit rate.
- The per-credit rate is calculated by dividing annual tuition by the number of quarters to determine a quarterly rate. The quarterly rate is divided by the prescribed course load credit hours as specified for the program (below).
- Course overloads are defined as follows per quarter: AZCOM >29 credit hours; CPG >21 credit hours; CHS Graduate >23 credit hours; AZCPM >27 credit hours; CGS Graduate > 23 credit hours; CDMA >30 credit hours; AZCOPT >30 credit hours; CVM >26 credit hours.

## Payments

The Office of Student Financial Services accepts credit / debit cards or eChecks for tuition, fees, insurance, on-campus housing, and other direct costs; however, the following must apply:

- Financial aid, if applicable, must be applied first. Any additional payments made prior to financial aid, will be returned to the method of payment used.
- If using a third party's credit card, the Student Accounts must receive authorization from the cardholder.
- MasterCard, Visa, Discover, and American Express are accepted.

For those paying by mail or in person, all checks and money orders should be made payable to Midwestern University with the MWU student ID number indicated on the front. If tuition payments are made by mail, please address the envelope as follows:

Midwestern University  
Attn: Office of Student Financial Services - Barrel III, Suite 400  
19555 N. 59th Avenue, Glendale, AZ 85308

Unpaid balances owed as scheduled will be processed in accordance with Midwestern University's Overdue Accounts Policy.

### Payment Plans

Payment plans allow students to divide unpaid quarterly balances into three equal, interest-free installments during the quarter for which the balance is owed. Payment Plan policies include:

- Financial aid, if applicable, must be applied first; the payment plan is established for the remaining balance due.
- To set up the payment plan each quarter, students must utilize MWU's electronic billing and payment system available at <https://online.midwestern.edu>.
- A minimum balance of \$200 is required.
- Must be paid in full by the end of each quarter.
- To maintain continued payment plan eligibility, students must adhere to all due dates and have not been late on any current or prior payment plans.

### International Student Prepayment Policy

All accepted international matriculates requesting an I-20 document to obtain an F-1 student visa, or who are not U.S. citizens/ permanent residents/ eligible non-citizens must prepay the full annual tuition, and in some cases, other mandatory program fees 45 days before the first day of class. Continuing students will pay on a per-quarter basis by the scheduled due dates.

### Returned Checks

Students are notified via email and phone when checks are returned. A replacement method of payment is required to resolve the balance. If two or more checks are returned, a student will be required to pay by cashier's check or money order, without exception.

### Overdue Accounts

Student Accounts will follow up on all past-due accounts via email and/or by phone. The overall goal is to encourage students to pay timely to avoid the consequences below:

- 10 days past due - a 1.5% late fee will be assessed for all balances equal to or >\$500; a fixed late fee of \$7.50 will be assessed on balances equal to or <\$499.
- 15 days past due - College Dean will be notified of the delinquency.
- 30 days past due - student may be dropped from enrollment by the College.
- Academic transcripts may be withheld.
- Risk of being referred to a third party for collection, which may result in additional fees and / or delinquency reported to the national credit bureaus.

Students are responsible for notifying Student Accounts of any circumstance that may necessitate an exception to payment deadlines. Exceptions are limited, however, may be considered for situations beyond the student's control (i.e., delay of financial aid funds applied for well in advance of the due date).

### Direct Deposit

Direct deposit for refunds is highly recommended to avoid delays. Students without direct deposit will be issued a paper refund check mailed to the address on file.

MWU will not be held responsible for any bank fees or charges resulting from insufficient funds in a student's bank account. MWU is also not responsible for late charges on any past-due bills a student may incur. It is the student's responsibility to ensure the funds deposited have cleared the bank.

Direct deposit or refund checks made in error to the student must be returned in full to MWU immediately.

## Satisfactory Academic Progress for Financial Aid Eligibility

Federal regulations (Sections [668.16](#), [668.32](#), and [668.34](#)) require that all graduate and professional students who receive Federal student aid (includes loans, work-study, and grants) make satisfactory academic progress (SAP) toward completion of their degree to continue receiving Title IV Federal student aid.

This policy is used to determine eligibility for Federal Financial Aid only and is as strict as or stricter than academic policies. Academic programs may have different academic standards and criteria to maintain academic eligibility within the program.

### ***Qualitative (Cumulative Grade Point Average):***

Students are required to maintain a minimum cumulative GPA as defined by their college/academic program throughout their program of study while attending Northwestern University.

### ***Quantitative (Pace):***

Pace is the rate at which a student completes requirements for their academic program and is calculated by dividing the number of cumulative credits completed by the number of cumulative credits attempted. Students must progress through their academic program to ensure they will graduate within the maximum timeframe (as specified by each college/academic program).

### ***Maximum Time Frame:***

The maximum time frame is defined by the length of the program. Program lengths are measured in years for clinical programs and credit hours for non-clinical programs. Students must complete the requirements for their degree within the maximum timeframe for completing their program of coursework (as defined by their college/academic program). See chart titled Northwestern University Standards of Satisfactory Academic Progress for Financial Aid Eligibility below for specific timeframes by program.

Students become ineligible for Federal financial aid when it becomes mathematically impossible to complete the program within the maximum time with the right appeal (as specified by each college/academic program).

### ***SAP Eligibility Review:***

For programs with a length of one academic year or less, SAP is reviewed on a quarterly basis. Students who do not achieve SAP at the end of one quarter are automatically placed on financial aid warning. Students on warning are eligible for Federal financial aid but must meet the minimum cumulative GPA and pace standard for their program by the end of the quarter. Students in all other programs are reviewed annually for SAP. Students who do not achieve the minimum cumulative GPA and pace standard will be placed on Federal financial aid suspension with the right to appeal.

Email notifications are sent by the Assistant Director of Student Financial Services to the student's Northwestern University email address if the student does not meet SAP standards. The email notification includes instructions to appeal for continuation of Federal financial aid.

### ***SAP Appeals:***

A student who does not meet the SAP appeal policy is considered ineligible for Federal financial aid. However, students who have mitigating circumstances that prevented them from making satisfactory

academic progress may submit a SAP Appeal to request to have their aid reinstated due to cumulative grade point average, pace, and maximum time frame. Mitigating circumstances include but are not limited to:

- Death of an immediate family member (spouse, mother, father, guardian, sister, brother, son or daughter)
- Major medical issue (i.e. requires hospitalization) experienced by the student or an immediate family member of the student (as designated above)
- Domestic violence
- Involuntary call to active military duty
- Other extreme circumstances (case by case basis)

The complete appeal will contain:

1. A SAP appeal form,
2. A written statement typed and signed by the student, describing the student's mitigating circumstances and what has changed to improve academic performance,
3. Supporting documentation, and
4. An academic plan approved by the student's advisor.

Incomplete appeals will not be accepted or reviewed. SAP appeals are reviewed by the University Financial Aid Committee. Students should allow up to two weeks for their appeal to be reviewed and a decision to be rendered. All decisions are final and cannot be appealed for the same set of circumstances. If the appeal is approved, the student may regain eligibility for Federal student aid, and will be placed on financial aid probation.

#### ***Academic Plans:***

Students must submit an Academic Plan with the SAP appeal application. Academic Plans are developed by Program Directors, faculty advisors, or the Office of the Dean.

For students who need longer than one quarter (payment period), an Academic Plan is necessary to help ensure the student can meet SAP by a specific point in time. While programs have discretion to determine the length of the Academic Plan, students must be monitored at the end of each quarter to confirm all components as specified in the Academic Plan are being met.

#### ***Maximum Appeals:***

For programs with a length of one academic year or less, a maximum of one appeal is allowed. For all other programs, a maximum of two appeals is allowed.

#### ***Regaining Eligibility:***

Any student who has become ineligible to receive Federal financial aid may regain eligibility by meeting the SAP standards or the conditions set forth in the academic plan.

#### ***Treatment of non-punitive grades, repeated courses, audit courses, pass/fail courses, withdrawals and incompletes:***

Grades of I (Incomplete), W (Withdrawal), WF (Withdrawal/ Failing), and F are counted as attempted hours only (not earned hours) for pace calculation. Grades of I, W and P do not affect GPA. Also, if the "WF" grade occurs after the add/drop period, it will be included in the GPA.

Classes in which students are auditing cannot be included in the amount of credit or contact hours earned when determining eligibility for Federal financial aid.

Please note all repeat coursework grades are included in the GPA and Pace (attempted and completed). Only the most recent grade is used in the computation of the student's GPA. Also, if an "I"



grade remains beyond the 10 calendar days, it is automatically converted to a grade of “F” by the Registrar, which signifies failure of the course.

**Program Specific requirements:**

Academic standards are linked below for each program:

- [Doctor of Osteopathic Medicine](#)
- [Doctor of Pharmacy](#)
- [Doctor of Dental Medicine](#)
- [Doctor of Optometry](#)
- [Doctor of Clinical Psychology](#)
- [Master of Medical Sciences in Physician Assistant Studies](#)
- [Doctor of Physical Therapy](#)
- [Master of Occupational Therapy](#)
- [Master of Science in Speech-Language Pathology](#)
- [Master of Arts in Biomedical Sciences](#)
- [Master of Biomedical Sciences](#)
- [Doctor of Podiatric Medicine](#)
- [Doctor of Veterinary Medicine](#)
- [Doctor of Nurse Anesthesia Entry into Practice](#)
- [Master of Science in Cardiovascular Science](#)
- [Post-Master's Doctor of Nurse Anesthesia Practice Completion](#)
- [Master of Public Health](#)
- [Master of Science in Precision Medicine](#)
- [Post-Graduate Certificate in Precision Medicine](#)
- [Doctor of Nursing Practice](#)
- [Master of Science in Nursing / Adult-Gerontology Primary Care Nurse Practitioner](#)
- [Master of Science in Nursing / Nurse Leadership in Global Health](#)

## Standards of Satisfactory Academic Progress for Financial Aid Eligibility

Clinical Programs	Published Length	150% Limit
Osteopathic Medicine	4 years	6 years
Pharmacy	3 years	4.5 years
Physician Assistant	2 years	3 years
Occupational Therapy	2 years	3 years
Cardiovascular Science	2 years	3 years
Podiatric Medicine	4 years	6 years
Clinical Psychology (4 year track)	4 years	6 years
Clinical Psychology (5 year track)	5 years	7.5 years
Doctor of Nurse Anesthesia Practice - Entry Level	3 years	4.25 years
Doctor of Dental Medicine	4 years	6 years
Optometry	4 years	6 years
Physical Therapy	2.5 years	3.75 years
Veterinary Medicine	4 years	6 years
Speech Language Pathology	2 years	3 years

Non-Clinical Programs	Published Length	150% Limit
Biomedical Sciences (M.B.S.)	88.5 credits	132.75 credits
Biomedical Sciences (M.A.)	45 credits	67.5 credits
Doctor of Nurse Anesthesia Practice - Completion	54 credits	81 credits
Master of Public Health	56 credits	84 credits

<b>Non-Clinical Programs</b>	<b>Published Length</b>	<b>150% Limit</b>
Master of Precision Medicine	28 credits	42 credits
Precision Medicine Certificate	22 credits	33 credits
Doctor of Nursing Practice	56 credits	84 credits
Master Science Nursing Leadership	45 credits	67.5 credits
Master Science Nursing Adult-Gerontology	72 credits	108 credits

## Academic Status Chart for Determining Financial Aid Eligibility and Enrollment Status

<b>Academic Status</b>	<b>Credit hours per quarter</b>
Full-Time*	12 credit hours minimum
Three-Quarter Time	9-11 credit hours
Half-Time	6-8 credit hours
Less than Half-Time	1-5 credit hours

\*Full-time graduate programs are determined by the educational institution.

## Leave of Absence / Withdrawals / Return of Title IV Funds - Policy and Procedure

### Policy

- Students requesting a leave of absence while enrolled at Midwestern University must adhere to the policies and procedures established by the College Dean. In addition, students receiving Federal financial aid must understand and follow Federal Title IV leave of absence regulations as stated in this policy, which may affect the amount of financial assistance received. As stipulated by Federal financial aid regulations, a student receiving Title IV assistance, shall be granted a leave of absence under the following conditions:
  - The student must request the leave of absence in writing to the Program Director, if applicable, with approval from the College Dean. The letter should clearly state the reason(s) for the requested leave of absence.
  - MWU will not charge the student any additional institutional charges (tuition or program related fees) during a leave of absence.
  - Students on leave of absence are entitled to all the services afforded by the student services fee.
  - A subsequent leave of absence may be granted for the same student due to an unforeseen circumstance such as military duty, jury duty or a circumstance covered under the Family and Medical Leave Act of 1993 (FMLA).
  - Any additional leave of absence requests may not exceed a total of 180 days in a 12-month period. This 12-month period begins with the first day of the initial leave of absence.
  - There must be a reasonable expectation that a student will return from a leave of absence to continue enrollment at MWU.
- Students granted approved leave of absence will maintain financial aid eligibility and all charges will remain on the student account. Students are not eligible to receive any additional financial aid during a leave of absence.
- For purposes of administering Federal financial aid, a student who is receiving Title IV financial aid funds and is granted a leave of absence that does not meet the above guidelines will be considered to have withdrawn from MWU for financial aid purposes.

4. A student who received financial aid prior to the leave of absence and fails to return will be considered to have withdrawn from MWU for financial aid purposes as of the first day on which the leave of absence was granted. The Office of Student Financial Services will have 45 days after the day of determination to calculate a refund and return funds to the lender.
5. For students who do not begin attendance the quarter for which financial aid was received, SFS must return the full amount of unearned Title IV funds no later than 30 days after the institution becomes aware that the student will not or has not commenced attendance.
6. Upon receipt of the leave of absence notification, the Office of Student Financial Services informs the student of loan obligations, possible revisions in aid, deferment options, and consequences of failure to return may have on the student's repayment term, including the exhaustion of the student's grace period.
7. Students are not eligible to receive any financial aid during periods of non-attendance. Any refunds received must be returned in full.
8. All outstanding balances must be paid in full prior to a student's return from a leave of absence.

#### Notification of Withdrawal

1. A student must provide written notification and documentation, if applicable, to the appropriate College Dean or Program Director, stating the reason for withdrawal from MWU. If approved, the College Dean will conditionally approve a withdrawal until all clearances are obtained.
2. Upon receipt of a student's official notification, the withdrawal date is the earlier of either the date the student begins the school's withdrawal process or otherwise provides notification. In some cases, the student's last date of attendance at a documented academically-related activity (exam, turning-in of assignment, etc.) may be used as the withdrawal date.
3. The student must receive clearance for withdrawal from the MWU departments on the <http://online.midwestern.edu> leave system. The online system notifies administrative offices such as the Registrar to process the withdrawal, and Student Financial Services to prepare the required financial aid exit and calculate the return of unearned Federal Title IV aid and all other aid, as appropriate.
4. Upon submission of all completed documentation and adherence to all clearance procedures, the College Dean will provide an official letter of withdrawal to the student. If a student does not complete the online exit counseling requirement, the student will either be emailed or sent by certified mail the exit requirements.
5. The withdrawal date for students who do not provide notification will be the earlier of the midpoint of the payment period or the date the school determines is related to the circumstances beyond the student's control.

## Federal Student Aid - Return of Title IV (R2T4)

MWU has instituted and adheres to all requirements included in the Federal Formula for Return of Title IV Funds (R2T4) as specified in Section 484B of the Higher Education Act of 1965 (as amended).

Student Financial Services (SFS) is required by Federal law to recalculate financial aid eligibility for a student who withdraws, is suspended, is dismissed, takes a leave of absence, or ceases attendance before completion of the term.

If an R2T4 calculation is required, SFS must return the amount of unearned Title IV funds to Department of Education (ED) no later than 45 days after the student's Date of Determination. The calculation for Return of Title IV funds is based upon the student's withdrawal date.

For Title IV purposes, the student's withdrawal date is the earlier date of one of the following:

- The date the formal withdrawal process begins or the date the student otherwise provides official notification of their intent to withdraw (i.e., letter, email, in-person)
- The last documented date of attendance in an academically related engagement (i.e., documented attendance in a class or lab or submissions of an assignment).

Title IV funds include – Federal Direct Unsubsidized loans, Federal Direct Graduate PLUS loans, and the Federal Work-Study (FWS) program. However, FWS funds awarded or earned by the student will always be excluded from the R2T4 calculation.

### ***R2T4 calculation***

The R2T4 calculation determines whether financial aid must be repaid to the federal student aid programs.

1. The percentage of a payment period completed is calculated by the number of days enrolled up to the student's withdrawal date, divided by the total days in the same payment period. The Title IV aid earned is equal to the percentage of the payment period completed. After 60%, there is no return of Title IV funds and the student is considered to have earned 100%. The academic calendar is used to determine the total days in the length of payment period.
2. Student Financial Services uses the student's withdrawal date to perform the R2T4 calculation. The resulting R2T4 calculation form shows the percentage of earned federal aid, the amount of earned and unearned federal aid.
3. Scheduled breaks of five days or more are excluded from calculation. If a student withdraws while on a scheduled break, the withdrawal date is the last date of scheduled academic engagement break prior to the break.
4. Title IV returns are returned in the following order:
  - Federal Direct Unsubsidized Loans
  - Federal Graduate PLUS Loans

### ***Withdrawal Exemptions for Title IV***

A student who qualifies for one of the three exemptions below is not considered withdrawn if the student:

- Completes all the requirements for graduation in the program before completing the number of days in the quarter the student was scheduled to attend
- Successfully completes:
  - One module (clinical/ rotation) that includes 49% or more of the number of countable days in the quarter, excluding scheduled breaks of 5 or more consecutive days and all days in between modules (clinical rotation blocks).
  - A combination of modules (clinical rotations) that when combined contains 49% or more of the number of countable days in the quarter, excluding scheduled breaks of 5 or more consecutive days and all days between the modules.
- Successfully completes coursework equal to or greater than half-time (6 credits) for the quarter.

Successful completion of coursework means earning a passing grade.

### ***Post-Withdrawal Disbursements***

If the student did not receive all of the funds that were earned prior to withdrawing, a post-withdrawal disbursement may be due.

SFS must provide written notification to the student prior to making any post-withdrawal disbursement within 30 days of the student's date of determination. MWU must receive permission from the student before it can release the post withdrawal disbursement. The student will have 14 days to respond in writing to the notice and if a response is not received within the timeframe, the school will not process the disbursement. The post-withdrawal disbursement notification will include information of the funds that will be applied to the student's account first, and any resulting credit balance will be refunded to the student as soon as possible and no later than 14 days. Students may choose to decline some, or all loan funds to not incur additional debt. Please note that accepting a post-withdrawal disbursement of student loan funds will increase a student's overall student loan debt, which must be repaid under the terms of the Master Promissory Note.

MWU may use all or a portion of the post-withdrawal disbursement of funds for tuition, fees, and housing, but must have the student's permission to apply the post-withdrawal disbursement to any other school charges. If the student does not give permission, the student will be offered the funds in the form of a refund.

All credit balances resulting in a recalculation from the R2T4 will be refunded as soon as possible and no later than 14 days.

### Tuition and Fees Refund Policy

MWU adheres to the R2T4 Calculation formula for institutional refunds. If a student withdraws during a payment period, MWU will determine how much tuition and fees were unearned by the institution. Students who withdraw before completing 60 percent of the quarter may have to repay all or a portion of the Federal Title IV financial aid funds that have been disbursed to them.

Figures are calculated based on how many calendar days in the payment period were attended through the withdrawal date divided by the total number of calendar days in that same payment period. After 60% of the payment period, the institution will have earned the total amount paid for the payment period. Equipment or supplies fees will be waived if the equipment is returned to the school in the exact condition for which was received by the student. MWU will refund as prescribed below any unearned amount. Please see the R2T4 Calculation section for more details.

#### ***Return of Funds by the School***

All returns will be distributed in the following order, as applicable:

- Federal Student Loans – refer to the R2T4 calculation
- Other Federal Sources of Aid including Title VII funding - Title VII funds include Health Professions Student Loans (HPSL) and Primary Care Loans (PCL). Any unearned tuition will be returned to the lender.
- Other state, private, or Institutional Aid / Scholarships (Scholarships will be adjusted subject to their donor agreements)
- The student

Students who feel that individual circumstances warrant exceptions from published policy may appeal the MWU Refund Policy. Student appeals need to be submitted to the Director of Student Financial Services & Registrar.

### Military Funds & Veterans' Educational Benefits

Military funds will be returned to the appropriate branch according to the institutional refund policy when the student fails to: begin attendance, start a course (regardless if the student starts other courses), or the course is cancelled.

Veterans' Educational benefits paid for tuition and fees will be returned directly to the VA by Student Accounts upon receipt of the VA Debt Letter. Students will be required to repay MWU directly as a result.

## 2025 - 2026 Academic Term Calendar (Detailed dates are found in Program Calendars)

### Summer

Event	Date
Memorial Day (No Classes; Offices Closed)	May 26, 2025
<b>Summer Term Begins</b>	<b>June 2, 2025</b>

Event	Date
Juneteenth (No Classes; Offices Closed)	June 19, 2025
Independence Day (No Classes; Offices Closed)	July 4, 2025
Summer Term Ends	August 15, 2025
Commencement - CHS (Physician Assistant/Clinical Psychology)	August 29, 2025

## Fall

Event	Date
Fall Term Begins	August 25, 2025
Labor Day (No Classes; Offices Closed)	September 1, 2025
White Coat Ceremony (AZCOM, AZCPM)	September 26, 2025
White Coat Ceremony (CDMA, CPG, CVM, CHS, AZCOPT)	September 27, 2025
Fall Term Ends	November 07, 2025
Thanksgiving Break	November 10 - 28, 2025

## Winter

Event	Date
<b>Winter Term Begins</b>	<b>December 1, 2025</b>
Winter Break	December 22 - January 2, 2026
Martin Luther King Jr. Day (No Classes; Offices Closed)	January 19, 2026
Winter Term Ends	February 27, 2026

## Spring

Event	Date
<b>Spring Term Begins</b>	<b>March 9, 2026</b>
Spring Term Ends	May 22, 2026
Memorial Day (Offices Closed)	May 25, 2026

## Commencements

Event	Date and Time
Arizona College of Osteopathic Medicine	May 30, 2026 - 9:00 a.m.
College of Dental Medicine	May 30, 2026 - 12:00 p.m.
College of Pharmacy	June 2, 2026 - 9:00 a.m.
College of Podiatric Medicine	June 2, 2026 - 12:00 p.m.
College of Veterinary Medicine	June 2, 2026 - 3:00 p.m.
College of Health Science	June 3, 2026 - 9:00 a.m.
College of Graduate Studies	June 3, 2026 - 12:00 p.m.
Arizona College of Optometry	June 3, 2026 - 3:00 p.m.

## Summer 2026 - Trailer (DNAP, PsyD, Nursing)

Event	Date
Classes Begin	June 1, 2026
Classes End	August 14, 2026

Last Revision: 05/15/2025

# Colleges and Programs

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# Arizona College of Osteopathic Medicine

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## Mission

Midwestern University Arizona College of Osteopathic Medicine educates students to exhibit professionalism, provide patient care, and serve their communities in order to become qualified osteopathic physicians.

The mission will be achieved by meeting the following objectives:

1. Incorporate clinical teaching into the curriculum.
2. Incorporate osteopathic principles and practice, including osteopathic manipulative treatment, into the curriculum.
3. Incorporate basic scientific principles.
4. Provide opportunities for research and scholarly activity for students, residents, and faculty.
5. Prepare students for COMLEX-USA Level 1, Level 2 CE, and clinical skills evaluation to support completion of the program and graduation.
6. Demonstrate student acquisition of the osteopathic core competencies.
7. Assess the performance of AZCOM graduates.
8. Encourage participation in community service by students, residents, and faculty.
9. Support postgraduate training programs associated with Midwestern University, including osteopathic recognition program development.
10. Equip students to be successful in residency placement.
11. Provide faculty and staff development opportunities.
12. Provide financial literacy programs and events.
13. Support mental health and wellness for students, residents, and faculty.

## Accreditation

The Arizona College of Osteopathic Medicine is accredited by the American Osteopathic Association (AOA)/Commission on Osteopathic College Accreditation (COCA). COCA is recognized as the accrediting agency for colleges of osteopathic medicine by the United States Department of Education and the Council of Postsecondary Accreditation (COPA). AZCOM is currently accredited through 2028.

For further information, please contact the Commission on Osteopathic College Accreditation, American Osteopathic Association, 142 E. Ontario St., Chicago, IL 60611; 800/621-1773; or [www.osteopathic.org/accreditation/](http://www.osteopathic.org/accreditation/).

## Degree Description

Upon graduation from Arizona College of Osteopathic Medicine, the Doctor of Osteopathic Medicine (D.O.) degree is granted. The usual length of the course of study is four academic years. The curriculum consists of two years of primarily didactic instruction followed by two years of primarily clinical rotations, including the applicable didactic material. Upon graduation with the D.O. degree, the graduate is eligible for postdoctoral residency training in all fields of medicine. Completion of requirements for a D.O. degree does not guarantee placement in a residency program, future employment, licensure, board certification, or credentialing.

Osteopathic Medicine graduates must complete a graduate medical education program (residency training program) to become licensed to practice osteopathic medicine.

Graduates should check the licensure requirements for the country, state, district or territory in which they intend to pursue employment.

# Admissions

The Arizona College of Osteopathic Medicine considers for admission those students who possess the academic, professional, and personal qualities necessary to become exemplary osteopathic physicians. To select these students, the College uses a rolling admissions process within a competitive admissions framework.

United States citizens and permanent residents who have met all prerequisites and technical standards are eligible to be considered for admission. A limited number of citizens of countries in which osteopathic physicians are legally able to obtain unrestricted licenses and who otherwise meet all prerequisites and technical standards are eligible to be considered for admission to AZCOM and must remain in good standing with the State Department for participation in osteopathic medical training throughout the AZCOM Curriculum.

## Admission Requirements

Students seeking admission to AZCOM must submit the following documented evidence:

1. Completion of the admission course requirements.
  - Grades of C or better (grades of C- are not acceptable)
  - To be competitive, students should have minimum cumulative GPAs and science GPAs over 3.00 on a 4.00 scale
2. Completion of a bachelor's degree at a regionally accredited college or university prior to matriculation.
3. Competitive scores on the Medical College Admissions Test (MCAT).
  - Only MCAT exam scores earned from tests taken no more than three (3) years prior to the matriculation date of the planned enrollment year are acceptable.
  - Register for MCAT exam through Association of American Medical Colleges website at <https://students-residents.aamc.org/applying-medical-school/taking-mcat-exam/>
4. Two letters of recommendation are required.
  - One letter from either a pre- medical advisory committee or science professor who has taught the applicant.
  - Second letter from either a D.O. or M.D. Letters from osteopathic physicians are strongly recommended. Letters written by family members are not acceptable.

Students seeking admission to AZCOM must:

1. Demonstrate understanding of and interest in osteopathic medicine.
2. Demonstrate service orientation through community service or extracurricular activities.
3. Demonstrate motivation for and commitment to health care as demonstrated by previous work, volunteer work, or other life experiences.
4. Demonstrate verbal, nonverbal and written communication skills necessary to interact with patients and colleagues.
5. Pass the Midwestern University criminal background check and fingerprint clearance.
6. Commit to abide by Midwestern University Drug-Free Workplace and Substance Abuse Policy.
7. Meet the Technical Standards for the College.
8. Must not have previously been withdrawn or dismissed from a D.O. or M.D. program in the U.S. or Internationally. This does not apply to students applying for transfer as described elsewhere in the catalog.

## Admission Course Requirements

Course	# of Semester/Quarter Hours
Biology with Lab	8 Semester/12 Quarter hours
General Chemistry with Lab	8 Semester/12 Quarter hours
Organic Chemistry with Lab or other advanced Chemistry with Lab	8 Semester/12 Quarter hours
Physics	8 Semester/12 Quarter hours

Course	# of Semester/Quarter Hours
English Composition	6 Semester/9 Quarter hours

*Courses that may contribute to success in medical school include Anatomy, Physiology, and Biochemistry*

## Competitive Admissions

Within its competitive admissions framework, the College uses multiple criteria to select the most qualified candidates from an applicant pool that exceeds the number of seats available. AZCOM typically receives over 3000 applications for its 250 seats.

## Rolling Admissions

AZCOM uses a rolling admissions process in which applications are reviewed and interview decisions are made at each interval during the admissions cycle.

Interviews are conducted and selection decisions for the College are made until the class is filled. Applicants are notified of their selection status within four weeks after their interview date. To be competitive within this process, candidates should apply early in the admissions cycle.

## Application Process and Deadlines

The official AACOMAS application deadline is March 1st; however, applicants are strongly encouraged to apply early in the cycle. Due to the large number of applications and the limited number of seats available, applications will be considered on a first-come, first-served basis only until all seats are filled.

1. AACOMAS Application - March 1st deadline to initiate the application process, all applicants must register and apply online via the centralized application service administered by AACOMAS at <http://aacomas.aacom.org/>. The AACOMAS application is typically available in May or June. As part of this process, students must submit official MCAT scores (for tests taken no more than three years prior to the matriculation date), and official transcripts directly to AACOMAS. The Office of Admissions will not accept MCAT scores or transcripts submitted directly to Midwestern University. The deadline for submission of the AACOMAS application is March 1st.
2. Letters of Recommendation - March 1st Deadline  
Applicants must submit two letters of recommendation. One letter must be written by a pre-health advisory committee or science professor who has taught the applicant. The second letter must be written by a physician, either a D.O. or M.D. Letters from osteopathic physicians are strongly recommended. The required letters of recommendation must be received by AACOMAS on or before the deadline of March 1st. Letters must adhere to the following guidelines:
  - a. The applicant's full legal name and AACOMAS ID number must be on the front page of the recommendation. The applicant must provide this information to the evaluator.
  - b. Letters must be sent directly to AACOMAS from the evaluator and must be printed on letterhead stationery, which includes the complete contact information for evaluator.
  - c. The evaluator's academic degrees must be listed (e.g. Ph.D., D.O., M.D.).
  - d. Applicants who have previously applied to AZCOM must submit new letters of recommendation.
  - e. Letters from family members will not be accepted.
3. Complete Application - March 1st Deadline All application materials, including the AACOMAS application, MCAT scores (as reported to AACOMAS), two required letters of recommendation, and all supplemental application materials must be received by AACOMAS on or before March 1st. Only completed applications will be reviewed for potential fall enrollment.
4. Application Reviews and Interview Decisions AZCOM uses a rolling admissions process to review completed applications and make interview decisions. Applications will not be reviewed until all

required application materials have been received by the Office of Admissions, including the AACOMAS application, official MCAT scores (as reported to AACOMAS), and both required letters of recommendation. Applicants complete their files as soon as possible to remain competitive in this process and to ensure full consideration of their applications.

Please Note: Applicants are responsible for tracking the receipt of their application materials and verifying the status of their required application materials on the University website. Instructions for accessing application information on the University website will be sent to applicants by the Office of Admissions. Applicants are advised to keep the Office of Admissions informed of any changes to the mailing address and e-mail address. All requests for application withdrawals must be made in writing. Applicants are expected to act professionally in their interactions with AACOMAS and with AZCOM and should follow the AACOMAS applicant protocol at all times.

## Interview and Selection Process

Applicants must meet all of the admissions requirements listed previously to be considered for an interview. After the Office of Admissions receives all of the required application materials, applicant files are reviewed to determine whether applicants merit interview invitations based on established criteria of the Admissions Committee. Applicants who are invited to interview will be contacted by the Office of Admissions and receive instructions for scheduling their interviews via the University's web-based scheduling system. Additional applicants may be placed on an interview "Wait List" pending possible interview openings toward the end of the interview cycle.

When applicants accept interview appointments, they join other interviewees to meet with members of an interview panel selected from a volunteer group of basic scientists, administrators, admissions staff, students, and clinicians. Panel members assess applicants for their academic and personal preparedness for medical school, and their understanding of the osteopathic physician's role in the healthcare team. They rate applicants on a standardized evaluation form relative to each variable. At the conclusion of the interviews, the panel members forward their applicant evaluations to the Admissions Committee. The committee may recommend to accept, to deny, or to place the applicant on either the hold or alternate list. This recommendation is then forwarded to the Dean of AZCOM for final approval. The Dean, via the Office of Admissions, notifies accepted applicants within four weeks of their interview.

## Articulation Agreements with Other Institutions

AZCOM has articulation agreements with the following institutions: Arizona Christian College, Arizona State University, Aurora University, Grand Canyon University, California Northstate University College of Health Sciences, and Midwestern University College of Graduate Studies, Biomedical Sciences Masters Program and College of Pharmacy Program.

## Reapplication Process

After receiving either denial or end-of-cycle letters, applicants may reapply for the next enrollment cycle. Before reapplying, however, applicants should seek the advice of an admissions counselor.

To initiate the reapplication process, applicants must submit their applications to AACOMAS. Applications are then processed according to standard application procedures.

## Transfer Admission

AZCOM may elect to accept transfer students from other U.S. osteopathic medical schools as long as these students remain in good academic and professional standing, have no COMLEX-USA licensing exam failures, and provide acceptable reasons for seeking their transfers. The American Osteopathic Association (AOA)/Commission on Osteopathic College Accreditation (COCA) standards require that the last two years of instruction must be completed within the college of osteopathic medicine granting the D.O. degree.

Currently enrolled students are not granted advanced standing for individual courses completed at another institution. Full credit is granted for course work satisfactorily completed by students transferring from another institution for the purpose of completing their course of study at AZCOM.

Students requesting transfers must meet AZCOM's general requirements for admission and follow transfer procedures:

1. All inquiries for transfer to AZCOM must be submitted to the Office of Admissions.
2. The Office of Admissions will confirm the availability of rotation sites through the Office of the Dean of AZCOM.
3. If the Dean of AZCOM designates available transfer positions, applications will be accepted for review.
4. Students must return their completed applications to the Office of Admissions and must include a statement of reason of transfer as well as the following from the COM:
  - Transcripts (must have no "F's" or repeated courses)
  - Class rank (must be in top 50%)
  - Dean's letter verifying "Good Academic Standing" and specifying that the student is eligible for readmission
  - Letter of reference from the Academic Dean or Dean of Students indicating the student has no professionalism concerns
5. AZCOM requires passage of COMLEX- USA Level 1 prior to transfer.
6. Completed applications are forwarded to the Dean of AZCOM.
7. A group appointed by the Dean of AZCOM conducts interviews with applicants.
8. Recommendations are forwarded to the Dean of AZCOM for final approval.
9. Applicants are notified by the Dean of AZCOM through the Office of Admissions of the final transfer decision.

## Technical Standards, AZCOM

### Technical Standards

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the College.

Candidates must be able to perform the following abilities and skills:

1. Observation: The candidate must be able to accurately make observations at a distance of 1 - 10 feet with ability to read print materials, including but not limited to, those on a computer screen or electronic device. Observation necessitates the functional use of vision and sense of touch and is enhanced by the functional use of all of the other senses. (The candidate must be able to accurately auscultate lung/breath, heart and bowel sounds to complete the curricular requirement to individually complete physical examination of a patient.)
2. Communication: The candidate must be able to communicate in English, proficiently and sensitively, in verbal and written form, and be able to perceive verbal and nonverbal communication.
3. Motor: Candidates must be able to coordinate both gross and fine motor movements, maintain equilibrium and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control and eye-to-hand coordination to perform profession-specific skills and tasks. Candidates must be able to lift 20 lbs.
4. Intellectual, Conceptual, Integrative and Quantitative Abilities: The candidate must be able to problem solve, measure, calculate, reason, analyze, record and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.

5. **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of their intellectual abilities, the exercise of good judgment and the consistent, prompt, completion of all responsibilities and the development of mature, sensitive, and effective relationships. Candidates must be able to tolerate physically, mentally, and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn are all personal qualities required during the educational process. The candidate must agree to participate in touching/ palpating on the skin and being touched/palpated on the skin by individuals regardless of gender in all academic settings, including osteopathic manipulative techniques. These activities will take place in large and small group settings as directed in the College's curricular requirements.

Candidates are required to verify that they understand and are able to meet these Technical Standards at least four weeks prior to matriculation (or if admitted later, within one week of deposit). Candidates who may only meet Technical Standards with accommodation, must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is neither able to grant accommodations that alter the educational standards of the curriculum nor grant accommodations if there is no formal request by the student.

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student should apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the College's Student Promotion and Graduation Committee.

## **Graduation Requirements**

The degree Doctor of Osteopathic Medicine (D.O.) is conferred upon candidates of good professional standing who have completed all academic requirements, satisfied all financial obligations, and completed all graduation requirements.

Students must pass all didactic course work and rotation courses with a grade of "C," or better, in order to graduate.

Students must pass COMLEX-USA Level 1 and COMLEX- USA Level 2 CE examinations of the National Board of Osteopathic Medical Examiners (NBOME), as well as a standardized clinical skills evaluation.

## **Maximum Length to Degree Completion**

As stipulated by the American Osteopathic Association - Commission on Osteopathic College Accreditation (AOA-COCA), the education program leading up to the D.O. degree, may not exceed 150% of time required to earn degree in the program in which the student enters (6 years for a 4 year program) from the date of matriculation, except in the case of a student earning a Ph.D. in addition to the D.O. degree.

Academic policies set forth within this catalog establish the timeline for coursework and licensure examination completion in order to meet all graduation requirements within the six-year timeframe. In the event that a student requires a leave of absence, the total length of time taken by the student to complete their degree is considered prior to the leave being granted, and the student is advised accordingly. As detailed in the Leave of Absence subsection of the Grades Appeals Policy section of the catalog, typically a single leave of absence will not exceed 12 months, and consecutive or multiple interrupted leaves of absence will not exceed 18 months. The duration of all leaves is monitored by a representative of the Office of the Dean to prevent a student from exceeding the six-year maximum timeframe.

# Licensure Requirements

Licensure for the practice of medicine is granted on a state-by-state basis. Graduation from Arizona College of Osteopathic Medicine (AZCOM) meets one of the basic requirements for licensure in all 50 states.

Midwestern University's Arizona College of Osteopathic Medicine (AZCOM) is accredited by the American Osteopathic Association (AOA)/Commission on Osteopathic College Accreditation (COCA). COCA is recognized as the accrediting agency for colleges of osteopathic medicine by the United States Department of Education and the Council of Postsecondary Accreditation (COPA). AZCOM is currently accredited through 2028. Graduates are eligible to take the Comprehensive Osteopathic Medical Licensing Exam (COMLEX-USA) series of examinations leading to licensure as a physician, as approved by their residency program director.

Midwestern University's Arizona College of Osteopathic Medicine (AZCOM) program is designed to meet one of the educational requirements to become licensed to practice medicine in the following states and territories: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, District of Columbia, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

Midwestern University Arizona College of Osteopathic Medicine has not made a determination that its Doctor of Osteopathic Medicine curriculum meets the territorial educational requirements for licensure or certification in the following territories: Puerto Rico and the U.S. Virgin Islands.

Students in this program receive a direct notification that Midwestern University has not made a determination if their program meets the requirements in the above listed territories. In addition, all Osteopathic Medicine graduates must complete a graduate medical education program (residency training program) to become licensed to practice.

MWU has not made a determination that its Doctor of Osteopathic Medicine curriculum meets the requirements for the licensure or certification outside of the United States of America.

Each student should check the additional licensure requirements for the country, state, district or territory in which the student intends to pursue employment.

## Osteopathic Medicine Curriculum

### Instructional Program

As scientists and practitioners of the healing arts, osteopathic physicians subscribe to a philosophy that regards the body as an integrated whole with structure and function working interdependently. As an extension of this philosophy, osteopathic physicians treat their patients as unique persons with biological, psychological, and sociological needs, an approach that underscores the osteopathic commitment to patient-oriented versus disease-oriented healthcare. In recognition of this approach, Arizona College of Osteopathic Medicine (AZCOM) has developed, and continues to refine, a four-year curriculum that educates students in the biopsychosocial approach to patient care, as well as the basic medical arts and sciences.

Within this curricular format, AZCOM students spend their first two years completing a rigorous basic science and introductory clinical curriculum, preparing for their clinical studies, including early simulated and clinical experiences. During their third and fourth years, students rotate through a variety of clinical training sites accruing 84 weeks of direct patient care experience. By stimulating intellectual curiosity and teaching problem-solving skills, the AZCOM curriculum encourages students to regard learning as a lifelong process.

Ultrasound is vertically integrated into the core concepts within the four-year curriculum. Student training throughout all four years includes both hands-on workshops and didactic sessions specific to diverse clinical disciplines. The hands-on workshops are developed in collaboration with clinical faculty, preclinical faculty, and consulting sonographers.

**Total Curricular Hours 247.5**

*Please Note:* AZCOM reserves the right to alter its curriculum and delivery, however and whenever it deems appropriate.

## First Year: Fall, Winter and Spring Quarters (58.00)

### OMS I Curriculum Fall Quarter

Course Code	Title	Credits
ANATG 1516	Anatomical Sciences I	7.5
BIOCG 1511	Biochemistry I	6.0
COREG 1560A	Interprofessional Healthcare I	0.5
MPSYG 1511	Introduction to Human Behavior I	1.0
OCMDG 1511	Osteopathic Principles and Practice I	4.0
<b>Sub-Total Credits</b>		<b>19.00</b>

### OMS I Curriculum Winter Quarter

Course Code	Title	Credits
ANATG 1526	Anatomical Sciences II	6.0
BIOCG 1522	Biochemistry II	3.0
COREG 1570A	Interprofessional Healthcare II	0.5
MPSYG 1522	Introduction to Human Behavior II	1.0
OCMDG 1522	Osteopathic Principles and Practice II	4.0
PHYSG 1521	Physiology I	5.0
<b>Sub-Total Credits</b>		<b>19.50</b>

### OMS I Curriculum Spring Quarter

Course Code	Title	Credits
ANATG 1536	Anatomical Sciences III	4.0
COREG 1580A	Interprofessional Healthcare III	0.5
CLMDG 1516	Humanity in Medicine	1.0
FMEDG 1531	Public Health, Medical Ethics and Jurisprudence	2.0
MICRG 1531	Immunology	2.5
MPSYG 1533	Introduction to Human Behavior III	1.0
OCMDG 1533	Osteopathic Principles and Practice III	4.0
PHYSG 1532	Physiology II	4.5
<b>Sub-Total Credits</b>		<b>19.50</b>

## Second Year: Fall, Winter and Spring Quarters (55.00)

### OMS II Curriculum Fall Quarter

Course Code	Title	Credits
CLMDG 1661	Interprofessional Collaboration Experience I	0.5
CMEDG 1601	Osteopathic Patient Care I	4.5
MICRG 1615	Microbiology I	4.0
OMEDG 1614	Osteopathic Principles and Practice IV	1.5
PATHG 1611	Pathology I	5.0
PHARG 1610	Pharmacology I	3.5
<b>Sub-Total Credits</b>		<b>19.00</b>



## OMS II Curriculum Winter Quarter

Course Code	Title	Credits
CLMDG 1662	Interprofessional Collaboration Experience II	0.5
CMEDG 1602	Osteopathic Patient Care II	4.5
MICRG 1625	Microbiology II	4.0
OMEDG 1625	Osteopathic Principles and Practice V	2.0
PATHG 1622	Pathology II	5.0
PHARG 1620	Pharmacology II	3.5
<b>Sub-Total Credits</b>		<b>19.50</b>

## OMS II Curriculum Spring Quarter

Course Code	Title	Credits
CLMDG 1631	Introduction to Imaging	1.0
CLMDG 1663	Interprofessional Collaboration Experience III	0.5
CLMDG 1700	Introduction to Clerkship	1.0
CLMDG 1702	ACLS	1.0
CMEDG 1603	Osteopathic Patient Care III	3.5
OMEDG 1636	Osteopathic Principles and Practice VI	1.5
PATHG 1633	Pathology III	5.0
PHARG 1630	Pharmacology III	3.0
<b>Sub-Total Credits</b>		<b>16.50</b>

## Third Year: Summer, Fall, Winter and Spring Quarters

Course Code	Title	Credits
CLMDG 1701	Osteopathic Clinical Medicine III	6.0
ELECG 1701	Third Year Elective Rotations	12.0
FMEDG 1701	Family Medicine Rotation I	6.0
FMEDG 1702	Family Medicine Rotation II	6.0
IMEDG 1701	General Internal Medicine Rotation I	6.0
IMEDG 1702	General Internal Medicine Rotation II	6.0
MPSYG 1701	Psychiatry Rotation	6.0
OBGYG 1701	Obstetrics / Gynecology Rotation	6.0
PEDIG 1701	Pediatric Rotation	6.0
RURLG 1701	Rural Medicine	6.0
SURGG 1701	General Surgery Rotation	6.0
<b>Sub-Total Credits</b>		<b>72.00</b>

## Fourth Year: Summer, Fall, Winter and Spring Quarters

Course Code	Title	Credits
CLMDG 1803	Osteopathic Clinical Medicine IV	2.5
ELECG 1801	Fourth Year Elective Rotations	36.0
EMEDG 1801	Emergency Medicine Rotation	6.0
IMEDG 1803	Subspecialty Internal Medicine Rotation	6.0
IMEDG 1804	Critical Care Rotation	6.0
SURGG 1802	Subspecialty Surgery Rotation	6.0
<b>Sub-Total Credits</b>		<b>62.50</b>
Total Credits		247.5

# Applied Master of Osteopathic Education in Glendale (AMOEG) Curriculum for OMM Scholars

The AMOEG Program stands for the Applied Masters in Osteopathic Education in Glendale. This program constitutes the clinical clerkship training years and adds one extra year to the typical 2-year AZCOM curriculum allowing scholars to achieve the additional Master's degree. Three (3) students are selected each year into the OMM Scholar program which includes partial tuition support along with a monthly stipend provided each year. Applicants are selected based on several criteria including, but not limited to, academic excellence, interest in osteopathic medicine, teaching experience, interpersonal skills, research interest, future career plans, letter of recommendation, and communication skills in the interview setting. Requirements for this position include a cumulative GPA of 3.25 upon completion of the OMS-II winter quarter (applicants whose GPA is slightly below the minimum GPA may be considered on a case-by-case basis). Scholars during their first and third year of the clerkship training years are involved primarily with the typical 2-year AZCOM clerkship curriculum, in addition to table training and providing three lectures to the first- and second-year students during OMM lab, as well as an assigned leadership liaison role. During their second clerkship year, scholars are involved more intensively with case presentations, QI projects, research projects, leading didactics sessions, 1 half day per week of clinical training, and reflecting on their teaching and learning.

## Summer, Fall, Winter, and Spring Quarters (44 weeks)

Course Code	Title	Credits
AMOEG 1700	Teaching and Leadership in Osteopathic Medicine I	9.0
CLMDG 1355	AZCOM Basic Cranial Course	3.0
AMOEG 1703	OMM Third Year Elective	6.0
<b>Sub-Total Credits</b>		<b>18.00</b>

## Summer, Fall, Winter, and Spring Quarters (44 weeks)

Course Code	Title	Credits
AMOEG 1800	Teaching and Leadership in Osteopathic Medicine II	17.0
AMOEG 1801	Research in Osteopathic Medicine	6.0
AMOEG 1802	Osteopathic Primary Care Longitudinal Clerkship	14.0
AMOEG 1804	Peer Teaching Strategies for AMOE	6.0
CLMDG 1415	Teaching in Humanity in Medicine	1.5
<b>Sub-Total Credits</b>		<b>44.50</b>

## Summer, Fall, Winter, and Spring Quarters (12 weeks)

Course Code	Title	Credits
AMOEG 1803	Teaching and Leadership in Osteopathic Medicine III	3.5
ELECG 1801	Research Rotation	6.0
<b>Sub-Total Credits</b>		<b>9.50</b>
Total Credits		72

## Preclinical Elective Courses

Students may register for and take preclinical elective courses during years one and two. They may begin taking electives courses as early as the spring quarter of their first year through winter quarter of their second year. The most current offerings may be viewed on the Midwestern University intranet, but vary from year to year. All preclinical elective courses are graded on a pass/fail basis. Failure of elective courses carry the same weight as failures in core curriculum courses such as Anatomical Sciences, Biochemistry, etc. Courses may include:

- [CLMDG 1301](#) Research - Multiple Disciplines
- [CLMDG 1302](#) Teaching in the Anatomical Sciences
- [CLMDG 1303](#) Osteopathic Clinical Medicine Table Trainers
- [CLMDG 1304](#) Research Dissemination
- [CLMDG 1305](#) The Integration of Medicine and Dentistry: The Future of Patient Healthcare
- [CLMDG 1307](#) Emergency Medicine: Early Exposure Experience
- [CLMDG 1308](#) Addiction Medicine
- [CLMDG 1315](#) ECG Interpretation
- [CLMDG 1346](#) Medical Hypnosis
- [CLMDG 1350](#) Essential Procedures
- [CLMDG 1352](#) Obstetrics and Gynecology Clinical Skills Development
- [CLMDG 1354](#) A Foundation for Leadership in Your Life
- [CLMDG 1355](#) AZCOM Basic Cranial Course
- [CLMDG 1356](#) Medical Spanish
- [CLMDG 1360](#) Point of Care Ultrasound
- [CLMDG 1365](#) Physician Finance and Wellness
- [CLMDG 1402](#) Pediatric Elective
- [CLMDG 1456](#) Medical Improv: Communication, Cognition and Teamwork in Medicine
- [CLMDG 1415](#) Teaching in Humanity in Medicine
- [IPECG 1401A](#) Improving Patient Safety I- Interprofessional
- [IPECG 1402A](#) Improving Patient Safety II - Interprofessional
- [IPECG 1404A](#) Leadership in Healthcare Teams - Interprofessional

## Clinical Rotations

Core clinical rotations are required and include assessment by preceptor evaluations, post-rotation exams, clinical experience logs, and other assignments determined by each clinical department. Core rotations include family medicine, internal medicine, surgery, pediatrics, psychiatry, and obstetrics/gynecology in the third year and emergency medicine and critical care in the fourth year. Additionally, students are required to participate in rural selective, and elective rotations in the third year, as well as medicine selective, surgical selective, and electives in the fourth year.

Students must complete elective rotations in recognized fields of medicine. This is an opportunity to participate in a learning experience that is not part of the core OMS III curriculum. Examples of elective rotations include anesthesiology, cardiology, cardiovascular/thoracic surgery, dermatology, endocrinology/metabolism, gastroenterology, hematology/oncology, infectious disease, nephrology, neurology, neurosurgery, nuclear medicine, obstetrics/gynecology, ophthalmology, orthopedic surgery, otorhinolaryngology, pathology, PM&R, pulmonology, radiology, rheumatology/immunology, urology, research, international, and directed study for osteopathic understanding & business of medicine.

Students may pursue elective clinical rotations at preapproved institutions where an additional agreement to send AZCOM students has been established. Elective rotations may also be taken in any of the required core rotation disciplines. Other elective choices are subject to review and approval by the Associate Dean of Clinical Education. Elective options are also subject to the limitations as noted in the Clinical Rotations Policy Manual.

Matching to a residency is an important part of a student's professional development leading to licensure and expected by Midwestern University. Having its students match to residencies is also important for AZCOM's accreditation requirements. As such, AZCOM is aware that students may be asked to perform 'second look interviews' in connection with matching to a residency program. Although residency takes place after graduation from Midwestern University, the interview process is a standard and regularly anticipated part of the AZCOM program. AZCOM does not provide credit for these second look interviews; however, AZCOM is supportive of student participation in a second look interview and requires that students inform the Clinical Education Department prior to participating in second look interviews, including the location, dates, and specialty. Notification must be sent to the student's assigned coordinator in advance of the second look interview.

# Department Descriptions

## Department of Anatomy

Through a comprehensive course of study in gross anatomy, embryology, histology, and neuroscience, the anatomy curriculum of the basic sciences provides thorough instruction in the morphology of the human body. The study of anatomy is particularly germane to osteopathic medicine because the relationship between structure and function is a fundamental tenet of osteopathic philosophy. Direct observation of human structure is the essence of the Anatomical Sciences course. All students participate in the dissection of the donor under the guidance of the Department of Anatomy faculty in dissection workshops. Dissection is supplemented by the study of surface anatomy, models, osteologic specimens, radiographs and cross sections. In addition, there are concurrent ultrasound workshops to demonstrate the clinical relevance of the anatomy being learned. The curriculum also includes the normal pattern of human development with an emphasis on the development of specific organ systems, the microscopic structure of cells and their organization into tissues and organs, and case studies to apply and reinforce clinical concepts.

## Department of Biochemistry and Molecular Genetics

Biochemistry is the science concerned with the cellular constituents at the molecular level and all the reactions that take place within a living cell. The Department of Biochemistry and Molecular Genetics offers courses dedicated to the understanding of life at the biochemical, genetic, genomic and cellular level. By presenting this molecular knowledge, biochemistry enables physicians of any medical specialty to appreciate the alteration of a cell's properties, structures and functions in diseases. The biochemistry curriculum further builds on research advances to provide the foundation underpinning other basic biomedical sciences, leading to the clinical comprehension of molecular and cell biology, cell metabolism, medical genetics and nutrition. The curriculum also includes a set of workshops with small groups using case-based learning where biochemical concepts are reinforced and applied to select medical cases.

## Department of Clinical Education

The Department of Clinical Education consists of the following clinical departments: Osteopathic Family and Community Medicine, Integrated Medicine, Internal Medicine, Maternal and Child Health, and Surgery and Anesthesia. The department contributes to all four years of the student's pre-doctoral training providing academic knowledge, clinical simulation, assessment and active clinical exposure and training. During the first two years, the student receives training in basic science courses and skills labs, as well as hands-on experiences with standardized patients during Objective Structured Clinical Examinations (OSCEs), and osteopathic manipulative treatment and other clinical skills within Osteopathic Family and Community Medicine. In addition, there are regularly scheduled small groups and lectures to facilitate the clinical application of didactic learning and hands-on experiences. Through these courses, students gain foundational medical knowledge, demonstrate application of clinical skills, and develop professional skills needed for clinical experiences. During the third and fourth years, students build on their academic knowledge through clinical rotation exposure in physician's offices, clinics and hospitals, with direct patient care, post-rotation examinations, and other evaluative tools. Each student is assigned to a Clinical Coordinator, for each of third year and fourth year, who assists the student with rotation scheduling, documentation compliance, and coordination of applications to residencies. Department faculty maintain an open-door policy and are integrally involved in coaching and mentoring students regarding career choices and the residency match process. Through clinical rotations and faculty guidance, medical students gain competence in the integration of medical knowledge, development of differential diagnosis, the reporting of patient care and advancement of professional skills needed to advance to post graduate training in residency. The department also maintains a strong collaboration with the Midwestern University GME Consortium, where medical students are provided clinical rotation opportunities within medical facilities and programs associated with accredited residencies.

## Department of Integrated Medicine

The Department of Integrated Medicine consists of several disciplines: Emergency Medicine, Human Behavior/Psychiatry, Radiology and Point of Care Ultrasound. Human Behavior courses are offered in the first two years, as well as an Introduction to Imaging. Integration of osteopathic principles occurs in each of the courses along with a vertical and longitudinal ultrasound curriculum offered throughout the four year curriculum. Faculty regularly observe, debrief, and grade OSCE experiences throughout the four-year curriculum. During third year clinical rotations, the department manages the core clinical clerkship in Psychiatry. Students are also provided an opportunity to experience Emergency Medicine as an elective in third-year and as a core rotation in fourth year. Radiology, Point of Care Ultrasound, and EMS electives are offered during the third and fourth years. Rotations consist of office-based, hospitalist- based, and residency-based rotation opportunities.

## Department of Internal Medicine

The Department of Internal Medicine participates in the student's didactic undergraduate medical education throughout the four years at AZCOM. The first year involves instruction in patient care experiences, including instruction in history and physical examinations. Faculty participate in the Osteopathic Patient Care (OPC) course with direct video monitoring of students, debriefing of their patient encounters, and SOAP note grading. The department is responsible for the required core clinical clerkship rotations in Internal Medicine during the third year in both residency and preceptor-based General Internal Medicine. During the fourth year, Critical Care, and one rotation within a medical subspecialty are offered. Third year rotations consist of office-based, hospitalist-based, and residency-based rotation opportunities. Elective rotations are also available in third and fourth years in Hematology/Oncology, Rheumatology, Gastroenterology, Neurology, Cardiology, Allergy and Immunology, Sports Medicine, Geriatrics, Pulmonology, Infectious Disease, Nephrology, Endocrinology, Critical Care, and Hospice Care.

## Department of Maternal and Child Health

The Department of Maternal and Child Health participates in the students' medical education during all four years at AZCOM through didactic lectures as well as hands-on skills workshops. In the first and second year, the department faculty participate, lecture and assist in the Osteopathic Patient Care courses on multiple aspects of women's health care.

The department also offers an elective course for second year students who are interested in learning more about Obstetrics and Gynecology and is responsible for the required core clinical rotation in Obstetrics and Gynecology in the third year. A required pre-rotation component features intensive small groups where students participate in hands-on, skill- based workshops involving case presentation and simulation. The skills development workshop consists of a simulation delivery with an interactive birthing that mimics a true labor and delivery experience, followed by a hands-on vaginal delivery with a birthing model, and concludes with a review of suturing skills.

The pediatric faculty teach, lecture and participate in workshops for Osteopathic Patient Care (OPC). The department manages all third and fourth year pediatric rotations. Third year rotations consist of office-based, hospitalist-based, and residency-based rotation opportunities. There are also rural pediatric office rotations within and outside of the state of Arizona for interested students. Fourth year rotations provide opportunities for electives in pediatric subspecialties such as Pediatric Gastroenterology, Pediatric Cardiology, and Neonatology in the Intensive Care Unit.

## Department of Microbiology and Immunology

Through a comprehensive presentation of medical microbiology and immunology, the student is introduced to the fundamental characteristics of pathogenic microorganisms and immune mechanisms. Using an organ-system approach, students receive the information necessary for a foundational understanding of microbial pathogenesis in the context of clinical disease. Pertinent information for various diseases includes the etiology, epidemiology, clinical manifestations, diagnostic procedures, and necessary methods for prevention and control. A separate course in immunology

explores the immune system. The roles of cells and molecules in the protection of the human host as well as their roles in immunologically mediated disorders are explored. Insight into the mechanisms that provide effective defense from infection and malignancy is emphasized.

## Department of Osteopathic Family and Community Medicine

The Department of Osteopathic Family & Community Medicine includes faculty board certified in Family Medicine & Osteopathic Manipulative Medicine, Preventive Medicine and Public Health, Neuromusculoskeletal Medicine, Sports Medicine, and Obesity Medicine. Faculty are involved in medical student training including the integration of osteopathic principles, theory and practice throughout the four years of medical school. Through weekly lecture and lab sessions, pre-clinical students develop physical examination and psychomotor skills for the practice of osteopathic patient care and manipulative medicine (OMM) in addition to skills in differential diagnosis, case presentation, EKG interpretation, medical documentation, prescription writing, evidence-based medicine, biostatistics, ethical and humanistic care, and community health practices. All systems of the body are discussed using a case-based format across the age span, carefully integrating the art of medicine and osteopathic principles with the concepts of medical diagnosis and treatment of common disease entities.

Prior to clinical rotations, all students participate in department-led procedural workshops. During their third year, students are required to complete two core clinical clerkship rotations in Family Medicine. Third year rotations consist of office-based and residency-based rotation sites. Many students have the opportunity to work with department faculty in the Midwestern University Multispecialty Clinic on campus and/or the Midwestern University Comprehensive Care Clinic located in Central Phoenix. Third- and fourth-year students continue to receive ongoing education in osteopathic principles and practices through didactic lectures and labs delivered by department faculty. Multiple elective rotations are offered by the department, including, but not limited to, sports medicine, dermatology, physical medicine & rehabilitation, and addictionology. Faculty are integrally involved in career counseling and mentoring for the various specialties included in our department.

The department offers an OMM Student Scholarship Program with scholars earning an Applied Master of Osteopathic Education over osteopathic year III to V. This program presents an opportunity for students to enhance their skills and knowledge of OMM, participate in teaching in the department, and develop clinical research and leadership skills. Scholars complete their clinical education experience over three calendar years instead of two, which includes patient care experiences integrating osteopathic principles and treatment in a longitudinal clerkship. The OMM Scholar holds specific responsibilities within the department in addition to regular academic requirements. During the scholarship period, the OMM Scholar becomes a vital part of the department. Included are unique experiential courses in osteopathic teaching, leadership, and research. Engagement in community service and quality improvement activities are incorporated into coursework.

The department also supports an Osteopathic Neuromusculoskeletal Medicine (ONMM) Residency program with a weekly didactic and hands-on training session, as well as osteopathic patient care in the campus clinic and an in-patient neuromusculoskeletal medicine consult service. In addition, the department supports the Midwestern University postgraduate residency programs with didactics and OMM workshops, as well as OSCE and procedural training.

## Department of Pathology

Under the tutelage of experienced physicians, specialty board certified in anatomic and clinical pathology, the department's mission is to transition students from the basic sciences learned in their first year into young doctors that can understand the mechanisms and manifestations of disease in a given patient, make a prompt and accurate diagnosis, and understand the pathophysiologic alterations that are targeted for treatment. Three quarters are taught throughout the second year. General pathology is taught in the fall quarter, and specific organ systems are addressed later in the year. Teaching is primarily lecture based with comprehensive coverage of the full spectrum of afflictions affecting patients. Emphasis is placed on early clinical recognition from patient history and presenting signs and symptoms, as well as the selection of the appropriate laboratory and ancillary studies needed

to make a definitive diagnosis. Rationale for surgical, pharmacologic and other medical interventions is presented. Liberal use of case studies in lectures and case-based examination questions incorporated clinical vignettes prepare students for their clinical rotations and for Level 1 of their COMLEX-USA examinations.

## Department of Pharmacology

The science of Pharmacology deals with properties and effects of drugs and, in a more general sense, with the interactions between chemical compounds and living systems. Medical pharmacology focuses on the mechanisms of action, toxicities, and therapeutic uses of biologically active substances in humans. Physicians utilize pharmacology not only to treat but also to prevent disease. At AZCOM, medical students are shown the correlation between pharmacology and related medical sciences, taught how to interpret the actions and uses of major classes of drugs, and instructed in the applications of pharmacodynamics to therapeutics. The course is designed to ensure that students are given the tools to use pharmaceuticals in all areas of the practice of medicine.

## Department of Physiology

The Department of Physiology offers courses that provide a comprehensive understanding of the functions of human organs and organ systems, as well as a sound basis for comprehending the adaptations and functional transitions that occur in disease.

Mastery of physiologic concepts and problem/case- based learning are emphasized to provide a foundation that is conducive to the development of diagnostic skills. In addition to conventional didactic instruction, small group clinical case discussion sessions, problem- based workshops, ultrasound workshops and simulations are used to promote critical thinking, problem solving, and application of physiologic concepts and principles to clinically relevant problems.

## Department of Surgery and Anesthesia

The Department of Surgery and Anesthesia participates in didactic teaching throughout the four years of medical school by teaching, lecturing, and participating in workshops. In the second year, the department offers a skills-based surgery elective. Several small group open forums are offered to interested second year students to provide information on how best to proceed in choosing rotations that will optimally prepare them for their pursuit of a residency in Surgery or Anesthesia. The department is responsible for the required core clinical rotation during the third year in General Surgery. Using both preceptor-based and ward- based clinical settings, this rotation helps the student transition from the classroom to the clinical environment by exposing the student to various aspects of patient care in a General Surgery practice. Prior to the core General Surgery rotation, each student participates in a required skills-based workshop that maximize the student's learning potential and successful completion of the core surgery rotation. The hands-on skills lab consists of five separate stations including airway management; scrubbing, gowning, gloving and operating room etiquette; surgical documentation and chart review for patient management; wound closure principles and techniques; and an OMM station covering the diagnosis and treatment for common postoperative surgical problems. During the rotation, students are required to meet with department faculty in a small-group setting to formally present interesting cases in which they have participated during the rotation. During the fourth year, the department oversees elective surgical rotations including, Anesthesiology, Burns, Colorectal, Neurological Surgery, Ophthalmology, Orthopedic Surgery, Otolaryngology, Plastic and Reconstructive Surgery, Thoracic/Cardiovascular Surgery, Transplant Surgery, Trauma Surgery, Urology, and Vascular Surgery.

Together with the Department of Internal Medicine, the department also coordinates a Surgical Intensive Care Unit (SICU) Core clinical rotation.

# Student Academic Policies

The following academic policies apply to all students who matriculate during the academic year of this catalog publication. These policies will apply throughout the entire time a student is enrolled in the College. In the event that these policies need to be revised as the result of new accreditation requirements, mandates by the United States Department of Education, or other unforeseen circumstances, students will be notified in writing prior to the effective date of the new policy.

Faculty and students should also refer to the University Academic Policy section of the catalog for additional policies that apply to all students at Midwestern University.

## Academic and Career Counseling

### Academic Counseling

To meet the mission of the University and AZCOM, academic counseling by MWU/AZCOM faculty is provided to students over the continuum of the medical school curriculum to help ensure successful completion of the program and graduation.

During the OMS III and OMS IV academic years, academic advising is provided to students as part of an ongoing assessment through members of the Dean's leadership team, department chairs, department faculty, and the Student Promotion and Graduation Committee.

Longitudinal assessment of student performance, and specifically students at academic risk, are monitored and counseled by the Associate Dean for Academic Affairs.

### Career Counseling

#### **AZCOM Office of the Dean**

The Dean's leadership team (Dean, Assistant Dean, Associate Dean of Clinical Education, Associate Dean for Academic Affairs, Associate Dean for Curricular Integration and Faculty Development) maintains an open-door policy. They are integrally involved in coaching and mentoring students throughout medical school regarding their career choices and the residency match process. Additionally, during third year, the Office of the Dean will schedule individual meetings for each student to meet with a member of the Dean's leadership team to discuss their current academic performance, licensing exam score concerns, and preparation for the residency match. Prior to the meeting, students are asked to draft characteristics to be reviewed/edited for inclusion in their Medical Student Performance Evaluations (MSPE). Overall MSPE content is discussed so that students know what to expect. Students will have an opportunity to review their MSPEs before submission to ERAS or other application service applicable to that student's residency specialty.

### AZCOM Clinical Department Chairs and Faculty

The AZCOM Clinical Department Chairs and faculty maintain an open-door policy and are integrally involved in coaching and mentoring students regarding career choices and the residency match process.

Guidance for rotations, interview planning, and rank order match list process is provided individually for all students interested.

## Postgraduate Education/Midwestern University (MWU) Graduate Medical Education (GME) Consortium

Midwestern University offers continuity of osteopathic medical education from the first year of medical school to the final year of postgraduate training. The MWU GME Consortium is an Accreditation Council for Graduate Medical Education (ACGME)- accredited Sponsoring Institution for ACGME-accredited residency and fellowship programs across four hospitals and one clinic. The curriculum includes a multifaceted graduate medical education approach focusing on educational excellence.



Each participating site offers a unique and enriching clinical experience. Our Sponsoring Institution supports a quality clinical learning environment in each program, hospital, and clinic. Our trainees can expect a stimulating educational environment with exposure to a diverse scope, variety, and volume of patients and will participate in a comprehensive curriculum. Graduates will be well-prepared for autonomous practice in rural, urban, and metropolitan areas.

Students may visit the MWU GME Consortium's [website](#) for information on current and new programs under development.

## Academic Review & Progression

There are two Student Promotion and Graduation Committees, the Preclinical Promotions Committee (PPC) and the Student Promotion and Graduation Committee (SPGC). These committees are comprised of medical school faculty who review the academic performance of students and assess students for promotion to the next academic year, or for graduation. The PPC assesses students in the preclinical years, and the SPGC assesses students in the clinical years.

## Academic Surveillance, Warning and Probation

*Good academic standing* is achieved by maintaining a C or better average in all courses/rotations at all times. A student on academic warning or academic probation is not considered to be in good academic standing. To return to good academic standing, a student must retake the failed courses/rotations, and incur no further failures. Academic warning and academic probation must be reported in the Medical Student Performance Evaluation (MSPE) released to the student's residency application service(s).

*Advanced standing* is not granted for currently enrolled students. Full credit is granted for course work completed by students transferring from another COCA-accredited institution for the purpose of completing their course of study at AZCOM.

*Academic warning* is issued by the AZCOM Office of the Dean and does not require the student to meet with the Preclinical Promotions Committee, or the Student Promotion and Graduation Committee, when a student has failed a single course/rotation. Academic warning represents notice that continued substandard academic performance may compromise the student's ability to pass one or more courses/rotations. Academic warning is not noted on the transcript. A student who is failing a course/rotation is required to meet with the course director or course faculty to formulate a plan of action. A student who is failing more than one course/rotation is required to meet with a representative of the Office of the Dean to formulate a plan to achieve academic success.

*Academic probation* is defined as failure of two or more courses/rotations, or a failure of any level of COMLEX- USA. Academic probation is recommended by the Preclinical Promotions Committee, or the Student Promotion and Graduation Committee, and is issued by the Dean of AZCOM when a student meets this criterion, which represents notice that continued substandard academic performance may result in dismissal. When a student is placed on academic probation it is noted in the student's permanent academic file. A student on academic probation is required to meet with a representative of the Office of the Dean to formulate a plan for academic success. When a student remediates the failed course(s) or failed COMLEX-USA exam and returns to good academic standing, this is also noted in the student's file. Academic probation is not noted on the transcript. Students on academic warning or probation are ineligible to hold student organization offices, or to participate in international rotations.

## Preclinical Promotions Committee

The Preclinical Promotions Committee (PPC) is charged with maintaining academic and professional standards of excellence in the preclinical courses. At a minimum, the committee meets after the conclusion of each academic quarter to assess the academic status of students with an academic failure. The committee assesses the progress of each student at the end of the academic year. Students who attain satisfactory academic and professional progress are promoted to the next academic year,

provided all tuition and fees have been paid. Students who accumulate two or more failures in the preclinical years, and students in the Extended Study Program (ESP) who accumulate one or more failures in the preclinical years are required to meet with the Preclinical Promotions Committee. Failure of the student to appear when required may result in disciplinary action, and does not constitute a reason for appeal. Students not in an extended study program who have one failure have the option to meet with the committee, but are not required to meet. Notification of the date, time and venue of the committee meeting is sent to the student by priority e-mail to the official MWU student e-mail account, at least two business days in advance. Decisions of the committee are confidentially e-mailed to the student's official MWU e-mail account. The right to appeal a decision for dismissal or program extension exists and is described elsewhere in this catalog. Appeals must be filed in writing, using the student's official MWU e-mail account, with the Dean of AZCOM within three business days following official notification of the committee decision.

## Preclinical Promotions Committee or Student Promotion and Graduation Committee -- Guidelines for Course and Rotation Failures\*

<b>Didactic Course or Clinical Rotation</b>	<b>Usual Action*</b>	<b>Academic Status</b>	<b>Repeat Course Timing</b>	<b>Action Following Remediation</b>
All Passed	Promote or Graduate	Good Standing	N/A	N/A
One course or one rotation failure	Retake course/rotation	Warning	Summer, Extended Study Program (ESP), or on committee recommended schedule	Pass: Promote Fail: Dismiss
Any combination of course or rotation failures resulting in two failures	Retake courses/rotations	Probation	Summer, Extended Study Program (ESP), or on committee recommended schedule	Pass both: Promote Fail either: Dismiss
Any combination of course or rotation failures resulting in three failures	Recommend Dismissal			

All course and/or rotation failures are cumulative throughout the duration of enrollment at AZCOM.

\* Action may be modified by the Preclinical Promotions Committee or the Student Promotion and Graduation Committee.

Failures in elective courses and non-core rotations carry the same weight as failures in core curriculum courses.

## Student Promotion and Graduation Committee

The Student Promotion and Graduation Committee (SPGC) meets, as needed, to review academic and professional progress of students in the third and fourth years. Students who attain satisfactory academic and professional progress are promoted to the next academic year, provided all tuition and fees have been paid. Students who accumulate two or more didactic course, or rotation failures, after the preclinical years, students who have failed any section of COMLEX-USA Levels 1 or 2CE, and students with identified academic or professional deficiencies are required to meet with the committee. Failure to appear when required may result in disciplinary action and does not constitute a reason for appeal. Notification of the date, time, and venue of the committee meeting is sent to the student at least two business days in advance by priority e-mail to the student's official MWU e-mail account. Decisions of the committee are confidentially e-mailed to the affected student using the student's official MWU e-mail account. The right of appeal exists and is described elsewhere in this catalog. Appeals must be filed in writing with the Dean of AZCOM within three (3) business days following official notification of the committee decision.

The Student Promotion and Graduation Committee also recommends to the Faculty Senate for graduation those students who have successfully completed all curriculum requirements, who have passed COMLEX- USA Level 1 and COMLEX-USA Level 2 CE of the National Board of Osteopathic Medical Examiners examinations, and who have paid all tuition and fees.

## Appeal Process

Following notification of a decision by the Preclinical Promotions Committee, or the Student Promotion and Graduation Committee, a student may appeal the decision in writing within three business days to the Dean of AZCOM. The Dean may grant an appeal only if a student can demonstrate one of the following:

- Bias of one or more committee members
- Material information not available to the committee at the time of its initial decision (not to include student's decision not to appear at required attendance meeting of the committee)
- Procedural error

During the appeal process, students must continue to attend classes. Failure of the student to meet with the Preclinical Promotions Committee, or the Student Promotion and Graduation Committee, does not constitute a reason for appeal.

## Attending Off-Campus Meetings, Conferences, Events

Students interested in attending osteopathic or other professional conferences, lobby/advocacy days, specialty-focused meetings, or any medically or educationally related presentation offered while classes are in session must submit a written request for an excused absence a minimum of 14 days prior to the event date for students in the first 2 years.

Students must be in good academic standing. First and second year students must receive written approval from the course directors of the courses they will miss and from a representative of the Office of the Dean to attend the event. Third and fourth year students should follow the procedure for obtaining an excused absence from rotations as described in the Clinical Rotation Manual.

Students are advised to wait until approval has been granted prior to making travel arrangements. Any costs incurred due to a student being denied approval to attend an off-campus event are the sole responsibility of the student.

Please refer to the Clinical Rotation Manual for further information regarding third and fourth year students making similar requests.

## Clinical Rotation Attendance Policy

Third and fourth year students must attend all clinical rotations. The Department of Clinical Education establishes its own attendance requirements as stated in the Clinical Rotation Manual. Attendance and on- call requirements for clinical rotations, as well as AZCOM scheduled events, take precedence over non- rotation events. Students must assure that the requirements of each clinical rotation are understood and will be met prior to scheduling non-rotation events. Refer to the Clinical Rotation Manual for details.

## COMLEX-USA Exam Policy

*Students must pass COMLEX-USA Level 1, COMLEX-USA Level 2 CE examinations and a clinical skills assessment to be eligible to graduate.*

*COMLEX-USA Pass Rate and Average Score Historical first-time pass rates and average scores by AZCOM students and graduates for COMLEX-USA Levels 1, 2 CE, and 3 can be found on the [AZCOM Program Statistics](#) webpage.*

## COMLEX-USA Eligibility

The Dean of AZCOM must certify a student is in good academic and professional standing for a student to register for and take COMLEX-USA Level 1 and Level 2CE. Students must successfully complete all second- year course requirements, and meet other requirements as established by the Office of the Dean, prior to authorization to take COMLEX-USA Level 1. For those students authorized to take

COMLEX-USA Level 1, the initial attempt to pass the examination must occur prior to the start of rotation unless otherwise authorized by the Office of the Dean. Students begin clinical rotations while awaiting results of the first examination attempt.

Students must pass the COMLEX-USA Level 1 examination and meet requirements as established by the Office of the Dean prior to taking COMLEX-USA Level 2 CE. For Level 2 CE, the initial attempt at the examination must be taken within 90 days of the end of all OMS III course requirements.

Per National Board of Osteopathic Medical Examiners (NBOME) requirements, the AZCOM Dean may not certify graduates to register for and take the COMLEX- USA Level 3, except under limited circumstances.

The United States Medical Licensing Examination (USMLE) is not a substitute for any component of the COMLEX-USA examination, and does not fulfill a graduation requirement.

### **COMLEX-USA Level 1**

Any student who fails the COMLEX-USA Level 1 examination on the first attempt will be permitted to complete the clinical rotation in which the student is participating at the time of the failure notification. The student will be required to complete a program of study as directed by the Dean of AZCOM, or Dean's designee, and may be placed on a mandatory academic leave (not to exceed four months). The student will be placed on academic probation until the passing COMLEX-USA Level 1 score is received.

Any student who fails the COMLEX-USA Level 1 examination a second time will be allowed to complete the clinical rotation in which the student is participating at the time of failure notification. The student must meet with the Student Promotion and Graduation Committee to determine the most appropriate course of action for the third attempt. The student may be placed into a second dedicated study period and/or academic leave for a maximum of four months. The student may not participate in rotations until a passing score is received. Upon receipt of a pass, the student may resume rotations on the next scheduled block.

All retakes of COMLEX-USA Level 1 must be completed within one year of the date of the initial failure. At no time will the student be placed on mandatory or elective leave to prepare for COMLEX-USA Level 1 that will delay student progress to the extent that it would take more than six years from matriculation for completion of the D.O. program.

A student who fails COMLEX-USA Level 1 a third time will be recommended for dismissal.

### **COMLEX-USA Level 2 CE**

Any student who fails the COMLEX-USA Level 2 CE examination (with no prior failures of any COMLEX-USA component) will be permitted to complete the clinical rotation in which the student is participating at the time of failure notification as directed by the Dean of AZCOM, or the Dean's designee, and may be placed on mandatory academic leave (not to exceed four months) as outlined in the Student Promotion and Graduation Committee guidelines. If on an academic leave of absence, the student may resume rotations on the next scheduled block after having taken the examination for the second time and is awaiting the results. The student will be placed on academic probation until the passing COMLEX-USA Level 2 CE score is received.

Any student who fails COMLEX-USA Level 2 CE a second time (with no prior failures of any other COMLEX-USA component) will be referred to the Student Promotion and Graduation Committee to determine a course of action, which may include a mandatory academic leave of absence not to exceed four months in length. The student will remain on academic probation until the examination is passed. The student may not return to rotations until a passing score is received. All retakes of COMLEX-USA Level 2 CE, must be completed within one year of the date of the initial failure.

Any student who accumulates two COMLEX-USA failures (in any combination of levels/examinations) will be referred to the Student Promotion and Graduation Committee to determine a course of action.

The committee will review the student's academic record and use this information to decide whether the student may return to clinical rotations while awaiting the results of the COMLEX-USA retake, or if the student may not return to rotations until a passing score is achieved.

A student who accumulates three COMLEX-USA failures of the same level, or any combination of COMLEX-USA Levels 1 or 2 CE examinations, will be recommended for dismissal.

## Student Promotion and Graduation Committee Guidelines for COMLEX-USA Failures\*

Exam	Usual Action*	Academic Status	Repeat Course Timing	Action Following Retake*
All Passed	Continue in program	Good standing	N/A	N/A
One COMLEX-USA failure	Retake failed COMLEX-USA component after study and remediation plan is complete.	***Academic probation until passed.	Retake period will be recommended by the Student Promotion and Graduation Committee and determined by the Office of the Dean; not to exceed four months.	Pass: Continue in program Fail: See next row
Two COMLEX-USA failures (any combination of levels)	Retake failed COMLEX-USA component after study and remediation plan is complete.	**Academic probation until passed.	Retake period will be recommended by the Student Promotion and Graduation Committee and determined by the Office of the Dean; not to exceed four months. The student may return to rotations should the COMLEX-USA Level be passed.	Pass: Continue in program Fail: See next row
Three COMLEX-USA failures (any combination of levels)	Recommend Dismissal			

\* Action may be modified by the Student Promotion and Graduation Committee.

\*\* An academic leave of absence is noted on the student's transcript and academic record; academic probation is noted in the academic record. Both are reported in the Medical Student Performance Evaluation (MSPE).

## Course Withdrawal from One or More Courses

Please refer to the Midwestern University section of the catalog under Academic Policies, Withdrawal.

## Criminal Background Check

AZCOM conducts pre-matriculation criminal background checks as required by Arizona state law. Each student is expected to obtain and produce a copy of a fingerprint background card obtained at the student's expense upon matriculation. Affiliation agreements may require additional fingerprinting or background checks, which will be done at the student's own expense.

## Disciplinary Warning/Probation

Disciplinary Warning or Probation occurs for student acts of professional misconduct as defined in Appendices 2 and 4 of the Midwestern University Student Handbook. Disciplinary Warning or Probation is not noted on the transcript. It is kept in the student's permanent academic file. Disciplinary Warning and Probation information may be shared with clinical sites that are affiliated with Midwestern University educational programs and is documented in the Medical Student Performance Evaluation (MSPE).

## Dismissal

Matriculation in medical school is a privilege, not a right. Therefore, a student may be dismissed for any of the following reasons:

1. Failure to exhibit the personal and professional qualifications prerequisite to the practice of medicine, such as acts of dishonesty, including but not limited to cheating on examinations or course work, and falsification of patient records/logs, including writing medical notes for themselves, verbal reports, or plagiarism,
2. Violation of MWU and AZCOM rules and regulations that have been stipulated to be grounds for dismissal,
3. Failure to achieve minimum academic standards in courses, rotations, or COMLEX-USA policies as described in the Student Promotion and Graduation Committee tables,
4. Falsification of admission records,
5. Failure to meet and maintain technical standards,
6. Irregular behavior during COMLEX-USA testing,
7. Conviction of a felony or other criminal offense,
8. Failure to report a criminal arrest,
9. Intentional or inappropriate access or release of patient medical records or other violation of HIPAA laws.

Students who fail three or more courses/rotations cumulatively are recommended for dismissal. Students who have failed any combination of levels of COMLEX- USA three times are recommended for dismissal. The Student Promotions and Graduation Committee and the Preclinical Promotions Committee reserve the right to change the usual actions for reasons of additional consideration. The committee decision may be appealed to the Dean of AZCOM in accordance with policies found elsewhere in this catalog.

## Readmission after Dismissal for Poor Academic Performance

Students who have been dismissed are not eligible for readmission. Students who have withdrawn when facing dismissal are not eligible for readmission.

## Dual Degree Opportunities

Selected students who have demonstrated the capacity to successfully manage course work for their primary academic degree, may request to enroll in a second degree program. This can be developed in four different settings:

- Students who are enrolled in one of the Midwestern University (MWU) Masters Degree programs in Arizona and are accepted at AZCOM may elect to complete the Masters Degree already begun.
- Students who wish to pursue a Masters Degree or certificate in Precision Medicine (MS), or Master in Public Health (MPH) at Midwestern University, may enroll through the College of Graduate Studies at the discretion of an Office of the Dean representative.
- A student who wishes to pursue a Masters Degree which is not offered at MWU (may include but not be limited to MPH, MBA, MEd) should investigate information about the desired program and discuss with an Office of the Dean representative. Students have a number of options for institutions offering such degrees in the metropolitan area.
- Students who wish to apply for a PhD program anywhere in the United States should investigate information about the desired program and discuss with an Office of the Dean Representative. Typically, those entering a leave of absence to participate in a PhD program will do so between years 2 and 3 of the DO program and may not enter the PhD program until after successfully completing the COMLEX-USA Level 1 examination. Participating in a Ph.D. program, may extend the completion date beyond 6 years.

## Extended Study Program (ESP)

### **Academic Extended Study Program**

A student may be placed in the Extended Study Program (ESP) for academic reasons at the recommendation of the Preclinical Promotions Committee or AZCOM Deans Office. If a student is placed in ESP, such action does not modify or limit the Preclinical Promotions Committee's recommendation for academic warning or probation or dismissal. Thus, the student may be dismissed for academic reasons while in ESP.

Students will be assessed tuition for any additional years of instruction while enrolled. Placement in the Extended Study Program will change the student's expected date of graduation. Students may not be extended in both preclinical years. ESP does not change the 6 year maximum to completion of the D.O. degree.

### **Non-Academic Extended Study Program**

The purpose of this program is to provide additional time to address significant personal issues by creating a program of study that allows students to complete the first two years of the curriculum in three years.

Students must petition the Dean of AZCOM to become an ESP student no later than the completion of 50% of a quarter. Requests received after that time are reviewed by the Dean and granted only for reasons of substantiated hardship or medical emergency. Students who voluntarily enter ESP may be permitted to retake courses over the summer, at AZCOM or another approved institution, at the discretion of the AZCOM Deans Office. Students will be assessed tuition for any additional years of instruction. Placement in the Extended Study Program will change the student's expected date of graduation. Students may not be extended in both preclinical years and be enrolled. Program completion may not extend beyond 6 years from matriculation.

## Grade Point Average

Courses are recorded in terms of quarter hour(s) of credit. Multiplication of the credits for a course by the numeric value for the grade awarded gives the number of quality points earned for a course. Dividing the total number of quality points earned in courses by the total number of credits in those courses gives the grade point average. Grades reported as Pass (P), Withdrawal (W), or Withdrawal Failing (WF) are recorded on the student's permanent record but are not used in the calculation of the student's grade point average.

The student's session and cumulative grade point averages are computed and recorded by the Office of the Registrar. The grade point average is calculated at the end of each session and at the end of the academic year, and does not include grades or credits for audited courses, or courses with a grade of Withdrawal (W), Withdrawal Failing (WF), or Failed (F) courses that were later successfully repeated. The grades for transfer courses required by the University or College (e.g. to remediate a failed course) are included in the grade point average (see Grade for Retaken Course, below).

## Grade for Retaken Course

If a student receives a failing grade, that grade is recorded on the transcript as a letter grade (an "F" entry). Upon repetition of a failed course, the original grade of "F" remains on the transcript, and the repeated course and new grade are entered on the transcript.

The grade for a failed course repeated and passed at Midwestern University, or at an outside institution is recorded on the transcript as a grade of "C." For all failed clinical rotations at Midwestern University that are repeated and passed, a grade of "C" will be recorded on the transcript. For both preclinical coursework and clinical rotations that are repeated, the original failing grade will remain on the transcript but will not be included in the GPA calculations. The grade of "C" will be included in the GPA calculation. If a repeated preclinical course or clinical rotation is failed, a grade of "F" is again recorded on the transcript. Students who fail a course a second time will be recommended for dismissal.

AZCOM students may not repeat passed courses for the purpose of improving a grade. For academic reasons, the Student Promotion and Graduation Committee (SPGC) may require a passed rotation to be repeated.

## Grading System

Students receive letter grades corresponding to the level of achievement in each course, based on the results of examinations, required course work, and, as applicable, other established criteria. The letter grades, percent ranges, and quality points per credit are as follows:

Grade	Percent (%)	Quality Points (per credit)	Comments
A	93-100	4.000	--
A-	90-92	3.670	--
B+	87-89	3.330	--
B	83-86	3.000	--
B-	80-82	2.670	--
C+	77-79	2.330	--
C	70-76	2.000	--
F	<70	0.000	--
I	--	0.000	An Incomplete grade may be assigned by a course director when a student's work is of passing quality but incomplete, or if a student qualifies for re-examination. It is the responsibility of the student to request an extension from the course instructor. By assigning an "I" grade, it is implied that an instructor agrees that the student has a valid reason and should be given additional time to complete required coursework. All incomplete grades must be resolved within 10 calendar days from the end of finals for the quarter. In the case of courses ending prior to final exam week, it is the obligation of the course director to monitor the use and resolution of the incomplete grade, with notice to the Registrar. If an incomplete grade remains beyond 10 days, it may be converted to a grade of "F," which signifies failure of the course.
IP			In Progress grades may be assigned by a course director under certain circumstances (illness, family death, etc.) when incomplete work cannot be resolved within a 10-day period. An outstanding grade should not extend for more than one quarter with notification to the Registrar.
P	--	0.000	A Pass designation indicates that the student has made satisfactory progress or completed required coursework satisfactorily. Grade of 'P' is counted toward credit hour accruals for graduation but is not counted in any GPA calculations.
W	--	0.000	Withdrawal is given if the grade achieved up to the time of the withdrawal is >70% or >C. Withdrawal is not counted in the GPA calculation, and is not counted in credit hour accrual for graduation. Refer to Midwestern University academic policies for more information.
W/F	--	0.000	A Withdrawal/Failing is given after 50% of a course is completed and the grade achieved up to the time of withdrawal is <70% or <C. Withdrawal/Failing is not counted in the GPA calculation, and is not counted in credit hour accrual for graduation. Refer to Midwestern University academic policies for more information.
AU	--	0.000	This designation indicates an audited course, that is, a student registered for a course with the understanding that neither academic credit nor a grade is earned. The course status may not be changed from audit to full credit after the start of the quarter. The designation AU is not counted in the GPA calculation.
PG	--	0.000	The designation of PG indicates a pending grade.

*These grading scales apply to all courses unless otherwise noted in the course syllabus.*

## Immunization and Screening Policy

Full-time students enrolled in a program with a clinical component are required to follow the immunization and screening policy as outlined in the general screening policy section of the Midwestern University Student Handbook. Immunization requirements for AZCOM students are subject to current applicable state health department protocols and affiliated site/hospital rotation requirements. Students who do not follow the immunization and screening policy by the stated



deadline may jeopardize their acceptance or continued enrollment in the College. If, at any time, testing attestation of disease-free state, or immunizations expire, students may be placed on a mandatory leave of absence until such time that they are in full compliance with this requirement.

While immunization waiver is available for medical and religious reasons, lack of immunization may impact rotation availability and could delay or stop clinical rotations.

## Health Insurance Coverage Policy

AZCOM students are required to follow the health insurance policy as outlined in the Midwestern University Student Handbook. Insurance requirements for AZCOM students are subject to state health department protocol and affiliated hospital rotation requirements. AZCOM students insured by Medicaid must purchase a personal commercial policy to cover themselves when outside of their home state. AZCOM students who do not follow the insurance policy by the stated deadline may jeopardize their acceptance or continued enrollment in the College. Proof of insurance will be required annually.

## Liaison Structure

### **Student/Faculty Liaison Committee, First and Second Years**

These two committees consist of a faculty liaison who is involved in the first or second year curriculum and two students elected by the first and second year classes.

The faculty liaison is appointed by the Dean of AZCOM, and each class elects student liaisons according to the guidelines stated in the current Midwestern University Student Handbook. The student liaisons and the faculty liaisons generally meet once a quarter to discuss questions the class may have regarding University policy, academic and nonacademic issues that relate to the teaching environment in the first and second years. The faculty liaison reports on meetings that have taken place at the Dean's Advisory Council meetings.

### **Student/Faculty Liaison Committee, Third and Fourth Years**

This committee consists of the AZCOM Associate Dean for Clinical Education and other faculty members of the Department of Clinical Education. The presidents of the third and fourth year classes are the student representatives. The committee generally meets on an as-needed basis to discuss questions the class may have regarding University policy, academic and nonacademic issues that relate to the teaching environment in the third and fourth years. One of the faculty liaisons reports on meetings that have taken place at the Dean's Advisory Council meetings.

## **Dean's Advisory Council**

The Dean's Advisory Council serves as a forum for communication between faculty, staff and student leaders. The faculty liaisons from the Student/Faculty Liaison Committees are members of Dean's Advisory Council. Meetings are scheduled at the discretion of the Dean of AZCOM.

## Promotion Policy

Students must meet all requirements for their class year in order to be promoted to the next class year.

## Supervision of Medical Students by Licensed Healthcare Providers

While on clinical rotations, medical students must have direct, on-premises supervision by licensed healthcare providers within their scope of practice and with appropriate qualifications in their disciplinary fields who are licensed to practice medicine in the state in which care is being provided. In the case of physicians, the physician must be AOA or ABMS board certified/eligible to serve as a preceptor or clinical faculty member. Any licensed healthcare provider, as defined above, who is designated as a teacher for AZCOM students, is recognized to be a member of the extended faculty. Health professionals providing health services to a student, through a therapeutic relationship, must

recuse themselves from the academic assessment or promotion of the student receiving those services.

## MWU GME Consortium

The [AZCOM Program Statistics webpage](#) provides historical match rates to graduate medical education programs accredited by the Accreditation Council for Graduate Medical Education (ACGME).

Through its membership in the MWU GME Consortium, AZCOM offers a continuity of osteopathic medical education from the first year of medical school to the final year of postdoctoral training. With unique predoctoral and postdoctoral teaching and training opportunities at some of the finest healthcare facilities in the Midwest and Southwest, as well as around the country, AZCOM and MWU GME-affiliated hospitals consistently lead the nation in terms of cutting-edge technology, treatment, and care.

The ACGME accredits the MWU GME Consortium and serves as a Sponsoring Institution for ACGME-sponsored accredited residency programs in Arizona. It also provides resources and accreditation services to institutions that sponsor GME programs. With a focused commitment to osteopathic principles and practices, development, and support of clinical rotations, the MWU GME Consortium programs include residencies in primary disciplines and fellowship programs and have received accreditation from the ACGME.

AZCOM and the MWU GME Consortium are broad-reaching in scope, resulting in a multifaceted approach to graduate medical education focusing on primary care. Each training site provides the highest-quality clinical experience to train future physician healthcare professionals. The goal is to provide access to resources to facilitate a quality clinical learning environment within each program across each hospital site and clinic. Our trainees can expect a stimulating educational environment with exposure to a diverse variety, scope, and volume of patients.

## AOA Code of Ethics

AZCOM faculty has adopted the Code of Ethics established by the American Osteopathic Association as quoted directly below:

The American Osteopathic Association (AOA) has formulated this Code to guide its member physicians in their professional lives. The standards presented are designed to address the osteopathic physician's ethical and professional responsibilities to patients, to society, to the AOA, to others involved in health care and to self.

Further, the American Osteopathic Association has adopted the position that physicians should play a major role in the development and instruction of medical ethics.

**Section 1.** The physician shall keep in confidence whatever the physician may learn about a patient in the discharge of professional duties. The physician shall divulge information only when required by law or when authorized by the patient.

**Section 2.** The physician shall give a candid account of the patient's condition to the patient or to those responsible for the patient's care.

**Section 3.** A physician-patient relationship must be founded on mutual trust, cooperation and respect. The patient, therefore, must have complete freedom to choose a personal physician. The physician must have complete freedom to choose patients whom the physician will serve. However, the physician should not refuse to accept patients for reasons of discrimination, including, but not limited to, the patient's race, creed, color, sex, national origin, sexual orientation, gender identity or handicap. A physician should always be available to provide emergency services.

**Section 4.** A physician is never justified in abandoning a patient. The physician shall give due notice to a patient or to those responsible for the patient's care when the physician withdraws from the case so that another physician may be engaged.

**Section 5.** A physician shall practice in accordance with the body of systematized and scientific knowledge related to the healing arts. A physician shall maintain competence in such systematized and scientific knowledge through study and clinical applications.

**Section 6.** The osteopathic medical profession has an obligation to society to maintain its high standards and, therefore, to continuously regulate itself. A substantial part of such regulation is due to the efforts and influence of the recognized local, state and national associations representing the osteopathic medical profession. A physician should maintain membership in and actively support such associations and abide by their rules and regulations.

**Section 7.** Under the law a physician may advertise, but no physician shall advertise or solicit patients directly or indirectly through the use of matters or activities, which are false or misleading.

**Section 8.** A physician shall not hold forth or indicate possession of any degree recognized as the basis for licensure to practice the healing arts unless the individual is actually licensed on the basis of that degree in the state in which the physician practices. A physician shall designate the individual's osteopathic school of practice in all professional uses of the physician's name. Indications of specialty practice, membership in professional societies, and related matters shall be governed by rules promulgated by the American Osteopathic Association.

**Section 9.** A physician should not hesitate to seek consultation whenever the physician believes it advisable for the care of the patient.

**Section 10.** In any dispute between or among physicians involving ethical or organizational matters, the matter in controversy should first be referred to the appropriate arbitrating bodies of the profession.

**Section 11.** In any dispute between or among physicians regarding the diagnosis and treatment of a patient, the attending physician has the responsibility for final decisions, consistent with any applicable osteopathic hospital rules or regulations.

**Section 12.** Any fee charged by a physician shall compensate the physician for services actually rendered. There shall be no division of professional fees for referrals of patients.

**Section 13.** A physician shall respect the law. When necessary a physician shall attempt to help to formulate the law by all proper means in order to improve patient care and public health.

**Section 14.** In addition to adhering to the foregoing ethical standards, a physician shall recognize a responsibility to participate in community activities and services.

**Section 15.** It is considered sexual misconduct for a physician to have sexual contact with any current patient whom the physician has interviewed and/or upon whom a medical or surgical procedure has been performed.

**Section 16.** Sexual harassment by a physician is considered unethical. Sexual harassment is defined as physical or verbal intimation of a sexual nature involving a colleague or subordinate in the workplace or academic setting, when such conduct creates an unreasonable, intimidating, hostile or offensive workplace or academic setting.

**Section 17.** From time to time, industry may provide some AOA members with gifts as an inducement to use their products or services. Members who use these products and services as a result of these gifts, rather than simply for the betterment of their patients and the improvement of the care rendered in their practices, shall be considered to have acted in an unethical manner. (Approved July 2003)

**Section 18.** Physicians shall not intentionally misrepresent themselves or their research work in any way.

**Section 19.** When participating in research, a physician shall follow the current laws, regulations and standards of the United States or, if the research is conducted outside the United States, the laws, regulations and standards applicable to research in the nation where the research is conducted. This standard shall apply for physician involvement in research at any level and degree of responsibility, including, but not limited to, research, design and funding either as examining and/or treating provider, supervision of other staff in their research, analysis of data and publication of results in any form for any purpose.

## Osteopathic Medicine Program Calendar

MS-I, MS-II

Summer 2025

Holiday	Class	Date
Memorial Day	<b>*No Classes*</b>	<b>May 26, 2025</b>
Juneteenth (Observed)	<b>*No Classes*</b>	<b>June 19, 2025</b>
Independence Day (Observed)	<b>*No Classes*</b>	<b>July 4, 2025</b>

Fall 2025

Holiday	Class	Date
Orientation	MS-I	August 4 - 6, 2025
Classes Begin	MS-I, MS-II	August 11, 2025
Last Day to Add/Drop Classes	MS-I, MS-II	August 15, 2025
<b>Labor Day *No Classes*</b>	<b>*No Classes*</b>	<b>September 1, 2025</b>
<b>White Coat Ceremony</b>		<b>September 26, 2025</b>
Last Day of Classes	MS-I, MS-II	October 17, 2025
Quarterly Exams	MS-I, MS-II	October 20 - 24, 2025
Fall Break	MS-I, MS-II	October 27 - 31, 2025

Winter 2025

Event	Class	Date
Classes Begin	MS-I, MS-II	November 3, 2025
Last Day to Add/Drop Classes	MS-I, MS-II	November 7, 2025
Thanksgiving Break	MS-I, MS-II	November 24 - 28, 2025
Winter Break	MS-I, MS-II	December 22, 2025 - January 2, 2026
Classes Resume	MS-I, MS-II	January 5, 2026
<b>Martin Luther King/ Jr. Day</b>	<b>*No Classes*</b>	<b>January 19, 2026</b>
Last Day of Classes	MS-I, MS-II	January 30, 2026
Quarterly Exams	MS-I, MS-II	February 2 - 6, 2026
Spring Break	MS-I, MS-II	February 9 - 13, 2026

## Spring 2026

Event	Class	Date
Classes Begin	MS-I, MS-II	February 16, 2026
Bridging Ceremony	MS-II	TBA
Last Day to Add/Drop Classes	MS-I, MS-II	February 20, 2026
Last Day of Classes	MS-I, MS-II	April 24, 2026
Quarterly Exams	MS-I	April 27 - May 1, 2026
Quarterly Exams	MS-II	April 27 - May 8, 2026
Quarter Break	MS-I	May 4 - August 7, 2026
Quarter Break	MS-II	May 11 - 29, 2026
<b>Memorial Day</b>	<b>*No Classes*</b>	<b>May 25, 2026</b>
<b>Commencement</b>		June 1, 2026 9:00 a.m.

## MS-III/MS-IV ROTATIONS

Term	Rotation	Date
Summer	Rotation Block 1	June 9 - July 4, 2025
Summer	Rotation Block 2	July 7 - August 1, 2025
Summer	Rotation Block 3	August 4 - August 29, 2025
Fall	Rotation Block 4	September 1 - September 26, 2025
Fall	Rotation Block 5	September 29 - October 24, 2025
Fall	Rotation Block 6	October 27 - November 21, 2025
Winter	Rotation Block 7	November 24 - December 19, 2025
Winter	Vacation	December 22, 2025 - January 2, 2026
Winter	Rotation Block 8	January 5 - 30, 2026
Winter	Rotation Block 9	February 2 - 27, 2026
Spring	Rotation Block 10	March 2 - 27 2026
Spring	Rotation Block 11	March 30 - April 24, 2026
Spring	Rotation Block 12	April 27 - May 22, 2026
	<b>Memorial Day</b>	<b>May 25, 2026</b>
	Senior Week	May 26 - 29, 2026

Last Revision: 05/9/2025

# Faculty

## Administrative Faculty

### **Lori A. Kemper, D.O., M.S.**

AT Still University, Kirksville College of Osteopathic Medicine

Dean, Arizona College of Osteopathic Medicine

Clinical Professor

### **Katherine A. Mitzel, D.O.**

Midwestern University, Arizona College of Osteopathic Medicine

Associate Dean, Curricular Integration and Faculty Development

Clinical Professor

### **Randall L. Nydam, Ph.D.**

University of Oklahoma

Associate Dean, Academic Affairs

Professor

### **Sean C. Reeder, D.O.**

Kansas City University of Medicine and Biosciences, College of Osteopathic Medicine

Associate Dean, Department of Clinical Education

Clinical Associate Professor

### **Shannon C. Scott, D.O.**

Arizona College of Osteopathic Medicine

Assistant Dean, Medical Director, Midwestern

University Multispecialty Clinic

Clinical Professor

### **Yir Gloria Yueh, Ph.D.**

University of Connecticut

Vice President and Chief Academic Officer

Colleges of Medicine and Graduate Studies

Professor

## Anatomy Faculty

### **Wade Grow, Ph.D., Chair**

University of Idaho

Professor

### **Karen Baab, Ph.D.**

City University of New York

Professor

### **Justin Georgi, Ph.D.**

Stony Brook University

Professor

### **Ari Grossman, Ph.D.**

Stony Brook University

Professor

### **Margaret Hall, Ph.D.**

Stony Brook University

Professor

### **Christopher Heesy, Ph.D.**

Stony Brook University

Professor

### **Sandra Inouye, Ph.D.**

Northwestern University

Associate Dean of Academic Affairs, College of Graduate Studies

Dir. of Anatomical Laboratories & Body Donation Program

Professor

### **T. Bucky Jones, Ph.D.**

Ohio State University

Professor

### **Jason Kaufman, Ph.D.**

Washington University, St. Louis

Professor

### **Andrew Lee, Ph.D.**

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Professor

### **Leigha Lynch, Ph.D.**

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### **Matthew O'Neill, Ph.D.**

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### **Erin Simons, Ph.D.**

Ohio University

Professor

### **Heather Smith, Ph.D.**

Arizona State University

Professor

### **Beth Townsend, Ph.D.**

Washington University, St. Louis

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University of Texas, Austin

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## Biochemistry and Molecular Genetics Faculty

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New York University  
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**Kathryn Lawson, Ph.D.**  
University of Arizona  
Associate Professor

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## Integrated Medicine Faculty

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Assistant Professor

**Dhritiman Samanta, Ph.D.**

The University of Southern Mississippi  
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**Gwen Wodiuk, DNP, FNP-C**

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& Health Sciences  
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**Pathology Faculty****Tony Tullos, M.D., Chair**

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**Parveen Ranjan, M.D.**

University of Delhi Medical School, New Delhi  
Assistant Professor

**Joshua Routh, M.D.**

University of Arizona, School of Medicine  
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**Pharmacology Faculty****Pamela E. Potter, Ph.D., Chair**

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Professor

**Gerald Call, Ph.D.**

University of Kansas Medical Center  
Professor

**Douglas Jones, Ph.D.**

University of Texas  
Associate Professor

**Shaleen Korch, Ph.D.**

University of North Dakota  
Professor

**Jeffrey Norris, DVM, Ph.D.**

University of California-Davis  
Associate Professor

**Physiology Faculty****Layla Al-Nakkash, Ph.D., Chair**

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Professor

**Thomas L. Broderick, Ph.D.**

University of Alberta  
Professor

**Joao Carvalho-de-Souza, DVM, Ph.D.**

State University of Ceara, Fortaleza, Brazil  
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**Estela Jauregui, Ph.D.**

Washington State University  
Assistant Professor

**Christopher R. Olson, Ph.D.**

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Associate Professor

**Ann Revill, Ph.D.**  
University of Arizona  
Associate Professor

**Tobias Riede, D.V.M., Ph.D.**  
Humboldt - University of Berlin, Germany  
Associate Professor

**Johana Vallejo-Elias, Ph.D.**  
University of Missouri  
Professor

## Surgery and Anesthesia Faculty

**Tanja Lea Gunsberger, D.O., Chair**  
Kansas City University of Medicine and  
Biosciences, College of Osteopathic Medicine  
Clinical Assistant Professor

**Marc Brandon, M.D.**  
Baylor College of Medicine  
Clinical Assistant Professor

**Elizabeth Ferguson, M.D.**  
University of Minnesota, Duluth School of  
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Clinical Assistant Professor

**Mary Wojnakowski, CRNA, Ph.D.**  
University of Pittsburgh  
Clinical Professor

## Abrazo Health Liaison

**Leslie Easley, D.O.**  
Midwestern University, Arizona College of  
Osteopathic Medicine  
Director of Clinical Education, Abrazo Health  
Adjunct - Clinical Assistant Professor

# Arizona College Of Osteopathic Medicine Courses

## AMOE 1700: Teaching and Leadership in Osteopathic Medicine

### I

The Osteopathic Teaching and Leadership Course is an experiential course that encompasses both learning community and practicum experiences. The learning community portion of the course introduces the students to the foundation of teaching and learning. The practicum portion includes a variety of experiential experiences, including teaching and table-training during OMM labs, physical diagnosis workshops, and ultrasound labs. Leadership opportunities will be offered to each student.

**Credits** 9.0

## AMOE 1703: OMM Third Year Elective

As part of the AMOE curriculum, all students will be enrolled in an osteopathic manipulative medicine (OMM) rotation to replace one elective rotation during the third year.

**Credits** 6.0

## AMOE 1800: Teaching and Leadership in Osteopathic Medicine

### II

The Osteopathic Teaching and Leadership Course is an experiential course that encompasses a learning community, practicum, and service-learning experiences. The course is to be completed in the second year of the Applied Master of Osteopathic Education. The learning community portion of the course introduces the students to the foundation of teaching and learning. The practicum portion includes a variety of experiential educational experiences, including teaching and table-training during OMM labs, physical diagnosis workshops, and ultrasound labs. Students will actively engage in leadership and community service activities through their assigned leadership liaison role. Community service activities will include activities with the Interprofessional Health Outreach through Medicine and Education (ImHOME) course at shelter events for patients experiencing homelessness.

**Credits** 17.0

## **AMOEG 1801: Research in Osteopathic Medicine**

Research in Osteopathic Medicine is an experiential course that encompasses both learning community and practicum experiences. The course is to be completed in the second year of the AMOE program. The learning community portion of the course introduces the students to the foundation of research methods and practices. The practicum portion includes a variety of scholarly activity projects including research study design and preparing oral case and poster presentations.

**Credits** 6.0

## **AMOEG 1802: Osteopathic Primary Care Longitudinal Clerkship**

The overall aim of the longitudinal osteopathic primary care clerkship rotation is to provide students with clinical experiences where they will apply their knowledge and skills as they develop competence in the care of patients; practice the integration of osteopathic manipulative medicine in primary care; foster long-term continuity of patient care; participate in a learning community; contribute to OMM didactic sessions; and conduct quality improvement projects. Students will participate in the MWU multispecialty clinic one-half day weekly, as well as complete a 2-week hospital-based rotation.

**Credits** 14.0

## **AMOEG 1803: Teaching and Leadership in Osteopathic Medicine III**

The Osteopathic Teaching and Leadership Course is an experiential course that encompasses both learning community and practicum experiences. The learning community portion of the course introduces the students to the foundation of teaching and learning. The practicum portion includes a variety of experiential experiences, including teaching and table-training during OMM labs, physical diagnosis workshops, and ultrasound labs. Leadership opportunities will be offered to each student. This course should be the culmination of the student gaining and demonstrating the skills of teaching and leadership gained over the previous two years.

**Credits** 3.5

## **AMOEG 1804: Peer Teaching Strategies for AMOE**

This course was developed specifically for the OMM Scholars, who engage in peer-teaching. Goals are to provide additional skills in identifying learning strategies and resources for students and to apply these strategies under the supervision of course instructors by providing near-peer advising for students preparing for the COMLEX-USA Level 1, COMLEX-USA Level 2 CE and participating in the Directed Study for Achieving Osteopathic Competency elective.

**ELIGIBILITY:** This course is for students in the second year of the Applied Master of Osteopathic Education (AMOEG) program.

**INELIGIBILITY:** Students who have previously been enrolled in the course; any student not enrolled in AMOEG, unless by authorization of the Dean of AZCOM.

**Credits** 6.0

## **ANATG 1516: Anatomical Sciences I**

This is an integrated course combining the four traditional medical school anatomical disciplines: gross anatomy, histology, embryology, and neuroscience. The curriculum is organized into six modules over three quarters with multiple exams per module. The modules cover broad anatomical themes. Fall quarter begins with the segmented body plan, which includes back dissections and finishes with tubes within tubes, which includes thorax, abdomen and pelvis dissections. Curriculum delivery is through lectures, laboratory-based dissection workshops, ultrasound workshops, small group activities, and online resources. Student progress is evaluated through written and practical examinations.

**Credits** 7.5

## **ANATG 1526: Anatomical Sciences II**

This is an integrated course combining the four traditional medical school anatomical disciplines: gross anatomy, histology, embryology, and neuroscience. The curriculum is organized into six modules over three quarters, with multiple exams per module. The modules cover broad anatomical themes. Winter quarter begins with limb outgrowth, which includes lower extremity and upper extremity dissections, and finishes with pharyngeal arches and cranial nerves, which includes head and neck dissections. Curriculum delivery is through lectures, laboratory-based dissection workshops, ultrasound workshops, small group activities, and online resources. Student progress is evaluated through written and practical examinations.

**Credits** 6.0

## **ANATG 1536: Anatomical Sciences III**

This is an integrated course combining the four traditional medical school anatomical disciplines: gross anatomy, histology, embryology, and neuroscience. The curriculum is organized into six modules over three quarters, with multiple exams per module. The modules cover broad anatomical themes. Spring quarter begins with the sensorimotor head, which includes head and neck dissections, and finishes with brain and behavior. Curriculum delivery is through lectures, laboratory-based dissection workshops, ultrasound workshops, small group activities, and on-line resources. Student progress is evaluated through written and practical examinations.

**Credits** 4.0

## **BIOCG 151I: Biochemistry I**

Course modules feature proteins and enzymes emphasizing structure-function relationships; cell biology emphasizing how cells move and divide; molecular biology emphasizing the role of nucleic acids in expression of genetic information; intermediary metabolism emphasizing metabolism of carbohydrates, lipids, and amino acids; hemostasis emphasizing the mechanisms leading to platelet plug and fibrin clot formation, including tests available to identify hemostasis disorders; heme synthesis and catabolism emphasizing the clinical implications; cell cycle regulation and molecular basis of cancer emphasizing the molecular and genetic basis of cancer and tumor progression; and medical biostatistics emphasizing the concepts of sensitivity, specificity, positive predictive value and negative predictive value. Clinical aspects of biologic processes during the fed and fasted states are emphasized. Workshops introduce the biochemical basis of clinical laboratory tests and illustrate clinical applications of biochemical concepts.

**Credits** 6.0

## **BIOCG 1522: Biochemistry II**

Course modules feature human nutrition emphasizing importance of nutrition in health and preventive medicine; human genetics emphasizing inheritance of selected genetic disorders; biochemistry of the organs emphasizing the customization of biochemical pathways; various types of anemia focusing on causes, lab tests and its related topics. Workshops introduce the biochemical basis of exercising muscle, myocardial infarction, obesity, common clinical laboratory tests and/or illustrate clinical applications of biochemical concepts. Selected workshops feature a modified problem-based learning environment.

**Credits** 3.0

## **CLMDG 130I: Research Elective**

Students will participate in ongoing research projects under the direction of a Midwestern University faculty member or off-campus clinical or basic science research under the direction of a qualified and approved research principal investigator.

**Credits** 1.0

### **Prerequisites**

Midwestern University faculty must approve all projects for credit to be assigned.

## **CLMDG 1302: Teaching in Anatomical Sciences**

During medical school, students prepare to become diagnosticians, prescribers, case managers, counselors, and informed research consumers. However, they do not receive instruction in one of the most important roles they will be expected to fulfill in their careers – that of a teacher/educator. Students will learn the basic skills of effective teaching in small and large group settings and will apply the skills they learn by teaching in gross anatomy laboratories, dissection workshops, and/or ultrasound workshops.

**Credits** 1.0

-2

## **CLMDG 1303: Osteopathic Clinical Medicine Table Trainers**

The CLMDG Table Trainer Elective provides OMS II students with the opportunity to review osteopathic clinical medicine skills, including both OMM and physical examination techniques. OMS II students will review OCMDG core technique videos & lab material & take a short 2-3 question Canvas quiz. They will attend a hands-on review session with the OMM Scholars on Tuesday afternoons and teach the lab material to OMS I students, under the supervision of OCMDG faculty and OMM scholars, on Wednesdays, according to the course schedule. They will also assist the OMM scholars in open lab on days prior to practical examinations. The course is graded on a Pass/Fail basis and is 2.0 credit hours per quarter.

**Credits** 2.0

## **CLMDG 1304: Research Dissemination**

The Research Preparation course will prepare students to present their clinical and basic science research that has been completed prior to enrollment. Students will participate in large group presentations on the development of a scientific abstract, poster, and conference presentation. Students will receive feedback from the instructor weekly on each component of their scholarly deliverable and peer feedback following the completion of their rough draft of the abstract. Each student will then have the opportunity to present their scientific research to the group and garner feedback that will be incorporated into future renditions of their scientific product.

**Credits** 1.0

## **CLMDG 1305: The Integration of Medicine and Dentistry: The Future of Patient Healthcare**

The course is designed to familiarize medical students with the interprofessional concepts of the oral-systemic connection, dental trauma, mutual care of chronic diseases, dental oncology, smoking cessation, sleep medicine, caries prevention in primary care settings, nutrigenomics, oral manifestations of commonly used medications, polypharmacy and deprescribing, and HPV/ head and neck cancers interprofessional approach to prevention and treatment. The course is taught via 5, 2-hour, in-person lectures.

**Credits** 1.0

## **CLMDG 1307: Emergency Medicine: Early Exposure Experience**

This ten-week elective (one quarter) early exposure in emergency medicine will be offered through the Abrazo Health Emergency Medicine Program. AZCOM first- and second-year students will have the opportunity to voluntarily participate in shadowing emergency medicine faculty and residents for a total of six 4 hour shifts. There will be an initial orientation and on-boarding that will occur on day one. Each student will have a meeting midway through the full experience for feedback and the ability to have one-on-one time with faculty and residents. The course is offered only once per student.

**Credits** 1.0

## **CLMDG 1308: Addiction Medicine**

One out of every seven patients that a physician sees will have a lifetime history of an addictive disorder. The treatment and diagnosis of addiction is critically important for medical students to learn. This elective will be based on the American Society of Addiction Medicine's textbook, "Principles of Addiction Medicine", as well as the ASAM 2000 review course in Addiction Medicine. Clinical case lectures will relate to the assessment and treatment of addictive disorders with an emphasis on drug types.

Course Objectives:

1. Student to understand the genetic predisposition for addictive disorders and be able to identify them based on family history.
2. Understand the underlying neurochemistry, neurocircuitry and neuroadaptation as a basis for understanding the clinical presentations of active addiction, withdrawal states and psychiatric illnesses associated with addictive behaviors.
3. Be able to diagnose addictive disorders based on DMS-IV criteria and distinguish dependence from abuse.
4. Understand the basic principles of pain treatment with an emphasis on the regulatory issues surrounding the use of controlled substances.
5. Understand the acute intoxication, acute withdrawal and post-acute withdrawal states associated with alcohol, sedative-hypnotics, opioids and stimulants as based upon the pharmacology and neurocircuitry that is affected by these substances.

**Credits** 1.0

## **CLMDG 1315: ECG Interpretation**

This is an introductory course in electrocardiography interpretation.

**Credits** 1.0

## **CLMDG 1346: Medical Hypnosis**

This course will instruct medical students in the techniques and applications of medical hypnosis for future use in their medical practice. The course is designed in a format of 10 weeks, 1 hour per session modules to accomplish learning objectives. This course is most effective when taught through lecture, demonstration and pairing of students to practice techniques with each other.

In this 10-week course, the students will learn how to do Hypnosis and Self-Hypnosis. The first half of the hour is spent lecturing and/or demonstrating a technique. The students then pair-up and perform the technique on one another.

**Credits** 1.0

## **CLMDG 1350: Essential Procedures**

This one credit elective course is designed to provide the student with an introduction to clinical skills commonly performed while completing a surgical, anesthesia, emergency medicine, or critical care clerkship.

**Credits** 1.0

## **CLMDG 1352: Obstetrics and Gynecology Clinical Skills Development**

This course focuses on the development of fundamental knowledge specific to the specialty of obstetrics and gynecology. This course develops the clinical skill set necessary to succeed in OB/GYN clerkship and residency. Students will have the opportunity to learn from clinical vignettes and observing/participating in Clinical and surgical management of abnormal pap smear, cervical cancer, management of maternal and fetal changes during labor, hypoxia, and acidosis. This course also focuses on high-risk pregnancies and their outcomes.

**Credits** 1.0

## **CLMDG 1354: A Foundation for Leadership in Your Life**

This course is filled with opportunities for you to discover for yourself a new context for leadership in your life. The course is designed to increase workability in your relationships with others and increase performance in your work.

**Credits** 2.0

## **CLMDG 1355: AZCOM Basic Cranial Course**

This is a 40-hour introductory course covering osteopathic cranial manipulative medicine as approved by the Osteopathic Cranial Academy (OCA), which allows students to become members of the academy. The course provides an opportunity for students to further their knowledge of applied anatomy, enhance their palpatory skills, and develop a unique set of osteopathic techniques specific to the cranium and its related structures. Instruction is provided through lectures, small group discussions and closely supervised hands-on labs.

**Credits** 3.0

## **CLMDG 1356: Medical Spanish**

This course is designed to expose medical students with minimal experience speaking medical Spanish to basic Spanish vocabulary, phrases and commands that can be used in the healthcare setting as well as increasing understanding of cultural attitudes which may impact medical care. Please note this course is not intended to provide clinical education, but only the framework of Spanish vocabulary, so when appropriate medical skills have been acquired through medical education, the student should be able to apply the Spanish vocabulary.

**Credits** 1.0

## **CLMDG 1360: Point of Care Ultrasound**

This elective course, students will be required to participate in weekly, clinically-based ultrasound lectures and workshops. Students will be required to demonstrate on one another proper procedures for bedside examinations common to point-of-care ultrasound. Additionally, students will utilize simulation devices to learn to properly locate and identify with ultrasound specific clinical pathologies.

**Credits** 2.0

## **CLMDG 1365: Physician Finance and Wellness**

This is an interactive course that covers the basics of personal finance, investing, and wellness. Students will also gain an in-depth understanding of options for student loan repayment and forgiveness. Lectures will be posted on Canvas the day before they are given in class.

**Credits** 1.0

## **CLMDG 1402: Pediatric Elective**

This 5-week course has been designed for those students that have a high-level interest in joining the Pediatric specialty. A strong emphasis will be placed on knowledge of a high-level overview of well child exam, immunizations, developmental milestones, newborn care, breastfeeding and rashes. This course will concentrate on clinical case presentations, development of differential diagnosis and developing an appropriate management plan to care for pediatric patients.

**Credits** 1.0

## **CLMDG 1415: Teaching in Humanity in Medicine**

This course provides students the opportunity to obtain additional training in the awareness, empathy, and cultural competencies necessary to interact professionally with individuals in their future medical practices who identify as members of a minority population (e.g., LGBTQI, ethnic or racial, disabled individuals). Students will participate in interactive in-class discussions and co-facilitate group discussions alongside a faculty facilitator and student participants.

**Credits** 1.5

## **CLMDG 1456: Medical Improv: Communication, Cognition, and Teamwork in Medicine**

Medical improvisation or medical improv is an approach involving multiple narrative and communication strategies including role play, peer feedback and reflection. Medical improvisation can be used to enhance awareness and develop skills for improving communication with patients, families, teams or across disciplines; demonstrating empathy; and considering differences of race, ethnicity, gender, ability, culture and other social determinants of health and health care delivery. This approach adapts theater improvisation techniques and skills to medical education and the larger arena of health care and contributes to students' exploration of the concepts of narrative health care and medical humanities. Students will participate in interactive in-class exercises in pairs or small groups and debrief in small group discussion to reflect on the application of the selected improvisation exercises to health care.

**Credits** 1.0

### **Prerequisites**

[CLMDG 1516: Humanity in Medicine](#)

## **CLMDG 1516: Humanity in Medicine**

This course seeks to provide future physicians with the awareness, empathy, and cultural competencies necessary to interact professionally with individuals in their future medical practices who identify as members of a minority population (e.g., LGBTQI, ethnic or racial, people with disabilities). Particular emphasis will be placed on understanding systemic socioeconomic issues facing minority populations with respect to their access to healthcare, identifying the current ways in which these populations are underserved in medicine, and instilling student doctors with the skills, respect, and cultural competencies necessary to improve healthcare for under served populations. Students will participate in interactive small group discussion, and reflect on selected readings (research articles and position statements), and perspectives of minority individuals in an effort to realize our shared humanity and the importance of improving access to healthcare for all.

**Credits** 1.0



## **CLMDG 1631: Introduction to Imaging**

The Introduction to Imaging lectures emphasize the history of radiology, along with chest and related structures, the abdomen, and related structures, as well as when and why particular radiographic studies are ordered in clinical medicine. The Radiology section is given in order to introduce the student to both inpatient and outpatient radiology presentations that will be encountered on their clinical rotations.

The course will be partially administered through Canvas. This will allow the students to become familiar with some of the electronic radiology resources. While this course will be completed by the end of spring quarter, it is truly a springboard into radiological learning to take place during the clinical years. The students will continue to have access to the electronic resources introduced throughout the third and fourth years. While the online content will not contain any grading system, the students are encouraged to take advantage of this resource. This resource will contain further learning material for the objectives covered during Introduction to Imaging as well as links to other useful radiology sites.

**Credits** 1.0

## **CLMDG 1661: Interprofessional Collaboration Experience I**

This course was designed to help osteopathic medical students promote better interprofessional collaboration by increasing understanding of the practice of other members of the healthcare team. Building on the COREG courses from their matriculation year, students' familiarity with concepts from the Interprofessional Education Collaborative (I.P.E.C.) will be reviewed. Students will observe one of the provider-student teams in the Midwestern Clinics for 2 hours. Students will be expected to interview the professionals and create a 5-minute vlog about their experience. Students will review several lectures created by support staff in the various clinics to better understand the multiple roles involved in running a health organization.

**Credits** 0.5

## **CLMDG 1662: Interprofessional Collaboration Experience II**

This course was designed to help osteopathic medical students promote better interprofessional collaboration by increasing understanding of the practice of other members of the healthcare team. Building on the COREG courses from their matriculation year, students' familiarity with concepts from the Interprofessional Education Collaborative (I.P.E.C.) will be reviewed. Students will observe one of the provider-student teams in the Midwestern Clinics for 2 hours. Students will be expected to interview the professionals and create a 5-minute vlog about their experience. Students will review several lectures created by support staff in the various clinics to better understand the multiple roles involved in running a health organization.

**Credits** 0.5

## **CLMDG 1663: Interprofessional Collaboration Experience III**

This course was designed to help osteopathic medical students promote better interprofessional collaboration by increasing understanding of the practice of other members of the healthcare team. Building on the COREG courses from their matriculation year, students' familiarity with concepts from the Interprofessional Education Collaborative (I.P.E.C.) will be reviewed. Students will observe one of the provider-student teams in the Midwestern Clinics for 2 hours. Students will be expected to interview the professionals and create a 5-minute vlog about their experience. Students will review several lectures created by support staff in the various clinics to better understand the multiple roles involved in running a health organization.

**Credits** 0.5

## **CLMDG 1700: Introduction to Clerkship**

Introduction to Clerkship is presented in the spring quarter of the second year. The course objective is to prepare students to start their clinical clerkship rotations. It is comprised of the following components: 1) Large group lectures on administrative and clinical rotation requirements relevant to the beginning of clinical rotations; 2) Workshop skills sessions on starting ultrasound-guided central line placement, suturing, and performing biopsies; 3) required online compliance course modules.

**Credits** 1.0

## **CLMDG 1701: Osteopathic Clinical Medicine III**

The focus of the OCM III course is to prepare and assist students in the transition from didactic to clinical education. Course content consists of 3 formative Objective Structured Clinical Evaluations to build upon clinical skills, followed by a summative Core Competency Capstone for DOs. Asynchronous learnings cover telemedicine, medical Spanish, clinical nutrition, antibiotic stewardship, and opioid use disorder.

**Credits** 6.0

## **CLMDG 1702: ACLS**

The Basic Life Support (BLS) and Advance Life Support Course (ACLS) is provided as a requirement for AZCOM students beginning their clinical rotations. It is a 1 credit course and meets the national standards set by the American Heart Association for BLS and ACLS courses. The course must be passed in order to start clinical rotations.

**Credits** 1.0

## **CLMDG 1803: Osteopathic Clinical Medicine IV**

Osteopathic Clinical Medicine IV (OCM IV) is a fourth-year transition to residency (TTR) course designed to align with consensus-derived recommendations for knowledge and skills needed in the transition to residency. The course will prepare students for different aspects of the residency application, match and post-match as well, including interview preparation, learner self-assessment and reflection, and the development of individualized learning plans for residency. Didactic sessions focus on preparing students for increased patient care responsibilities, and patient-centered, population-based & interdisciplinary team-based care that factors in the understanding of systems and healthcare policies. The course includes hands-on osteopathic skills lab concentrating on manipulative treatment for hospitalized patients.

**Credits** 2.5

## **CMEDG 1601: Osteopathic Patient Care I**

Osteopathic Patient Care I is a blend of case-based curriculum, online modules, large group didactics, small group learning experiences, and standardized patient clinical encounters. In large group case sessions, a clinical case is presented, and students must obtain a history and physical examination on the patient. Students work in small student groups to determine problem lists, differentials, and treatment plans. Students write SOAP notes and prescriptions based on their clinical cases, and an in-depth discussion of the case is provided by the faculty the following week. Students will participate in Objective Structured Clinical Experiences (OSCEs) to further develop and refine their clinical history and exam skills, presentations, SOAP note writing, and interpersonal skills. Additional sessions of this course provide further clinical correlations in either small group, online module, or lecture format, with a strong focus on the pulmonary and cardiovascular systems. Evidence-based medicine (EBM), epidemiology, and clinical design-making concepts are incorporated throughout the course. Small group experiences include topics of differential diagnosis, EKG interpretation, EBM, heart failure, cardiovascular ultrasound, and case presentations.

**Credits** 4.5

## **CMEDG 1602: Osteopathic Patient Care II**

Osteopathic Patient Care II is a blend of case-based curriculum, online modules, large group didactics, small group learning experiences, and standardized patient clinical encounters. In the case sessions, a clinical case is presented, and students must obtain a history and physical examination on the patient. Students work in small student groups to determine problem lists, differentials, and treatment plans. Students write SOAP notes and prescriptions based on their clinical cases, and an in-depth discussion of the case is provided by the faculty the following week. Students will participate in Objective Structured Clinical Experiences (OSCEs) to further develop and refine their clinical history and exam skills, presentations, SOAP note writing, and interpersonal skills. Additional sessions of this course provide further clinical correlations in either small group, online module, or lecture format, with a strong focus on the gastrointestinal, renal, and genitourinary systems. Topics in evidence-based medicine (EBM) and biostatistics are incorporated throughout the course. Small group experiences include topics of jaundice and elevated liver enzymes, ultrasound and case presentations.

**Credits** 4.5

## **CMEDG 1603: Osteopathic Patient Care III**

Osteopathic Patient Care III is a blend of case-based curriculum, online modules, large group didactics, small group learning experiences, and standardized patient clinical encounters. In the case sessions, a clinical case is presented, and students must obtain a history and physical examination on the patient. Students work individually to determine problem lists, differentials, and treatment plans. Students write SOAP notes and prescriptions based on their clinical cases, and an in-depth discussion of the case is provided by the faculty the following week. Students will participate in Objective Structured Clinical Experiences (OSCEs) to further develop and refine their clinical history and exam skills, presentations, SOAP note writing, and interpersonal skills. Additional sessions include small group experiences on obstetrical care and participation in a journal club in a variety of speciality areas. Additional lectures providing clinical correlations with a strong focus on the endocrine, neurologic, and dermatologic systems, as well as obstetrics and gynecology will be provided.

**Credits** 3.5

## **COREG 1560A: Interprofessional Healthcare I**

Changes in our healthcare delivery system are creating a growing demand for health professionals with skills in collaboration and teamwork. This course will describe the roles and responsibilities of the various healthcare disciplines and introduce the One Health concept. It will also provide students the opportunity to interact with one another as members of an interprofessional team. This collaboration will promote communication and the application of shared values and ethics using a team-based approach to care for humans, animals, and the environment.

**Credits** 0.5

## **COREG 1570A: Interprofessional Healthcare II**

Changes in our healthcare delivery system are creating a growing demand for health professionals with skills in collaboration and teamwork. This course will describe the roles and responsibilities of the various healthcare disciplines and introduce the One Health concept. It will also provide students the opportunity to interact with one another as members of an interprofessional team. This collaboration will promote communication and the application of shared values and ethics using a team-based approach to care for humans, animals, and the environment.

**Credits** 0.5

## **COREG 1580A: Interprofessional Healthcare III**

Changes in our healthcare delivery system are creating a growing demand for health professionals with skills in collaboration and teamwork. This course will describe the roles and responsibilities of the various healthcare disciplines and introduce the One Health concept. It will also provide students the opportunity to interact with one another as members of an interprofessional team. This collaboration will promote communication and the application of shared values and ethics using a team-based approach to care for humans, animals, and the environment.

**Credits** 0.5

## **ELECG 1701: Third Year Elective Rotations**

Students may arrange for a third-year elective rotation at established Midwestern University/AZCOM rotation sites. Any out-of-state site must be approved by the appropriate Department Chair. Rotations are subject to the current Department of Clinical Education Rotation Training Policy Manual. Rotations may be done in any department-approved specialty. No rotations with family members are permitted. There is no examination for this rotation.

**Credits** 12.0

## **ELECG 1801: Research Rotation**

The Research Rotation is an experiential 4-week rotation during which students work under the supervision of their Program Director to prepare and submit their poster presentation/abstract/manuscript related to the quality improvement or research activity that they did during the second year of the Applied Master of Osteopathic Medicine program. Students are eligible to receive credit for a rotation in the AZCOM curriculum at the same time.

**Credits** 6.0

## **ELECG 1801: Fourth Year Elective Rotations**

There are 24 weeks of electives during the fourth year. Elective rotations may be done in two or four week blocks. Students may request to do electives in basic science or clinical research. Additionally, if approved, one 4-week elective can be used for an international rotation, or military officer training. All electives must be approved by the appropriate Department Chair. Additional policies regarding electives are provided in the Department of Clinical Education Rotation Manual.

**Credits** 36.0

## **EMEDG 1801: Emergency Medicine Rotation**

This fourth-year rotation consists of four weeks of emergency department experiences, and exposes the student to various aspects of managing patients in an emergency department setting. This rotation emphasizes diagnostic skills, ability to prioritize patient care and different views of problems that are typically seen in an emergency department setting. There is a national, standardized post-rotation examination at the conclusion of this rotation.

**Credits** 6.0

## **FMEDG 1531: Public Health, Medical Ethics and Jurisprudence**

The course provides an overview of fundamental concepts and principles related to public health, epidemiology, clinical ethics, and medical jurisprudence. Core concepts necessary for the practice of evidence-based medicine will be presented in addition to examining topics related to the legal and ethical aspects of medicine frequently encountered in clinical practice. In addition to preparing students for licensure examinations, completion of the course will provide students with the foundation needed to practice evidence-based medicine, provide compassionate and humane patient care, and ensure compliance with the law and standards of professional conduct.

**Credits** 2.0

## **FMEDG 1701: Family Medicine Rotation I**

The Family Medicine I rotation consists of a four-week experience in third year, which is primarily preceptor-based, but may include both ambulatory and inpatient settings, some of which include residency-based opportunities. This clerkship will expose the student to various aspects of the diagnosis and management of patients in a family medicine practice, including the incorporation of osteopathic principles. This experience is supplemented by small group tutorials, online cases, and reading objectives. There is a nationally standardized post-rotation examination at the conclusion of this rotation.

**Credits** 6.0

## **FMEDG 1702: Family Medicine Rotation II**

The Family Medicine II rotation consists of a four-week experience in third year, which is primarily preceptor-based, but may include both ambulatory and inpatient settings, some of which include residency-based opportunities. This clerkship will expose the student to various aspects of the diagnosis and management of patients in a family medicine practice, including the incorporation of osteopathic principles. This experience is supplemented by small group PICO project presentations, online cases and reading objectives. There is a nationally standardized post-rotation examination at the conclusion of this rotation.

**Credits** 6.0

## **IMEDG 1701: General Internal Medicine Rotation I**

General Internal Medicine Rotation I includes hospital residency-based training. Reading assignments, learning objectives, small group sessions, and lectures will supplement the clinical experience. There is a national standardized postrotation examination at the conclusion of this rotation.

**Credits** 6.0

## **IMEDG 1702: General Internal Medicine Rotation II**

General Internal Medicine Rotation II includes hospital department-based training or ambulatory internal medicine. Reading assignments, learning objectives, small group sessions, and lectures will supplement the clinical experience. There is a national standardized post-rotation examination at the conclusion of this rotation.

**Credits** 6.0

## **IMEDG 1803: Subspecialty Internal Medicine Rotation**

During the fourth year, each student will participate in at least one 4-week medical sub-specialty rotation in a discipline of the students choice. Appropriate sub specialties include, but are not limited to Cardiology, Gastroenterology, Hematology, Oncology, Rheumatology, Pulmonology, Neurology, Infectious Disease, Nephrology, Allergy/Immunology, and Endocrinology. Rotation specific reading objectives supplement the clinical experience for each specialty.

**Credits** 6.0

## **IMEDG 1804: Critical Care Rotation**

Each fourth year student will participate in a four-week Critical Care rotation. The objectives for this rotation include examining, studying and participating in the management of patients in the hospital critical care setting. The student will become familiar with many common and some uncommon presentations encountered by the critical care physician, and will observe and perform procedures indicated for each patient. Rotation experiences include reading, lectures, patient care management, and a post-rotation examination.

**Credits** 6.0

## **IMEDG 1804S: Surgical Intensive Care Unit Rotation (alt. choice)**

In fourth year, students may request a four-week Surgical Intensive Care Unit (SICU) rotation that satisfies their Critical Care core rotation. The SICU rotation enables the student to experience a surgeon-led ICU with post-op surgery and trauma patients. The SICU experience allows the student to learn about critically ill surgery and trauma patients; examination, presentations, procedures and surgery. The student is responsible for all required Critical Care core and SICU material. The student must pass the Critical Care core examination with an additional 15 SICU-related questions.

**Credits** 6.0

## **IPECG 1401A: Improving Patient Safety I**

IPECG 1401 is a seven-week interprofessional education course conducted asynchronously online. It is designed for students, working on authentic teams to develop the skills to improve patient safety and reduce medical errors through well-planned systems of performance measurement and quality improvement. The skills learned will range from taking ownership of patient and system safety issues to developing solid interpersonal professional relationships.

**Credits** 1.5

## **IPECG 1402A: Improving Patient Safety II**

This interprofessional, on-line elective is designed for students, working on authentic healthcare teams, to develop the skills needed to improve patient safety and reduce medical errors through well-planned systems of performance measurement and quality improvement. The skills learned will range from taking ownership of quality improvement for patient and system safety issues to developing solid interpersonal professional relationships.

**Credits** 1.5

## **IPECG 1404A: Leadership in Healthcare Teams**

This interprofessional, on-line elective is designed for students, working on authentic healthcare teams, to develop the skills needed for leadership in their area(s) of practice. The skills learned will range from taking ownership of patient issues to developing solid interpersonal professional relationships.

**Credits** 1.5

## **MICRG 1531: Immunology**

This course uses a didactic approach for a comprehensive coverage of immunology. Students are presented with information pertinent to fundamental principles of immunology, the cells and cell products involved in host defense mechanisms, their origin, function, and their roles in both health and infectious processes. The course is designed not only to instill basic principles in immunology but also to discuss important topics for clinical practice and research, including immunizations, immunodiagnostics, and immunologically-mediated diseases, disorders, and deficiencies.

**Credits** 2.5

## **MICRG 1615: Microbiology I**

Fall quarter of this two-quarter series uses a hybrid didactic and workshop approach for a comprehensive coverage of medical microbiology. This course sequence includes discussion of basic classification, structure, metabolism and genetics of bacteria, viruses, parasites, and fungi, as well as discussion of individual pathogens in the context of infectious disease. The infectious disease portion uses an organ systems approach, focusing on basic morphologic, culture and diagnostic modalities, physiology, virulence determinants, epidemiology, host-pathogen interactions, and management of disease with special emphasis on factors pertinent to clinical medicine and public health. Clinical correlations and case presentations are featured for each organ system.

**Credits** 4.0

## **MICRG 1625: Microbiology II**

Winter quarter of this two-quarter series uses a hybrid didactic and workshop approach for a comprehensive coverage of medical microbiology. This course sequence includes discussion of basic classification, structure, metabolism and genetics of bacteria, viruses, parasites, and fungi, as well as discussion of individual pathogens in the context of infectious disease. The infectious disease portion of each course uses an organ systems approach, focusing on basic morphologic, culture and diagnostic modalities, physiology, virulence determinants, epidemiology, host-pathogen interactions, and management of disease with special emphasis on factors pertinent to clinical medicine and public health. Clinical correlations and case presentations are featured for each organ system.

**Credits** 4.0

## **MPSYG 1511: Introduction to Human Behavior I**

This course begins with an introduction to the course, the Diagnostic and Statistical Manual of Mental Disorders (DSM-VTR) and the biopsychosocial model used in psychiatric assessment. Students will learn the components of a psychiatric evaluation and learn basic interview skills. Topics in psychopathology include anxiety disorders, trauma related disorders, obsessive-compulsive and related disorders, and depressive disorders and Bipolar disorders.

**Credits** 1.0

## **MPSYG 1522: Introduction to Human Behavior II**

Introduction to Human Behavior II Students will be introduced to neuroanatomy, genetics, and neurochemistry. Common modalities of psychotherapy will be introduced. Topics in psychopathology include psychotic disorders, eating disorders, substance disorders, sexual disorders, sleep disorders, and personality disorders. Students will also learn integration of biological and psychological principles in psychiatric interviewing and assessment.

**Credits** 1.0

## **MPSYG 1533: Introduction to Human Behavior III**

This course will cover the human life cycle beginning with childhood and progressing through death. Other topics will include neurocognitive disorders, end of life, psychological testing, impulse disorder, psychiatric emergency care, and diversity and inclusion in psychiatry. The student will learn to integrate the knowledge of psychopathology into interview skills, diagnostic formulation and treatment planning.

**Credits** 1.0

## **MPSYG 1701: Psychiatry Rotation**

Four-week rotation designed to provide students direct contact with psychiatric patients. This facilitates the development of skills in diagnosis, treatment, and management of psychiatric disorders and enhances critical thinking and problem solving. Inpatient, outpatient, crisis intervention, and residency-based settings are utilized. There is a national standardized post-rotation examination at the conclusion of this rotation.

**Credits** 6.0

## **OBGYG 1701: Obstetrics / Gynecology Rotation**

This third year, four-week rotation is designed to provide the student with the fundamental knowledge base in obstetrics and gynecology (OB/GYN). The student will be introduced to basic procedures relevant to the practice of OB/GYN, to facilitate an understanding of the approach to clinical problem solving in OB/GYN, and promote acquisition of skills in the diagnosis, management, and prevention of common obstetrical and gynecological conditions. Rotation settings include both hospital residency-based and ambulatory center-based sites. There is a national standardized post-rotation examination at the conclusion of this rotation.

**Credits** 6.0

## **OCMDG 1511: Osteopathic Principles and Practice I**

This course is the first in a 3-course series introducing students to osteopathic clinical medicine with weekly lectures and laboratory experiences. Instruction begins with an orientation to the osteopathic profession followed by training in professionalism and basic history and physical examination skills including documentation and presentation, with emphasis on the osteopathic structural examination. Components of the osteopathic history and physical examination covered in this course align with anatomical sciences curriculum. Students will learn the proper use of diagnostic equipment, as well as palpatory techniques, identification of anatomic landmarks, and diagnosis and treatment of somatic dysfunctions using case-based presentations carried through lecture and laboratory sessions. Guest lecturers, peer table trainers, osteopathic scholars and simulation are used to build a complete educational experience. Students are evaluated through assignments, quizzes, exams, participation in laboratory setting, Standardized Patient Examination (SPE) practical, and Osteopathic Principles and Practice (OPP) practicals.

**Credits** 4.0

## **OCMDG 1522: Osteopathic Principles and Practice II**

This course is the second in a 3-course series and continues to utilize weekly lectures and laboratory experiences to develop the practical skills necessary to diagnose and treat patients. Students will continue to learn how to take a complete history from patients across the life cycle, including difficult patient encounters. The course focuses on additional body systems in alignment with the anatomical sciences curriculum, continuing to cover the structural-functional disturbances, and the diagnosis and treatment of somatic dysfunction. Point-of-care-ultrasound hands-on laboratory experiences are incorporated. Normal and abnormal findings are emphasized and illustrated through clinical cases, and students will practice patient care documentation multiple times throughout the course. The development of clinical reasoning skills is emphasized, and training is enhanced by guest lecturers, peer table-trainers, osteopathic scholars, and history and physical experiences. Students are evaluated by history and physical examination assignments, video quizzes, written examinations, laboratory participation, Standardized Patient Examination (SPE) practical, and Osteopathic Principles and Practice (OPP) practicals.

**Credits** 4.0



## **OCMDG 1533: Osteopathic Principles and Practice III**

This course is the third in a 3-course series and continues to develop the practical skills necessary to diagnose and treat patients across the life cycle and special population groups. Teaching methods include weekly lectures and laboratory experiences. The course focuses on additional body systems in alignment with the anatomical sciences curriculum, continuing to cover the structural-functional disturbances, and the diagnosis and treatment of somatic dysfunction. Normal and abnormal findings are emphasized and illustrated through clinical cases. Students will practice patient care documentation multiple times throughout the course with an introduction to medicolegal documentation. The development of clinical reasoning skills and an empathetic approach to patients is emphasized. Training is enhanced by guest lecturers, peer table-trainers, osteopathic scholars, and history and physical experiences. Students are evaluated by history and physical examination assignments, video quizzes, written examinations, laboratory participation, Standardized Patient Examination (SPE) practical, and Osteopathic Principles and Practice (OPP) practicals.

**Credits** 4.0

## **OMEDG 1614: Osteopathic Principles and Practice IV**

This course is structured with weekly lectures and laboratory sessions that reinforce material presented in lectures. Material presented expands upon the osteopathic principles taught in the first year, while also introducing new concepts, such as cranial manipulation. Students perform osteopathic structural examinations, diagnoses, and manipulative treatment. Where possible, the sequence of material is coordinated with concepts presented in other second year courses. Students are evaluated by midterm and final written examinations, as well as practical examinations on core osteopathic treatment techniques.

**Credits** 1.5

## **OMEDG 1625: Osteopathic Principles and Practice V**

This course is structured with weekly lectures and laboratory sessions that reinforce material presented in lectures. Material presented expands upon the osteopathic principles taught in previous osteopathic & physical exam courses, while also introducing new concepts. Students perform osteopathic structural examinations, diagnoses, and manipulative treatment. Where possible, the sequence of material is coordinated with concepts presented in other second year courses, and complementary reading assignments are given. Students are evaluated by midterm and final written examinations, as well as practical examinations on core osteopathic treatment techniques.

**Credits** 2.0

## **OMEDG 1636: Osteopathic Principles and Practice VI**

This course is structured with weekly lectures and laboratory sessions that reinforce material presented in lectures. Material presented expands upon the osteopathic principles taught in previous osteopathic & physical exam courses, while also introducing new concepts, including exercise prescriptions, and the use of OMT in pediatric and obstetric patients. Students perform osteopathic structural examinations, diagnoses, and manipulative treatment. Where possible, the sequence of material is coordinated with concepts presented in other second year courses and presented in a case-based format. Practice board-style OMM question banks are assigned to help prepare students for standardized testing. Students are evaluated by practical examinations on core osteopathic treatment techniques, as well as midterm and final written examinations, with the final written examination being a COMAT OMM examination.

**Credits** 1.5

## **PATHG 1611: Pathology I**

Introduction to basic concepts of pathology stressing altered cellular, genetic, and molecular mechanisms, and attempts to convey the dynamic nature of processes involved. By focusing on the organism as a whole system, the discipline of pathology can provide a bridge for transition by showing the interrelationship between basic scientific principles and the practice of clinical medicine. This approach provides a complete, medical overview of the disease process in relation to its histological, functional, and structural changes. Students have an opportunity to develop necessary skills to interpret and use laboratory data in describing and recognizing various types of injury to cells, tissues, and organs.

**Credits** 5.0

## **PATHG 1622: Pathology II**

This is a continuation of PATHG 1611. This course identifies causes and mechanisms of disease as they relate to specific organ systems as well as stressing the need for the medical student to understand the pathophysiology of disease and its implications to both the patient and the physician. Emphasis is also placed on the dynamic process of the pathologic progression of changes, adaptive responses, and therapeutic modifications as well as discovering how all these changes produce the ultimate clinical manifestations of disease processes.

**Credits** 5.0

## **PATHG 1633: Pathology III**

This is a continuation of PATHG 1611 and 1622. This course identifies causes and mechanisms of disease as they relate to specific organ systems as well as stressing the need for the medical student to understand the pathophysiology of disease and its implications to both the patient and the physician. Emphasis is also placed on the dynamic process of the pathologic progression of changes, adaptive responses, and therapeutic modifications as well as discovering how all these changes produce the ultimate clinical manifestations of disease processes.

**Credits** 5.0

## **PEDIG 1701: Pediatric Rotation**

Third year, 4-week rotation designed to introduce students to management of common pediatric conditions. Emphasis is placed on obtaining a pediatric history, performing physical examination, communicating with adult care givers, formulating differential diagnoses, and selecting appropriate diagnostic studies where appropriate. Students should be able to differentiate between normal and abnormal findings, provide patient and family education, well child examinations and anticipatory guidance, and begin to develop a cost-effective management plan that incorporates necessary referrals. Rotation settings include both hospital residency-based and ambulatory-based sites. There is a national standardized post-rotation examination at the conclusion of this rotation.

**Credits** 6.0

## **PHARG 1610: Pharmacology I**

This is the first of three courses in Pharmacology. The introductory section of the course will present general principles of pharmacology, including pharmacokinetics and pharmacodynamics, and toxicology. The next section of the course covers drugs acting on the autonomic nervous system, asthma, and allergy. The final section deals with drugs used in treatment of cardiovascular conditions. There are 36 lecture hours. Emphasis will be on clinical pharmacology, problem solving, making therapeutic decisions, and evaluating the patient's response to pharmacotherapy.

**Credits** 3.5

## **PHARG 1620: Pharmacology II**

This course is the continuation of PHARG 1610. Topics in winter quarter include drugs affecting the gastrointestinal tract, drugs acting in the central nervous system, and drugs used for hormonal therapy. There will be 35 lecture hours. Emphasis will be on clinical pharmacology, problem solving, making therapeutic decisions, and evaluating the patient's response to pharmacotherapy.

**Credits** 3.5

## **PHARG 1630: Pharmacology III**

This course is a continuation of PHARG 1610 and 1620. The spring quarter covers all aspects of chemotherapy of infectious disease and cancer. The last portion of the course is devoted to comprehensive review. There will be 30 lecture hours. The course emphasizes clinical pharmacology, problem solving, making therapeutic decisions, and evaluating the patient's response to pharmacotherapy.

**Credits** 3.0

## **PHYSG 1521: Physiology I**

This course presents homeostasis, biophysics, regulation of membrane transport, excitable cells, skeletal muscle, smooth muscle, cardiac, cardiovascular and respiratory systems. A discussion of circulatory fluid dynamics, peripheral vascular tone, blood pressure, and electrical and mechanical activity of the heart is included in the cardiovascular section of course. Small group case discussions, problem-based workshops, ultrasound workshops, and simulations facilitate development of critical thinking and problem-solving skills using basic physiologic concepts to understand the pathogenesis of signs and symptoms in specific case studies.

**Credits** 5.0

## **PHYSG 1532: Physiology II**

This is a sequel course to PHYSG 1521 that builds on physiologic foundations developed during the preceding quarter. Course covers the function, mechanism of action, regulation, and integration of renal and gastrointestinal, endocrine and reproductive systems that maintain body homeostasis. The renal section of the course presents the function and the regulation of the nephron and the entire kidney, including acid/base balance. The gastrointestinal section of the course presents the function and the regulation of motility, digestion, absorption and secretion within the various regions of the gastrointestinal tract. The endocrine and reproductive sections of the course present function, mechanism of action, and regulation of specific hormones. Small group discussions and problem-based workshops, ultrasound workshops and simulations will refine critical thinking and problem-solving skills as students identify physiologic and pathophysiologic mechanisms underlying the signs and symptoms described in pertinent clinical case studies.

**Credits** 4.5

## **RURLG 1701: Rural Medicine**

This third year required rotation focuses on the unique challenges faced when caring for patients in a rural area. Students complete a four-week rotation in an area and specialty assigned by the Clinical Education Department. Please refer to the Clinical Education Clerkship Manual for more information on rural site availability. There is no postrotation examination for this rotation.

**Credits** 6.0

## **SURGG 1701: General Surgery Rotation**

The third year core curriculum enables the student to learn fundamental knowledge of and psychomotor skills of surgery. There are residency-based and preceptor-based rotations. Students must participate in the Pre-Rotation Surgical Preparation (PRSP) skills lab. During this lab, the student will learn essential skills of laparoscopic surgery, ultrasound, suturing, gowning and gloving, Foley and NGT insertion. There will be a short lecture to help prepare students for clinical rotations in the hospital and operating room. Students will learn how to diagnose basic surgical diseases, present cases to an attending, write progress notes, do simple surgical procedures, assist in the operating room, and more. The course is on Canvas, and it has modules for the student to complete each week along with a quiz. During the course, the student must post a case presentation and a quality improvement project (QI) and give feedback to a peer. The course is meant to be interactive online with the Course Director, peers and coordinator. The final grade is determined by the Surgery Shelf Exam, quizzes, case presentation and peer review, QI project with feedback to a peer, and the rotation evaluation.

**Credits** 6.0

## **SURGG 1802: Subspecialty Surgery Rotation**

Fourth year students will complete a 4-week subspecialty surgery rotation. Depending on the interest of the student during the third year core rotation, the student will choose from many subspecialties such as: Cardiothoracic, ENT, Orthopedics, Trauma, Urology, Vascular, and Plastic Surgery. There is no post-rotation exam for this rotation. Final grade is dependent on the rotation evaluation.

**Credits** 6.0

# College of Pharmacy, Glendale Campus

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## Mission

The mission of Midwestern University College of Pharmacy is to advance the profession of pharmacy by educating future and current pharmacists, engaging in scholarship and research, and maximizing health outcomes through patient care and public service in a culturally diverse society.

## Vision

The Midwestern University College of Pharmacy is dedicated to excellence and innovation in pharmacy education, scholarship, and service.

## Core Values

The Midwestern University College of Pharmacy embraces the following core values to guide all our endeavors:

### *Excellence*

We strive to achieve and maintain the highest standards.

### *Professionalism*

We demonstrate responsibility, respect for others, and accountability to uphold the trust of our stakeholders.

### *Integrity*

We embody the principles of honesty, compassion, and ethics.

### *Inclusion*

We celebrate diversity and cultivate a sense of belonging for all.

### *Collegiality*

We commit to working with others to foster collaboration for the improvement of public health and society.

## Accreditation

Midwestern University College of Pharmacy Doctor of Pharmacy program is accredited by the Accreditation Council for Pharmacy Education, 190 S. LaSalle Street, Suite 3000, Chicago, IL 60603; 312/664-3575; Fax 866/228-2631; website [www.acpe-accredit.org](http://www.acpe-accredit.org).

## Degree Description

At the College, students pursue the Doctor of Pharmacy (Pharm.D.) degree. The Pharm.D. Program prepares the student for entry into the profession of pharmacy. The entire program requires a total of five years of coursework, the first two years at another college and the final three calendar years at the College of Pharmacy, Glendale Campus (CPG). On a year-round basis students complete required courses emphasizing the basic and pharmaceutical sciences, social and administrative sciences, pharmacy practice, elective professional courses, and clinical/experiential education. The curriculum is organized on a sequential, professional year basis [i.e., students will progress, in order, through the First Professional Year (PS-1), Second Professional Year (PS-2), and Third Professional Year (PS-3) as outlined below]. Additional information on progression is found in Student Academic Policies.

Students will participate with interprofessional healthcare team members in the management of and health promotion for all patients. Students will learn and implement the Pharmacists' Patient Care Process (PPCP) to establish patient-pharmacist relationships and provide patient-centered care.

## Curriculum Outcomes

Graduates of Midwestern University College of Pharmacy will be able to demonstrate competency in 26 curricular outcomes embedded within the following domains:

1. Knowledge and problem-solving skills
2. Patient and population care
3. Practice and systems management
4. Communications and interpersonal skills
5. Personal and professional development
6. One Health and interprofessionalism

## Admissions

The College considers for admission those applicants who possess the academic and professional promise necessary for development as outstanding members of the pharmacy profession. The admissions process is highly selective so applicants are strongly encouraged to apply early in the process as the majority of the class is expected to be filled by early January.

Evaluation of completed applications will begin in July and continue until all seats in the class are filled. This initial evaluation will determine which applicants are eligible for on-campus interviews, and a final evaluation will determine which applicants are eligible for acceptance. Multiple criteria are used to select the most qualified candidates in a competitive admissions environment in which the applicant pool exceeds the number of seats available. Grade point averages (GPAs), letters of recommendation, professional preparedness and motivation, personal qualities, communication skills, teamwork skills, and decision-making skills will all be considered when applicant files are reviewed.

### Admissions Requirements

Students seeking admission to the College must submit the following documented evidence:

1. Completion of 60 semester hours or 84 quarter hours of nonremedial, prerequisite coursework from regionally accredited U.S. colleges or universities, or recognized postsecondary Canadian institutions that use English as their primary language of instruction and documentation.
  - Grades of in the C range or better for prerequisite courses
  - Preferred minimum cumulative GPA and science GPAs of 2.50 on a 4.00 scale.
2. Completion of prepharmacy coursework requirements by the end of spring semester or spring quarter prior to matriculation to the College.
3. No Pharmacy College Admissions Test (PCAT) score is required for admission.
  - Applicants currently applying to another college within Midwestern University may have scores from the MCAT, DAT, or OAT transferred.
  - Current MWU students wishing to apply to the College of Pharmacy may have scores from the MCAT, DAT, or OAT transferred.
  - Competitive test scores no more than 5 years prior to the planned enrollment year.
4. Demonstration of a people or service orientation through community service or extracurricular activities.
5. Motivation for and commitment to the pharmacy profession as demonstrated by previous work, volunteer work, or other life experiences.
6. Oral and written communication skills necessary to interact with patients and colleagues.
7. Completion of the College's on-campus or virtual interview process (by invitation only).
8. Passing the Midwestern University criminal background check.

9. Commitment to abide by the Midwestern University Drug-Free Workplace and Substance Abuse Policy.

## Prerequisite Courses

Course(s)	Semester	Quarter
	Hrs	Hrs
Written Communication <i>Any course in English Composition / Writing; *Courses with a significant writing component may satisfy additional credit hours.</i>	6	8
Biology with laboratory (for science majors)	8	12
Anatomy (human or vertebrate)	3	4
General Chemistry with laboratory (for science majors)	8	12
Organic Chemistry with laboratory (for science majors) <i>Any 2 courses in Organic Chemistry. *Courses with strong organic chemistry component (e.g. Biochemistry) may be acceptable (please consult with an Admissions Counselor).</i>	8	12
Physical/Chemical/Biological Sciences <i>Any course in the areas of physical, chemical or biological sciences (courses may not be used to satisfy multiple prerequisites). <b>Physics recommended.</b></i>	3	4
Mathematics <i>Any course in the areas of algebra, pre-calculus, calculus, or other advanced mathematics courses. <b>Calculus recommended.</b></i>	3	4
Statistics	3	4
Verbal Communication <i>Any course in Speech/Public Speaking. *Courses with a significant verbal communication component may satisfy additional credit hours.</i>	3	4
Social and Behavioral Sciences <i>Any 3 courses within the areas of economics, psychology, sociology, anthropology, or political science. <b>Economics recommended.</b></i>	9	12
General Education Electives <i>Any 2 courses within the areas of humanities, fine arts, foreign language, business, or computer sciences. *Other course may qualify, please consult with an Admissions Counselor.</i>	6	8
Total Credit Hours	60	84

## Application Process and Deadlines

Applicants must submit a completed PharmCAS application by the stated PharmCAS deadline.

**Regular Decision PharmCAS Application** Applicants must apply via the online PharmCAS application ([www.pharmcas.org](http://www.pharmcas.org)) which is available usually in July of the academic year preceding the year in which applicants plan to matriculate. Please refer to the PharmCAS application instructions for specific details about completing PharmCAS applications, required documents, and processing time. Applicants who have taken coursework or earned degrees from foreign institutions must also submit to PharmCAS an evaluation of their transcripts from an approved foreign transcript evaluation service (see International Applicants).

The deadline for submitting the PharmCAS application is April 1st each year. In addition to the online application and application fee, applicants are strongly encouraged to forward official transcripts from all colleges and universities attended to PharmCAS by May 1st. PharmCAS will not consider applications complete and will not begin the verification process until all official transcripts have been received.

Students are encouraged to complete their PharmCAS applications early in the cycle. The College will consider completed applications on a first-come, first-served basis until all seats are filled.

- Pharmacy College Admissions Test (PCAT) No PCAT score is required for admission.
  - Applicants currently applying to another college within Midwestern University may have scores from the MCAT, DAT, or OAT transferred.
  - Current MWU students wishing to apply to the College of Pharmacy may have scores from the MCAT, DAT, or OAT transferred.
- The College of Pharmacy, Glendale Campus has multiple early assurance pathways that include agreements to hold seats for qualified applicants.

#### Pre-Pharmacy Advantage Program (PPAP)

The PPAP is a cost-effective, early assurance program for select students enrolled in affiliated community colleges. The program provides students who are motivated to become pharmacists with a clear path to achieving their goal. Students admitted to the PPAP are required to:

- Complete their prerequisite requirements during the first two years at an affiliated college or university;
- And then transition into Midwestern University's College of Pharmacy , Glendale Campus to begin a three-year Doctor of Pharmacy (Pharm.D.) program.

At the end of five years the successful PPAP student will earn a Pharm.D. degree enabling the graduate to embark upon an exciting career in this high-demand healthcare field. Benefits of the PPAP include:

- An Associate's Degree in Science is earned upon completion of pre- pharmacy coursework.
- An excellent foundation for pharmacy education.
- A clear road map for what courses to take and when.
- Direct entry into MWU CPG upon successful completion of program requirements.

#### Arizona Christian University (ACU) Articulation Agreement

The ACU Articulation Agreement guarantees interviews and reserves seats in the class for qualified students who fulfill certain requirements. CPG will: Reserve a minimum of 5 seats for students who achieve a minimum of a 3.25 cumulative and science GPA.

- Letters of Recommendation Applicants must submit two letters of recommendation from two professionals directly to PharmCAS. CPG will only accept letters received directly from PharmCAS. It is preferred that one letter be written by a college professor who has actually taught the applicant or a pre-health advisory committee, science professor, or health professional who knows the applicant well. Please refer to the PharmCAS application instructions for specific guidelines and requirements for submitting letters of recommendation. The deadline for submission of the letters of recommendation is May 1st.
- Completed Applications  
All application materials, including the PharmCAS application, verification of transcripts by PharmCAS, and two letters of recommendation (submitted to PharmCAS), must be received by the Office of Admissions to be reviewed for potential entrance into the College.

*Please Note:* Applicants are responsible for tracking the receipt of their application materials and verifying the status of their applications on the University website. The Office of Admissions will send qualified applicants instructions for creating an account. Applicants must create and utilize their account to track and check their application status online. Applicants are also responsible for notifying the Office of Admissions of any changes in their mailing address or e-mail address:

Midwestern University Office of Admissions 19555 North 59th Avenue Glendale, AZ 85308  
623/572-3215 or 888/247-9277  
[admissaz@midwestern.edu](mailto:admissaz@midwestern.edu)



## Interview and Selection Process

The Director of Admissions, Associate Dean, and/or the Admissions Committee review applicant files when complete to determine applicant eligibility for interviews.

Invitations are sent to eligible applicants for an interview, which are scheduled on a first-call, first-scheduled basis. No interviews will be granted until the application process is complete. Interview invitations typically extend from September through May.

During the interview process, applicants will meet with an interview panel that may consist of pharmacy faculty members, pharmacists, and pharmacy students. Panel members will evaluate professional motivation and preparedness, personal qualities, communication skills, and decision-making ability by rating applicants on a standardized evaluation scale. After reviewing the applicant's completed application and interview evaluation, the Admissions Committee recommends accepting, denying, or placing applicants on an alternate list. Recommendations are then forwarded to the Dean for final approval.

Applications to the College are processed and reviewed during regular intervals in the admissions cycle until the class is filled.

The Pharm.D. Program is rigorous and challenging. The Admissions Committee will therefore assess the quality and rigor of the prepharmacy academic records presented by applicants. When assessing the prepharmacy academic records, the Admissions Committee will:

1. View applicants with cumulative and science grade point averages below 2.75 on a 4.00 scale with particular concern. Although 2.50 on a 4.00 scale is the preferred minimum cumulative and science GPA for admission consideration, higher cumulative GPAs are more competitive and recommended.
2. View with concern applicants whose prepharmacy math and science coursework was completed longer than 10 years ago. More recent (within five years) prepharmacy math and science coursework is preferred.
3. Consider the reputations for quality and rigor of the institutions where applicants have taken coursework, the extent of completion of science prerequisites, the usual credit load carried per term, the difficulty level of previous coursework, and trends in the applicant's grades.

## Additional MWU Agreements (Inter-college)

### MWU Arizona College of Medicine (AZCOM) Admission Program

The MWU Arizona College of Medicine will annually reserve up to five seats in each of their matriculating classes for qualified College of Pharmacy, Glendale Campus students who are interested in attending the College of Medicine following graduation from CPG. Under this agreement, qualified pharmacy students in their first or second year of the Pharm.D. program apply for admission to AZCOM with delayed matriculation to the Fall Quarter following graduation from CPG.

## Reapplication Process

After receiving a denial letter, applicants may reapply for the next enrollment cycle. Before reapplying, however, applicants should seek the advice of an admissions counselor. To initiate the reapplication process, applicants must submit their application to PharmCAS. Applications are then processed by the standard application procedures.

## Transfer Admission from Another Pharmacy School

The College may accept transfer students from other ACPE- accredited pharmacy schools or colleges who are currently enrolled, are in good academic standing, and provide legitimate reasons for seeking transfer.

Transfer applicants should not apply via PharmCAS. All requests for transfer information should be referred to the Office of the Dean where potential transfer applicants can receive counseling prior to receiving and submitting their applications.

Students requesting transfers must meet the College's general requirements for admission. They must also submit the following documents by January 15th:

1. A letter to the Associate Dean of Professional Affairs indicating their reasons for requesting transfer and explaining any difficulties encountered at their current institution;
2. A completed College transfer application;
3. Official transcripts from all schools attended-undergraduate, graduate, and professional;
4. Catalogs and detailed pharmacy syllabi for any courses for which advanced standing consideration is requested;
5. A letter from the Dean of the college of pharmacy in which the student is enrolled that describes their current academic status and terms of withdrawal or dismissal;
6. One letter of recommendation from a faculty member at the current college of pharmacy;
7. Additional documents or letters of recommendation as determined by the Director of Admissions or Dean.

The Office of the Dean will collect and forward student portfolios to the Admissions Committee for review. When reviews are positive, candidates will be invited for interviews and their completed file will be reviewed by the committee which will provide a recommendation. When transferring students are admitted and request advanced standing, the Office of the Dean will forward these student requests to the appropriate faculty. No advanced standing credit will be awarded for professional pharmacy coursework completed at a foreign college of pharmacy.

## Readmission After Dismissal or Withdrawal for Poor Academic Performance

Students dismissed or who withdraw due to poor academic performance may reapply for admission to the College if they:

1. Seek academic counseling from the Office of the Dean prior to enrolling in the required advanced prepharmacy curriculum;
2. Complete at least two semesters or three quarters of full-time study (i.e., at least 15 credit hours per semester or quarter) of a curriculum at the advanced prepharmacy level or higher at a regionally accredited U.S. college or university;
3. Earn grades of at least C (not C-) in all courses taken;
4. Maintain a cumulative GPA of 2.50 or better.

Students fulfilling these requirements will be permitted to reapply to the University and the College. Students should obtain their applications from the Office of the Dean and not through PharmCAS. Completed readmission applications must be submitted by February 15th to the Office of the Dean. The completed application of reapplying PS-1 students will be forwarded to the Admissions Committee for review and recommendation. The completed application of a reapplying PS-2 or PS-3 student will be forwarded by the Office of the Dean to the Student Promotion and Graduation Committee for review and recommendation. The respective committees will review applications for evidence of improved academic potential. Committee recommendations are forwarded to the Dean for final action.

No guarantee of admission is implied, and questions related to advanced standing and similar issues will be addressed as they are for new applicants. Readmission will be granted only once.

# Technical Standards, Pharmacy

## Technical Standards

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the College.

Candidates must be able to perform the following abilities and skills:

1. **Observation:** The candidate must be able to accurately make observations at a distance and close at hand, including those on a computer screen or electronic device. Observation necessitates the functional use of vision and sense of touch and is enhanced by the functional use of all of the other senses. (The candidate must be able to accurately auscultate lung/breath, heart and bowel sounds to complete the curricular requirement to individually complete physical examination of a patient/client.)
2. **Communication:** The candidate must be able to communicate in English, proficiently and sensitively, in verbal and written form, and be able to perceive nonverbal communication.
3. **Motor:** Candidates must be able to coordinate both gross and fine motor movements, maintain equilibrium and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control and eye-to-hand coordination to perform profession-specific skills and tasks. Candidates must be able to lift 20 lbs. vertically and horizontally.
4. **Intellectual, Conceptual, Integrative and Quantitative Abilities:** The candidate must be able to problem solve, measure, calculate, reason, analyze, record and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
5. **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of the individual's intellectual abilities, the exercise of good judgment and the consistent, prompt completion of all responsibilities and the development of mature, sensitive, and effective relationships. Candidates must be able to tolerate physically, mentally and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn are all personal qualities required during the educational process. The candidate must agree to participate in touching/palpating on the skin and being touched/palpated on the skin by individuals regardless of gender in all academic settings. These activities will take place in large and small group settings as directed in the College's curricular requirements.

Candidates are required to verify that they understand and are able to meet these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet Technical Standards with accommodation, must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

# Graduation Requirements

The degree Doctor of Pharmacy (Pharm.D.) is conferred upon candidates of good moral character who have completed all academic requirements, satisfied all financial obligations, and completed all graduation requirements. All graduating students are also required to attend the commencement for conferral of the degree, unless excused by the Dean.

Candidates for graduation must be of good moral character consistent with the requirements of the pharmacy profession and CPG faculty. It is the position of the faculty that anyone who uses, possesses, distributes, sells, or is under the influence of narcotics, dangerous drugs, or controlled substances, or who abuses alcohol or is involved in any conduct involving moral turpitude, fails to meet the ethical and moral requirements of the profession and may be dismissed from any program or denied the awarding of any degree from CPG.

To qualify for graduation, a student must have satisfied the following requirements:

1. Successfully completed a minimum 84 quarter credit hours or 60 semester credit hours of prerequisite coursework, as stipulated, for full admission to the program;
2. Successfully completed the 203 quarter credit hours of the program of professional and experiential coursework approved by the CPG faculty and Dean;
3. Attained a cumulative grade point average of 2.00 (C) for all requisite professional and experiential coursework at CPG;
4. Achieved a cumulative rotation grade point average for rotations of 2.00 or greater;
5. Repeated, upon approval, and earned a passing grade for any required courses in the professional program for which a grade of "F" has been issued;
6. Successfully completed, at a minimum, the last 4 didactic quarters and all experiential rotations at CPG;
7. Been recommended for the degree by a majority vote of the CPG Student Promotion and Graduation Committee;
8. Settled all financial accounts with the University;
9. Complete all graduation clearance requirements as instructed by the Office of the Registrar.

Graduates are responsible for providing a permanent address to the Registrar so that official documents can be forwarded.

# Licensure Requirements

Laws in all states, including the District of Columbia and Puerto Rico, require applicants for licensure to: 1) be of good moral character; 2) be at least 21 years of age (Arizona is an exception); 3) have graduated from a Doctor of Pharmacy degree program of an ACPE-accredited college or school of pharmacy; and 4) have passed two examinations given by the board of pharmacy. All states, the District of Columbia, Puerto Rico, and the Virgin Islands use the North American Pharmacy Licensure Examination (NAPLEX) and NABP Multistate Pharmacy Jurisprudence Examination (MPJE).

All jurisdictions require candidates for licensure to have a record of practical experience or internship training acquired under the supervision and instruction of a licensed practitioner. Some states, including Arizona, accept the training completed during a formal academic program, e.g., CPG's Pharm.D. Program.

Midwestern University College of Pharmacy's Doctor of Pharmacy program meets the educational requirements for licensure to practice as a pharmacist in the following states and territories: Alabama, Alaska, Arizona, Arkansas\*, California, Colorado, Connecticut, District of Columbia, Delaware, Florida, Georgia, Guam, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota\*, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

\*Special Note: Licensure in the states of Arkansas and South Dakota requires an additional 240 hours of pharmacy practice experiences.

Midwestern University College of Pharmacy has not made a determination that its Doctor of Pharmacy Program curriculum meets the territorial educational requirements for licensure or certification in the following territories: Puerto Rico and U.S. Virgin Islands. Students in this program receive a direct notification that Midwestern University has not made a determination if their program meets the requirements in the above listed territories.

Each student should check the additional licensure requirements for the state, district or territory in which they intend to pursue employment.

Publications concerning the NAPLEX licensure examination and internship experience are available from the National Association of Boards of Pharmacy, 1600 Feehanville Drive, Mount Prospect, IL 60056; 847/391-4406, [www.nabp.pharmacy](http://www.nabp.pharmacy).

For further information regarding licensure, please contact the Office of the Dean.

## Departments

### Department of Pharmaceutical Sciences

The Department of Pharmaceutical Sciences (PSCI) includes several specialty areas that provide the student with a foundation of knowledge upon which the therapeutics of pharmacy practice will be understood. The specialty areas are taught throughout the curriculum in unique classes as well as in the integrated sequence courses that are threaded through the didactic portion of the curriculum. The specialty areas taught by the PSCI faculty include physiology, pathophysiology, pharmaceuticals/pharmacokinetics, medicinal chemistry, and pharmacology/toxicology. "The mission of the Department of Pharmaceutical Sciences is to empower students with the scientific foundation essential to the professional pharmacy curriculum. The department endeavors to contribute significantly to Midwestern University by excelling in scientific research and service both within and outside of the College.

### Department of Pharmacy Practice

The Department of Pharmacy Practice (PPRA) comprises faculty who provide education in the social, administrative and clinical aspects of pharmacy practice, including patient care experiences. Required courses in the social and administrative science area include an introduction to career development and current pharmacy topics, a survey of the healthcare system, professional practice management, and pharmacy law and ethics. Required courses in the clinical science area include drug literature evaluation and the pharmacotherapeutics of prescription and non-prescription medications. A clinical skills development sequence integrates the knowledge and skills from other courses including communications, prescription processing, and pharmaceutical care. Supervised practice experiences required during the program provide opportunities for students to apply knowledge acquired in didactic courses to life situations. The experiences are designed to promote the development of technical, cognitive, and decision-making skills that are necessary for the contemporary practice of pharmacy in a variety of practice environments. Various states apply these experiences to their state board of pharmacy internship requirements.

### Office of Experiential Education

The mission of the Office of Experiential Education is to cultivate dedicated and proficient student pharmacists by providing high quality pharmacy practice experiences through the ongoing development of students, sites, and preceptors.

# Pharmacy Curriculum

The College reserves the right to alter its curriculum however and whenever it deems appropriate.

Total Quarter Credits in the Professional Program: 203

## First Professional Year

### Summer Quarter

Course Code	Title	Credits
BIOCG 1551	Biochemistry	3.0
PHYSG 1501	Human Physiology I	3.0
PPRAG 1501	Clinical Skills Development 1	3.5
PPRAG 1536	People, Patients and Populations	4.0
PPRAG 1591	Introduction to Pharmacy Practice	1.0
PSCIG 1540	Pharmaceutical Calculations	2.5
<b>Sub-Total Credits</b>		<b>17.00</b>

### Fall Quarter

Course Code	Title	Credits
COREG 1560C	Interprofessional Healthcare	0.5
MICRG 1553	Immunology	3.0
PHYSG 1502	Human Physiology II	3.0
PPRAG 1502	Clinical Skills Development 2	3.0
PPRAG 1571	Healthcare Systems	3.0
PSCIG 1541	Pharmaceutics 1, Non-Sterile Dosage Forms	4.0
PSCIG 1541L	Pharmacy Compounding	2.0
<b>Sub-Total Credits</b>		<b>18.50</b>

### Winter Quarter

Course Code	Title	Credits
BIOCG 1552	Molecular Biology and Human Genetics	2.0
COREG 1570C	Interprofessional Healthcare	0.5
PHIDG 1501	Integrated Sequence 1	3.0
PHIDG 1502	Integrated Sequence 2	4.0
PPRAG 1503	Clinical Skills Development 3	2.0
PPRAG 1532	Foundations of Clinical Reasoning	1.5
PSCIG 1542	Pharmaceutics 2, Sterile Dosage Forms	2.0
<b>Sub-Total Credits</b>		<b>15.00</b>

### Spring Quarter

Course Code	Title	Credits
COREG 1580C	Interprofessional Healthcare	0.5
MICRG 1513	Microbiology	3.0
PHIDG 1503	Integrated Sequence 3	4.0
PPRAG 1504	Clinical Skills Development 4	2.5
PPRAG 1524	Pharmacy Law and Public Policy	2.5
PSCIG 1564	Pharmacokinetics and Biopharmaceutics	3.5
<b>Sub-Total Credits</b>		<b>16.00</b>

## Second Professional Year

### Summer Quarter

Course Code	Title	Credits
PPRAG 1694	Introductory Community Experience	6.0
PPRAG 1695	Introductory Institutional Experience	6.0
<b>Sub-Total Credits</b>		<b>12.00</b>

### Fall Quarter

Course Code	Title	Credits
PHIDG 1604	Integrated Sequence 4	4.0
PHIDG 1605	Integrated Sequence 5	5.0
PPRAG 1605	Clinical Skills Development 5	1.5
PPRAG 1665	Ethical Decision Making	2.0
PPRAG 1672	Research Methods & Epidemiology for Healthcare Professionals	3.0
	Electives (0-3)	0-3
<b>Sub-Total Credits</b>		<b>15.50-18.5</b>

### Winter Quarter

Course Code	Title	Credits
PHIDG 1606	Integrated Sequence 6	5.0
PHIDG 1607	Integrated Sequence 7	4.5
PPRAG 1606	Clinical Skills Development 6	1.5
PPRAG 1676	Evidence-Based Healthcare	3.0
	Electives (0-3)	0-3
<b>Sub-Total Credits</b>		<b>14.00-17</b>

### Spring Quarter

Course Code	Title	Credits
PHIDG 1608	Integrated Sequence 8	6.0
PHIDG 1609	Integrated Sequence 9	3.5
PPRAG 1607	Clinical Skills Development 7	1.5
PPRAG 1667	Complementary and Alternative Medicine	2.0
PPRAG 1675	Management 1	2.5
	Electives (0-3)	0-3
<b>Sub-Total Credits</b>		<b>15.50-18.5</b>

## Third Professional year

### Summer Quarter

Course Code	Title	Credits
PPRAG 1701	Acute Care Management	4.5
PPRAG 1708	Clinical Skills Development 8	1.5
PPRAG 1737	Disease State Management	4.5
PPRAG 1776	Management 2	2.0
	Electives (0-3)	0-3
<b>Sub-Total Credits</b>		<b>12.50-15.5</b>

**Clinical Block Advanced Pharmacy Practice Experience Rotations: 36 weeks for a total of 54 credit hours plus 4 hours PharmD. Seminar.**

<b>Course Code</b>	<b>Title</b>	<b>Credits</b>
PPRAG 1791	Advanced Community Pharmacy Practice Experience	9.0
PPRAG 1792	Advanced Acute Care Pharmacy Practice Experience	9.0
PPRAG 1793	Advanced Ambulatory Care Pharmacy Practice Experience	9.0
PPRAG 1794	Advanced Health System Pharmacy Practice Experience	9.0
PPRAG 1795	Patient Care Elective Advanced Pharmacy Practice Experience	9.0
PPRAG 1796	Elective Advanced Pharmacy Practice Experience	9.0
PPRAG 1790	Pharm.D. Seminar	4.0
<b>Sub-Total Credits</b>		<b>58.00</b>



## Professional Elective

In addition to the required courses, students must complete a minimum of 9.0 hours of elective credit in the CPG program prior to their advanced experiential rotations (APPEs). Electives are generally taken in the didactic quarters following completion of introductory experiential rotations (IPPEs).

Course Code	Title	Credits
IPECG 1401A	Improving Patient Safety I	1.5
IPECG 1401C	Improving Patient Safety I	1.5
IPECG 1402A	Improving Patient Safety II	1.5
IPECG 1402C	Improving Patient Safety 2	1.5
IPECG 1403C	Improving Patient Safety 3	1.5
IPECG 1404A	Leadership in Healthcare Teams	1.5
IPECG 1404C	Leadership in Healthcare Teams	1.5
IPECG 1410C	Safe Opioid Practices	1.5
IPECG 1420C	Antibiotic Stewardship	1.5
ONEHG 1301C	One Health Grand Rounds	2.0
ONEHG 1301J	One Health Grand Rounds	2.0
PPRAG 1301	Special Project/Research	1.5
PPRAG 1302	Special Project/Research	3.0
PPRAG 1338	Pharmacy-Based Health Screenings	1.5
PPRAG 1339	History of Pharmacy in the United States	1.5
PPRAG 1445	A Foundation for Leadership	2.0
PPRAG 1348	Personal Finance for the Healthcare Professional	1.5
PPRAG 1349	Medication Management in Hospice Patients	1.5
PPRAG 1411	Pharmacological Management of Chronic Pain	1.5
PPRAG 1415	Rare and Interesting Diseases	1.5
PPRAG 1418	Nuclear Pharmacy	1.5
PPRAG 1419	Topics in Women's Health	1.5
PPRAG 1420	Pharmacy Based Immunization Delivery	2.0
PPRAG 1421	Dental Health and the Pharmacist	1.5
PPRAG 1426	Putting Your Best Residency Foot Forward	1.5
PPRAG 1427	Postmenopausal Women's Health	1.5
PPRAG 1428	Acute Care Cardiology	3.0
PPRAG 1431	Book Club	1.5
PPRAG 1432	Advanced Communication with the Spanish Speaking Patient	1.5
PPRAG 1433	Introduction to Specialty Pharmacy	1.5
PPRAG 1434	Advanced Oncology Therapeutics	1.5
PPRAG 1438	Managed Care	1.5
PPRAG 1439	Pediatric Pharmacotherapy	1.5
PPRAG 1441	Medication Therapy Management	1.5
PPRAG 1442	Advanced Geriatric Pharmacotherapy	1.5
PPRAG 1443	Veterinary Pharmacology	1.5
PPRAG 1447	CPG Grand Rounds: Clinical Pearls	1.5
PPRAG 1448	Advanced Psychiatric Pharmacy	1.5
PPRAG 1449	Advanced Research Methods: Using Analytics in Health Care Research	3.0
PSCIG 1301	Special Project/ Research	1.5
PSCIG 1302	Special Project/ Research	3.0
PSCIG 1304	Mental Health First Aid Certification	1.0
PSCIG 1305	Pharmacy: Its History and Heroes	2.0
PSCIG 1323	Use and Abuse of Drugs	1.5

PSCIG 1357	Introduction to Forensic Science for Healthcare Professionals	1.5
PSCIG 1360	Introduction to Drug, Biologics and Medical Device Regulation	1.5
PSCIG 1361	Introduction to Toxicology	1.5
PSCIG 1362	Advanced Cardiovascular Pharmacology	1.5
PSCIG 1363	Introduction to Teaching and Learning	1.5
PSCIG 1364	Introduction to Teaching and Learning	3.0
Total Credits		203

## Student Academic Policies

The following academic policies apply to all students who matriculate during the academic year of this catalog publication. These policies will apply throughout the entire time a student is enrolled in the college. In the event that these policies need to be revised as the result of new accreditation requirements, mandates by the United States Department of Education, or other unforeseen circumstances, students will be notified in writing prior to the effective date of the new policy.

Faculty and students should also refer to the University Academic Policy section for additional policies that apply to all students at Midwestern University.

### Early Monitoring of Students in Academic Difficulty

Faculty contact students who have earned a failing grade in required courses based on course assessments to date and offer to meet with them to discuss strategies for success. The Dean's Office also contacts those students, meets with them, and reviews strategies for success and available resources. The Office of the Dean will notify students who are earning a failing grade in a required course and outline additional learning/studying resources, and/or suggested or required meetings with relevant faculty, Dean's Office personnel, and/or Student Services personnel with the intent to optimize the student's future academic success.

### Student Promotion and Graduation Committee

The Student Promotion and Graduation Committee (SPGC) is composed of members of the College faculty and a representative from the Office of the Dean. The Committee is responsible for enforcing the published academic and professional standards established by the faculty and for assuring that the standards are met by all students enrolled in the College. As such, the Committee recommends the criteria, policies and procedures for student advancement and graduation, as well as academic probation, dismissal, and readmission to the College faculty for adoption. The Committee meets, at a minimum, at the end of each academic quarter to review the academic progress and performance of students enrolled in the program in relation to institutional academic policies. At the end of the academic year, the Committee assesses the academic and professional progress and performance of each student. If the student's progress is satisfactory, the student is promoted to the next academic year, provided all tuition and fees have been paid. Finally, the Committee also identifies and recommends candidates for graduation to the MWU Faculty Senate.

If a student fails to make satisfactory progress in completing the prescribed course of study, the Committee shall recommend to the Dean or the Dean's designee appropriate action to correct the deficiency(ies). In instances involving more than one failure of a student to maintain satisfactory academic/professional progress, the Committee may recommend dismissal.

Among the options available to the Committee in regard to unsatisfactory student performance are that the student:

- be placed on academic probation for a specified period of time
- take an alternate approved course offered at another college or university

- repeat the course(s) in which there is a failure according to the College's alternate course retake policy
- repeat the course(s) in which there is a failure when the course is offered again in the curriculum
- be placed in an extended track program
- be dismissed from the College.

## Academic Standards for the Pharm.D. Program

An annual didactic grade point average will be used as the primary measure of academic performance. It is calculated from all didactic courses for a particular professional year. Grades earned in courses taken prior to matriculation in the professional program, grades earned for courses taken at another institution while enrolled in the professional program are not included in the calculation of this annual grade point average.

## Academic Policies

Students must maintain an annual grade point average of at least 2.000 in their professional program to remain in good academic standing. If a student earns a grade of "F" in one or more courses or pharmacy practice experiences, the student is notified in writing that they are being placed on academic probation.

Academic probation represents notice that continued inadequate academic performance may result in dismissal from the College. The student must repeat all courses or pharmacy practice experiences in which a grade of "F" was received. The recommendation of how a student will remediate a failed course(s) is made by the Student Promotion and Graduation Committee to the Dean or the Dean's designee. The recommendation may include, but not be limited to, an alternate course retake, an extended program of study or dismissal from the program. Placement of a student in an alternate course retake(s) or on an extended program does not modify or limit the Committee's actions for dismissal.

Repeated pharmacy practice experiences are subject to availability of sites as determined by the Office of Experiential Education.

When a student fails to make satisfactory progress in completing the prescribed course of study, the Office of the Dean will notify the student, in writing (i.e., via email) at least two working days in advance of the Committee meeting when the student's academic performance will be reviewed. The student will be offered an opportunity to submit a written reflection letter outlining the circumstances that have led to the course failure(s) and also an opportunity to appear before the Committee (in person, virtually or via telephone) in order to present their case. In such instances, the student shall inform the Office of the Dean, in writing at least 24 hours in advance of the meeting, of their desire to submit a reflection letter and/or appear before the Committee or their intent to waive this right. If the student chooses to appear before the Committee, this prerogative extends to the involved student only and not to any other individuals. The SPGC will make a recommendation on a course of action to the Dean or the Dean's designee. Within two working days following the Committee meeting, the Office of the Dean will provide notification in writing (i.e., via email) to the involved student, informing the student of the recommendation of the Committee and the decision by the Dean or the Dean's designee.

To be returned to good academic standing after completion of an alternate course retake(s) or an extended track year, a student must have an annual grade point average of 2.000 or above and have successfully repeated all courses or pharmacy practice experiences in which a grade of "F" was received.

Failure of the same course when it is repeated may result in dismissal from the College. If the student does not meet the criteria for satisfactory academic performance at the end of the alternate course retake(s) or extended program, the student may be dismissed.

The following policies also guide recommendations made by the Student Promotion and Graduation Committee:

1. Students must successfully resolve all "I" (incomplete) and "IP" (in-progress) grades before beginning pharmacy practice experiences.
2. To proceed to pharmacy practice experiences, a student must have earned a passing grade in all coursework with an annual grade point average of 2.000 or above. Eligibility to start Introductory Pharmacy Practice Experiences (IPPEs) is determined by the cumulative annual grade point average calculated from all courses in the First Professional (PS-1) Year. Eligibility to start Advanced Pharmacy Practice Experiences (APPEs) is determined by the cumulative grade point average calculated from all coursework over both the Second Professional (PS-2) Year and the Third Professional (PS-3) Year summer quarter.

## Student Graduation and Promotion Committee Guidelines

This table summarizes the usual SPGC recommendation. The SPGC recommendation may vary based on specific student circumstances.

Circumstance	Usual Recommendation	Academic Status	Retake Course	Action Following Retake
<b>PS-1, PS-2,3 Didactic Quarters</b>				
All courses passed	Promote	Good Standing	No	No retake
Annual GPA < 2.00	Academic Probation until GPA > 2.00	Probation	No	No retake
<b>No Previous Course Failure</b>				
1 didactic course failure* within a quarter	ACRT	Probation	PS-1: IPPE Summer Block #1  PS-2,3: APPE Block #1	Pass: Promote Fail: Dismissal
2 didactic course failures* within a quarter	ACRTs	Probation	PS-1: IPPE Summer Block #1  PS-2,3: APPE Blocks #1 and #2	Pass: Promote Fail one or both: Dismissal
3 or more didactic course failures* within a quarter	Dismissal	Dismissed	No	N/A
<b>Previous Course Failure(s) Not Yet Remediated</b>				
One ACRT scheduled but not yet taken, and one additional course failure occurs in a future quarter in the same academic year	An additional ACRT (maximum 2 in any academic year) or (at student's option) ETDG	Probation;  Student advised another course failure likely means dismissal	PS-1: IPPE Summer Block #1  PS-2,3: APPE Block #1	ACRTs: Pass: Promote Fail one or both: Dismissal
One ACRT scheduled but not yet taken, and more than one didactic course failure occurs in future quarter(s) in the same academic year	Dismissal	Dismissed	No	N/A
Two ACRTs scheduled but not yet taken, and one or more additional didactic course failures occur in future quarter(s) in the same academic year	Dismissal	Dismissed	No	N/A
<b>Previous Course Failure(s) Already Remediated Through ACRT</b>				
Student has successfully remediated one failed course, and one additional didactic course failure occurs in any academic year	ACRT	Probation	PS-2,3: APPE Block #1	Pass: Promote Fail: Dismissal

<b>Circumstance</b>	<b>Usual Recommendation</b>	<b>Academic Status</b>	<b>Retake Course</b>	<b>Action Following Retake</b>
Student has successfully remediated one failed course, one ACRT is scheduled but not yet taken, and an additional didactic course failure occurs in any academic year.	Dismissal	Dismissed	No	N/A
Student has successfully remediated two failed courses, and an additional didactic course failure occurs in any academic year	Dismissal	Dismissed	No	N/A

<b>Students on Extended Track with Delayed Graduation</b>				
Student has not yet successfully remediated the failed course, and one additional didactic course failure occurs in the same quarter in the same academic year	ETDG	Probation	PS-1: Repeat failed courses next academic year PS-2,3: Repeat failed courses next academic year	Pass: Promote Fail: Dismissal
Student has not yet successfully remediated the failed course(s), and one or more additional didactic course failure(s) occur in a subsequent quarter in the same academic year	Dismissal	Dismissed	No	N/A
Student has successfully remediated the failed course, and one additional didactic course failure occurs in a quarter in any academic year	ACRT	Probation	PS-1: IPPE Summer Block #1 PS-2,3: APPE Block #1	Pass: Promote Fail: Dismissal
Student has successfully remediated the failed course(s), one ACRT is scheduled but not yet taken and an additional didactic course failure occurs in any academic year	Dismissal	Dismissed	No	N/A
<b>Experiential Rotations</b>				
All experiential rotations passed	Promote	Good Standing	No	No retake
Annual GPA < 2.00	Academic Probation until GPA > 2.00	Probation	No	No retake
1 IPPE experiential rotation failure (with no or one previous didactic course failure)	IPPE vacation block or APPE block #1	Probation	Repeat in same Summer if possible; if not, repeat as APPE block #1	Pass: Promote Fail: Dismissal
1 IPPE experiential rotation failure (with two or more previous didactic course failure)	Dismissal	Dismissed	No	N/A
2 IPPE experiential rotation failures	Dismissal	Dismissed	No	N/A
1 APPE experiential rotation failure	APPE block #7	Probation	Retake failed APPE at another site	Pass: Promote Fail: Dismissal
2 APPE experiential rotation failures	Dismissal	Dismissed	No	N/A

\*Course failure = Final grade “F” for a course; WF (Withdrawal Failure) is not considered

ACRT = Alternate Course Re-Take. The academic policy allows a student to take a maximum of two ACRTs.

ETDG = Extended track program with delayed graduation. Student repeats the course(s) in the next academic year. From the MWU Catalog: “In general, a student is allowed to go through an extended program only once.”

## Introductory and Advanced Pharmacy Practice Experience Failures

A withdrawal failure (WF) may only be granted to a student with the approval of the Director of Experiential Education if the student is receiving a failing grade at the time of withdrawal and if the

withdrawal is due to extenuating health or personal issues. A student who is requested by the preceptor or site administration to permanently leave the IPPE/APPE site for unprofessional behavior or patient safety issues may be issued a grade of "F". When a student fails an APPE, the student must petition the Student Promotion and Graduation Committee within 3 calendar days after the last day of the APPE to retake the same type of APPE. If granted, the timing of the retake will be subject to availability of sites as determined by the Office of Experiential Education.

## Extended Program

Problems may arise that may necessitate the restructuring of a student's academic course load. Accordingly, an individual's academic course load may be reduced so that the student enters what is termed an extended track repeat year program. Such a program rearranges the course schedule so that the normal time period for the program is extended, usually by one additional year. Only enrolled students may enter an extended program. To enter an extended program, either one or both of the following conditions must be met:

1. *Personal hardship.* If a student is experiencing unusual stresses in life and a decreased academic load could alleviate added stress, the student may petition the Student Promotion and Graduation Committee through the Dean or the Dean's designee for an extended program. This petition is not automatically granted and is approved only in exceptional circumstances. The Committee is responsible for evaluating the petition and submitting a recommendation concerning a student's request for an extended program to the Dean or the Dean's designee. The Dean or the Dean's designee is responsible for reviewing and assessing the Committee's recommendation, and then notifying the student of a decision.
2. *Academic.* As described above, a student ending an academic year with an annual GPA of less than 2.000 will be required to repeat courses or pharmacy practice experiences from that year in which "F" grades were received. A student may be placed in an extended track program for academic reasons through a decision by the Dean or the Dean's designee upon recommendation of the Student Promotion and Graduation Committee. A student placed on an extended track program for academic reasons is automatically placed on academic probation and may not be returned to good academic standing until the student successfully completes all course that were unsatisfactory and are required for graduation.

If a student is placed on an extended program, such action does not modify or limit the Committee's actions for dismissal. In general, a student is allowed to go through an extended program only once. Thus, the student may be dismissed for academic reasons while on an extended program.

A student who completes the extended program is defined as a reentering student as the student reenters the next professional year curriculum and resumes a normal course load. A reentering student must achieve a cumulative grade point average of 2.000 at the end of each quarter to continue at the College. A reentering student who earns a grade of "F" in one course or pharmacy practice experience may be dismissed from the College.

## Dismissal

A student may be dismissed from the College for academic reasons upon the recommendation of the Student Promotion and Graduation Committee to the Dean or the Dean's designee. The decision to dismiss a student is based on the determination by the Committee that the student has not satisfactorily demonstrated the aptitude to successfully achieve the standards and requirements set forth in the academic policies and professional expectations for the program.

## Appeal Process

Following notification of a decision for dismissal or extended track program, a student may appeal, in writing, the decision to the Dean. Such appeals must be received by the Dean within three working days after the student is officially notified of the dismissal or extended track program decision. A narrative explaining the basis for the appeal must accompany the request. An appeal must be based on one or more of the following premises:

1. Bias of one or more members of the Student Promotion and Graduation Committee
2. Material, documentable information not available to the Committee at the time of its initial decision
3. Procedural error

The Dean will review the appeal request and decide if there is sufficient information to convene a meeting of the Student Promotion and Graduation Committee, which would be asked to provide a recommendation to the Dean on the appeal request. Once a decision is made to convene a Committee meeting, the student requesting the appeal shall be notified in writing (i.e., by email) by the Office of the Dean at least two working days in advance of the scheduled Committee meeting in which the student's appeal will be heard. The student will be offered an opportunity to appear before the Committee (in person, virtually or by telephone) in order to present their case. In such instances, the student shall inform the Office of the Dean, in writing at least 24 hours prior to the meeting, of their desire to appear before the Committee or their intent to waive this right. If the student chooses to appear before the Committee, this prerogative extends to the involved student only and not to any other individuals.

Following the meeting, the Committee submits their recommendation to the Dean. Upon receipt of the Committee's recommendation, the Dean makes the final decision on all appeals.

The student must attend all didactic classes in which they are registered until the appeal process is complete. Students registered in an experiential rotation course may be placed on a mandatory leave of absence until the appeal process is finalized.

## Technology

Students must have a laptop computer to use in various learning activities. Specific specifications of the required computer will be available to students at the time of the admissions interview.

# Student Administrative Policies

## Absence Reporting Procedure

In the event of serious illness, personal emergency, personal incapacitation, or other exceptional problem of a serious nature that causes a student to be absent from a session requiring mandatory attendance or class, a student must notify one of the following: CPG's Office of the Dean, CPG department head, or course director. To be excused from a rotation, the student's preceptor and the Office of Experiential Education must be notified. Failure to notify the Office of Experiential Education will result in an unexcused absence and policies detailed in the Experiential Education Manual will apply. Assuming that there is a legitimate reason for a student's absence, the CPG's Office of the Dean will contact by e-mail or telephone the coordinators of courses in which the student will miss an examination, quiz, or graded assignment, or will send a letter to all appropriate course directors that confirms in writing that the student will be absent, the reason for the absence, the courses from which the student will be absent, and the date(s) of the student's absence. This will be done as soon as possible (within 24 hours) after the student has called in. It is the student's responsibility to contact the course director immediately upon the student's return for instructions regarding how the missed session can be made up. If a student fails to follow this procedure, the student is held responsible for the policies stated in course syllabi regarding unexcused absences. Unexcused absences may result in course failure.

## Requesting an Excused Absence for Personal/Professional Reasons

The College recognizes that a student may need to be excused from class or rotations for non-illness, non-emergency-related reasons. An Absence Request Form must be completed at least 2 weeks prior to the day the student wishes to be excused. Forms are available in the Office of the Dean. Completion of the form by the student does not imply the student is excused from classes until the course directors of the affected courses approve the request.

## Advanced Standing

All requests for Advanced Standing by newly admitted, transfer, or enrolled students are processed on a course-by-course basis by the Office of the Dean. To be considered, a student must submit an Advanced Standing Request Form to the Office of the Dean on which the student lists the course(s) previously taken at an accredited college or university. The course(s) previously taken must be similar in content (including skills) to the professional course that the student is scheduled to take. Similar in content means that the course previously taken is at graduate level and includes all the major topics/skills covered in the program course for which Advanced Standing is being requested. Advanced Standing will only be considered for coursework taken in which a letter grade of B or better has been earned. The student is responsible for providing a list comparing course topics/skills covered in each course (the course taken and the course for which Advanced Standing is being requested). For each course used to support an Advanced Standing request, the student must provide an official course description, a course syllabus, when it was taken, and an unofficial transcript showing the course grade. The course previously taken must be at least the same number of credit hours as the course for which Advanced Standing is being requested. The course previously taken must have been started and completed within 24 months of the start of the course that Advanced Standing is being requested. For some courses, a student may be required to take a comprehensive challenge exam in addition to receiving a grade of B or better. All requests must be submitted at least 3 weeks prior to the start of the program course for which Advanced Standing is being requested. Advanced Standing will NOT be considered for courses that have been failed and retaken, or for experiential rotations (i.e., IPPEs or APPEs). No advanced standing will be awarded for professional pharmacy coursework completed at a foreign college of pharmacy. Once the request has been evaluated by a Dean's office representative and it is determined that the request meets this criteria, the request will be sent to the course director for the course in which Advanced Standing is being requested for final approval.

## Class Standing

To achieve the status of a second-year student in the professional program (PS-II), students must have successfully completed all requisite PS-I courses and earned an annual didactic GPA of 2.00. To achieve the status of a third-year student in the professional program (PS-III), students must have successfully completed all requisite PS-II courses, the two introductory rotations, and earned an annual didactic GPA of 2.00.

## Dean's List

Following each quarter, the College of Pharmacy, Glendale Campus recognizes students for the Dean's List who have distinguished themselves by achieving a GPA of 3.50 or better for the quarter. This applies for full-time didactic coursework only. Students who are currently undergoing an extended program of study are not eligible for the Dean's List.

## Attendance

Upon acceptance to the Midwestern University College of Pharmacy, students are expected to devote their entire efforts to the academic curriculum. The College actively discourages employment that will conflict with a student's ability to perform while didactic and experiential courses are in session and will not take outside employment or activities into consideration when scheduling classes, examinations, reviews, field trips, or individual didactic or experiential course functions. Class attendance is mandatory for all students during experiential courses (IPPEs and APPEs). Refer to the student IPPE or APPE manual for specific details regarding this policy.



## Faculty Mentorship

CPG assigns a faculty mentor to students in each entering class. Students are assigned a faculty advisor selected from the faculty of CPG. In addition to these faculty advisors, the College Dean, Associate Deans and the Dean of Students, as well as other faculty members and professional staff, are also available to assist students with academic advising, counseling, and enrichment.

Students are placed into groups upon entry into the College. Each group of students is assigned a faculty mentor who will mentor them throughout the program. Faculty mentors act as liaisons between the faculty and students. Their responsibilities include:

1. Serving as the student's mentor and academic/professional counselor;
2. Monitoring the academic progress and professional growth of the student;
3. Assist the student in seeking academic and personal counseling services provided by the institution;
4. Serving as an advocate for the student; and
5. Serving the student during the individual's selection of a career within the pharmacy profession.

## Grades

The following includes all grading options and corresponding definitions that may be issued within CPG.

Grade	Quality Points (per credit)	Comments
A	4.000	-
A-	3.670	-
B+	3.330	-
B	3.000	-
B-	2.670	-
C+	2.330	-
C	2.000	-
F	0.000	-
I	0.000	An Incomplete (I) grade may be assigned by an instructor when a student's work is of passing quality but incomplete, or if a student qualifies for re-examination. It is the responsibility of the student to request an extension from the course instructor. By assigning an "I" grade, it is implied that an instructor agrees that the student has a valid reason and should be given additional time to complete required coursework. All incomplete grades must be resolved within 10 calendar days from the end of final exams for the quarter. In the case of courses ending prior to final exam week, it is the obligation of the course director to monitor the use and resolution of the incomplete grade, with notice to the Registrar.
IP	0.000	An In-Progress (IP) grade may be assigned when extenuating circumstances make it necessary to extend the grade completion period past 10 calendar days (e.g. illness, family death). Authorization by the Dean is required, and the completion period should not typically exceed one quarter.
P	0.000	Pass (for a pass/fail course); designation indicates that the student has made satisfactory progress or completed required coursework satisfactorily. Grade of "P" is counted toward credit hour accruals for graduation but does not affect GPA calculations.
F	0.000	Fail (for a pass/fail course); designation indicates that the student has not made satisfactory progress or completed required coursework satisfactorily. Grade of "F" is counted toward credit hour accruals as attempted but not completed. Grade of "F" is calculated into the GPA (quality points are lowered due to unsuccessful course completion). Multiple F's can be grounds for dismissal.
W	0.000	Withdrawal is given if the work completed up to the time of withdrawal was satisfactory. This grade is not counted in any GPA calculation and is not counted in credit hour accruals for graduation.
WF	0.000	Withdrawal/Failing is given if the work completed up to the time of withdrawal is below the passing grade level for the Program/School. This grade is not counted in any GPA calculation and is not counted in credit hour accruals for graduation.

Grade	Quality Points (per credit)	Comments
AU	0.000	This designation indicates an audited course in which a student is registered with the understanding that neither academic credit nor a grade is earned. The status of the course cannot be changed from audit to full credit after the start of the quarter. The designation AU is not counted in the GPA calculation.
AP		This designation indicates the decision of a college to award academic credit that precludes a student from taking required course work. The designation of Advanced Placement (AP) is applied toward credit hour accruals, but is not counted in the GPA calculation.

## Grades & Grade Point Average

Courses are recorded in terms of quarter hour(s) of credit. Multiplication of the credits for a course by the numeric value for the grade awarded gives the number of quality points earned for a course. Dividing the total number of quality points earned in courses by the total number of credits in those courses gives the grade point average.

Grades reported as "W", "WF", and "P" are recorded on a student's permanent record but are not used in the calculation of a student's grade point average. Similarly, a grade of "I" or "IP" may be assigned and is used only when special/extenuating circumstances exist (e.g., prolonged illness, family crisis, etc.), which prevent a student from completing the necessary course requirements on time, in order to receive a grade.

Any request for an extension to complete required course or pharmacy practice experience requirements must be approved first by the course director responsible for the course or pharmacy practice experience. Unless otherwise specified, a grade of "I" must be resolved within 10 days from the end of the quarter or pharmacy practice experience or the incomplete grade is automatically converted into a grade of "F", which signifies failure of the course or pharmacy practice experience. It is the responsibility of the student when receiving an incomplete grade to complete all of the course requirements within this time, unless otherwise specified. If a student receives a failing grade ("F") in a course or pharmacy practice experience, that grade will be recorded on the student's transcript. If a course re-examination is successfully completed, a minimally passing grade is registered in place of the "F" and the student's cumulative grade point average will reflect the change. If a student is unsuccessful at re-examination, the grade of "F" will remain.

A student's academic standing is determined on the basis of the student's grade point average. Inclusion on the Dean's List, honors at graduation, placement on probation, and dismissal depend directly on the grade point average.

## Grade for Retaken Course

If a student receives a failing grade, that grade is recorded on the transcript as a letter grade (an "F" entry). This deficiency may be corrected as recommended by the Student Promotion and Graduation Committee. Upon repetition of a failed course, the original grade of "F" remains on the transcript, and the repeated course and new grade are entered on the transcript. The grade for a failed course repeated and passed at Midwestern University, or at an outside institution is recorded on the transcript as a grade of "C". For all failed experiential rotations at Midwestern University College of Pharmacy that are repeated and passed, a grade of "C" will be recorded on the transcript. For both didactic coursework and experiential rotations that are repeated, the original failing grade will remain on the transcript but will not be included in the GPA calculations. The grade of "C" will be included in the GPA calculation. If a repeated didactic course or experiential rotation is failed, a grade of "F" is again recorded on the transcript. Students who fail a course or rotation a second time may be recommended for dismissal as described in the COP Student Promotion and Graduation Committee Recommendations Guidelines.

## Graduation Honors

Graduation honors are awarded to candidates for the full-time Doctor of Pharmacy degree who have distinguished themselves by virtue of high academic achievement while enrolled in the professional program of the College. Only grades from didactic courses taken at the College will be included in determining graduation honors.

Degrees with honor are awarded based on the level of academic achievement as follows:

### Didactic Course

Grade Point Average	Graduation Honor
> 3.90	Summa cum laude
3.75 - 3.89	Magna cum laude
3.50 - 3.74	Cum laude

## Leave of Absence from APPEs in the Pharm.D. Program

Refer to the University policy. Requests for leaves from the Pharm.D. Program must be in writing and forwarded to the Dean by June 1 of the PS-III year. No requests for leaves of absence will be permitted after this time except for extraordinary circumstances. Once APPEs have started, the minimum approved length of time for a leave of absence is six months.

## Awards

Availability of awards is subject to continued support by the sponsoring organization.

### *APhA Academy of Students of Pharmacy Mortar and Pestle Professionalism Award*

A wooden mortar and pestle is presented annually to a graduating student who exhibits the ideals of professionalism and excellence in patient care in all aspects of their academic pharmacy career. The winner is eligible to compete in an essay competition to receive a monetary award to be used for professional development activities.

### *APhA-ASP Senior Recognition Certificate*

The Academy of Students of Pharmacy Chapter presents this certificate each year to a 3rd year student who has made outstanding contributions to the chapter.

### *ASHP Student Leadership Award*

Each year the American Society of Health-Systems Pharmacists provides a leadership award to a student who has demonstrated qualities of leadership through involvement with ASHP activities. The student receives a monetary award and a copy of the ASHP Drug Information reference.

### *College Awards for Excellence*

Each year plaques are presented to outstanding students in the areas of medicinal chemistry, pharmaceuticals, pharmacology, therapeutics, and pharmacy administration.

### *Facts and Comparisons Award of Excellence in Clinical Communication*

A set of reference texts is presented to the graduating student who has demonstrated superior verbal and written clinical communication skills.

### *Midwestern University College of Pharmacy, Glendale Campus Excellence in Clinical Skills Development Award*

A certificate is presented to the graduating student exhibiting excellent patient care skills.

*Henry J. Goeckel Kappa Psi - Grand Council Scholarship Key and Certificate*

Kappa Psi Pharmaceutical Fraternity provides a Grand Council Scholarship Key and Certificate to a graduating Kappa Psi brother that graduates with first honors. The student receives a 14K-gold scholarship key and certificate from the Kappa Psi Council in recognition of the individual's academic achievement.

*Midwestern University College of Pharmacy, Glendale Campus Excellence in Service Award*

The award is given for superior scholastic and professional achievement. Leadership qualities as well as professional attitude are considered along with academic performance in selecting the graduating student for this honor.

*Midwestern University College of Pharmacy, Glendale Campus Excellence in Pharmacy Award*

A certificate is presented to the graduating student who has demonstrated outstanding achievement in the provision of drug information services.

*National Community Pharmacist Association (NCPA) Outstanding Student Member Award*

A plaque is presented each year by the NCPA in recognition of a student's entrepreneurial spirit and commitment to advancing independent community pharmacy practice.

*Natural Medicines Comprehensive Database Award*

A plaque and reference text are presented to a graduating student who has demonstrated an interest in the area of natural medicines.

*Natural Standard Research Collaboration Award*

A certificate and reference text are presented to a graduating student who perpetuates multidisciplinary, evidence-based research practices, healthcare communications, or information.

*Midwestern University College of Pharmacy, Glendale Campus Communications Award*

A certificate is presented to the graduating student who has demonstrated effective communication skills during the student's experiential rotations.

*The Robert C. Johnson Leadership Award*

This named award recognizes a graduating student who has been active in a leadership role and maintains an acceptable scholastic level. The student shall have actively participated in one or more student professional associations or demonstrated leadership in other capacities. The student is expected to undertake a project that contributes to patient care and/or for the advancement of the profession.

## Scholarships

Availability of scholarships is subject to continued support by the sponsoring organization.

*CVS Charitable Trust, Inc. Scholarship*

The CVS Charitable Trust, Inc. provides scholarships to students interested in entering community pharmacy practice.

*Craig A. Johnston Memorial Scholarship*

A scholarship is presented to a student in their 2nd or 3rd year with a grade point average of 3.0 or higher. Preference is given to a member of Kappa Psi.

*Dennis J. McCallian Scholarship*

A scholarship is presented to a student who demonstrates academic achievement in their 2nd or 3rd year. Must be actively involved in the community.

*John Dik Memorial Scholarship*

A scholarship presented to a student in their 2nd or 3rd year with a grade point average of 3.0 or higher. The student must be active in the community and demonstrate leadership qualities.

*The Midwestern University College of Pharmacy, Glendale Campus Heritage of Pharmacy Scholarship*  
One scholarship is presented each year to a student who has demonstrated academic achievement and professionalism.

*National Association of Chain Drug Stores Foundation Scholarship*  
Monetary awards are presented to students who are interested in pursuing a career in community pharmacy.

*Pharmacists Mutual Companies Scholarship*  
A scholarship is provided to a student who has demonstrated academic achievement.

*Albertsons Safeway Scholarship*  
Albertsons Safeway provides scholarships to educationally disadvantaged students in their 2nd and 3rd year of professional study.

*Walgreen Pharmacy Scholarship*  
The Walgreen Company provides scholarships to students who have demonstrated strong leadership and communication skills. These students must also have an interest in community pharmacy practice.

*Wal-Mart Pharmacy Scholarship*  
Wal-Mart provides scholarships to students with strong leadership qualities and a desire to enter community pharmacy practice.

## Pharmacy Program Calendar

### Summer 2025

Event	Class	Date
<b>Memorial Day</b>	<b>*No Classes*</b>	<b>May 26, 2025</b>
Orientation	PS-I	May 27 - 30, 2025
Classes Resume	PS-III	June 2, 2025
Classes Begin	PS-I	June 2, 2025
Last Day to Add/Drop Classes	PS-I, PS-III	June 6, 2025
<b>Juneteenth (Observed)</b>	<b>*No Classes*</b>	<b>June 19, 2025</b>
<b>Independence Day (Observed)</b>	<b>*No Classes*</b>	<b>July 4, 2025</b>
Last Day of Class	PS-I, PS-III	August 8, 2025
Quarterly Exams (PS-I/PS-III) PS-III Break?	PS-I, PS-III	August 11 - 15, 2025
Quarter Break	PS-I, PS-III	August 18 - 22, 2025

### Fall 2025

Event	Class	Date
Classes Begin	PS-I, PS-II	August 25, 2025
Last Day to Add/Drop Classes	PS-I, PS-II	August 29, 2025
<b>Labor Day</b>	<b>*No Classes*</b>	<b>September 1, 2025</b>
<b>White Coat Ceremony</b>		<b>September 27, 2025</b>
Last Day of Classes (PS-I/PS-II)	PS-I, PS-II	October 31, 2025
Quarterly Exams (PS-I/PS-II)	PS-I, PS-II	November 3 - 7, 2025
Thanksgiving Break (PS-I/PS-II)	PS-I, PS-II	November 10 - 28, 2025
Thanksgiving Break (PS-III)	PS-III	November 27-28, 2025
Holiday Break (PS-III)	PS-III	December 22 - January 9, 2026

## Winter 2025

Event	Class	Date
Classes Begin	PS-I, PS-II	December 1, 2025
Last Day to Add/Drop Classes	PS-I, PS-II	December 5, 2025
Winter Break	PS-I, PS-II	December 22, 2025 - January 2, 2026
Classes Resume	PS-I, PS-II	January 5, 2026
<b>Martin Luther King/ Jr. Day</b>	<b>*No Classes*</b>	<b>January 19, 2026</b>
Last Day of Classes	PS-I, PS-II	February 20, 2026
Quarterly Exams	PS-I, PS-II	February 23 - 27, 2026
Spring Break	PS-I, PS-II	March 2 - 6, 2026

## Spring 2026

Event	Class	Date
Classes Begin	PS-I, PS-II	March 9, 2026
Last Day to Add/Drop Classes	PS-I, PS-II	March 13, 2026
Last Day of Classes	PS-I, PS-II	May 15, 2026
Quarterly Exams	PS-I, PS-II	May 18 - 22, 2026
<b>Memorial Day</b>	<b>*No Classes*</b>	<b>May 25, 2026</b>
Quarter Break	PS-I, PS-II	May 26 - 29, 2026
Commencement		June 2, 2026 9:00 a.m.

## ROTATIONS

### PS-II

Term	Rotation	Date
Summer	Rotation Block 1	May 27 - June 20, 2025
Summer	Rotation Block 2	June 23 - July 18, 2025
	<b>Independence Day * No Rotations*</b>	<b>July 4, 2025</b>
Summer	Rotation Block 3	July 21 - August 15, 2025
Summer	Summer Break	August 18 - 22, 2025

### PS- III

Term	Rotation	Date
	Break Week	August 11 - 15, 2025
Fall	Rotation 1	August 18 - September 26, 2025
	<b>Labor Day *No Rotations*</b>	<b>September 1, 2025</b>
Fall	Rotation 2	September 29 - November 7, 2025
Winter	Rotation 3	November 10 - December 19, 2025
	<b>Thanksgiving Break</b>	<b>November 27 - 28, 2025</b>
	<b>Holiday Break</b>	<b>December 22, 2025 - January 9, 2026</b>
Winter	Rotation 4	January 12 - February 20, 2026
	<b>Martin Luther King Jr. Day * No Rotations*</b>	<b>January 19, 2026</b>
Spring	Rotation 5	February 23 - April 3, 2026
Spring	Rotation 6	April 6 - May 15, 2026

Last Revision: 08/28/2024

# Faculty

## Pharmacy Practice Faculty

**Jeffrey F. Barletta, Pharm.D., FCCM**  
Temple University School of Pharmacy  
Vice Chair and Professor

**Kelsey Buckley, Pharm.D., BCACP**  
University of Iowa School of Pharmacy  
Professor

**Melinda J. Burnworth, Pharm.D., BCPS, FASHP, FAzPA**  
University of Missouri-Kansas City School of Pharmacy  
Professor

**Stephanie J. Counts, MEd, Pharm.D.**  
University of Arizona College of Pharmacy  
Associate Professor

**Lindsay E. Davis, Pharm.D., BCPS, ASH-CHC, TTS, FAzPA**  
University of Arizona College of Pharmacy  
Professor

**Michael A. Dietrich, Pharm.D., FAzPA**  
Xavier University of Louisiana College of Pharmacy  
Associate Dean of Professional Affairs and Associate Professor

**Nicole K. Early, Pharm.D., BCPS, BCGP, FASCP, FAzPA**  
University of Florida College of Pharmacy  
Professor

**Shareen El-Ibiary, Pharm.D., BCPS, FCCP, FCSHP**  
University of South Carolina College of Pharmacy  
Chair and Professor

**Kathleen A. Fairman, MA, Ph.D.**  
Walden University School of Psychology  
Associate Professor

**Dawn S. Gerber, PharmD., BCGP, FASCP, FAzPA**  
Drake University College of Pharmacy and Health Sciences  
Associate Professor

**Kellie J. Goodlet, Pharm.D., BCPS, BCIDP**  
University of Arizona College of Pharmacy  
Associate Professor

**Mary Gurney, Ph.D., BCPA, FAPhA**  
University of Wisconsin-Madison School of Pharmacy  
Professor

**Vanthida Huang, Pharm.D., BSPHM, FCCP**  
Temple University School of Pharmacy  
Professor

**Elizabeth K. Pogge, Pharm.D., MPH, BCPS-AQ Cardiology, BCGP, FASCP, FAzPA**  
University of Nebraska Medical Center College of Pharmacy  
Professor

**Erin C. Raney, Pharm.D., BCPS, BC-ADM**  
University of Arizona College of Pharmacy  
Professor

**Michael T. Rupp, Ph.D., FAPhA**  
Ohio State University College of Pharmacy  
Professor

**Marc Scheetz, Pharm.D., M.Sc.**  
Butler University  
Associate Dean and Professor

**Carrie Sincak, Pharm.D., BCPS**  
University of Illinois at Chicago  
Associate Dean and Professor

**Tara Storzjohann, Pharm.D. BCGP, FASCP**  
Southwestern Oklahoma State University College of Pharmacy  
Professor

## Pharmaceutical Sciences Faculty

**Shaifali Bhalla, Ph.D.**  
University of Illinois at Chicago  
Associate Dean

**Tamer Elbayoumi, Ph.D.**  
Northeastern University Bouve' College of Allied Health Sciences  
Professor

**Mitchell R. Emerson, Ph.D.**  
University of Kansas Medical Center School of Medicine  
Dean and Professor

**Melanie A. Jordan, Ph.D.**  
Virginia Commonwealth University Medical College of Virginia  
Associate Professor

**Medha Joshi, Ph.D.**  
Institute of Chemical Technology Mumbai, India  
Chair and Professor



**Mark Olsen, Ph.D.**  
University of Texas  
Associate Professor

**Charles A. Veltri, Ph.D.**  
University of Utah College of Pharmacy  
Associate Professor and Associate Dean

**Volkmar Weissig, Ph.D., Sc.D.**  
Martin Luther University-Halle, Germany Institute  
of Biochemistry  
Professor

**Mingyi Yao, Ph.D.**  
Creighton University School of Medicine  
Professor

## Graduate Studies Faculty with Joint Appointments

**Thomas Broderick, Ph.D.**  
University of Alberta  
Professor

**Fernando Gonzalez, Ph.D.**  
University of Texas Southwestern Medical Center  
Associate  
Professor

**John A. Hnida, Ph.D.**  
University of New Mexico  
Associate Professor

**Sam Katzif, Ph.D.**  
George State University  
Associate Professor

**Chongwoo Kim, Ph.D.**  
John Hopkins University  
Associate Professor

**Kathryn Lawson, Ph.D.**  
University of Arizona  
Associate Professor

**Kathryn J. Leyva, Ph.D.**  
Northern Arizona University  
Chair and Professor

**Adebayo Molehin, Ph.D.**  
University of Queensland  
Assistant Professor

**Mark Swanson, Ph.D.**  
Stony Brook University  
Associate Professor

**Johana Vallejo-Elias, Ph.D.**  
University of Missouri  
Professor

# College Of Pharmacy, Glendale Campus Courses

## BIOCG 1551: Biochemistry

This course instills basic principles in biochemistry with particular emphasis on pharmaceutical applications. Lectures address acid/base chemistry, structure and function relationships of proteins, enzymes in biochemistry, and major pathways for protein, carbohydrate, and lipid metabolism, and pertinent nutritional topics.

**Credits** 3.0

## BIOCG 1552: Molecular Biology and Human Genetics

This course instills basic principles in molecular biology and human genetics. Lectures address nucleic acid structure, the flow of information from DNA to protein, current techniques in DNA technology including gene therapy and pharmacogenetics, the molecular basis of cancer and several topics in clinical genetics. Emphasis is placed on the pharmaceutical applications of all topics addressed.

**Credits** 2.0

### Prerequisites

[BIOCG 1551](#) Biochemistry

## **COREG 1560C: Interprofessional Healthcare**

The Interprofessional Healthcare course series involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course series is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs and in-person interprofessional case studies. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

## **COREG 1570C: Interprofessional Healthcare**

The Interprofessional Healthcare course series involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course series is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs and in-person interprofessional case studies. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

## **COREG 1580C: Interprofessional Healthcare**

The Interprofessional Healthcare course series involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course series is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs and in-person interprofessional case studies. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

## **IPECG 1401C: Improving Patient Safety 1**

This interprofessional online course will introduce students to how they can improve patient safety and reduce medical errors. The course instruction is through online Institute for Healthcare Improvement (IHI) educational modules reinforcing that knowledge through authentic team case study discussions and self-reflection writings. Completion of IPECG 1401C and IPECG 1402 will lead to an IHI certificate in Basic Safety. Enrollment is limited to PS-2 students only.

**Credits** 1.5

## **IPECG 1402C: Improving Patient Safety 2**

This interprofessional online course will introduce students to how they can improve patient safety and reduce medical errors through the PDSA process. The course instruction is through online Institute for Healthcare Improvement (IHI) educational modules, reinforcing that knowledge through authentic team case study discussions and self-reflection writings. Completion of [IPECG 1401](#) and IPECG 1402 will lead to an IHI certificate in Basic Safety.

**Credits** 1.5

### **Prerequisites**

[IPECG 1401C: Improving Patient Safety 1](#)

## **IPECG 1403C: Improving Patient Safety 3**

This interprofessional course is the third in a three-course sequence where students will demonstrate how they can improve quality and patient safety while reducing medical errors through well planned systems of performance measurement and quality improvement. This course will be conducted as an independent special project with a community provider to improve quality and patient safety in a specifically identified area of the practice.

**Credits** 1.5

### **Prerequisites**

[IPECG 1402C: Improving Patient Safety 2](#)

## **IPECG 1404C: Leadership in Healthcare Teams**

This interprofessional online elective is designed for students, while working on authentic healthcare teams, to develop the skills needed for leadership in their area(s) of practice. The skills learned will range from taking ownership of patient issues to developing solid interpersonal professional relationships. The course instruction is through online educational modules, reinforcing that knowledge through authentic team case study discussions and self-reflection writings. Enrollment is limited to PS-2 students only.

**Credits** 1.5

## **IPECG 1410C: Safe Opioid Practices**

This interprofessional online elective is designed to educate students about the opioid abuse epidemic currently being seen in the United States, with the main goal to prepare students to work through interprofessional collaboration to recognize and reduce opioid abuse in patients. This IPE elective will provide foundational knowledge instruction through online educational modules and that knowledge will be reinforced through interprofessional team-based case studies and online discussion boards. Enrollment is limited to PS-2 students only.

**Credits** 1.5

## **IPECG 1420C: Antibiotic Stewardship**

This interprofessional online elective course provides education on the appropriate use of antibiotics as outlined by the Centers for Disease Control (CDC). Topics covered include increasing antibiotic resistance and the importance of antibiotic stewardship, an overview of the incidence of antibiotic adverse drug reactions, background and errors in antibiotic use, drivers of inappropriate antibiotic use, and considerations for specific infections including otitis media, bronchitis, asthma, COPD and pharyngitis. Special attention is paid to the current guidelines and recommendations for antibiotic use in dentistry for pre-op or pre-treatment prophylaxis. The course will utilize a combination of CDC educational modules, quizzes on the content covered in those modules, and interprofessional authentic team-based case discussions of the module content. Enrollment is limited to PS-2 students only.

**Credits** 1.5

## **MICRG 1513: Microbiology**

This survey course in basic and medical microbiology focuses on the more common pathogenic microorganisms that cause morbidity and mortality in humans. The pattern of discussion is uniform: etiology, epidemiology, pathogenesis and pathology, clinical manifestations, diagnosis and prevention.

**Credits** 3.0

## **MICRG 1553: Immunology**

This course presents basic aspects of the body's defense system. Initial lectures address cells and organs of the immune system, complement activation, antigen processing and presentation, and cytokines. Introductory lectures are tied together later in the course with discussions of inflammation and the body's response to infectious disease. The role of the immune system in the rejection of organ transplants, autoimmunity, hypersensitivity, cancer, and AIDS are also discussed in detail. Current advances in immunotherapy and immunoprophylaxis are emphasized.

**Credits** 3.0

## **ONEHG 1301C: One Health Grand Rounds**

This course is open to all students in professional curricula at MWU. In cross-disciplinary teams mentored by MWU faculty or liaisons from public health agencies, each student team will select a topic based on its public health importance and professional relevance, review available research and publications, and provide an oral presentation of their findings. Through the collaborative research process and team presentations, participants will gain a deeper understanding of the contributory role each health professional has within their respective scope of community practice.

**Credits** 2.0

## **PHIDG 1501: Integrated Sequence 1**

The Integrated Sequence is a series of nine sequential modules of varying lengths. Each module incorporates the principles of pathophysiology, medicinal chemistry, pharmacology, and pharmacotherapeutics utilizing an organ-based systems approach.

**Credits** 3.0

### **Prerequisites**

[PHYSG 1501](#) Human Physiology 1; [PHYSG 1502](#) Human Physiology 2; [BIOCG 1551](#) Biochemistry; [MICRG 1553](#) Immunology; completion of or concurrent enrollment in [PPRAG 1503](#) Clinical Skills Development 3

## **PHIDG 1502: Integrated Sequence 2**

The Integrated Sequence is a series of nine sequential modules of varying lengths. Each module incorporates the principles of pathophysiology, medicinal chemistry, pharmacology, and pharmacotherapeutics utilizing an organ-based systems approach.

**Credits** 4.0

### **Prerequisites**

[PHIDG 1501: Integrated Sequence 1](#)

Completion of or concurrent enrollment in [PPRAG 1503](#) Clinical Skills Development 3

## **PHIDG 1503: Integrated Sequence 3**

The Integrated Sequence is a series of nine sequential modules of varying lengths. Each module incorporates the principles of pathophysiology, medicinal chemistry, pharmacology, and pharmacotherapeutics utilizing an organ-based systems approach.

**Credits** 4.0

### **Prerequisites**

[PHIDG 1502: Integrated Sequence 2](#)

Completion of or concurrent enrollment in [PPRAG 1504](#) Clinical Skills Development 4

## PHIDG 1604: Integrated Sequence 4

The Integrated Sequence is a series of nine sequential modules of varying lengths. Each module incorporates the principles of pathophysiology, medicinal chemistry, pharmacology, and pharmacotherapeutics utilizing an organ-based systems approach.

**Credits** 4.0

**Prerequisites**

[PHIDG 1503: Integrated Sequence 3](#)

Completion of or concurrent enrollment in [PPRAG 1605](#) Clinical Skills Development 5

## PHIDG 1605: Integrated Sequence 5

The Integrated Sequence is a series of nine sequential modules of varying lengths. Each module incorporates the principles of pathophysiology, medicinal chemistry, pharmacology, and pharmacotherapeutics utilizing an organ-based systems approach.

**Credits** 5.0

**Prerequisites**

[PHIDG 1604: Integrated Sequence 4](#)

Completion of or concurrent enrollment in [PPRAG 1605](#) Clinical Skills Development 5

## PHIDG 1606: Integrated Sequence 6

The Integrated Sequence is a series of nine sequential modules of varying lengths. Each module incorporates the principles of pathophysiology, medicinal chemistry, pharmacology, and pharmacotherapeutics utilizing an organ-based systems approach.

**Credits** 5.0

**Prerequisites**

[PHIDG 1605: Integrated Sequence 5](#)

Completion of or concurrent enrollment in [PPRAG 1606](#) Clinical Skills Development 6

## PHIDG 1607: Integrated Sequence 7

The Integrated Sequence is a series of nine sequential modules of varying lengths. Each module incorporates the principles of pathophysiology, medicinal chemistry, pharmacology, and pharmacotherapeutics utilizing an organ-based systems approach.

**Credits** 4.5

**Prerequisites**

[PHIDG 1606: Integrated Sequence 6](#)

Completion of or concurrent enrollment in [PPRAG 1606](#) Clinical Skills Development 6

## PHIDG 1608: Integrated Sequence 8

The Integrated Sequence is a series of nine sequential modules of varying lengths. Each module incorporates the principles of pathophysiology, medicinal chemistry, pharmacology, and pharmacotherapeutics utilizing an organ-based systems approach.

**Credits** 6.0

**Prerequisites**

[PHIDG 1607: Integrated Sequence 7](#)

Completion of or concurrent enrollment in [PPRAG 1607](#) Clinical Skills Development 7

## PHIDG 1609: Integrated Sequence 9

The Integrated Sequence is a series of nine sequential modules of varying lengths. Each module incorporates the principles of pathophysiology, medicinal chemistry, pharmacology, and pharmacotherapeutics utilizing an organ-based systems approach.

**Credits** 3.5

### **Prerequisites**

[PHIDG 1608: Integrated Sequence 8](#)

Completion of or concurrent enrollment in [PPRAG 1607](#) Clinical Skills Development 7

## PHYSG 1501: Human Physiology I

This course provides the core knowledge of physiology required by students to understand normal body function and the ability to analyze and interpret the immediate and long-term compensatory responses to common disease states of excitable cells (muscle and nervous tissue), the sensory system, and the endocrine and reproductive systems. Basic and applied terms are defined. Essential relationships between structure and function are defined and discussed.

**Credits** 3.0

## PHYSG 1502: Human Physiology II

This course provides core knowledge of physiology required by students of pharmacy in order to understand normal function and to acquire the ability to analyze and interpret the immediate and long-term compensatory responses to common disease states of the renal, cardiovascular, respiratory, and gastrointestinal systems. Basic and applied terms are defined. Essential relationships between structure and function are defined and discussed.

**Credits** 3.0

## PMCG 1404: Advanced Topics in Pharmacogenomics

This advanced-topics course provides an in-depth knowledge of the clinical applications of pharmacogenomics. Students deepen their understanding of how genetic differences impact drug therapy. Students view recorded lectures presented by experts on disease-specific topics and also read assigned papers relevant to those topics. Assessment is based on completion of worksheets. Upon successful completion of this course, students will demonstrate a broad understanding of the current and potential clinical applications of pharmacogenomics.

**Credits** 1.0

**Lecture Hours** 10

### **Prerequisites**

[PMGC 501: Introduction to Genetics and Genomics](#)

[PMGC 502: Genomics of Rare and Complex Diseases](#)

[PMGC 602: Pharmacogenomics](#)

## PPRAG 1301: Special Project/Research

These courses provide an opportunity for students to work with individual faculty mentors on research projects of variable scope that are intended to lead to publication, an abstract or a poster. All special projects/research require the approval of the appropriate department chair and Dean.

**Credits** 1.5

## PPRAG 1302: Special Project/Research

These courses provide an opportunity for students to work with individual faculty mentors on research projects of variable scope that are intended to lead to publication, an abstract or a poster. All special projects/research require the approval of the appropriate department chair and Dean.

**Credits** 3.0

## **PPRAG 1338: Pharmacy-Based Health Screenings**

Through active participation in lecture discussions and workshops, the student will be prepared to implement health screening programs in pharmacy practice settings. The course focuses on risk factor assessment and hands-on experience with screening devices for cancer, cardiovascular disease, diabetes, and osteoporosis. The course also addresses regulatory requirements of the Occupational Safety and Health Administration (OSHA) and Clinical Laboratory Improvement Amendments (CLIA) and development of policies and procedures for screening programs.

**Credits** 1.5

### **Prerequisites**

PHIDG 1605: [Integrated Sequence 5](#)

## **PPRAG 1339: History of Pharmacy in the United States**

This course is designed to introduce the pharmacy student to the history of pharmacy. This will be accomplished by focusing upon the historical development of pharmacy in the United States by examining the growth and professionalization of the field, its statutory regulation and its product development. Students will be able to apply the lessons of history to current and future practice philosophies.

**Credits** 1.5

## **PPRAG 1348: Personal Finance for the Healthcare Professional**

The objective of this course is to introduce the tools needed to financially succeed after graduation. The class will focus on introduction to the areas of taxes, planning for retirement, investing, debt consolidation, home ownership, money management, and insurance.

**Credits** 1.5

## **PPRAG 1349: Medication Management in Hospice Patients**

This course is designed to provide an overview of common diseases and symptoms encountered in terminal patients. Emphasis will be placed on the appropriate selection of medications to palliate symptoms such as pain, dyspnea, excess secretions, constipation, diarrhea, hiccups, pruritus, etc. Common diseases include but are not limited to: breast, brain, lung, colon and renal cancers; COPD; dementia; and CHF. Patient cases will be used during each session to illustrate symptom management issues.

**Credits** 1.5

### **Prerequisites**

PHIDG 1607: [Integrated Sequence 7](#)

## **PPRAG 1350: Perspectives in Rural Pharmacy Practice**

This elective course offers exposure to various concepts related to pharmacy practice in rural settings. This course will connect students with various pharmacists practicing in rural settings with interactive discussion of various topics relevant to rural pharmacy practice. The course will be structured as a weekly showcase of selected rural pharmacy practitioners/sites leading topic discussions addressing areas of concern for rural healthcare.

**Credits** 1.5

**Lecture Hours** 15

## **PPRAG 1411: Pharmacological Management of Chronic Pain**

Upon completion of this course students will understand how to assess pain; understand the differences between addiction, dependence and tolerance; be able to recommend appropriate medication therapies for nociceptive and neuropathic pain; understand the reasons for the multitude of available analgesic choices; understand the role of complementary and alternative medicine; and be conversant with the legal and ethical issues of pain management.

**Credits** 1.5

**Prerequisites**

[PHIDG 1607: Integrated Sequence 7](#)

## **PPRAG 1415: Rare and Interesting Diseases**

This course provides a forum for students to learn how to manage patients with rare and interesting disease states. The pathophysiology, epidemiology, clinical manifestations, diagnostic tests or procedures, treatment and the pharmacist's role in the management for each disease state/genetic abnormality/adverse drug event will be reviewed. Activities will simulate patient work up and written/oral presentations in clinical practice.

**Credits** 1.5

**Prerequisites**

Completion of or concurrent enrollment in [PHIDG 1609](#) Integrated Sequence 9

## **PPRAG 1418: Nuclear Pharmacy**

This course provides the student an overview of the various aspects of nuclear pharmacy. This includes basic nuclear physics, radiation measurement and safety, regulatory considerations, radiopharmaceutical preparation, products, quality control, and imaging modalities.

**Credits** 1.5

**Prerequisites**

[PSCIG 1564: Pharmacokinetics and Biopharmaceutics](#)

## **PPRAG 1419: Topics in Women's Health**

The purpose of this course is to provide an overview of advanced topics in women's health particularly related to reproductive health. Expanded information in topics such as contraception, infertility, drug use in pregnancy, and mood disorders related to pregnancy are provided. The course utilizes various teaching methods including lectures, case studies, readings, assignments, and discussions. Students will develop a working knowledge to aid them in caring for women with gender-related disease states.

**Credits** 1.5

**Prerequisites**

[PHIDG 1503](#) Integrated Sequence 3

## **PPRAG 1420: Pharmacy Based Immunization Delivery**

This course teaches the skills necessary to become a primary source for vaccine information and administration. It teaches the basics of immunology and focuses on practice implementation and legal/regulatory issues. Students must complete 12 hours of self-study prior to the class and must submit the completed material upon arrival to class.

**Credits** 2.0

**Prerequisites**

[MICRG 1553: Immunology](#)



## **PPRAG 1421: Dental Health and the Pharmacist**

This course provides an overview of dentistry and its relation to healthcare. Discussion includes questions that pharmacists often are asked regarding oral lesions, injuries to the oral cavity, and efficacy of OTC remedies. Information about various dental specialties will help the pharmacist refer their patients to the appropriate specialist. Misuse and abuse of dental drugs and medications and investigation and enforcement of dental regulations concerning drug abuse will be discussed.

**Credits** 1.5

## **PPRAG 1426: Putting Your Best Residency Foot Forward**

Post-graduate pharmacy residency programs are highly valuable and are becoming increasingly competitive. This elective course provides guidance on the residency selection decision process, curriculum vita (CV) development, creation of a strong letter of intent and interviewing skills. Students will learn and apply how to incorporate experiences from their didactic, experiential, and co-curricular education into their residency application and interview. To meet the learning objectives, students will complete interactive written and verbal activities to demonstrate knowledge, skills, and abilities. Achievement of learning objectives will be evaluated by assessment rubrics tailored to each activity.

**Credits** 1.5

### **Prerequisites**

Enrollment is limited to PS-2 students only

## **PPRAG 1427: Postmenopausal Women's Health**

This course provides an in-depth review of postmenopausal women's health issues. Through active participation in patient case studies and class discussion, students will learn to design pharmacotherapeutic plans to address symptoms of menopause during the menopause transition and to reduce risk factors for chronic medical conditions common during this life stage.

**Credits** 1.5

### **Prerequisites**

[PHIDG 1503: Integrated Sequence 3](#)

## **PPRAG 1428: Acute Care Cardiology**

This elective course provides students with an in-depth review and expansion of knowledge regarding the management of medical pharmacotherapy in patients with acute cardiovascular issues, building upon concepts that were introduced in Integrated Sequence 4 and 5. The class is focused on application of knowledge to improve patient care. Learning techniques that will be utilized include lecture, discussion, formulation of a Pharmacists' Patient Care Process (PPCP) for patient cases, evaluation of primary literature, and student debates.

**Credits** 3.0

### **Prerequisites**

[PHIDG 1604: Integrated Sequence 4](#)

[PHIDG 1605: Integrated Sequence 5](#)

## **PPRAG 1431: Book Club**

This professional elective course is designed to use a book club/current topics format to provide the pharmacy student with an introduction to the art of patient care and the issues healthcare providers face regarding their own biases and stereotypes. The purpose of this course is to thoughtfully tackle some of the assumptions we make as health care providers and explore ways to be more thoughtful in our decisions and care of our patients.

**Credits** 1.5

## **PPRAG 1432: Advanced Communication with the Spanish Speaking Patient**

This elective will develop the basic verbal and written skills required to effectively communicate with the Spanish speaking patient in the pharmacy setting. There will be a strong focus on patient interviewing skills and counseling on the most common topics seen in the community setting. This course assumes the student is already familiar with basic Spanish and therefore introductory level Spanish.

**Credits** 1.5

### **Prerequisites**

[PPRAG 1501: Clinical Skills Development 1](#)

[PPRAG 1502: Clinical Skills Development 2](#)

[PPRAG 1503: Clinical Skills Development 3](#)

[PPRAG 1504: Clinical Skills Development 4](#)

One year of college level Spanish or equivalent or permission from instructor.

## **PPRAG 1433: Introduction to Specialty Pharmacy**

This elective that will provide an introduction to current therapies, management of patients and other operations requirements within specialties including Solid Organ Transplant/BMT, Oncology, Inflammatory (Rheumatology, Dermatology), and Infectious Disease (HIV and Hepatitis C). The course is composed of alternating disease state overview presentations with student case study presentations the following week for practical application.

**Credits** 1.5

## **PPRAG 1434: Advanced Oncology Therapeutics**

This course focuses on the clinical aspects of the pharmaceutical care of patients with hematologic and oncologic diseases. Clinical topics include disease state management, supportive care, hospice/palliative care, management of drug shortages and literature evaluation.

**Credits** 1.5

### **Prerequisites**

[PHIDG 1609: Integrated Sequence 9](#)

[PPRAG 1676: Evidence-Based Healthcare](#)

## **PPRAG 1438: Managed Care**

The purpose of this course is to provide an overview of managed care pharmacy and how it impacts the US healthcare system. The course prepares students to understand and learn about professional practice opportunities in managed care pharmacy by exploring: healthcare reform, managed healthcare delivery models, prescription benefit design, pharmacy networks, utilization management tools, P&T Committees, pharmacy data management, pharmacy benefit managers, specialty pharmacy and pharmaceutical manufacturers. In addition, the course focuses on how business principles are integrated into the managed care pharmacy department, and address how clinical pharmacy, quality improvement, medication therapy management/disease management programs are coordinated within the managed care pharmacy environment.

**Credits** 1.5

## PPRAG 1439: Pediatric Pharmacotherapy

This course focuses on specific issues related to the treatment and care of pediatric patients. Clinical topics include common childhood illness and treatments as well as drug delivery systems used for pediatric patients, current controversies in pediatric pharmacotherapy, commonly used over the counter medications and alternative therapies used by pediatric patients. This course incorporates lectures, projects and reading assignments to enhance student learning about pediatric issues.

**Credits** 1.5

### **Prerequisites**

[PHIDG 1609: Integrated Sequence 9](#)

Completion of or concurrent enrollment in [PPRAG 1701](#) Acute Care Management

## PPRAG 1441: Medication Therapy Management

This course introduces students to current trends in Medication Therapy Management (MTM) with a particular focus on the provision of pharmacist's services as an integral part of managing patient drug therapy. Students will gain insight into the challenges and opportunities that are presented to pharmacists when they address drug therapy misadventures and perform comprehensive medication reviews for patients with complex drug regimes. Particular attention is focused on development of drug therapy intervention skills that will maximize the results achieved when patient interventions are performed. In addition, students learn basic information about how the online intervention process works. The course includes having students role play case study examples of both therapeutic interventions and comprehensive medication reviews.

**Credits** 1.5

### **Prerequisites**

[PPRAG 1438: Managed Care](#)

## PPRAG 1442: Advanced Geriatric Pharmacotherapy

This course is designed to enhance students' knowledge and skills related to geriatric pharmacotherapy. The course provides an introduction to general principles of aging, roles of pharmacists in working with geriatric patients, and an overview of geriatric syndromes. The format of the course involves brief lectures, and students will be expected to actively participate in discussions and case-based assignments. There is an emphasis on managing the healthcare needs of patients with multiple comorbidities.

**Credits** 1.5

### **Prerequisites**

Completion or concurrent enrollment in [PHIDG 1607](#) Integrated Sequence 7

## PPRAG 1443: Veterinary Pharmacology

This course is designed to enhance the knowledge of future community pharmacists in the area of small animal veterinary pharmacology, dispensing of common small animal prescriptions, and recommendations of OTC medications for common household pets. Primary focus will be on cats and dogs. This course includes an on-site session with CVM Faculty at the MWU Companion Animal Clinic.

**Credits** 1.5

### **Prerequisites**

[PHIDG 1609: Integrated Sequence 9](#)

## **PPRAG 1445: A Foundation for Leadership**

This course is filled with opportunities for you to discover for yourself a new context for leadership in your life. The course is designed to increase workability in your relationships with others as well as increase performance in your work. The focus of this course is discovery through inquiry. Rather than engaging in typical case studies or using a model of learning that focuses on you "knowing the right answers to questions", we will engage in an Inquiry model. This inquiry will focus on you "discovering for yourself what leadership in your life actually looks like". This new model requires your participation in class discussions and completing the class assignments. If you have not participated in this type of course before, it may be unfamiliar at first, yet easy to adapt to as the course unfolds. By the end of this course, you will be standing on a powerful foundation for exercising leadership in your life.

**Credits** 2.0

## **PPRAG 1447: CPG Grand Rounds: Clinical Pearls**

This elective course provides students with exposure to "Grand Rounds" where contemporary clinical content is taught utilizing patient cases. The presenters will be pharmacists in practice or in post-graduate training. Students will gain clinical knowledge and practice pearls on a potpourri of clinical topics and benefit from exposure to the "Grand Round" format, which is a common form of continuing education in practice. Students will also gain experience in providing constructive written feedback to near-peer presenters and insight regarding the difficulty in providing feedback that is clear and specific. This course will develop the student's written communication skills which are a central element in the Pharmacist's Patient Care Process (PPCP), as well as a vital component of personal and professional development. Additionally, this course will allow the students the opportunity to develop assessment, feedback, and self-awareness skills.

**Credits** 1.5

## **PPRAG 1448: Advanced Psychiatric Pharmacy**

Students will develop advanced knowledge of mental health and mental illness as it relates to the practice of pharmacy in the clinical setting and define the role of pharmacists in providing mental healthcare.

**Credits** 1.5

### **Prerequisites**

[PHIDG 1607: Integrated Sequence 7](#)

## **PPRAG 1449: Advanced Research Methods: Using Analytics in Health Care Research**

This course is designed to give students practical, hands-on experience in literature review, development of research questions and hypotheses, study design, analytics, and research reporting. Working iteratively throughout the course, students develop a research project on a topic of their choice, complete an ethics application, analyze the data, and produce a final research report. The report may be cited as a research project on applications for residency or fellowship and may be suitable for conversion after course completion to a poster presentation for one or more scientific meetings. Focus is on practical methods, effective project management, and basic interpretive techniques to facilitate research projects for residency, fellowship, or employment. The course prepares students to engage and collaborate effectively with a health care team, using evidence-based, accurate analysis and clear communication about statistical results.

**Credits** 3.0

### **Prerequisites**

[PPRAG 1672: Research Methods & Epidemiology for Healthcare Professionals](#)

[PPRAG 1676: Evidence-Based Healthcare](#)

A grade of "B" or better in both courses and permission of the instructor

## **PPRAG 1501: Clinical Skills Development 1**

These courses integrate the skills needed to fulfill the professional responsibilities of pharmacy practice as they relate to patient-centered care and the patient care process. Principles taught in this course and the co-requisite courses will be utilized to provide the contextual framework for the skills considered.

**Credits** 3.5

## **PPRAG 1502: Clinical Skills Development 2**

These courses integrate the skills needed to fulfill the professional responsibilities of pharmacy practice as they relate to patient-centered care and the patient care process. Principles taught in this course and the co-requisite courses will be utilized to provide the contextual framework for the skills considered.

**Credits** 3.0

### **Prerequisites**

[PPRAG 1501: Clinical Skills Development 1](#)

## **PPRAG 1503: Clinical Skills Development 3**

These courses integrate the skills needed to fulfill the professional responsibilities of pharmacy practice as they relate to patient-centered care and the patient care process. Principles taught in this course and the co-requisite courses will be utilized to provide the contextual framework for the skills considered.

**Credits** 2.0

### **Prerequisites**

[PPRAG 1502: Clinical Skills Development 2](#)

Completion of or concurrent enrollment in [PSCIG 1542](#) Pharmaceutics 2 Completion of or concurrent enrollment in [PHIDG 1501](#) Integrated Sequence 1

## **PPRAG 1504: Clinical Skills Development 4**

These courses integrate the skills needed to fulfill the professional responsibilities of pharmacy practice as they relate to patient-centered care and the patient care process. Principles taught in this course and the co-requisite courses will be utilized to provide the contextual framework for the skills considered.

**Credits** 2.5

### **Prerequisites**

[PPRAG 1503: Clinical Skills Development 3](#)

[PSCIG 1542: Pharmaceutics 2, Sterile Dosage Forms](#)

Completion of or concurrent enrollment in [PHIDG 1503](#) Integrated Sequence 3

## **PPRAG 1524: Pharmacy Law and Public Policy**

This course presents principles of law and public policy as they relate to pharmacy practice under federal, state and local regulations. Topics include general rules and regulations governing pharmacy practice, controlled substances, Health Insurance Portability and Accountability Act (HIPAA), and public policy.

**Credits** 2.5

## PPRAG 1532: Foundations of Clinical Reasoning

This course defines the fundamental concepts of clinical reasoning as it relates to the pharmacists' patient care process. Students will learn how cognitive bias can impact patient safety and will practice a framework for clinical reasoning that will serve as the foundation for subsequent clinical and experiential coursework.

**Credits** 1.5

### **Prerequisites**

[PPRAG 1501: Clinical Skills Development 1](#)

[PPRAG 1502: Clinical Skills Development 2](#)

### **Corequisites**

[PHIDG 1501: Integrated Sequence 1](#)

[PPRAG 1503: Clinical Skills Development 3](#)

## PPRAG 1536: People, Patients and Populations

This course introduces several concepts including the patient's perspective of health, illness, and patient-provider interactions, public health key concepts, educational assessment, and consultation related to medication use. The main goal of this course is to help students understand and think about healthcare through both the patient and population lens, as well as understanding their role as a healthcare provider. Sociological and psychological implications of living with chronic medical conditions are discussed. Students learn to consider how the patient feels and how they can impact both patient and population outcomes as health care professionals.

**Credits** 4.0

## PPRAG 1571: Healthcare Systems

An overview of the organization, delivery and financing of medical and pharmaceutical care in the U.S. Particular emphasis is placed on the interdependent roles of pharmacists with other healthcare providers, and the key organizations and institutions that are involved in delivering pharmaceutical care to patients. Historical perspective is provided where it contributes to an understanding of contemporary practice.

**Credits** 3.0

## PPRAG 1591: Introduction to Pharmacy Practice

This course will help students develop a foundation for future pharmacy practice. Based on class interest, students will explore various pharmacy career options through pharmacist interviews, guest speakers, and completion of the APhA Career Pathways Assessment. Students will begin to develop professional communication skills as they interview two pharmacists and one patient for a final paper, and use self-reflection to summarize the interview responses in a personal narrative. Students will also be provided with foundational knowledge in medical terminology, with two exams focusing solely on medical terminology. The final paper will serve as the final assessment of learning and integration.

**Credits** 1.0

## PPRAG 1605: Clinical Skills Development 5

These courses integrate the skills needed to fulfill the professional responsibilities of pharmacy practice as they relate to patient-centered care and the patient care process. Principles taught in this course and the co-requisite courses will be utilized to provide the contextual framework for the skills considered.

**Credits** 1.5

### **Prerequisites**

[PPRAG 1504: Clinical Skills Development 4](#)

Completion of or concurrent enrollment in [PHIDG 1604](#) Integrated Sequence 4 and [PHIDG 1605](#) Integrated Sequence 5

## PPRAG 1606: Clinical Skills Development 6

These courses integrate the skills needed to fulfill the professional responsibilities of pharmacy practice as they relate to patient-centered care and the patient care process. Principles taught in this course and the co-requisite courses will be utilized to provide the contextual framework for the skills considered.

**Credits** 1.5

### **Prerequisites**

[PPRAG 1605: Clinical Skills Development 5](#)

Completion of or concurrent enrollment in [PHIDG 1606](#) Integrated Sequence 6 and [PHIDG 1607](#) Integrated Sequence 7

## PPRAG 1607: Clinical Skills Development 7

These courses integrate the skills needed to fulfill the professional responsibilities of pharmacy practice as they relate to patient-centered care and the patient care process. Principles taught in this course and the co-requisite courses will be utilized to provide the contextual framework for the skills considered.

**Credits** 1.5

### **Prerequisites**

[PPRAG 1606: Clinical Skills Development 6](#)

Completion of or concurrent enrollment in [PHIDG 1608](#) Integrated Sequence 8, [PHIDG 1609](#) Integrated Sequence 9

## PPRAG 1665: Ethical Decision Making

In daily pharmacy practice, pharmacists encounter a variety of behavioral and ethical issues related to interactions with patients, providers and healthcare organizations. This course presents the principles underlying the dynamics of these constantly changing interactions to help future pharmacists better understand, predict and ultimately change the nature of their interactions with patients, other providers and healthcare organizations. Future pharmacists who have mastered the concepts in this course will be better equipped to optimize the delivery of pharmaceutical care and ultimately achieve more positive patient outcomes

**Credits** 2.0

## PPRAG 1667: Complementary and Alternative Medicine

This course is designed as a survey of complementary and alternative medicine. Students will be introduced to the theory and practice of some of the more popular complementary/alternative therapies (such as dietary supplements, acupuncture, traditional Chinese medicine, homeopathy, herbal medicine, etc.). The course will include the use of complementary/alternative medicine associated with common disease states. Students will have the opportunity to research and present a complementary/alternative treatment to the class.

**Credits** 2.0

### **Prerequisites**

[PPRAG 1504: Clinical Skills Development 4](#)

[PPRAG 1676: Evidence-Based Healthcare](#)



## **PPRAG 1672: Research Methods & Epidemiology for Healthcare Professionals**

This course introduces students to statistics and research design. The course covers basic methodological concepts, study designs, descriptive and inferential statistical techniques, computerized statistical testing resources, and data sources commonly used in published pharmaceutical and medical research. Basic epidemiological metrics and computations are presented as well as the development and evaluation of research protocols, survey research, database analyses, and clinical drug investigations.

**Credits** 3.0

## **PPRAG 1675: Management 1**

This course is an introduction to management concepts, principles and techniques that are applied in contemporary pharmacy practice and healthcare administration. The course is organized into four broad areas of managerial activity and responsibility: financial management, marketing management, operations management with an emphasis on medication safety, and an introduction to pharmacoeconomics.

**Credits** 2.5

## **PPRAG 1676: Evidence-Based Healthcare**

In this course, students will learn and apply skills that will improve their ability to practice evidence-based healthcare (EBHC). Students were introduced to the steps of practicing EBHC and learned about Step 1 (identify a clinical question) and Step 2 (find relevant literature) of practicing EBHC in previous courses. This course focuses on Step 3 (critically evaluate literature) and Step 4 (apply information to patients).

**Credits** 3.0

### **Prerequisites**

[PPRAG 1672: Research Methods & Epidemiology for Healthcare Professionals](#)

[PHIDG 1605: Integrated Sequence 5](#)

## **PPRAG 1694: Introductory Community Experience**

This experience provides an opportunity for students to participate in basic patient care and distribution services in a community or ambulatory care pharmacy practice setting. Pharmacy students, under the supervision of adjunct clinical faculty, gain experience in community pharmacy practice including the areas of professional communications, drug information retrieval, patient counseling on prescription, and OTC medications, medication distribution, extemporaneous products, and application of federal and state pharmacy laws.

**Credits** 6.0

### **Prerequisites**

Passing grades in all PS-1 year didactic courses and an annual grade point average of 2.00 or above

## **PPRAG 1695: Introductory Institutional Experience**

This experience provides an opportunity for students to participate in basic patient care and distribution services in an institutional pharmacy practice setting. Pharmacy students, under the supervision of adjunct clinical faculty, gain experience in institutional pharmacy practice including the areas of professional and patient communications, drug information retrieval, medication distribution systems, sterile product preparation, interprofessional activities, and application of federal and state pharmacy laws.

**Credits** 6.0

### **Prerequisites**

Passing grades in all PS-1 year didactic courses and an annual grade point average of 2.00 or above



## PPRAG 1701: Acute Care Management

This course integrates both the practice and patient care management of patients in the acute care (hospital and health-system) setting. Students will enhance their acute care knowledge through case-based lecture and clinical application in the corresponding Clinical Skills Development course.

**Credits** 4.5

### **Prerequisites**

[PHIDG 1609: Integrated Sequence 9](#)

[PPRAG 1607: Clinical Skills Development 7](#)

[PPRAG 1676: Evidence-Based Healthcare](#)

Completion of or concurrent enrollment in [PPRAG 1708](#) Clinical Skills Development 8

Completion of or concurrent enrollment in [PPRAG 1737](#) Disease State Management

## PPRAG 1708: Clinical Skills Development 8

These courses integrate the skills needed to fulfill the professional responsibilities of pharmacy practice as they relate to patient-centered care and the patient care process. Principles taught in this course and the co-requisite courses will be utilized to provide the contextual framework for the skills considered.

**Credits** 1.5

### **Prerequisites**

[PPRAG 1607: Clinical Skills Development 7](#)

Completion of or concurrent enrollment in [PPRAG 1701](#) Acute Care Management and [PPRAG 1737](#) Disease State Management

## PPRAG 1737: Disease State Management

This course focuses on the skills necessary for pharmacist-directed management of common ambulatory medical conditions involving the cardiac, pulmonary, and endocrine systems. The course builds upon the fundamental information provided in the Integrated Sequence through the incorporation of disease prevention strategies and medication therapy management principles into complex patient casework.

**Credits** 4.5

### **Prerequisites**

[PHIDG 1609: Integrated Sequence 9](#)

[PPRAG 1607: Clinical Skills Development 7](#)

[PPRAG 1676: Evidence-Based Healthcare](#)

Completion of or concurrent enrollment in [PPRAG 1708](#) Clinical Skills Development 8

Completion of or concurrent enrollment in [PPRAG 1701](#) Acute Care Management

## PPRAG 1776: Management 2

This course prepares students to engage in the classic functions of a human resource manager in the pharmacy practice setting including planning, organizing, decision making, staffing, leading or directing, communicating, motivating and evaluating. This course combines predesigned law room workshops and lecture series from MWU-CPG faculty and invited guest lectures including directors/chiefs of pharmacy, human resource managers and clinical managers.

**Credits** 2.0

## **PPRAG 1790: Pharm.D. Seminar**

This series of courses provides the student an opportunity to review pharmacy-related concepts and clinical reasoning skills to prepare them to be successful, competent pharmacists that are able to contribute meaningfully to the profession. Topics covered will systematically address the six NAPLEX® Competency Statements: Obtain, Interpret, or Assess Data, Medical, or Patient Information; Identify Drug Characteristics; Develop or Manage Treatment Plans; Perform Calculations; Compound, Dispense, or Administer Drugs, or Manage Delivery Systems; and Develop or Manage Practice or Medication-Use Systems to Ensure Safety and Quality.

**Credits** 4.0

**Prerequisites**

Concurrent enrollment in APPE coursework.

## **PPRAG 1791: Advanced Community Pharmacy Practice Experience**

This course will build upon the foundation of the introductory pharmacy practice experiences provided in the PS-2 year and the didactic curriculum. Under preceptor supervision, the student participates in the required APPE community course.

**Credits** 9.0

**Prerequisites**

Passing grades in all PS-2 and PS-3 didactic courses and a cumulative grade point average for these courses of 2.00 or above

## **PPRAG 1792: Advanced Acute Care Pharmacy Practice Experience**

This course will build upon the foundation of the introductory pharmacy practice experiences provided in the PS-2 year and the didactic curriculum. Under preceptor supervision, the student participates in the required APPE acute care course.

**Credits** 9.0

**Prerequisites**

Passing grades in all PS-2 and PS-3 didactic courses and a cumulative grade point average for these courses of 2.00 or above

## **PPRAG 1793: Advanced Ambulatory Care Pharmacy Practice Experience**

This course will build upon the foundation of the introductory pharmacy practice experiences provided in the PS-2 year and the didactic curriculum. Under preceptor supervision, the student participates in the required APPE ambulatory care course.

**Credits** 9.0

**Prerequisites**

Passing grades in all PS-2 and PS-3 didactic courses and a cumulative grade point average for these courses of 2.00 or above

## **PPRAG 1794: Advanced Health System Pharmacy Practice Experience**

This course will build upon the foundation of the introductory pharmacy practice experiences provided in the PS-2 year and the didactic curriculum. Under preceptor supervision, the student participates in the required APPE health system course.

**Credits** 9.0

### **Prerequisites**

Passing grades in all PS-2 and PS-3 didactic courses and a cumulative grade point average for these courses of 2.00 or above

## **PPRAG 1795: Patient Care Elective Advanced Pharmacy Practice Experience**

This course will build upon the foundation of the introductory pharmacy practice experiences provided in the PS-2 year and the didactic curriculum. Under preceptor supervision, the student participates in the elective APPE patient care course.

**Credits** 9.0

### **Prerequisites**

Passing grades in all PS-2 and PS-3 didactic courses and a cumulative grade point average for these courses of 2.00 or above

## **PPRAG 1796: Elective Advanced Pharmacy Practice Experience**

This course will build upon the foundation of the introductory pharmacy practice experiences provided in the PS-2 year and the didactic curriculum. Under preceptor supervision, the student participates in the elective APPE non-patient care course. Only one APPE experience may be a non-patient care experience.

**Credits** 9.0

### **Prerequisites**

Passing grades in all PS-2 and PS-3 didactic courses and a cumulative grade point average for these courses of 2.00 or above

## **PSCIG 1301: Special Project/ Research**

These courses provide an opportunity for students to work with individual faculty mentors on research projects of variable scope that are intended to lead to a publication, an abstract or poster. All special projects/research require the approval of the appropriate department chair and Dean.

**Credits** 1.5

## **PSCIG 1302: Special Project/ Research**

These courses provide an opportunity for students to work with individual faculty mentors on research projects of variable scope that are intended to lead to a publication, an abstract or poster. All special projects/research require the approval of the appropriate department chair and Dean.

**Credits** 3.0

## **PSCIG 1304: Mental Health First Aid Certification**

The Mental Health First Aid elective teaches you how to identify, understand, and respond to signs of mental health and substance use challenges (specifically in adults). This certificate program includes the typical signs and symptoms of both mental health and substance-use challenges, methods to engage with individuals in crisis, and mechanisms to connect these individuals to the appropriate type of help. More expanded discussions of trauma, substance-use and self-care are provided.

**Credits** 1.0

## **PSCIG 1305: Pharmacy: Its History and Heroes**

This course begins with a general overview of pharmacy throughout history, with special emphasis placed on United States pharmacy and pharmacy associations. The course ends with lectures focused on the history of the opioid epidemic, and a history of pandemics.

**Credits** 2.0

## **PSCIG 1323: Use and Abuse of Drugs**

This elective course provides an in-depth review of neuropharmacology of substances of abuse including stimulants, depressants and inhalants, ethanol, opioids, hallucinogens, marijuana, anabolic steroids and other performance enhancing drugs. In addition, an overview of drug use, drug use as a social problem, drug products and their regulations, the nervous system, the mechanism of action of drugs, preventing substance abuse and substance abuse and dependence will also be covered.

**Credits** 1.5

## **PSCIG 1357: Introduction to Forensic Science for Healthcare Professionals**

The use of forensic toxicology in the battle against the increased abuse of licit and illicit drugs is an important field of study. This course will introduce the main areas of forensic sciences and especially the involvement of physicians, pharmacists, and nurses in discovering and preventing the abuse of drugs.

**Credits** 1.5

### **Prerequisites**

[PPRAG 1524: Pharmacy Law and Public Policy](#)

## **PSCIG 1360: Introduction to Drug, Biologics and Medical Device Regulation**

The course will provide an overview to the FDA regulatory processes regarding the evaluation and development of drug, biologics and device products. Through interactive lecture format, course work and discussions, participants of this course gain the basic understanding, and become familiar with the current principles of regulatory affairs. Topics include the historical development of U.S. drug laws, overview of drug, biologics, and device development process and the FDA, pharmaceutical industry- FDA functions and interactions through approval and monitoring processes, policy-guided science, and some examples of the development of U.S. drug/device laws, shaping history, leading into the present state of regulation.

**Credits** 1.5

## **PSCIG 1361: Introduction to Toxicology**

This course is an introduction into clinical toxicology and the effects of natural products and chemicals on the human body. This course emphasizes the chemistry, pharmacology, and toxicity of specific chemicals and classes of compounds. Students will be presented with the mechanisms and then invited to present case studies and discuss the clinical features of management and prognosis.

**Credits** 1.5

## **PSCIG 1362: Advanced Cardiovascular Pharmacology**

This course is designed to expand students' knowledge of research in basic cardiovascular sciences. The novel experimental pre-clinical/translational concepts related to cardiac and vascular pathophysiology and potential drug target(s), along with proposed mechanism of action, if applicable, are covered. The course focuses on analysis of complex pathologic mechanism(s), including dysregulated signaling, inflammation, oxidative stress and myocardial remodeling, underlying arrhythmia, myocardial ischemia and heart failure, as well as evaluation of new/promising pharmacological intervention(s). The format of the course includes lectures and active participation in research article-based discussions, to produce student-developed evaluation and conclusions, in combined format of oral presentation and written summary of each discussed/presented topic information.

**Credits** 1.5

### **Prerequisites**

[PHIDG 1501: Integrated Sequence 1](#)

[PHIDG 1502: Integrated Sequence 2](#)

[PHIDG 1604: Integrated Sequence 4](#)

[PHIDG 1605: Integrated Sequence 5](#)

## **PSCIG 1363: Introduction to Teaching and Learning**

Winter Quarter Only. This 5 week course will introduce students to concepts in teaching and learning through discussion and hands on teaching experiences. Students will learn to teach in a laboratory setting in a small group environment. Weekly self-reflection activities will help students focus on their strengths, weaknesses, and development as an educator over the course of the quarter.

**Credits** 1.5

### **Prerequisites**

[PSCIG 1541L: Pharmacy Compounding](#)

[PSCIG 1542: Pharmaceutics 2, Sterile Dosage Forms](#)

## **PSCIG 1364: Introduction to Teaching and Learning**

Fall Quarter only. This 10 week course will introduce students to concepts in teaching and learning through discussion and hands on teaching experiences. Students will learn to teach in a laboratory setting in a small group environment. Weekly self-reflection activities will help students focus on their strengths, weaknesses, and development as an educator over the course of the quarter.

**Credits** 3.0

### **Prerequisites**

[PSCIG 1541L: Pharmacy Compounding](#)

[PSCIG 1542: Pharmaceutics 2, Sterile Dosage Forms](#)

## **PSCIG 1540: Pharmaceutical Calculations**

Pharmaceutical Calculations focuses on the pharmaceutical and clinical calculations that are critical to the safe and effective delivery of medications. Pharmacists must calculate patient-specific doses and prepare extemporaneously compounded prescriptions with a high degree of accuracy. The Pharmaceutical Calculations course prepares students to use these calculations in pharmacy practice. The course covers calculations performed by pharmacists for compounding and dispensing of medications in a variety of practice settings. Such calculations involve applications of concepts from arithmetic and algebra.

**Credits** 2.5

## **PSCIG 1541: Pharmaceutics 1, Non-Sterile Dosage Forms**

This course is designed to impart an understanding of the types and characteristics of pharmaceutical dosage forms, and the physico-chemical principles involved in design, development, formulation, preparation, and dispensing of non-sterile dosage forms.

**Credits** 4.0

**Prerequisites**

[PSCIG 1540: Pharmaceutical Calculations](#)

## **PSCIG 1541L: Pharmacy Compounding**

This laboratory-based course covers the fundamental concepts related to the preparation of extemporaneously compounded non-sterile dosage forms including powders, capsules, suppositories, ointments, solutions, suspensions and emulsions. Students will gain competency in the preparation of extemporaneously compounded dosage forms through review of pharmacy calculations, application of pharmaceutical sciences concepts, development and implementation of compounding protocols, and application of legal and professional requirements for the labeling and documentation of compounded products.

**Credits** 2.0

**Prerequisites**

Concurrent enrollment in or completion of [PSCIG 1541](#) Pharmaceutics I, Non-Sterile Dosage Forms

## **PSCIG 1542: Pharmaceutics 2, Sterile Dosage Forms**

This course covers the fundamental concepts related to the formulation, manufacture, quality assurance, and clinical preparation and administration of sterile products. Topics will include formulation and compatibility considerations, sterility assurance and aseptic technique including a review of USP Chapter [797], packaging, compounding methods and calculations, therapeutic issues, and advances in parenteral technologies. Laboratory sessions will focus on aseptic technique and familiarization with equipment used to prepare and administer parenteral medications.

**Credits** 2.0

**Prerequisites**

[PSCIG 1541: Pharmaceutics 1, Non-Sterile Dosage Forms](#)

[PSCIG 1541L: Pharmacy Compounding](#)

## **PSCIG 1564: Pharmacokinetics and Biopharmaceutics**

This course introduces pharmacy students to the principles of biopharmaceutics and pharmacokinetics by exploring the relationships between physiology, mathematics, and pharmacokinetic theory and their clinical application. Students will learn how to calculate and interpret pharmacokinetic parameters; discuss and explain pharmacokinetic principles; assess factors that affect drug disposition; design and adjust drug dosage regimens; and predict and explain mechanisms involved in drug interactions.

**Credits** 3.5

**Prerequisites**

[PSCIG 1542: Pharmaceutics 2, Sterile Dosage Forms](#)

# College of Health Sciences

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## Mission

The College of Health Sciences (CHS) is dedicated to excellence in the education of professionals who will meet the healthcare and service needs of the community. This mission is expressed in the education, scholarship, and service objectives of the programs of the College of Health Sciences.

## Student Academic Policies

The following academic policies apply to all students who matriculate during the academic year of this catalog publication. These policies will apply throughout the entire time a student is enrolled in the college. In the event that these policies need to be revised as the result of new accreditation requirements, mandates by the United States Department of Education, or other unforeseen circumstances, students will be notified in writing prior to the effective date of the new policy.

Faculty and students should also refer to the University Academic Policy section for additional policies that apply to all students at Midwestern University.

## Academic Monitoring

All students enrolled in CHS are expected to:

1. Maintain satisfactory academic progress in the student's course of study;
2. Understand and meet all established program/College academic and professional requirements and standards as described in the course syllabi, program-related manuals, University Catalog, and Student Handbook;
3. Self-monitor academic performance in all required courses;
4. Complete all course-related requirements in a timely and satisfactory manner;
5. Seek assistance if encountering academic difficulty;
6. Contact the appropriate Program Director and/or course coordinator when performance has been unsatisfactory; and
7. Regularly check mailbox at least twice a week and university e-mail account daily for information concerning educational programs. This is particularly important at the end of the quarter and during quarter breaks when information concerning academic performance may be distributed.

## Academic Review and Progression

The academic progress of enrolled students is regularly monitored to determine whether students are making satisfactory academic progress in their program of study based on stated criteria established by the program/College. The academic review process occurs at three levels: the program-based Student Academic Review Committee, the College-based Student Promotion and Graduation Committee, and the CHS Dean.

## Student Academic Review Committees

The Student Academic Review Committee of each program is appointed annually by the University Faculty Senate with the recommendation of the Program Director. Membership consists of three or more program faculty members and the Program Director (or designee). The Dean of Students (or designee) and the CHS Dean (or designee) are ex-officio members without vote.

At the end of each quarter and more often if necessary, this committee reviews and acts upon the academic progress of each student enrolled in the program. If satisfactory, the committee recommends progression of the student to the next quarter. If unsatisfactory, the committee recommends whether a student is placed on academic warning, academic probation, extended

program, academic leave of absence, or is dismissed. These recommendations are forwarded to the student and the CHS Dean. Following notification, a student may appeal the recommendation to the CHS Dean. The CHS Dean reviews all recommendations for consistency with stated College academic policies and practices and makes the final decision on the action to be taken.

The Student Academic Review Committee also recommends for graduation students who have satisfactorily completed all degree requirements specified by their respective program. These recommendations are forwarded to the CHS Student Promotion and Graduation Committee for review. Minutes of each meeting must be filed with the appropriate Program Director and the CHS Dean.

## CHS Student Promotion and Graduation Committee

This committee is appointed annually by the University Faculty Senate. Members include the CHS Program Directors and two faculty members from each program within CHS. The Registrar, Dean of Students, and the CHS Dean or designee are ex-officio members without vote.

At the end of each academic year, the committee reviews the recommendations from the individual Student Academic Review Committees and assesses the academic and professional progress and performance of each student. If satisfactory, the committee recommends promotion of the student. In addition, the committee meets annually, or as needed, to recommend for graduation all students who have satisfactorily completed all degree requirements specified by their program. The committee's recommendations are forwarded to the CHS Dean and the University Faculty Senate for approval. The chairperson of the committee is responsible for submitting minutes of each meeting to the CHS Dean.

## Satisfactory Academic Progress

To achieve satisfactory academic progress, a student enrolled in a degree program in CHS must pass all required courses and maintain a minimum cumulative grade point average. For most programs in CHS, students are required to maintain a cumulative grade point average of 2.750 or higher. The following programs have exceptions to the minimum 2.750 GPA requirement and/or additional criteria for satisfactory academic progress.

*Clinical Psychology (CP) Program - Downers Grove Campus:* A student enrolled in the Clinical Psychology Program must pass all courses and maintain a cumulative grade point average of 3.000 or higher to have achieved satisfactory academic progress. In addition, a student must achieve a minimum grade of "B-" or "P" in all required courses, seminars, and practica. To progress to the next quarter, a student must satisfactorily complete all academic requirements for the preceding quarter.

*Clinical Psychology (CP) Program - Glendale Campus:* A student enrolled in the Clinical Psychology Program must pass all courses and maintain a cumulative grade point average of 3.000 or higher to have achieved satisfactory academic progress. In addition, a student must achieve a minimum grade of "B-" or "P" in all required courses, seminars, and practica.

*Graduate Nursing Programs (GNP):* A student enrolled in one of the Graduate Nursing Programs must pass all courses and maintain a cumulative grade point average of 3.000 or higher to have achieved satisfactory academic progress. In addition, a student must achieve a "B-" or higher in all GNP courses. Graduate Nursing Programs include Master of Science in Nursing (Adult- Gerontology Primary Care Nurse Practitioner), Master of Science in Nursing (Leadership and Global Health), Doctor of Nursing Practice, and the Post-Master's Certificate in Adult-Gerontology Primary Care Nurse Practitioner.

*Nurse Anesthesia (NA) Program:* A student enrolled in the Master of Science in Nurse Anesthesia Program must pass all courses and maintain a cumulative grade point average of 2.750 or higher to have achieved satisfactory academic progress. In addition, a student must achieve a "B-" or higher in all NAAPG curriculum courses, as well as in all clinical rotation and clinical didactic component courses. A student enrolled in the Doctor of Nurse Anesthesia Practice (D.N.A.P.) entry- level or completion degree program must pass all courses, maintain a cumulative grade point average of 2.75 or higher, and achieve a "B-" or higher in all DNAPG courses.



*Occupational Therapy (OT) Program - Downers Grove Campus:* A student enrolled in the Doctor of Occupational Therapy (OTD) Program must pass all courses and maintain a cumulative grade point average of 3.000 or higher to have achieved satisfactory academic progress.

*Occupational Therapy (OT) Program - Glendale Campus:* A student enrolled in the Master of Occupational Therapy (M.O.T.) Program must pass all courses and maintain a cumulative grade point average of 2.750 or higher to have achieved satisfactory academic progress.

*Physician Assistant (PA) Program - Downers Grove Campus:* A student enrolled in the Physician Assistant Program must pass all courses and maintain a cumulative grade point average of 2.750 or higher to have achieved satisfactory academic progress. In addition, to progress to the next quarter, a student must satisfactorily complete all academic requirements for the preceding quarter.

*Physician Assistant (PA) Program - Glendale Campus:* A student enrolled in the Physician Assistant Program must pass all courses and maintain a cumulative grade point average of 3.000 or higher to have achieved satisfactory academic progress. In addition, to progress to the next quarter, a student must satisfactorily complete all academic and professionalism requirements for the preceding quarter. A student is not able to progress to clinical rotations until or unless their cumulative GPA is greater than or equal to 3.000.

*Speech-Language Pathology (SLP) Program:* A student enrolled in the Speech-Language Pathology Program must pass all didactic courses with a grade of C or higher, pass all clinical courses, and maintain a minimum cumulative grade point average of 3.000 to have achieved satisfactory academic progress.

## Academic Progress

Outcome	Usual Action <sup>1</sup>	Transcript Notation
No course failures; cumulative GPA $\geq$ 3.000 (CP, GNP, OT-IL, PA-AZ, SLP) or $\geq$ 2.750 (CVS, NA, OT-AZ, PA-IL, PT)	Allowed to progress to the next quarter	---
No course failures; one quarter of cumulative GPA $<$ 3.000 (CP, GNP, OT-IL, PA-AZ, SLP) or $<$ 2.750 (CVS, NA, OT-AZ, PA-IL, PT)	Allowed to progress and academic warning for the subsequent quarter	Academic warning is not noted on transcript.
One course failure; and/or two quarters of cumulative GPA $<$ 3.000 (CP, GNP, OT-IL, PA-AZ, SLP) or $<$ 2.750 (CVS, NA, OT-AZ, PA-IL, PT)	<p>a) Allowed to progress and academic probation until all academic requirements are met, or</p> <p>b) Academic probation until all academic requirements are met and academic leave of absence<sup>2</sup> for up to one year with retake of eligible course(s) on extended program and/or completion of any re-entry requirements</p> <p>Note: Students on an extended program may be subject to academic leave of absence or dismissal after additional course failures or failure to maintain the required cumulative GPA.</p>	<p>"F" grade is listed on transcript and is counted toward GPA calculation and total number of accumulated failures. Following successful retake of the course, the original "F" grade remains on transcript as an "F" but is no longer factored into the GPA calculation. The new grade will be factored into the GPA.</p> <p>Academic probation and extended program are not noted on transcript. Academic leave of absence is noted on transcript.</p>
Three or more quarters of cumulative GPA $<$ 3.000 (CP, GNP, OT-IL, PA-AZ, SLP) or $<$ 2.750 (CVS, NA, OT-AZ, PA-IL, PT)	<p>a) Allowed to progress and academic probation until all academic requirements are met, or</p> <p>b) Academic probation until all academic requirements are met and academic leave of absence<sup>2</sup> for up to one year with retake</p>	Academic probation and extended program are not noted on transcript. Academic leave of absence and dismissal are noted on transcript.

Outcome	Usual Action <sup>1</sup>	Transcript Notation
	of eligible course(s) on extended program and/or completion of any re-entry requirements, or c) Dismissal	
Two or more required course failures <sup>2</sup>	Dismissal  <i>Note: Two or more required course failures will typically result in dismissal. Any other decision is at the discretion of the Dean.</i>	Dismissal is noted on transcript.

<sup>1</sup> The Student Academic Review Committee may recommend any of the options listed among the usual actions described for each academic situation under review. All recommended actions will be dependent on, and may be limited by, the curriculum and accreditation requirements of the individual programs.

<sup>2</sup> May or may not be preceded by academic warning/probation. Course failures can include competency examinations/assessments as determined by the Program.

## Unsatisfactory Academic Progress

Students who fail to make satisfactory progress in completing the prescribed course of study are placed on academic warning, academic probation, extended program, academic leave of absence, or may be dismissed. The Student Academic Review Committee may recommend any of the options listed among the usual actions described for each academic situation under review. All recommended academic actions will be dependent on, and may be limited by, the curriculum and accreditation requirements of the individual programs.

A student will be notified by the CHS Dean when placed on academic warning as a result of failure to achieve the required minimum cumulative GPA established by the program. A student with academic deficiencies to be addressed by the Student Academic Review Committee shall be notified in writing with a delivery confirmation (i.e., next-day express mail, e-mail or hand-delivery) by the chair of the Student Academic Review Committee at least two business days in advance of the scheduled meeting in which the student's case will be heard. Students shall be permitted to appear before the Student Academic Review Committee (in person or via telephone or virtual meeting) to present their case. In such instances, the student shall inform the chair of the Student Academic Review Committee, in writing, whether the student intends to appear before the committee or waive this right. If a student chooses to appear before the committee, this prerogative extends to only the involved student and not to any other individuals. A student whose academic progress will be subject to review by their Student Academic Review Committee and who wishes to appeal a course grade must do so in an expedited manner prior to the scheduled meeting of the Committee. An appeal of a didactic course grade must be submitted within one business day following posting of the grade and within two business days for a failing clinical course grade. The appeal must be based on one of the following premises: factual errors in course assessment tools; mathematical error in calculating the final grade; or bias. Please refer to the Midwestern University Catalog Academic Policies section for a complete description of the Grade Appeals Policy.

Within two business days following the committee meeting, the chair of the Student Academic Review Committee is responsible for providing notification in writing with a delivery confirmation (i.e., next-day express mail, e-mail, or hand-delivery) to the involved student, informing the student of the committee's recommendation. In all instances, the chair of the Student Academic Review Committee shall be responsible for informing the CHS Dean of each recommendation made by the committee. Following notification of a recommendation by the Student Academic Review Committee, a student may appeal the recommendation to the CHS Dean (see Appeal Process description). The Dean reviews all recommendations for consistency with stated College academic policies and practices and makes

the final decision on the action to be taken. The Dean is responsible for providing written notification of the final decision to the student and to all appropriate academic support offices (i.e., Registrar, Student Financial Services, etc).

### *Academic Warning*

Academic warning is a formal notification of substandard academic performance and cautions the student that continued performance at this level might result in academic probation. An academic warning is issued by the Dean's Office when a student earns a cumulative GPA below the minimum GPA required by the student's respective program for one quarter. An academic warning can be issued by the Program Student Academic Review Committee when the student fails to meet any other established program academic requirements. An academic warning is in effect for one quarter. Academic warning is not noted on the student's transcript but is noted in the student's academic file that is kept in the program office. If the student achieves the minimum standard of academic performance required by the program during the quarter of academic warning, the student is returned to good academic standing. This is also noted in the student's file.

### *Academic Probation*

Academic probation represents notice of unsatisfactory academic progress. Academic probation typically occurs when the student fails a class during the academic program and/or earns a cumulative GPA below the minimum required by the respective program for two quarters (which do not have to be consecutive) and/or when the student fails to meet any other established program academic requirements. Academic probation is not noted on the student's transcript but is noted in the student's academic file in the program office. The student remains on academic probation until the failure is successfully repeated and/or the cumulative GPA is at or above the program's required minimum and all deficiencies have been corrected. Subsequently, when the student is returned to good academic standing, this is also noted in the student's file. Students on academic probation are ineligible to hold student organization offices or participate in off-campus professional meetings.

### *Extended Program*

When a student is not allowed to progress in the standard program curriculum due to course failure, failure to maintain the required cumulative GPA for two or more quarters, and/or failure to meet any other established program academic requirement, the Student Academic Review Committee may place the student on an extended program. While on an extended program, a student will be permitted to take elective courses or to retake courses in which the student has received a grade of "C" or less. The student will be able to resume the standard program curriculum upon successful completion of all programmatic requirements.

Extended program is not noted on the student's transcript. Leave of absence will be noted on the transcript for periods of non-enrollment during the extended program period. Periods of enrollment during an extended program count towards the maximum allotted time for completion of academic programs.

### *Academic Leave of Absence*

Academic leave of absence may occur when a student has failed one or more courses, has accumulated two or more quarters when the cumulative GPA is less than required by their program, or has not met programmatic criteria required to proceed in the curriculum. Academic leave of absence may or may not be preceded by academic probation. This action results in the suspension of the student from all academic courses for a period of up to one year, or until all program requirements for re-entry have been fully met. A mandatory academic leave of absence is noted on the student's transcript.

The student who has been placed on a mandatory academic leave of absence does not have to re-apply for admission and is guaranteed reentry into the academic program upon successful completion of all failed courses and/or when all programmatic requirements are met. Upon reentry to the academic program, the student is routinely placed on academic probation for the following quarter.

#### *Academic Dismissal*

A student may be dismissed from the College for academic reasons upon the recommendation of the program's Student Academic Review Committee. Dismissal is based on the determination that the student has not satisfactorily demonstrated that the student can successfully achieve the standards and requirements set forth in the academic policies and professional expectations for the program. Students who accumulate two or more failures or three quarters below the minimum required grade point average may receive a recommendation for dismissal. The course failures and/or the three-quarters with less than the required minimum cumulative GPA do not have to be consecutive.

#### *Remediation*

If a student fails to meet any academic or professional requirement, both informal and formal remediation strategies may be implemented to assist the student in successfully correcting deficiencies to avoid a potential course failure or disciplinary action. Remediation processes may include, but are not limited to, meetings with the student's faculty advisor, formal learning agreements, and participation in structured remediation programs.

#### *Retake of a Failed Course*

If a student passes a previously failed course, the original failure remains on the transcript as an "F" grade and is included in the total number of accumulated failures in the student's academic record. The grade from the original failed course is no longer used in the computation of the GPA following repeat of the course. The grade from the repeated course will be factored into the overall GPA.

Under exceptional circumstances, such as academic probation or extended program, students may retake a Midwestern University course in which a grade of "C" has been earned. The Program Director and the CHS Dean must approve this retake option. Typically, a maximum of three courses with "C" grades can be retaken, and a course may only be retaken once. The original "C" grade will remain on the transcript but will not be used in the computation of the GPA following the completion of the repeated course. The new grade will be factored into the overall GPA.

All repeated courses are subject to additional tuition. Students should consult with their financial aid advisor regarding the financial implications of repeated coursework.

#### *Readmission After Dismissal for Poor Academic Performance*

It is at the discretion of each CHS academic program to readmit a student who has been dismissed for poor academic performance. To initiate the reapplication process, candidates must complete and submit a new application and proceed through the standard application process established by the program. Before reapplying, however, individuals should seek the advice of an admissions counselor. It is expected that these individuals would have addressed documented deficiencies before reapplication and be able to demonstrate that all admission requirements and technical standards of the program have been met.

The program's Admissions Committee will review completed applications of candidates and submit recommendations to the Program Director for action. The CHS Dean, via the Office of Admissions, then notifies applicants in writing of admission decisions.

No guarantee of readmission is implied, and questions related to advanced standing and similar issues will be addressed as they are for new applicants. Reapplications are allowed only within the first two years following dismissal and readmission will be granted only once.

## Appeal Process

Following notification of a recommendation from the Student Academic Review Committee, a student may appeal the recommendation. The student has three business days to submit a formal written appeal of the recommendation to the CHS Dean. A narrative explaining the basis for the appeal should accompany the request. An appeal must be based on one of the following documented premises:

1. Bias of one or more members of the Student Academic Review Committee.  
*Note: The student must present specific evidence that the committee member(s) demonstrated bias against the student in conducting the academic review process.*
2. Material, documentable information not available to the committee at the time of its initial decision.  
*Note: The student must provide a detailed explanation of why the new information is relevant and why it was not made available to the committee members during the academic review process. The student should be prepared to produce pertinent documentation during the appeal review.*
3. Procedural error.  
*Note: The student must provide evidence that the committee did not correctly follow the procedures related to the conduct of the academic review process; for example, the student was not given notice of the meeting or committee recommendation in accordance with stated policies.*

The Dean will review and assess the student's appeal. Any student requesting an appeal shall be required to meet with the Dean within five business days of the appeal submission to present the student's case. The Dean may request that a course director, program director, and/or faculty advisor provide additional information about the student's case. After review of the appeal, the Dean will make a decision, typically within five business days, and then notify the student, the chair of the Student Academic Review Committee, and all appropriate support offices. The decision of the Dean is final.

Students must attend all classes during the appeal process. Students registered in a clinical course (rotation, practicum, etc.) may be placed on a mandatory academic leave of absence until the appeal process is finalized.

## Advanced Placement/Exemption from Coursework

Some programs in CHS may allow for the transfer of credits from graduate-level coursework completed at other institutions prior to matriculation at Midwestern University. All requests for advanced placement by newly admitted or transfer students are processed on a course-by-course basis by the program's Admissions or Education Committee. To request such consideration, a student must submit a letter of request to the Program Director in which the student lists a course(s) previously taken which might be similar in content to a professional course(s) that the student is scheduled to take. The student must also provide an official course description(s) and a syllabus (syllabi) of the course(s) previously taken. The program's Committee will share the submitted course materials with the appropriate course director to determine if the course(s) is an appropriate substitute. All requests must be submitted prior to matriculation. Each program determines the minimum letter grade of coursework for advanced placement. Typically, advanced placement will only be considered for coursework in which a minimum letter grade of "B-" or "C" has been earned. A "C-" letter grade is not acceptable for advanced placement consideration. Some programs may have additional requirements. If the Admissions or Education Committee denies the request for advanced placement, the student may appeal this decision to the CHS Dean.

If a course is accepted for credit, the equivalent Midwestern University course and the Advanced Placement (AP) notation will be recorded on the transcript along with the name of the institution at which the credit was earned. Any earned letter grade will not be included on the transcript or used in the GPA calculation.

## Class Standing

To progress to the next year in a professional program of the College, students must have satisfactorily completed all academic requirements for the preceding year of the professional program curriculum.

Exceptions to this requirement must be approved by the CHS Dean.

## Faculty Mentor Program

Most CHS academic programs assign a faculty mentor to students in each entering class. The faculty mentor assists with academic concerns. In addition to these faculty mentors, students may seek assistance from the CHS Office of the Dean and the Office of Student Services. The student determines the amount of interaction with the faculty mentor. It is the student's responsibility to initiate contact with the faculty mentor for assistance.

CHS faculty mentors act as liaisons between the faculty and students. Their responsibilities include:

1. Serving as the student's advisor and academic/professional counselor;
2. Overseeing and monitoring the academic progress and professional growth of the student;
3. Assisting the student in seeking academic and personal counseling services provided by the institution;
4. Serving as an advocate for the student;
5. Counseling the student during their selection of a career within the profession.

## Grades

### *Grading System*

Students receive letter grades corresponding to the level of achievement in each course, based on the results of examinations, required course work, and, as applicable, other established criteria. The letter grades, percent ranges, and quality points per credit are as follows:

Grade	Percent (%)	Quality Points (per credit)	Comments
A	93-100	4.000	-
A-	90-92	3.670	-
B+	87-89	3.330	-
B	83-86	3.000	-
B-	80-82	2.670	-
C+	77-79	2.330	Does not apply to the Clinical Psychology, Graduate Nursing, or Nurse Anesthesia Programs (NAAPG or DNAPG courses)
C	70-76	2.000	Does not apply to the Clinical Psychology, Graduate Nursing, or Nurse Anesthesia Programs (NAAPG or DNAPG courses)
F	< 70	0.000	-
F	< 80	0.000	For the Clinical Psychology, Graduate Nursing, and Nurse Anesthesia Programs (NAAPG or DNAPG courses)
I	-	0.000	An Incomplete grade may be assigned by an instructor when a student's work is of passing quality but incomplete, or if a student qualifies for re-examination. It is the responsibility of the student to request an extension from the course instructor. By assigning an "I" grade, it is implied that an instructor agrees that the student has a valid reason and should be given additional time to complete required coursework. All incomplete grades will be resolved within 10 calendar days from the end of final examinations for the quarter or they will automatically be converted to a grade of "F." In the case of courses ending prior to final exam week, it is the obligation of the course director to monitor the use and resolution of the incomplete grade with notice to the Registrar.
IP	-	0.000	An In-Progress grade may be assigned when extenuating circumstances make it necessary to extend the grade completion period past 10 calendar days (e.g. illness, family death). Authorization by the Dean is required, and the completion period should not typically exceed one quarter.

Grade	Percent (%)	Quality Points (per credit)	Comments
P	-	0.000	Pass (for a pass/fail course); designation indicates that the student has made satisfactory progress or completed required coursework satisfactorily. Grade of 'P' is counted toward credit hour accruals for graduation but does not affect GPA calculations.
F	-	0.000	Fail (for a pass/fail course); designation indicates that the student has not made satisfactory progress or completed required coursework satisfactorily. Grade of "F" is counted toward credit hour accruals as attempted but not completed. Grade of "F" is calculated into the GPA (quality points are lowered due to unsuccessful course completion).
W	-	0.000	Withdrawal is given if the work completed up to the time of withdrawal was satisfactory. This grade is not counted in any GPA calculation and is not counted in credit hour accruals for graduation.
WF	-	0.000	Withdrawal Failing is given if the work completed up to the time of withdrawal is below the passing grade level for the program. This grade is not counted in any GPA calculation and is not counted in credit hour accruals for graduation.
AU	-	0.000	This designation indicates an audited course in which a student is registered with the understanding that neither academic credit nor a grade is earned. The status of the course cannot be changed from audit to full credit after the start of the quarter.
AP			This designation indicates the decision of a college to award academic credit that precludes a student from taking required course work. The designation of Advanced Placement is applied toward credit hour accruals, but is not counted in the GPA calculation.

## Grade Point Average

The grade point average (GPA) is determined by calculating the total number of quality points earned and dividing them by the total number of credits carried. The total quality points earned for each course is determined by multiplying the quality points earned per credit (corresponding to the letter grade) by the number of credits assigned to the course. The student's cumulative grade point average is computed and recorded by the Office of the Registrar. It is calculated initially at the end of the first quarter of enrollment and does not include any grades or credits for courses audited or accepted for advanced placement or for courses with a grade of withdrawal (W), withdrawal failing (WF), or pass (P). Additionally, failing (F) grades for courses that are successfully repeated are not included in the GPA. Under exceptional circumstances and with the approval of the Program Director and Dean, a student may retake a course in which the student received a grade of "C." In such cases, the original grades remain on the transcript but only the new grades are used in the computation of the GPA.

## Graduation

The following degrees will be conferred upon candidates who have completed all academic requirements, satisfied all financial obligations, and completed all graduation requirements: Master of Science in Cardiovascular Science, Master of Arts in Clinical Psychology, Doctor of Psychology in Clinical Psychology, Master of Science in Nurse Anesthesia, Doctor of Nurse Anesthesia Practice, Master of Science in Nursing (Adult-Gerontology Primary Care Nurse Practitioner), Master of Science in Nursing (Leadership and Global Health), Doctor of Nursing Practice, Master of Occupational Therapy, Doctor of Occupational Therapy, Doctor of Physical Therapy, Master of Medical Science in Physician Assistant Studies, or Master of Science in Speech-Language Pathology. A Post-Master's Certificate in Adult-Gerontology Primary Care Nurse Practitioner is also offered.

## Immunization Policy

Full-time students enrolled in a program with a clinical component are required to have all immunizations and titers as outlined in the general policy section of the Student Handbook. Questions about specific requirements should be directed to the student's program.

## Leave of Absence

Please refer to the Midwestern University Catalog Academic Policies section for a complete description of the Leave of Absence Policy. A student may be placed on a mandatory leave of absence for

academic, medical, or administrative reasons that prevent the student from progressing in the program of study. Before voluntarily requesting a leave for personal reasons or after being placed on a mandatory leave, a student must make an appointment with the appropriate Program Director and representative from the Dean's Office to discuss the implications of the leave of absence and a revised program of study, if applicable. Typically, a single leave of absence will not exceed 12 months, and consecutive or multiple interrupted leaves of absence will not exceed 18 months. Periods of non-enrollment do not count towards the maximum allotted time for completion of academic programs.

## Professional Conduct

Students are expected to emulate the legal, moral, and ethical standards expected of professionals and display behavior that is consistent with these qualities. A Code of Responsibilities and Rights of the Students of Midwestern University is included in Appendix 1 of the MWU Student Handbook. This code clearly states the mode of behavior that is expected of students and covers both on-campus and off-campus activities. Students are expected to read and follow this code.

Unsatisfactory professional behavior, as defined in Appendices 2 and 4 of the MWU Student Handbook, is subject to disciplinary sanctions that may preclude academic progress in a student's program of study. The Dean of Students investigates formal complaints concerning student misconduct and recommends disciplinary action to the CHS Dean. A student who is found to have engaged in improper conduct is subject to disciplinary action which includes, but is not limited to, disciplinary warning/probation, temporary suspension, or dismissal. Disciplinary warning and probation are not noted on the transcript but are kept in the student's disciplinary file. Suspension and dismissal as a result of disciplinary action are noted on the student's transcript. Disciplinary information may be shared with clinical sites that are affiliated with Midwestern University educational programs.

## Transfer Policy (Intercampus)

Students are expected to complete the degree requirements at the campus to which students originally matriculated. Transfer between campuses is permitted only under extenuating and specific circumstances for enrolled students that are in good academic standing. Students should consult first with the Program Director and then with the Office of the Dean to discuss the process.



# Physician Assistant Program

## Mission

The Midwestern University Physician Assistant Program is committed to educate and mentor students in a setting that cultivates excellence, and prepares compassionate, competent physician assistants to serve in a changing healthcare environment. We value a culture of inclusion where students, staff and faculty are honored, respected, and engaged.

## Accreditation

The Accreditation Review Commission on Education for the Physician Assistant, Inc. (ARC-PA) has granted Accreditation-Continued status to the Midwestern University-Glendale Physician Assistant Program sponsored by Midwestern University-Glendale.

Accreditation-Continued is an accreditation status granted when a currently accredited program is in compliance with the ARC-PA *Standards*.

Accreditation remains in effect until the program closes or withdraws from the accreditation process or until accreditation is withdrawn for failure to comply with the *Standards*. The approximate date for the next validation review of the program by the ARC-PA will be June 2028. The program's accreditation history can be viewed on the ARC-PA website at: <http://www.arc-pa.org/accreditation-history-midwestern-university-glendale/>

For further information regarding accreditation please contact: ARC-PA, 3325 Paddocks Parkway, Suite 345, Suwanee, GA 30024; 770-476-1224; [www.arc-pa.org](http://www.arc-pa.org).

Midwestern University is accredited by The Higher Learning Commission, 230 South LaSalle Street, Suite 7- 500, Chicago, IL 60604-1413.

## Degree Description

The professional curriculum leads to a Master of Medical Science in Physician Assistant Studies (M.M.S.). This full-time 24-month professional program offers students the opportunity to earn a graduate degree and satisfy the eligibility requirements for the PA national certifying examination (PANCE). The PA program does not offer an extended course of study beyond the usual length of the program. The maximum allotted time for completion of this program is 36 months. The roles and specific clinical duties and responsibilities that graduates can expect to experience will vary depending on the chosen career path. PA Program graduates are expected to have the ability to competently perform patient histories and physical exams, gather pertinent patient data, order and interpret diagnostic studies, recognize common diseases and disorders, choose appropriate therapeutic modalities, perform minor surgical procedures, manage emergency life-threatening conditions, promote health through counseling, education, and disease prevention, and demonstrate interpersonal skills consistent with the physician assistant role. The program is a combination of 12 months of didactic and 12 months of clinical education.

The didactic coursework includes training in the basic medical sciences to include anatomy, physiology, biochemistry, pharmacology and pharmacotherapeutics, and microbiology. It also includes courses in medical interviewing and documentation, preventative and developmental medicine, health professionalism, physical diagnosis, medical ethics, epidemiology, evidence-based medicine, interprofessional health care, adult and pediatric clinical medicine, psychiatry and behavioral medicine, women's health, basic electrocardiography, emergency medicine and surgical principles, and therapeutic and diagnostic skills. During the remaining 12 months of the clinical year, students rotate through seven required core clinical rotations and one elective rotation.

The second-year clinical program is delivered at affiliated clinical sites and facilities. These sites are geographically and demographically diverse, reflecting the broad scope of practice opportunities that exist for PAs in the healthcare delivery system of this country. Sites may include ambulatory practice settings, small and large office-based group practices, community health centers, inpatient settings involving large and small hospitals, as well as federal and state facilities. These sites are in urban, suburban, and rural communities. In addition, the program has established formal affiliations with clinical facilities and practitioners in Arizona as well as a number of other states. As part of the clinical education phase of the program, students enrolled in the MWU PA Program will likely be assigned to clinical rotations that reflect this geographic and demographic diversity.

## Admissions

The Midwestern University PA Program considers applicants who possess the academic and professional promise necessary for development as competent, caring members of the healthcare community. The admissions environment is highly selective with approximately 2700 applications received last year.

Completed applications received on or before the application deadline are reviewed to determine applicant eligibility for interviews. Interviews are typically held between July and December. The PA Program conducts rolling admissions and admissions decisions are generally made within two weeks following an interview. Candidates are notified of status shortly thereafter. Cumulative and science grade point averages (GPAs), letters of recommendation, health care experience, knowledge of the profession, and motivation for a PA professional career will all be considered when reviewing applicant files.

## Admission Requirements

Students seeking admission to the PA Program must submit the following documented evidence:

1. All applicants must apply through the Centralized Application Service for Physician Assistants (CASPA) and meet the published admission criteria.
2. Minimum cumulative science and overall GPA of 3.00 on a 4.00 scale.
3. Completion of prerequisite courses as listed below from regionally accredited colleges or universities.
  - All prerequisite courses must be completed with a grade of a C or better
  - Life experience credits do not count toward fulfillment of any prerequisite courses
  - Courses in which "credit" or grades of "pass" are earned will be counted only when applicants can provide verification that the earned grades were equivalent to grades of C or better (grades of C- are not acceptable)
4. Completion of prerequisite courses prior to matriculation.
5. Applicants must determine which prerequisites are missing and which courses must be taken to fulfill any outstanding prerequisites.
6. Completion of a bachelor's degree from a regionally accredited college or university before matriculation.
7. Motivation for and commitment to health care as demonstrated by paid direct patient care hours, volunteer work, shadowing, or other life experiences.
8. Demonstration of service and leadership through community service or extracurricular activities.
9. Oral and written communication skills necessary to interact with patients and colleagues.
10. Satisfactory Midwestern University criminal background check.
11. Commitment to abide by the Midwestern University Drug-Free Workplace and Substance Abuse Policy.
12. Successful completion of all required immunizations prior to matriculation.
13. The applicant must meet the technical standards prior to matriculation.

**A competitive student for the Midwestern University Physician Assistant Program has the following qualities:**

A cumulative science and total GPA at or near the current Midwestern University Physician Assistant Program class average\*

Minimal number of course grades below a "B"

Health care hours at or above the current Midwestern University Physician Assistant Program class average\*

Demonstrate a good understanding of the desired profession and a sincere interest in a career in the field

Medically related experiences that indicate sufficient exposure for candidates to make informed decisions about medical careers

Demonstration of personal integrity and sound moral character

**\*Please see Physician Assistant Glendale Class of 2026 Profile - <https://www.midwestern.edu/academics/degrees-programs/college-health-sciences/master-medical-science-physician-assistant-studies/master-medical-science-physician-assistant-studies-glendale-campus>**

## Prerequisite Courses

Course	Sem/hours
***Biology with lab (must include at least 4 hours of Anatomy)	8 Sem/12 Qtr hours
***General Chemistry with lab	8 Sem/12 Qtr hours
***Organic Chemistry with lab	4 Sem/6 Qtr hours
Math (college algebra or above)	3 Sem/4 Qtr hours
English Composition	6 Sem/9 Qtr hours
Social and Behavioral Sciences (sociology, psychology, anthropology, etc.)	6 Sem/ 9 Qtr hours
Statistics	3 Sem/4 Qtr hours
Biochemistry (not required, but strongly recommended)	4 Sem/6 Qtr hours

All science prerequisites must be courses designed for science majors. No survey courses will count to fulfill science prerequisites. In-person science laboratory classes are highly recommended.

## Application Process and Deadlines

### 1. CASPA Application

Completed applications with all required materials must be submitted to the Centralized Application Service for Physician Assistants (CASPA) at [www.caspaonline.org](http://www.caspaonline.org) by October 1st. Please refer to the CASPA application instructions for specific details about completing the application, required documents, and processing time. CASPA applications are typically available beginning in April of the academic year preceding the year in which applicants plan to matriculate. Due to the large number of applications and the limited number of seats available, applicants are strongly encouraged to complete CASPA applications early in the cycle. Applications are reviewed continuously throughout the admissions cycle.

### 2. Letters of Recommendation

Applicants are required to submit a minimum of two letters of recommendation from professionals to CASPA ([www.caspaonline.org](http://www.caspaonline.org)). The Office of Admissions will only accept letters of recommendation received directly from CASPA. It is preferred, but not required, that one letter be written by a science professor who has taught the student or a pre-health advisory committee. The second letter can be written by any one of the following: pre- health advisory committee, pre-health advisor, college professor, or health care professional (preferably a PA) who knows the applicant well. Personal references are discouraged. Please refer to the CASPA application

instructions for specific guidelines and requirements for submitting letters of recommendation. The Office of Admissions must receive letters of recommendation no later than **November 1st**.

3. Completed Applications

The Office of Admissions will send a letter verifying receipt of the CASPA application to all applicants who meet the minimum cumulative science and overall GPA requirement of 3.00. Letters will also include instructions on tracking application status online. Applicants are responsible for tracking the receipt of application materials to ensure the submission of all required documents. Applicants will only be considered for entrance into the Program when the Office of Admissions has received all required application materials which must be received no later than **November 1st**. In-progress prerequisite courses must be completed prior to matriculation.

4. Advanced placement credit may be awarded for comparable Midwestern University courses only. Advanced placement credit is considered once applicants have been accepted into the Physician Assistant Program. Credit is not guaranteed and is awarded on a course-by-course basis consistent with the CHS Advanced Placement Policy.
5. Once the admissions cycle is underway, the Midwestern University Physician Assistant Program strongly encourages applicants to provide the Office of Admissions with updates to applications (i.e., transcripts of courses completed since the initial application, additional health care experience, etc.).
6. Once a CASPA Application is submitted, the Midwestern University Physician Assistant Program faculty are not permitted to discuss an application with the applicant other than at a formal interview. If you have an open and pending application, please address all inquiries to the Office of Admissions.

*Please note:* Applicants are responsible for notifying the Office of Admissions of any changes in mailing address or e-mail address. All requests for application withdrawal must be made in writing via e-mail, fax, or letter to the Office of Admissions:

Midwestern University Office of Admissions 1  
9555 North 59th Avenue  
Glendale, AZ 85308  
623/572-3215 or 888/247-9277  
[admissaz@midwestern.edu](mailto:admissaz@midwestern.edu)

## Interview and Selection Process

After the Office of Admissions receives CASPA application reports, applicant files are reviewed to determine whether applicants merit an interview. The following criteria are used to select the most qualified candidates for interview invitations: GPA, letters of recommendation, healthcare experience, knowledge of the profession, and motivation for a PA career. Evaluation of completed applications will begin in July and continue until all seats in the class are filled. Eligible candidates are typically invited to interview during the months of July through December. Applicant files may also be placed on an interview wait list pending possible openings toward the end of the interview cycle.

Applicants selected to interview will be notified by letter or telephone of available dates and asked to contact the Office of Admissions to confirm one of the dates offered. Letters of confirmation will be sent to applicants that include travel information for visiting the MWU campus (i.e., directions to campus and local lodging information).

A typical interview day involves participation in the following activities, which are coordinated by the Office of Admissions: a presentation by the Chair or member of the PA Admissions Committee, interaction with faculty members and meetings with current Midwestern University students. During each interview session, prospective students may be asked about academic, personal, and professional aspirations and preparedness for admission to the Program.

Prospective students will be rated on a standardized evaluation form, which is included with the applicant's file and forwarded to the PA Admissions Committee for review.

The PA Admissions Committee meets within one to two weeks after interviews have concluded. The Committee reviews complete application files for all applicants who were interviewed and formulates recommendations. The CHS Dean, via the Office of Admissions, notifies applicants in writing of admissions status. Applicants may be offered seats following interviews and subsequent Admissions Committee Meetings, until the class is filled, up until the time of matriculation.

## Reapplication Process

After receiving either a denial or end-of-cycle letter, prospective students may reapply for the following year's admissions cycle. Before reapplying, however, applicants are encouraged to seek input on strengthening the application from a counselor in the Office of Admissions after the admissions cycle is officially over. To initiate the reapplication process, prospective students must complete and submit new applications and proceed through the standard application procedures.

## Transfer Policy

MWU PA Program does not accept transfer students from other programs.

# Technical Standards, PA

## Technical Standards

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the college.

Candidates must be able to perform the following abilities and skills:

1. **Observation:** The candidate must be able to accurately make observations at a distance and close at hand, including those on a computer screen or electronic device. Observation necessitates the functional use of the sense of vision and sense of touch and is enhanced by the functional use of all the other senses. The candidate must be able to accurately auscultate lung/breath, heart and bowel sounds to complete the curricular requirement to individually complete physical examination of a patient/client.
2. **Communication:** The candidate must be able to communicate in English, proficiently and sensitively, in verbal and written form, and be able to perceive nonverbal communication.
3. **Motor:** Candidates must be able to coordinate both gross and fine muscular movements, maintain equilibrium and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control and eye-to-hand coordination to perform profession-specific skills and tasks. Candidates must have the physical ability to examine and perform necessary patient exams to include the ability to respond to emergency situations. Candidates must be able to perform therapeutic and diagnostic skills required in the administration of patient care.
4. **Intellectual, Conceptual, Integrative and Quantitative Abilities:** The candidate must be able to problem solve, measure, calculate, reason, analyze, record and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
5. **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of the candidate's intellectual abilities, the exercise of good judgment and the consistent, prompt completion of all responsibilities and the development of mature, sensitive and effective relationships. Candidates must be able to tolerate physically, mentally and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn are all personal qualities required during the educational process. The candidate must agree to participate in touching/palpating on the skin and being touched/palpated on the skin by individuals regardless of gender

in all academic settings, including dental head, neck exams, including intra- and extra- oral examinations. These activities will take place in large and small group settings as directed in the College's curricular requirements.

Candidates are required to verify understanding and ability to meet these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet Technical Standards with accommodation, must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/ Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the college. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

## Graduation Requirements

To qualify for the degree Master of Medical Science in Physician Assistant Studies (M.M.S.), students must:

1. Follow an approved course of study leading to the completion of all master's requirements.
2. Satisfactorily complete all professional courses with a minimum cumulative grade point average of 3.000; and no unremediated course failures.
3. Pass all the Summative evaluations.
4. Satisfactorily complete the required 126.5 credit hours in the overall course of study.
5. Receive a favorable recommendation for master's degree conferral from the PA Program Student Academic Review Committee and the CHS Student Promotion and Graduation Committee.
6. Be recommended for conferral of the master's degree by the University Faculty Senate.
7. Settle all financial accounts with the University, and
8. Complete all graduation clearance requirements as instructed by the Office of the Registrar.

## Certification/Licensure Requirements

To practice in most states, including Arizona, students must successfully complete a PA Program accredited by the ARC-PA. Students must also pass the certifying examination administered by the National Commission on Certification of Physician Assistants (NCCPA).

For further information regarding the certifying examination, contact: National Commission on Certification of Physician Assistants, Inc., 12000 Findley Road, Suite 100, Johns Creek, GA. 30097-1409; [678/417-8100]; [www.nccpa.net](http://www.nccpa.net)

Midwestern University's Glendale Physician Assistant program meets the educational requirements for certification and licensure to practice as a physician assistant in the following states and territories: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, District of Columbia, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, U.S. Virgin Islands, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

Each student should check the additional licensure requirements for the state, district or territory in which employment will be pursued.

## Physician Assistant Curriculum

The PA Program reserves the right to alter its curriculum, however and whenever, it deems appropriate. Information in this catalog does not establish a contractual relationship between MWU and the student.

This applies to the class matriculating in the current catalog year. Enrolled second-year PA students should refer to the previous catalog.

Total Credits in the Professional Program: 126.5

### First Professional Year

#### Summer Quarter

Course Code	Title	Credits
ANATG 1553	Human Anatomy and Embryology (with Gross Anatomy Lab)	7.0
BIOCG 551	Human Biochemistry	4.0
PASSG 553	Health Professionalism	0.5
PASSG 555	Preventative and Developmental Medicine	1.5
PASSG 556	Medical Interviewing and Documentation	1.5
PASSG 559	Preparation for Clinical Phase (PCP) I	0.5
<b>Sub-Total Credits</b>		<b>15.00</b>

#### Fall Quarter

Course Code	Title	Credits
COREG 1560B	Interprofessional Healthcare	0.5
PASSG 565	Clinical Medicine I	5.5
PASSG 568	Medical Ethics, Epidemiology & Evidence-Based Medicine	2.0
PASSG 1569	Physical Diagnosis	3.0
PHARG 566	Pharmacology and Pharmacotherapeutics I	3.0
PHYSG 1575	Human Physiology I	4.0
<b>Sub-Total Credits</b>		<b>18.00</b>

#### Winter Quarter

Course Code	Title	Credits
COREG 1570B	Interprofessional Healthcare	0.5
MICRG 570	Microbiology	3.0
PASSG 570	Clinical Medicine II	5.5
PASSG 573	Basic Electrocardiography	1.5
PASSG 579	Preparation for Clinical Phase (PCP) II	0.5
PHARG 570	Pharmacology and Pharmacotherapeutics II	3.0
PHYSG 1586	Human Physiology II	4.0
<b>Sub-Total Credits</b>		<b>18.00</b>

## Spring Quarter

Course Code	Title	Credits
COREG 1580B	Interprofessional Healthcare	0.5
PASSG 571	Therapeutic and Diagnostic Skills	2.5
PASSG 575	Women's Health	2.0
PASSG 580	Clinical Medicine III	5.5
PASSG 582	Emergency Medicine and Surgical Principles	3.0
PASSG 588	Psychiatry and Behavioral Medicine	2.0
PASSG 589	Preparation for Clinical Phase (PCP) III	1.0
PHARG 580	Pharmacology and Pharmacotherapeutics III	3.0
<b>Sub-Total Credits</b>		<b>19.50</b>

## Second Professional Year

### Summer Quarter

Course Code	Title	Credits
	Required and Elective Clinical Rotations (12 Credits)	12
PASSG 675	Clinical Assessment Day I	1.0
<b>Sub-Total Credits</b>		<b>13.00</b>

### Fall Quarter

Course Code	Title	Credits
PASSG 665A	Master's Portfolio	1.0
	Required and Elective Clinical Rotations (12 Credits)	12
PASSG 678	Mid-Year Evaluation	1.0
<b>Sub-Total Credits</b>		<b>14.00</b>

### Winter Quarter

Course Code	Title	Credits
PASSG 665B	Master's Portfolio	1.0
	Required and Elective Clinical Rotations (12 Credits)	12
PASSG 676	Clinical Assessment Day II	1.0
<b>Sub-Total Credits</b>		<b>14.00</b>

### Spring Quarter

Course Code	Title	Credits
PASSG 665C	Master's Portfolio	1.0
PASSG 686	End-of-Year Evaluation	1.0
PASSG 688	Cumulative Review and Examination Week	1.0
	Required and Elective Clinical Rotations (12 Credits)	12
<b>Sub-Total Credits</b>		<b>15.00</b>

## Required Clinical Rotations

Course Code	Title	Credits
PASSG 691	Emergency Medicine	6.0
PASSG 692	Family Medicine/ Primary Care	6.0
PASSG 693	Internal Medicine	6.0
PASSG 694	Pediatrics	6.0
PASSG 695	Psychiatry/Behavioral Medicine	6.0
PASSG 696	Surgery	6.0
PASSG 697	Women's Health	6.0
PASSG 698	Elective Rotation	6.0
Total Credits		126.5



# Student Academic Policies

## Academic Progress

The Physician Assistant Academic Policies apply to all students who matriculate during the academic year of the catalog publication. These policies will apply throughout the entire time a student is enrolled in the Program. In the event that these policies need to be revised as the result of new accreditation requirements, mandates by the United States Department of Education, or other unforeseen circumstances, students will be notified in writing prior to the effective date of the new policy.

Faculty and students should also refer to the University Academic Policy section and the College of Health Sciences Policy section for additional policies that apply to students at Midwestern University.

The academic standing of a student is determined by the student's cumulative grade point average.

To achieve satisfactory academic progress, a student must pass all required courses and maintain a cumulative grade point average of 3.000 or higher. In addition, to progress to the next quarter, a student must satisfactorily complete all academic and professionalism requirements for the preceding quarter. In order to progress to the clinical year, a student's cumulative GPA must be greater than or equal to 3.000.

## Physician Assistant Program Calendar

### PA-I Summer

Event	Date
<b>Memorial Day *No Classes*</b>	<b>May 26, 2025</b>
Orientation	May 27 - 30, 2025
Classes Begin	June 2, 2025
<b>Juneteenth (Observed) *No Classes*</b>	<b>June 19, 2025</b>
<b>Independence Day (Observed) *No Classes*</b>	<b>July 4, 2025</b>
Last Day of Class	August 8, 2025
Quarterly Exams	August 11 - 15, 2025
Quarter Break PA-I	August 18 - 22, 2025

### PA-I Fall

Event	Date
Classes Begin PA-I	August 25, 2025
Last Day to Add/Drop Classes PA-I	August 29, 2025
<b>Labor Day *No Classes*</b>	<b>September 1, 2025</b>
<b>White Coat Ceremony</b>	<b>September 27, 2025</b>
Last Day of Classes PA-I	October 31, 2025
Quarterly Exams PA-I	November 3 - 7, 2025
Thanksgiving Break PA-I	November 10 - 28, 2025

### PA-I Winter

Event	Date
Classes Begin PA-I	December 1, 2025

Event	Date
Last Day to Add/Drop Classes PA-I	December 5, 2025
Winter Break PA-I	December 22, 2025 - January 2, 2026
Classes Resume PA-I	January 5, 2026
<b>Martin Luther King/ Jr. Day *No Classes*</b>	<b>January 19, 2026</b>
Last Day of Classes PA-I	February 20, 2026
Quarterly Exams PA-I	February 23 - 27, 2026
Spring Break PA-I	March 2 - 6, 2026

## PA-I Spring

Event	Date
Classes Begin PA-I	March 9, 2026
Last Day to Add/Drop Classes PA-I	March 13, 2026
Last Day of Classes PA-I	May 15, 2026
Quarterly Exams PA-I	May 18 - 22, 2026
<b>Memorial Day *No Classes*</b>	<b>May 25, 2026</b>
Quarter Break PA-I	May 26 - 29, 2026

## PA-II Rotations

Term	Rotation	Date
Summer	Rotation 1	May 27 - July 2, 2025
Summer	Rotation 2	July 7 - August 12, 2025
Summer	CAD I	August 14 - 15, 2025
Fall	Rotation 3	August 18 - September 25, 2025
Fall	Rotation 4	September 29 - November 4, 2025
Fall	MYE	November 6 - 7, 2025
Winter	Rotation 5	November 10 - December 18, 2025
Winter	Winter Break	December 22, 2025 - January 2, 2026
Winter	Rotation 6	January 5 - February 10, 2026
Winter	CAD II	February 12 - 13, 2026
Spring	Rotation 7	February 16 - March 26, 2026
Spring	Rotation 8	March 30 - May 5, 2026
Spring	EYE	May 7 and 8, 2026
Spring	CREW	May 11 - 15, 2026
Spring	Program Completion	May 15, 2026

Last Revision: 08/28/2024

## Faculty

**Regan Alford, M.M.S., PA-C**

Midwestern University, Glendale  
Assistant Professor

**Deborah Black, M.S., PA-C**

A.T. Still University  
Clinical Coordinator and Assistant Professor

**Marcia Bouton, D.M.Sc., PA-C**

Midwestern University, Glendale  
Assistant Professor

**Kimberly Carter, D.M.Sc., PA-C**

A.T. Still University  
Director of Clinical Education and Associate Professor

**Nicole Hamilton, M.S.P.A.S, PA-C**

Butler University  
Assistant Professor

**Amber Herrick, M.S., PA-C**

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Associate Professor

**Gretchen Post, M.S.P.A.S., PA-C**

AT Still University  
Clinical Coordinator and Assistant Professor

**Robyn Sears, D.M.Sc., PA-C**

A.T. Still University  
Program Director and Associate Professor

**James Stoehr, Ph.D.**

Dartmouth Medical School  
Professor

**Jennifer Wild, D.O.**

Midwestern University, Glendale  
Medical Director and Assistant Professor

## Physician Assistant Program Courses

### ANATG 1553: Human Anatomy and Embryology (with Gross Anatomy Lab)

This course presents the anatomy of the human body and relevant embryological development in a lecture and laboratory format. The emphasis is on the relationship of form and function and the use of anatomy in physical diagnosis. Laboratory sessions include dissection of human cadavers. Student progress is evaluated through written and practical examination.

**Credits** 7.0

### BIOCG 551: Human Biochemistry

Biochemistry is concerned with the functioning of cellular constituents at the molecular level in health and how their functions are altered in disease. Biochemistry is fundamental to understanding all branches of the life sciences. Topics include cellular energy metabolism, signal transduction, cell biology, medical genetics, complete blood count, anemia, diabetes, and hemostasis tests.

**Credits** 4.0

### COREG 1560B: Interprofessional Healthcare

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

## **COREG 1570B: Interprofessional Healthcare**

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

## **COREG 1580B: Interprofessional Healthcare**

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

## **MICRG 570: Microbiology**

The course is organized by organ system and the major infectious diseases affecting each of these are discussed. Focus is on the etiology, pathogenesis, clinical manifestations and diagnosis of these selected diseases.

**Credits** 3.0

## **PASSG 1569: Physical Diagnosis**

This course is designed to teach the student the art and technique of physical assessment. Course content includes lectures and reading assignments covering normal and abnormal physical findings. In addition, there are weekly physical exam laboratory sessions designed to provide the student with hands-on practice in exam techniques. At the conclusion of the course the student will be expected to pass a written final exam and satisfactorily perform a complete physical examination.

**Credits** 3.0

## **PASSG 553: Health Professionalism**

The purpose of this course is to provide the student with an understanding and a perspective of the physician assistant (PA) profession. There will be discussion of various topics that illustrate the challenges faced by physician assistants in clinical practice. The material will be presented in a lecture and case-based format.

**Credits** 0.5

## **PASSG 555: Preventative and Developmental Medicine**

The purpose of this course is to introduce students to health promotion, wellness, screening, and disease prevention across the lifespan, as well as to guide clinical interventions and education in patient care. Students will learn about the role of nutrition, immunizations, pediatric and adult health screening and management, dental health, and modifiable risk factors in preventative medicine. The information delivered in this course will be further expanded upon in Clinical Medicine courses throughout the didactic year and reinforced on clinical rotations.

**Credits** 1.5

## **PASSG 556: Medical Interviewing and Documentation**

The purpose of this course is to create an awareness and understanding of the "art" of interviewing and proper documentation. The focus will be on obtaining a patient history, communicating with patients in different age groups, learning appropriate use of medical terms and abbreviations and understanding general principles of communication. The skill of interviewing a patient to obtain a history is one of the foundational skills a physician assistant should possess. Additionally, the student will be introduced to legal considerations of documentation and various forms of documentation including hospital notes.

**Credits** 1.5

## **PASSG 559: Preparation for Clinical Phase (PCP) I**

The purpose of the Preparation for the Clinical Phase (PCP) course series is to introduce students to the twelve-month clinical training phase of the Physician Assistant Program. The course series will focus on reviewing clinical rotation objectives, introducing students to Clinical Year guidelines and expectations of professionalism, and enhancing the transition from the didactic to clinical phase of education.

**Credits** 0.5

## **PASSG 565: Clinical Medicine I**

The Clinical Medicine series is a sequence of three courses. The courses introduce students to clinical conditions commonly encountered in practicing primary care medicine in pediatric and adult populations. Lectures will emphasize the epidemiology, pathophysiology, clinical presentation and course, as well as diagnostic and treatment modalities of each disease topic. Students will participate in case group sessions and standardized patient encounters. During the encounters, students will have the opportunity to develop competencies in history taking, performing physical exams, developing differential diagnoses, ordering and interpreting laboratory and diagnostic studies, and formulating an assessment and plan. Additionally, students will gain experience in prescription writing and medical documentation.

**Credits** 5.5

## **PASSG 568: Medical Ethics, Epidemiology & Evidence-Based Medicine**

The purpose of this course is to provide the PA student with 1) an overview of basic epidemiologic principles, 2) an introduction to evidence-based medicine (EBM), and 3) an opportunity to explore a variety of issues and themes central to the ethical dimensions of medicine. Class time will entail a mixture of didactic lectures, case presentations, small group activities, and interactive discussion.

**Credits** 2.0

## **PASSG 570: Clinical Medicine II**

The Clinical Medicine series is a sequence of three courses. The courses introduce students to clinical conditions commonly encountered in practicing primary care medicine in pediatric and adult populations. Lectures will emphasize the epidemiology, pathophysiology, clinical presentation and course, as well as diagnostic and treatment modalities of each disease topic. Students will participate in case group sessions and standardized patient encounters. During the encounters, students will have the opportunity to develop competencies in history taking, performing physical exams, developing differential diagnoses, ordering and interpreting laboratory and diagnostic studies, and formulating an assessment and plan. Additionally, students will gain experience in prescription writing and medical documentation.

**Credits** 5.5

## **PASSG 571: Therapeutic and Diagnostic Skills**

This course emphasizes skill development in performing routine therapeutic procedures and competence in managing therapeutic interventions. Areas of skill development include (at a minimum) injections, suturing and wound care, casting, splinting, venipuncture, and intravenous therapy.

**Credits** 2.5

## **PASSG 573: Basic Electrocardiography**

The purpose of this course is to introduce students to reading and interpreting the findings on rhythm strips and twelve-lead electrocardiograms. Students will learn how to determine heart rate, intervals, axis, chamber enlargement or hypertrophy, signs of ischemia and infarcts, and the effects electrolyte abnormalities and medications can have on the myocardium. Additionally, students will learn to recognize various arrhythmias, including atrial dysrhythmias, junctional dysrhythmias, ventricular dysrhythmias, and heart block.

**Credits** 1.5

## **PASSG 575: Women's Health**

The purpose of this course is to introduce the first-year physician assistant (PA) student to the principles of women's health, including topics such as sexually transmitted infections, menstrual abnormalities, health maintenance, gynecologic oncology, prenatal care and normal and abnormal labor and delivery. This course will provide the PA student with fundamental knowledge and skills critical for success in the second year and relevant to a PA in a variety of practice settings, including obstetrics/gynecology, primary care, emergency medicine and surgery.

**Credits** 2.0

## **PASSG 579: Preparation for Clinical Phase (PCP) II**

The purpose of the Preparation for the Clinical Phase (PCP) course series is to introduce students to the twelve-month clinical training phase of the Physician Assistant Program. The course series will focus on reviewing clinical rotation objectives, introducing students to Clinical Year guidelines and expectations of professionalism, and enhancing the transition from the didactic to clinical phase of education.

**Credits** 0.5

## **PASSG 580: Clinical Medicine III**

The Clinical Medicine series is a sequence of three courses. The courses introduce students to clinical conditions commonly encountered in practicing primary care medicine in pediatric and adult populations. Lectures will emphasize the epidemiology, pathophysiology, clinical presentation and course, as well as diagnostic and treatment modalities of each disease topic. Students will participate in case group sessions, standardized patient encounters, and high-fidelity simulations. During the encounters, students will have the opportunity to develop competencies in history taking, performing physical exams, developing differential diagnoses, ordering and interpreting laboratory and diagnostic studies, and formulating an assessment and plan. Additionally, students will gain experience in prescription writing and medical documentation.

**Credits** 5.5

## **PASSG 582: Emergency Medicine and Surgical Principles**

The Emergency Medicine and Surgical Principles course is designed to develop an approach to problems frequently encountered in the Emergency Department and to expose students to the role of the PA in surgical practice. Course goals related to emergency care also include review of the triage process and recognition of principles of intervention for life threatening emergencies as well as management and disposition of non-emergent patients. Elements of surgical care will include the pre-, intra- and post-operative care of the patient.

**Credits** 3.0

## **PASSG 588: Psychiatry and Behavioral Medicine**

This course presents a two-fold approach to issues in behavioral medicine and psychiatry. 1) A biopsychosocial and family systems model of the individual and family developmental stages present throughout the life cycle, and 2) an introduction to the major psychopathologies encountered in clinical practice. Emphasis is placed on medical assessment, diagnostic criteria, clinical management, and first-line treatments. Topics in behavioral medicine include problems of childhood, domestic violence, clinician well-being, stress management, and normal and abnormal sexuality. The psychopathologies include anxiety disorders, mood disorders, psychotic disorders, personality disorders, substance-related disorders, trauma, chronic illness, aging, and end of life care. Case histories and audio-visual presentations will enhance the student's understanding.

**Credits** 2.0

## **PASSG 589: Preparation for Clinical Phase (PCP) III**

The purpose of the Preparation for the Clinical Phase (PCP) course series is to introduce students to the twelve-month clinical training phase of the Physician Assistant Program. The course series will focus on reviewing clinical rotation objectives, introducing students to Clinical Year guidelines and expectations of professionalism, and enhancing the transition from the didactic to clinical phase of education.

**Credits** 1.0

## **PASSG 665A: Master's Portfolio**

The purpose of this second-year master's course is for the second-year physician assistant student to develop the skills for professional development in an independent fashion.

**Credits** 1.0

## **PASSG 665B: Master's Portfolio**

This second-year master's course series serves largely as an independent study, allowing the second-year physician assistant student to develop an electronic portfolio of professional and scholarly activities. The portfolio focus and/or content may change over the course of the clinical year, based on the individual student's personal experiences, preferences and opportunities. A summary of state regulatory requirements will be addressed and included by the student.

**Credits** 1.0

## **PASSG 665C: Master's Portfolio**

This second-year master's course series serves largely as an independent study, allowing the second-year physician assistant student to develop an electronic portfolio of professional and scholarly activities. The portfolio focus and/or content may change over the course of the clinical year, based on the individual student's personal experiences, preferences and opportunities. A summary of state regulatory requirements will be addressed and included by the student.

**Credits** 1.0

## **PASSG 675: Clinical Assessment Day I**

The Clinical Assessment Day (CAD) I offers an opportunity for the program and the student to assess student progress and to ensure students are meeting program learning objectives and academic milestones. The CAD I consists of an individual primary care-based practical examination, medical documentation, an individual skills assessment and lecture.

**Credits** 1.0

## **PASSG 676: Clinical Assessment Day II**

The Clinical Assessment Day (CAD) II offers an opportunity for the program and the student to assess student progress and to ensure students are meeting program learning objectives and academic milestones. The CAD II consists of an individual primary care-based practical examination, medical documentation, an individual skills assessment and lecture.

**Credits** 1.0

## **PASSG 678: Mid-Year Evaluation**

This course is designed to evaluate students at the midpoint of the clinical phase of the Physician Assistant program. The Mid-Year Evaluation (MYE) offers an opportunity for the program and the student to assess student progress and to ensure students are meeting program learning objectives and academic milestones. The mid-year evaluation consists of an individual primary care-based practical examination, medical documentation and a comprehensive primary care-based multiple-choice exam.

**Credits** 1.0

## **PASSG 686: End-of-Year Evaluation**

The End-of-Year Evaluation (EYE) course is the summative evaluation of the student conducted at the end of the clinical phase. The course consists of lectures and assessments. It is designed to gauge the student's readiness for the Physician Assistant National Certifying Examination (PANCE), as well as clinical practice. Graded components of EYE include individual performance during a primary care-based standardized patient examination, documentation of the encounter, and a comprehensive summative exam.

**Credits** 1.0

## **PASSG 688: Cumulative Review and Examination Week**

This course offered in the final academic quarter provides intensive review lectures focused on the fundamental knowledge and skills relevant to the Physician Assistant National Certifying Examination (PANCE). Additionally, a formative self-assessment examination is administered to identify areas of weakness in order for students to strengthen their preparedness for and performance on the PANCE.

**Credits** 1.0

## **PASSG 691: Emergency Medicine**

The clinical year courses/rotations will provide overall instruction and supervised clinical practice experiences. The course(s) will cover common conditions and abnormalities encountered across the lifespan, with an emphasis on the conditions listed in the National Commission on Certification of Physician Assistants (NCCPA) Physician Assistant National Certification Examination (PANCE) content blueprint.

**Credits** 6.0



## **PASSG 692: Family Medicine/ Primary Care**

The clinical year courses/rotations will provide overall instruction and supervised clinical practice experiences. The course(s) will cover common conditions and abnormalities encountered across the lifespan, with an emphasis on the conditions listed in the National Commission on Certification of Physician Assistants (NCCPA) Physician Assistant National Certification Examination (PANCE) content blueprint.

**Credits** 6.0

## **PASSG 693: Internal Medicine**

The clinical year courses/rotations will provide overall instruction and supervised clinical practice experiences. The course(s) will cover common conditions and abnormalities encountered across the lifespan, with an emphasis on the conditions listed in the National Commission on Certification of Physician Assistants (NCCPA) Physician Assistant National Certification Examination (PANCE) content blueprint.

**Credits** 6.0

## **PASSG 694: Pediatrics**

The clinical year courses/rotations will provide overall instruction and supervised clinical practice experiences. The course(s) will cover common conditions and abnormalities encountered across the lifespan, with an emphasis on the conditions listed in the National Commission on Certification of Physician Assistants (NCCPA) Physician Assistant National Certification Examination (PANCE) content blueprint.

**Credits** 6.0

## **PASSG 695: Psychiatry/Behavioral Medicine**

The clinical year courses/rotations will provide overall instruction and supervised clinical practice experiences. The course(s) will cover common conditions and abnormalities encountered across the lifespan, with an emphasis on the conditions listed in the National Commission on Certification of Physician Assistants (NCCPA) Physician Assistant National Certification Examination (PANCE) content blueprint.

**Credits** 6.0

## **PASSG 696: Surgery**

The clinical year courses/rotations will provide overall instruction and supervised clinical practice experiences. The course(s) will cover common conditions and abnormalities encountered across the lifespan, with an emphasis on the conditions listed in the National Commission on Certification of Physician Assistants (NCCPA) Physician Assistant National Certification Examination (PANCE) content blueprint.

**Credits** 6.0

## **PASSG 697: Women's Health**

The clinical year courses/rotations will provide overall instruction and supervised clinical practice experiences. The course(s) will cover common conditions and abnormalities encountered across the lifespan, with an emphasis on the conditions listed in the National Commission on Certification of Physician Assistants (NCCPA) Physician Assistant National Certification Examination (PANCE) content blueprint.

**Credits** 6.0

## **PASSG 698: Elective Rotation**

The clinical year courses/rotations will provide overall instruction and supervised clinical practice experiences. The course(s) will cover common conditions and abnormalities encountered across the lifespan, with an emphasis on the conditions listed in the National Commission on Certification of Physician Assistants (NCCPA) Physician Assistant National Certification Examination (PANCE) content blueprint.

**Credits** 6.0

## **PHARG 566: Pharmacology and Pharmacotherapeutics I**

The overall instructional goal of pharmacology and pharmacotherapeutics courses is to provide the physician assistant with a firm understanding of the effects of therapeutically important drugs, from a molecular to a behavioral level of organization. These courses discuss therapeutic strategies, and new types of drugs, as well as the clinical implications and contraindications. Lectures are designed on an organ system basis with emphasis on distinctive uses of drugs. Although large numbers of drugs are available on the market, only a few prototype agents have been selected for intensive study for this course.

**Credits** 3.0

## **PHARG 570: Pharmacology and Pharmacotherapeutics II**

The overall instructional goal of pharmacology and pharmacotherapeutics courses is to provide the physician assistant with a firm understanding of the effects of therapeutically important drugs, from a molecular to a behavioral level of organization. These courses discuss therapeutic strategies, and new types of drugs, as well as the clinical implications and contraindications. Lectures are designed on an organ system basis with emphasis on distinctive uses of drugs. Although large numbers of drugs are available on the market, only a few prototype agents have been selected for intensive study for this course.

**Credits** 3.0

## **PHARG 580: Pharmacology and Pharmacotherapeutics III**

The overall instructional goal of pharmacology and pharmacotherapeutics courses is to provide the physician assistant with a firm understanding of the effects of therapeutically important drugs, from a molecular to a behavioral level of organization. These courses discuss therapeutic strategies, and new types of drugs, as well as the clinical implications and contraindications. Lectures are designed on an organ system basis with emphasis on distinctive uses of drugs. Although large numbers of drugs are available on the market, only a few prototype agents have been selected for intensive study for this course.

**Credits** 3.0

## **PHYSG 1575: Human Physiology I**

In this two-quarter series, students are introduced through didactic instruction, workshops, and clinical case discussions to the basic physiologic principles that underlie the normal function of the various organs and organ systems. These core principles provide the foundation through which the student develops an understanding of the physiologic adaptations and transitions that occur in commonly occurring disease states. Emphasis is given to developing an understanding of health in physiologic terms and appreciation of the diverse regulatory processes that maintain the homeostasis of the human body.

**Credits** 4.0

## **PHYSG 1586: Human Physiology II**

In this two-quarter series, students are introduced through didactic instruction, workshops, and clinical case discussions to the basic physiologic principles that underlie the normal function of the various organs and organ systems. These core principles provide the foundation through which the student develops an understanding of the physiologic adaptations and transitions that occur in commonly occurring disease states. Emphasis is given to developing an understanding of health in physiologic terms and appreciation of the diverse regulatory processes that maintain the homeostasis of the human body.

**Credits** 4.0

# Occupational Therapy Program

## Mission

The Occupational Therapy Program is dedicated to excellence in the education of occupational therapists who will meet the occupational needs of individuals and communities through occupation-based, compassionate, and evidence-based practice. The Program is committed to cultivating a diverse workforce that supports the needs of all populations.

## Accreditation

The Midwestern University Occupational Therapy Program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 7501 Wisconsin Avenue, Suite 510E, Bethesda, MD 20814; 301/652-6611. Graduates of the program will be able to sit for the national certification examination for the occupational therapist administered by the National Board for Certification in Occupational Therapy (NBCOT).

Midwestern University is accredited by The Higher Learning Commission, A Commission of the North Central Association of Colleges and Schools (HLC/NCA), 230 South LaSalle Street, Suite 7-500, Chicago, IL 60604-1411; 312/263-0456.

## Degree Description

The Occupational Therapy Program offers a curriculum leading to the Master of Occupational Therapy (M.O.T.) degree for qualified students. The full-time, continuous, entry-level master's curriculum is designed to deliver the academic and clinical education required to prepare students for their professional role as key members of the healthcare team and as integral practitioners in the healthcare delivery system. The curriculum for the Master of Occupational Therapy degree is a continuous, full-time program, extending 24 months from matriculation to graduation. The maximum allotted time for completion of this program is 36 months. It is also required that all Level II fieldwork must be completed within 18 months of completion of the didactic portion of the program. The general education, professional training, experience, and personal character development of occupational therapists uniquely prepare them to respond to the needs of individuals who face challenges participating in their daily lives.

The Master of Occupational Therapy Program offers a balanced combination of foundational, clinical, and research coursework designed to foster therapists who are self-directed, thoughtful, and caring professionals. The program provides students with a balanced complement of coursework. Approximately half of the course credits are obtained from foundational courses in the sciences, occupational therapy theory, and research. The remaining credits focus on courses related to client evaluation and interventions appropriate for various client populations (e.g., children, the elderly, etc.), specialized coursework in upper extremity intervention, and many opportunities for experiential (hands-on) learning. The practice courses facilitate students' application of content related to client evaluation and intervention using community-based and case-based learning opportunities. In addition to such preclinical learning opportunities, the fieldwork program offers extensive and in-depth experiences to students. Such a strong curricular framework succeeds in preparing graduates who are ready - and able - to enter the profession of occupational therapy and to make a difference in the world.

The curriculum is designed to prepare entry-level practitioners to provide occupational therapy services in the home, community, and clinical practice settings that require independent judgment, leadership, and self-directed practice. The educational experience provides the foundation for graduates to identify and contribute to effecting solutions to the major emergent health issues of society and contribute to the academic and clinical education of future practitioners. It also is designed to prepare graduates for

leadership and management roles in the profession. The graduate will be prepared to make meaningful, ongoing contributions to society, healthcare, and the profession through leadership activities and collaborative efforts with others in occupational therapy and interprofessional education, practice, and research.

## Program Objectives

Upon completion of the Master of Occupational Therapy Program, graduates are expected to:

1. Provide evidence-based occupational therapy services in traditional and emerging areas of practice.
2. Meet the occupational needs of individuals and populations through professional advocacy and leadership.
3. Apply therapeutic use of occupations to support engagement in activities that promote health, well-being and quality of life.
4. Sustain continued professional development through lifelong learning activities.
5. Uphold the ethical standards, values and attitudes of the occupational therapy profession in order to sensitively meet the occupational needs of a culturally and socially diverse clientele.

These outcomes are accomplished through:

1. A curriculum model based on intentionally sequenced courses that act as vital links between application, analysis, synthesis, and evaluation of knowledge, skills and attitudes.
2. Critical application of current research and other forms of best evidence to improve occupational therapy practice and contribute to the body of related knowledge.
3. Sequential implementation of simulated and authentic clinical experiences across the curriculum.
4. Occupation-focused coursework and fieldwork experiences designed to facilitate critical and ethical reasoning.
5. Opportunities for both individual and group work to develop leadership, team-building, and professional skills, behaviors and attitudes.

## Admissions

The College of Health Sciences Occupational Therapy Program considers for admission those applicants who possess the academic and professional promise necessary for development as competent, caring members of the healthcare community. To select these candidates, a competitive admissions framework has been established for applicants who have received a bachelor's degree in any field, but who have not completed an accredited occupational therapy program.

Within this competitive admissions framework, multiple criteria are used to select the most qualified candidates from an applicant pool that exceeds the number of seats available. Interested individuals are advised to complete their application as early as possible to ensure timely consideration.

The Midwestern University Occupational Therapy Program uses the Centralized Application Service for Occupational Therapy Schools (OTCAS) for students applying to the program. Applications are due in OTCAS (<https://otcas.liaisoncas.com/>) by May 1st. Applications received after May 1st will be considered on a rolling basis for seats that may be available or placement on the alternate list. Please refer to the OTCAS website for instructions on submission of OTCAS application materials.

The Occupational Therapy Program operates on a rolling admissions basis in which completed applications are reviewed throughout the admissions cycle to determine application eligibility for interviews. Interviews are typically conducted during the winter and spring.

## Admission Requirements

Individuals applying for admission to the College of Health Sciences Occupational Therapy Program must submit documentation for the following minimum requirements before the academic year commences for the incoming class.

1. Completion of a baccalaureate degree from a regionally accredited college or university.
2. A minimum cumulative undergraduate grade point average (GPA) of 2.75 on a 4.00 scale. Grades of C or better for prerequisite coursework (grades of C- are not acceptable).
3. Completion of the minimum number of prerequisite courses in the prescribed subject areas at regionally accredited colleges or universities.
4. Satisfaction of the standards set forth by the Admissions Committee (including documentation of academic and professional promise in the prospective student).
5. Two letters of recommendation.
6. Completion of the Occupational Therapy Program's interview process. Interviews are by invitation only. Applicants are invited to an interview based on evidence supportive of excellence in:
  - Academic achievement
  - Oral and written communication skills
  - Articulation of the domain and scope of OT practice
  - Community service
  - Leadership in extracurricular or other activities
7. Commitment to abide by the Midwestern University Drug-Free Workplace and Substance Abuse Policy.
8. Passage of the Midwestern University criminal background check (a felony conviction may affect a graduate's ability to sit for the NBCOT Certification Examination or attain state licensure).

## Prerequisite Courses

Human Anatomy <sup>1,2</sup>	3 Sem/4 Qtr hrs
Statistics	3 Sem/4 Qtr hrs
Physiology <sup>1</sup>	3 Sem/4 Qtr hrs
Human Development	3 Sem/4 Qtr hrs
Abnormal Psychology	3 Sem/4 Qtr hrs
Other Social and Behavioral Science	3 Sem/4 Qtr hrs

<sup>1</sup>The Anatomy and Physiology requirements may also be fulfilled by taking Anatomy and Physiology I **and** Anatomy and Physiology II, as some universities offer combined courses.

<sup>2</sup> It is recommended that human Anatomy be completed successfully within 5 years of admission to the Program. The lab component with cadaver experience is also strongly recommended.

Other courses in basic sciences, psychology, anthropology, math, human development, research, and human movement may be considered as alternates to the stated minimum prerequisites. The Occupational Therapy Program Admissions Committee will assess and determine if a candidate's alternative coursework, work experience, and/or experiential learning meet the prerequisite requirements.

## Application Process and Deadlines

To be considered for admission to the Occupational Therapy Program, applicants must complete the following:

1. OTCAS Application

Applications are due in OTCAS (<https://otcas.liaisoncas.com/>) by May 1st. Applications received after May 1st will be considered on a rolling basis for seats that may be available or placement on the alternate list. Please refer to the OTCAS application instructions for specific details about

completing the application, required documents, and processing time. The OTCAS application should be available for applicants beginning in July. Due to the large number of applications and the limited number of seats available, applicants are strongly encouraged to complete their OTCAS application early in the cycle.

2. Letters of Recommendation

Applicants are required to submit a minimum of two letters of recommendation from professionals to OTCAS (<https://otcas.liasoncas.com/>). The Office of Admissions will only accept letters of recommendation received directly from OTCAS. It is preferred that one of the submitted letters is written by an occupational therapist who has supervised or mentored the applicant or a professional who can speak to the applicant's motivation, experiences in occupational therapy, or readiness for entering the Occupational Therapy Program. The second letter can be written by either a college professor who actually taught the student or a prehealth advisor who knows the applicant well. The applicant should refer to the OTCAS application instructions for specific guidelines and requirements for submitting letters of recommendation.

3. Completed Application

The Office of Admissions will send letters verifying receipt of OTCAS applications with all required materials to all applicants who meet the minimum cumulative GPA requirement of 2.75. The letters will also include instructions on checking the status of the required application materials online. Applicants are responsible for tracking the receipt of their application materials and ensuring the submission of all required documents. Only applicants who submit completed applications with all required application materials by May 1st will be considered for potential entrance into the program.

*Please note:* Applicants are responsible for notifying the Office of Admissions of any changes in their mailing address or email address. All application withdrawal requests must be made in writing via email or letter to:

Midwestern University  
Office of Admissions  
19555 N. 59th Ave.  
Glendale, AZ 85308  
Phone: 888/247-9277 or 623/572-3215  
[admissaz@midwestern.edu](mailto:admissaz@midwestern.edu)

## Interview and Selection Process

Students selected for an interview will be notified of available interview dates and invited by the Office of Admissions to schedule their interview. A typical interview day involves participation in the following activities, which are coordinated by the Office of Admissions: an interview with two interviewers, a campus tour, an opportunity to meet with counselors from the admissions office, and a conversation with current Midwestern University students on or at a later date.

During each interview session, the interviewer(s) question the applicant about their academic, personal, and professional aspirations and preparedness for admission to the Occupational Therapy Program, and rate(s) the prospective students on a standard evaluation form. These evaluations are included in applicant files provided to the Occupational Therapy Admissions Committee. The Occupational Therapy Admissions Committee meets approximately one to two weeks after the interviews. The Committee reviews the full application file for applicants who were interviewed and then formulates and submits a recommendation to the Dean for action. The Dean, via Office of Admissions, notifies applicants in writing of the admission action/decision. Applicants are extended acceptance to the program based on the aggregate qualitative and quantitative data gathered from the application, interview process, and completion of all published admissions requirements.

## Reapplication Process

Students who receive denial or end-of-cycle letters may reapply for the following year's admissions cycle. Before reapplying, however, individuals contemplating reapplication should seek the advice of an admissions counselor. To initiate the reapplication process, prospective students must complete and submit a new application and proceed through the standard application process.

## Transfer Policy

The Program does not accept transfer credits from another Occupational Therapy Program.

# Technical Standards, OT

## Technical Standards

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the college.

Candidates must be able to perform the following abilities and skills:

1. **Observation:** The candidate must be able to accurately make observations at a distance and close at hand, including those on a computer screen or electronic device. Observation necessitates the functional use of vision and sense of touch and is enhanced by the functional use of all of the other senses.
2. **Communication:** The candidate must be able to communicate in English, proficiently and sensitively, in verbal and written form, and be able to perceive nonverbal communication.
3. **Motor:** Candidates must be able to coordinate both gross and fine motor movements, maintain equilibrium and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control and eye-to-hand coordination to perform profession-specific skills and tasks. Candidates must be able to move at least 50 lbs. vertically and horizontally.
4. **Intellectual, Conceptual, Integrative and Quantitative Abilities:** The candidate must be able to problem solve, measure, calculate, reason, analyze, record and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
5. **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of their intellectual abilities, the exercise of good judgment, the consistent, prompt completion of all responsibilities, and the development of mature, sensitive and effective relationships. Candidate must be able to tolerate physically, mentally and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn are all personal qualities required during the educational process. The candidate must agree to participate in touching/palpating on the skin and being touched/palpated on the skin by individuals regardless of gender in all academic settings, including osteopathic manipulative techniques. These activities will take place in large and small group settings as directed in the College's curricular requirements.

Candidates are required to verify that they understand and are able to meet these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet Technical Standards with accommodation, must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent



enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

## Evaluation and Student Performance

Students in the Master of Occupational Therapy Program are formally evaluated at appropriate intervals during the curriculum to assess and document satisfactory progress and achievement of learning objectives and prescribed competencies. These evaluations occur on a regular basis at scheduled times during each course. Depending on the learning and competency outcome objectives, these evaluations are designed to assess the level of knowledge, problem-solving skills, psychomotor and clinical competencies, and behavioral performances of students during each course and/or fieldwork experience. Evaluation methods vary, depending on the course or experiential learning opportunity, and may include formal examinations, written essays, portfolio assignments, design and fabrication projects, psychomotor skill checks, or other methods of determining the extent to which each student has mastered the course content and skill competencies. Student performance in formal examinations is graded on a numerical/alphabetical system using a standard grading scale, which is published in this catalog. Students are customarily provided with feedback and grade reports after each examination summarizing their performance on each test item. Students will be required to participate in competency-based evaluations at various intervals throughout their academic curriculum.

Evaluations of student performance during the Fieldwork II experiences are formalized using standard evaluation tools established by the American Occupational Therapy Association. In keeping with the program's mission to exceed national standards, the Occupational Therapy Program reserves the right to augment the performance criteria required to successfully complete the Fieldwork Level II courses.

## Graduation Requirements

To qualify for the degree Master of Occupational Therapy (M.O.T.), students must:

1. Satisfactorily complete all courses with a minimum cumulative GPA of 2.75 or higher;
2. Satisfactorily complete the required minimum number of 118 credit hours in the curriculum;
3. Receive a favorable recommendation for Master's degree conferral from the Program faculty to the Program Student Academic Review Committee and from this committee to the CHS Student Promotion and Graduation Committee;
4. Receive a favorable recommendation for Master's degree conferral from the University Faculty Senate;
5. Settle all financial accounts with the University; and
6. Complete all graduation clearance requirements as instructed by the Office of the Registrar.

## Licensure Requirements

Occupational Therapy is a registered and/or licensed profession in all 50 states. To become licensed to practice as an occupational therapist in most states (including Arizona), a student must graduate from an ACOTE-accredited or approved educational program and pass the national certification examination for the occupational therapist administered by NBCOT. Most states (including Arizona) require status as an occupational therapist registered (OTR) to become a licensed occupational therapist (OTR/L). Most states require licensure in order to practice. A prior felony conviction may affect a graduate's ability to sit for the NBCOT certification examination or attain state licensure.

Midwestern University's Master of Occupational Therapy program is designed to meet the educational requirements to meet the licensure requirements to practice as an occupational therapist in the following states and territories: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, District of Columbia, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky,

Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, U.S. Virgin Islands, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Wyoming.

Each student should check the additional licensure requirements for the state, district or territory in which they intend to pursue employment.

## Occupational Therapy Curriculum

The professional master's curriculum is composed of 62.5-63.5\* required course credits (quarter hours) for the first calendar year and 54.5-55.5\* required course credits for the second calendar year, for a total of 118 quarter hours. Fieldwork courses are placed in the first and second years of the curriculum and include three 1-credit Level I experiences and a minimum of 24 Level II fieldwork credits spread over at least 2 practice settings. Moreover, faculty-guided and supervised learning opportunities in the community are pivotal learning experiences during the second year which reinforce and expand students' mastery of content and skill performance related to occupational therapy evaluation and intervention.

Students' proficiency in evaluation and intervention, independent decision-making and critical thinking are emphasized during OT Fieldwork II of the curriculum, which occur during the winter and spring quarters of the second professional year. Fieldwork experiences are offered in clinical, community, hospital, school, and other facilities that have a legal agreement with the University and are located throughout the continental United States. Relocation for fieldwork experiences may be required.

This curriculum applies to students admitted in Summer Quarter 2025. For students admitted prior to Summer 2025, refer to the published curriculum listing in the Midwestern University Catalog for their respective year of matriculation.

The Occupational Therapy Program reserves the right to alter its curriculum however and whenever it deems appropriate. Information in this catalog does not establish a contractual relationship between MWU and the student.

Total Quarter Credits in the Professional Program: 119\*

\*In addition to the required curriculum, students may complete elective (see OTHEG 901-910 in Courses tab) or remedial (see OTHEG 800 in Courses tab) coursework.

## First Professional Year

### Summer Quarter

Course Code	Title	Credits
ANATG 502	Anatomy	4.0
OTHEG 509	Analysis of Movement	2.0
OTHEG 510	Intro to Occupational Therapy	2.0
OTHEG 518	Activity Analysis	2.0
OTHEG 519	Intentional Relationships	2.0
OTHEG 521	Professional Writing	1.0
OTHEG 550	Fieldwork Foundations I	1.0
OTHEG 570	Intro to Service Learning	1.0
<b>Sub-Total Credits</b>		<b>15.00</b>

## Fall Quarter

Course Code	Title	Credits
COREG 1560D	Interprofessional Healthcare	0.5
OTHEG 500	Fieldwork I-A	1.0
ANATG 504	Neuroscience	3.0
OTHEG 534	Cognition and Perception	3.0
OTHEG 537	Biomechanics	3.0
OTHEG 538	Occupational Therapy Process	3.0
OTHEG 547	Group Dynamics	2.0
OTHEG 571	Service Learning A	0.5
<b>Sub-Total Credits</b>		<b>16.00</b>

## Winter Quarter

Course Code	Title	Credits
COREG 1570D	Interprofessional Healthcare	0.5
OTHEG 502	Childhood Occupations	3.0
OTHEG 523	Evidence-Based Practice I	2.0
OTHEG 530	Teaching and Learning	2.0
OTHEG 544	Psychosocial Practice I	3.0
OTHEG 552	Aging	5.0
<b>Sub-Total Credits</b>		<b>15.50</b>

## Spring Quarter

Course Code	Title	Credits
COREG 1580D	Interprofessional Healthcare	0.5
OTHEG 512	Pediatrics I: Young Children/Early Intervention	5.0
OTHEG 515	Neuro-Rehabilitation	5.0
OTHEG 524	Evidence-Based Practice II	2.0
OTHEG 536	Fieldwork I-B	1.0
OTHEG 545	Orthotics and Physical Agents	3.0
OTHEG 572	Service Learning B	0.5
OTHEG 901-910	OT Elective	1.0
<b>Sub-Total Credits</b>		<b>17.00-18.00</b>

## Second Professional Year

### Summer Quarter

Course Code	Title	Credits
OTHEG 603	Assistive Technology - Low Incidence Populations	2.0
OTHEG 615	Population Health & Emerging Practice	4.0
OTHEG 636	Fieldwork I-C	1.0
OTHEG 640	Therapeutic Reasoning	3.0
OTHEG 644	Psychosocial Practice II	3.0
OTHEG 653	Evidence-Based Practice III	3.0
OTHEG 671	Service Learning C	0.5
OTHEG 901-910	OT Elective	1.0
<b>Sub-Total Credits</b>		<b>16.50-17.50</b>

## Fall Quarter

Course Code	Title	Credits
OTHEG 605	Professional Development	3.0
OTHEG 621	Pediatrics II: Youth/School-Aged	4.0
OTHEG 637	Upper Extremity Rehabilitation	3.0
OTHEG 663	Evidence-Based Practice IV	3.0
OTHEG 901-910	OT Elective	1.0
<b>Sub-Total Credits</b>		<b>14.00-15.00</b>

## Winter Quarter

Course Code	Title	Credits
OTHEG 692	Fieldwork II-A	12.0
<b>Sub-Total Credits</b>		<b>12.00</b>

## Spring Quarter

Course Code	Title	Credits
OTHEG 693	Fieldwork II-B	12.0
<b>Sub-Total Credits</b>		<b>12.00</b>
Total Credits		119

# Student Academic Policies

### *Cardiopulmonary Resuscitation (CPR) & First Aid Certifications*

Students are required to maintain CPR certification at BLS level and basic First Aid course while enrolled in the Program. CPR and First Aid courses are provided for all enrolled students during the first year of the OT Program.

### *DPS IVP Fingerprint Clearance Card*

Students are responsible for maintaining an Arizona Department of Public Safety IVP Fingerprint Clearance Card while enrolled in the Program.

### *Professional Membership*

Students are responsible to maintain membership in their state (AZ) and national professional OT associations.

# Occupational Therapy Program Calendar

## Summer 2025

Event	Class	Date
<b>Memorial Day</b>	<b>*No Classes*</b>	<b>May 26, 2025</b>
Orientation	OT-I	May 27 - 30, 2025
Classes Begin	OT-I, OT-II	June 2, 2025
Last Day to Add/Drop Classes	OT-I, OT-II	June 6, 2025
<b>Juneteenth (Observed)</b>	<b>*No Classes*</b>	<b>June 19, 2025</b>
<b>Independence Day (Observed)</b>	<b>*No Classes*</b>	<b>July 4, 2025</b>
Last Day of Class	OT-I, OT-II	August 8, 2025
Quarterly Exams	OT-I, OT-II	August 11 - 15, 2025
Quarter Break	OT-I, OT-II	August 18 - 22, 2025
<b>Commencement (CHS (OTII))</b>		<b>TBA</b>

## Fall 2025

Event	Class	Date
Orientation	OT-I	August 18 - 20, 2025
Classes Begin	OT-I, OT-II	August 25, 2025
Last Day to Add/Drop Classes	OT-I, OT-II	August 29, 2025
<b>Labor Day (Observed)</b>	<b>*No Classes*</b>	<b>September 1, 2025</b>
<b>White Coat Ceremony</b>		<b>September 27, 2025</b>
Last Day of Classes	OT-I, OT-II	October 31, 2025
Quarterly Exams	OT-I, OT-II	November 3 - 7, 2025
Thanksgiving Break	OT-I, OT-II	November 10 - 28, 2025

## Winter 2025

Event	Class	Date
Classes Begin	OT-I	December 1, 2025
Last Day to Add/Drop Classes	OT-I	December 5, 2025
Winter Break	OT-I, OT-II	December 22, 2025 - January 2, 2026
Classes Resume	OT-I	January 5, 2026
<b>Martin Luther King, Jr. Day (Observed)</b>	<b>*No Classes*</b>	<b>January 19, 2026</b>
Last Day of Classes	OT-I	February 20, 2026
Quarterly Exams	OT-I	February 23 - 27, 2026
Spring Break	OT-I, OT-II	March 2 - 6, 2026

## Spring 2026

Event	Class	Date
Classes Begin	OT-I	March 9, 2026
Last Day to Add/Drop Classes	OT-I	March 13, 2026
Last Day of Classes	OT-I	May 15, 2026
Quarterly Exams	OT-I	May 18 - 22, 2026
<b>Memorial Day (Observed)</b>	<b>*No Classes*</b>	<b>May 25, 2026</b>
Quarter Break	OT-II	May 26 - 29, 2026
Quarter Break	OT-I	May 26 - June 5, 2026
Commencement CHS		June 3, 2026 9:00 a.m.

## Rotations

Term	Fieldwork	Date
Summer	Fieldwork I-C (OT-II)	June 2, -August 15, 2025
Fall	Fieldwork I-A (OT-I)	August 25 - November 7, 2025
Winter	Fieldwork II-A (OT-II)	November 10, 2025 - January 30, 2026
Spring	Fieldwork II-B (OT-II)	February 23 - May 15, 2026
Spring	Fieldwork I-B (OT-I)	March 9 - May 22, 2026

Last Revision: 04/11/2025



## Faculty

### **Alison de la Montaigne, Ed.D., OTR/L**

National University  
Assistant Professor

### **Holly Hussey, M.O.T., OTR/L**

Midwestern University  
Instructor

### **Holly Jones, OTD, OTR/L**

Baylor University  
Instructor

### **Katherine Schofield, DHS, OTR/L, CHT**

University of Indianapolis  
Assistant Program Director and Associate Professor

### **Cynthia Selim, DSc, OTR/L**

University of Oklahoma Health Science Center  
Assistant Professor

### **Mikaela Thompson, M.O.T., OTR/L**

Midwestern University  
Clinic Coordinator and Clinical Assistant Professor

### **Christopher T. Trujillo, OTD, OTR/L, PMP, ATP**

University of Utah  
Program Director and Associate Professor

### **Susan Tully, M.S., OTR/L**

University of North Carolina at Chapel Hill  
Assistant Professor

### **Tamara Turner, Ed.D., OTR/L**

Argosy University  
Academic Fieldwork Coordinator and Associate Professor

### **Charles Wilson, M.O.T., OTR/L**

Midwestern University  
Clinical Assistant Professor

## Occupational Therapy Program Courses

### **ANATG 502: Anatomy**

This course covers broad anatomical themes. Students will develop three-dimensional anatomical knowledge that is required for allied health training. Case studies will be used to foster familiarity with typical clinical presentations, and how to approach diagnoses from a basic anatomical perspective. Curriculum delivery is through lectures, laboratory-based prosection workshops, small group activities, and online resources. Student progress is evaluated through written and practical examinations.

**Credits** 4.0

### **ANATG 504: Neuroscience**

This course covers broad neuroscience themes, including the neuroanatomy of motor and sensory systems, and cognitive neuroscience. Brain dissection laboratory experiences enhance mastery of neuroscience concepts introduced in the course. Curriculum delivery is through lectures, laboratory-based brain dissection workshops, small group activities, independent activities, and online resources. Student progress is evaluated through written and practical examinations.

**Credits** 3.0

### **COREG 1560D: Interprofessional Healthcare**

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

## **COREG 1570D: Interprofessional Healthcare**

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

## **COREG 1580D: Interprofessional Healthcare**

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

## **OTHEG 500: Fieldwork I-A**

Fieldwork experience consists of guided learning experiences in various healthcare and/or community settings that provides students with direct opportunities to observe and interact with clients engaged in functional living activities that are appropriate for their respective cognitive, psychosocial and physical stage of development. Observational and documentation skills are emphasized.

**Credits** 1.0

## **OTHEG 502: Childhood Occupations**

This is the first course of three that are focused on pediatric occupational therapy services. This course addresses occupations in typical childhood development and occupational challenges caused by neurodevelopmental conditions in childhood. Facilitation of supports to family and child participation in occupations are emphasized. Identification and prevention of barriers for family and child participation in occupations are analyzed.

**Credits** 3.0

## **OTHEG 509: Analysis of Movement**

This introductory course emphasizes the recognition, assessment, measurement, and description of normal and abnormal movement in static and dynamic activities. Emphasis is on the development of the skills necessary to accurately measure and assess muscle strength and joint motion.

**Credits** 2.0

## **OTHEG 510: Intro to Occupational Therapy**

This is an introductory course focused on the foundations and scope of occupational therapy practice. The philosophy of the profession, with its unique emphasis on supporting performance, participation, health and well-being are presented from both historical and current perspectives. Occupation is discussed from the perspectives of roles and participation for meaningful engagement. Professionalism, in accordance with the AOTA Code of Ethics and Standards of Practice that guide practice across varied roles, responsibilities and involvement is also addressed.

**Credits** 2.0



## **OTHEG 512: Pediatrics I: Young Children/Early Intervention**

This course emphasizes the application of selected models of practice and strategies for occupational therapy practice with young children (birth to 5 years of age) who have deficits in occupational performance related to developmental, neuromotor, psychosocial, or medical challenges. Therapeutic approaches and clinical skills for working with children and families within the home, community, and clinical settings are emphasized. Practice settings for early intervention and family centered pediatric practice are discussed.

**Credits** 5.0

### **Prerequisites**

[OTHEG 502](#) Childhood Occupations

## **OTHEG 515: Neuro-Rehabilitation**

This course addresses the risk factors, clinical signs and symptoms, pathogenesis, and differential diagnosis of selected neurological diseases/problems most common to the adult population. The application of selected models of practice and strategies for occupational therapy practice with adults who have occupational performance dysfunction related to cognitive, perceptual, psychosocial, and neuromotor disabilities is emphasized. Therapeutic approaches and clinical skills for working with individuals within the home, community, and clinical settings are explored. Current research in etiology and treatment are discussed.

**Credits** 5.0

### **Prerequisites**

[ANATG 504](#) Neuroscience

## **OTHEG 518: Activity Analysis**

Using the Occupational Therapy Practice Framework, the process of analyzing various components of activities and occupations is introduced, emphasizing the value of occupation and purposeful activities not only as an outcome, but also as a treatment modality. The ability to grade and adapt activities and occupations is emphasized in preparation for the clinical courses that follow.

**Credits** 2.0

## **OTHEG 519: Intentional Relationships**

This introductory course provides students with opportunities to learn basic principles of therapeutic relationships. Topics include aspects of "personality", "emotional intelligence", and "first impressions" as they relate to therapeutic use of self; the intentional therapeutic relationship model; basic interviewing and motivational interviewing consistent with the practice and ethics of the OT profession. Learning strategies include small group discussion and simulated client encounters, in addition to traditional didactic instruction.

**Credits** 2.0

## **OTHEG 521: Professional Writing**

The Professional Writing course will support students in the academic writing requirements of this professional, graduate-level educational program through an examination of writing style and technique, as well as an extensive focus on the elements and formatting of a professional manuscript.

**Credits** 1.0

## **OTHEG 523: Evidence-Based Practice I**

The first of a four-course series, this course provides content foundational to understanding and applying research to the provision of occupational therapy services. Students gain skills in searching for, understanding, interpreting and critiquing research articles. Students learn how to apply research evidence to clinical problems and engage in shared decision making with clients.

**Credits** 2.0

## **OTHEG 524: Evidence-Based Practice II**

The second of a four-course series, this course provides content foundational to understanding and applying research to the provision of occupational therapy services. This second course has an emphasis on distinguishing study designs, evaluating the quality of studies, and making clinical decisions (along with clients) based on the available evidence.

**Credits** 2.0

### **Prerequisites**

[OTHEG 523: Evidence-Based Practice I](#)

## **OTHEG 530: Teaching and Learning**

This course focuses on principles of teaching and learning, which practitioners can apply as they prepare and give educational in-services, participate in advocacy work, or transition to academia. It also includes teaching and learning theories that can be applied to teaching patients, caregivers, and fieldwork students.

**Credits** 2.0

## **OTHEG 534: Cognition and Perception**

Early in the curricular sequence, this course lays the foundation for intervention with human conditions as they are encountered in subsequent quarters. The course addresses different components of cognition and perception, including memory, attention, learning, executive function and visual-perceptual skills, with an emphasis on examining the interplay of cognition and perception with performance in areas of occupation. Causes of cognitive and perceptual dysfunction and the impact on function are explored and interpreted. Different theories and models of practice for cognition and perception are analyzed.

**Credits** 3.0

## **OTHEG 536: Fieldwork I-B**

Fieldwork experience consists of guided learning experiences in various healthcare and/or community settings that provides students with direct opportunities to observe and interact with clients engaged in functional living activities that are appropriate for their respective cognitive, psychosocial, and physical stage of development. Observational, as well as foundational experiential and documentation skills are emphasized.

**Credits** 1.0

## **OTHEG 537: Biomechanics**

This course is the third and final course in the core sciences, addressing basic biomechanical principles and their application to occupational therapy intervention relative to static and dynamic movement, force analysis, and its implications on functional movement and activity. Addressed are the structure and function of joints, connective tissues, and muscles, along with the recognition, assessment, and description of normal and abnormal movement.

**Credits** 3.0

### **Prerequisites**

[ANATG 502](#) Anatomy

## **OTHEG 538: Occupational Therapy Process**

This course provides introductory experience in the evaluation and treatment process with clients throughout the lifespan and across the domain of occupational therapy practice. Learning opportunities develop introductory skills in therapeutic reasoning, occupational therapy theories, evidence-based practice, professional reasoning, and documentation of the therapy process in preparation for further development in subsequent courses.

**Credits** 3.0

## **OTHEG 544: Psychosocial Practice I**

This foundational course is designed to introduce students to psychiatric diagnoses, the impact of psychiatric conditions on occupational performance, and settings in which occupational therapists provide services to individuals with psychiatric diagnoses. General approaches to assessment and intervention are also introduced.

**Credits** 3.0

## **OTHEG 545: Orthotics and Physical Agents**

This course will introduce the fundamental principles involved in the application of basic orthotic devices and physical agent modalities in OT practice. Emphasis is placed on anatomical and biomechanical principles as they pertain to orthotic design and utilization, principles of orthotic selection/application and the fabrication process of four basic orthoses. Theoretical principles and physiological, neurophysiological, and electro physical changes that occur because of the application of selected physical modalities, and instruction on safe and effective application of therapeutic hydrotherapy, thermotherapy, and electrotherapy when used as an adjunct to, or in preparation for, therapeutic occupation.

**Credits** 3.0

## **OTHEG 547: Group Dynamics**

This course provides students with opportunities to learn and apply basic principles of group dynamics and group leadership. Students will gain a practical understanding of the stages of group therapy, understand different types of groups, practice the role of a therapist in influencing group processes, and role play as a member of a therapy group. Social and psychological processes in groups, phases of group development, and group dynamics will be explored. Occupational therapy principles as applied to group treatment, as well as leadership skills, methods of promoting group cohesion, management of group member behavior, motivation, problem solving, conflict resolution, and group process as a treatment modality will be emphasized. The class will combine lecture, readings, group role plays, and discussion. Multicultural applications and ethical considerations will be presented in relationship to group leadership, membership, and development, and other unique client characteristics that may affect group work will also be considered.

**Credits** 2.0

## **OTHEG 550: Fieldwork Foundations I**

This course introduces the student to the clinical education program, including its goals and objectives, policies, the types of clinical education experiences provided, and the expectations for student participation. Students begin to focus on increasing self-awareness through reflective exercises to foster development of professional behaviors.

**Credits** 1.0

## **OTHEG 552: Aging**

Building on skills introduced in Occupational Therapy Process, this course addresses the aging process, common conditions in the aging population, chronic disease management, and aging in place. Risk factors, signs and symptoms, pathogenesis, medical intervention, and occupational therapy intervention are explored. Therapeutic approaches in a variety of practice settings are explored including the home, community, hospital, skilled nursing, and outpatient clinic.

**Credits** 5.0

### **Prerequisites**

[OTHEG 538](#) Occupational Therapy Process

## **OTHEG 570: Intro to Service Learning**

Service learning consists of opportunities to enhance occupational therapy students' knowledge, skills, and to explore leadership opportunities in areas of health promotion, community issues, and social justice. The students will serve in community-based programs both internal and external to Midwestern University.

**Credits** 1.0

## **OTHEG 571: Service Learning A**

Service learning consists of opportunities to enhance occupational therapy students' knowledge, skills, and to explore leadership opportunities in areas of health promotion, community issues, and social justice. The students will serve in community-based programs both internal and external to Midwestern University.

**Credits** 0.5

## **OTHEG 572: Service Learning B**

Service learning consists of opportunities to enhance occupational therapy students' knowledge, skills, and to explore leadership opportunities in areas of health promotion, community issues, and social justice. The students will serve in community-based programs both internal and external to Midwestern University.

**Credits** 0.5

## **OTHEG 603: Assistive Technology - Low Incidence Populations**

This course focuses on the role of the OT practitioner as an inter-professional team member considering, assessing, and treating persons using augmentative and alternative communication devices and services to enhance occupational performance to foster participation and well-being.

**Credits** 2.0

## **OTHEG 605: Professional Development**

This course provides in-depth understanding of the United States healthcare system and other entities that influence or regulate occupational therapy practice either through policy, reimbursement, or credentialing, while gaining appreciation for the value of professional organizations in advancing the development of the practitioner and the profession. With this knowledge, students focus on contexts of occupational therapy practice, and the human resource, reimbursement, supervision, and management strategies for effective service delivery.

**Credits** 3.0

## **OTHEG 615: Population Health & Emerging Practice**

This course focuses on occupational therapy services directed toward communities and populations through culturally responsive, customized, and cost-effective programs. It further develops the concept of emerging practice areas and leads to subsequent development of a proposal for an innovative program directed toward maximizing health, well-being, and quality of life for communities and populations.

**Credits** 4.0

## **OTHEG 621: Pediatrics II: Youth/School-Aged**

This course emphasizes the application of selected models of practice and strategies for occupational therapy practice with school-aged children (ages 6-21 years) who have deficits in their occupational performance related to developmental, neuro-motor, psychosocial, or medical differences. Therapeutic approaches and clinical skills for working with children within their school, community, and clinical settings are emphasized. Practice settings for youth-centered pediatric practice are discussed.

**Credits** 4.0

### **Prerequisites**

[OTHEG 512](#) Pediatrics I: Young Children/Early Intervention

## **OTHEG 636: Fieldwork I-C**

Fieldwork experience consists of guided learning experiences in various healthcare and/or community settings that provides students with direct opportunities to observe and interact with clients engaged in functional living activities that are appropriate for their respective cognitive, psychosocial, and physical stage of development. Observational, as well as foundational experiential and documentation skills are emphasized.

**Credits** 1.0

## **OTHEG 637: Upper Extremity Rehabilitation**

Building on knowledge from the biomechanics course, this course focuses on evaluation and intervention strategies for the remediation of musculoskeletal physical limitations of the upper extremity. Emphasis is placed on impairments of the upper extremity, including fractures, tendon injuries, pain syndromes, arthritis, burns, amputations, and soft tissue disorders, and their effect on occupational performance. Workplace ergonomics and rehabilitation principles as they pertain to the upper quadrant will also be addressed.

**Credits** 3.0

### **Prerequisites**

[ANATG 502](#) Anatomy

## **OTHEG 640: Therapeutic Reasoning**

This course solidifies the philosophical assumptions, theories, and frames of reference underlying the practice of occupational therapy. The various aspects of professional reasoning are also reviewed, culminating in the integration of these assumptions, theories, and frames of reference with professional reasoning to guide intervention with clients.

**Credits** 3.0

## **OTHEG 644: Psychosocial Practice II**

Building on Psychosocial Practice I, this course focuses on the application of selected models of practice and strategies in occupational therapy. The course provides exposure to and practice with assessments and interventions used in psychosocial practice.

**Credits** 3.0

### **Prerequisites**

[OTHEG 544](#) Psychosocial Practice I

## **OTHEG 653: Evidence-Based Practice III**

Students conduct a systematic review to apply their knowledge of evidence-based practice to a specific clinical question. In this two-course sequence, students begin the process by writing a clinical question, finding the relevant evidence, abstracting the evidence, and writing the introduction and methods sections of their review paper.

**Credits** 3.0

**Prerequisites**

[OTHEG 524: Evidence-Based Practice II](#)

## **OTHEG 663: Evidence-Based Practice IV**

This course serves as a continuation of Evidence-Based Practice III in which students complete a systematic review on a specific clinical question. During this quarter, students write the results and discussion sections of their review paper and present their findings in an oral presentation. Based on their analysis of the findings, students derive specific implications for occupational therapy practice.

**Credits** 3.0

**Prerequisites**

[OTHEG 653](#) Evidence-Based Practice III

## **OTHEG 671: Service Learning C**

Service learning consists of opportunities to enhance occupational therapy students' knowledge, skills, and to explore leadership opportunities in areas of health promotion, community issues, and social justice. The students will serve in community-based programs both internal and external to Midwestern University.

**Credits** 0.5

## **OTHEG 692: Fieldwork II-A**

This 12-week internship is comprised of supervised field experience with clients and/or client groups who exhibit a variety of medical conditions, which include physical and/or psychosocial disabilities. This internship emphasizes the development of disciplined, higher-level critical thinking skills necessary to plan and provide high-quality client care. Students are supervised by registered occupational therapists with a minimum of one year of experience.

**Credits** 12.0

**Prerequisites**

Successful completion of all prior coursework

## **OTHEG 693: Fieldwork II-B**

This 12-week internship is comprised of supervised field experience with clients and/or client groups who exhibit a variety of medical conditions, which include physical and/or psychosocial disabilities. This internship emphasizes the development of disciplined, higher-level critical thinking skills necessary to plan and provide high-quality client care. Students are supervised by registered occupational therapists with a minimum of one year of experience.

**Credits** 12.0

**Prerequisites**

Successful completion of all prior coursework

## **OTHEG 800: Independent Study**

This course is designed to facilitate additional didactic or clinical endeavors related to a specific component of occupational therapy theory and/or practice. Course content, assignments and learning outcomes are developed in collaboration with the faculty mentor and the student. The Program Director must approve the plan. Course credit is variable depending on the scope of work to be accomplished.

**Credits** 1.0

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### **Prerequisites**

Permission of the Instructor

## **OTHEG 901: Advanced Neuro Elective**

This is an elective course focused on advancing the Neuro Rehab skills of the therapy practitioner. The course will build upon the neuro rehab skills introduced in general occupational therapy curriculum, developing the students' confidence and ability to evaluate and treat the complexities of the neuro population. The course will also focus on additional topics of the OTs role in concussion, vestibular and vision, principles of neuroplasticity, robotics/VR and NMES/FES use. Students will have multiple opportunities to engage with patients and collaborate with PT and SLP on patient care.

**Credits** 1.0

## **OTHEG 901-910: OT Elective**

Elective courses will vary from year to year depending on student interest and faculty availability. Students may select from courses offered by members of the OT Program that have been approved by the OT Program Education Committee, or offerings of other programs or colleges that have been approved by the CHS Curriculum Committee and OT Program Education Committee.

**Credits** 1.0

## **OTHEG 902: Advanced Orthotics Elective**

This course emphasizes the design and fabrication of complex orthotic devices to enhance an individual's ability to perform work, self-care, and play/leisure activities. The refinements of psychomotor and reasoning skills associated with design and fabrication of mobilization orthoses are highlighted.

**Credits** 1.0

## **OTHEG 903: Dementia Care Elective**

This is an elective course focused on advancing the dementia care skills of the therapy practitioner in an individual and public health context. The course will focus on communication with the person living with dementia and their support systems, a deeper understanding of the disease process and the therapeutic role throughout. The importance of the broader social environment in dementia care will also be a focus of the course.

**Credits** 1.0

## **OTHEG 904: Hippotherapy Elective**

This course will introduce the OT student to the therapeutic value of using the horse in Occupational Therapy practice. Hippotherapy is a neuro-physiological based therapy with the help of the horse. The horse at a walk serves as the therapeutic medium for transmitting movement. With the patient in sitting position on the horse, postural reflexes and reactions are practiced repeatedly with the aid of the horse's walk-specific forward movement. Proprioceptive sensorimotor input leads to improved posture, strength and movement patterns necessary for function. Students will understand the history of hippotherapy and become acquainted with the current literature of using equine movement in Occupational Therapy practice.

This course will cover the theory and evidence behind the inclusion of the horse into OT. Evaluation, treatment and documentation will be emphasized as well as the business management of including the horse into therapy.

**Credits** 1.0

## **OTHEG 905: Medical Spanish Elective**

This course is designed to expose occupational therapy students with little or no experience speaking Spanish to basic Spanish vocabulary, phrases, and commands that can be used in occupational therapy practice.

**Credits** 1.0

## **OTHEG 906: Occupational Justice Elective**

This elective course provides students with an overview of occupational justice and its relevance to occupational therapy practice. Topics include micro, meso, and macro occupational justice, occupational justice history, and practicing occupational justice. Students will be asked to explore examples of occupational justice in their communities and global occupational justice research. A panel of diverse OT practitioners will be available for a discussion on the impact of identity on OT practice.

**Credits** 1.0

## **OTHEG 907: Sensory Integration Elective**

This elective course will cover the theoretical framework of Ayres Sensory Integration (ASI) as well as serve as a guide for treatment planning and implementation of this treatment model for children with sensory processing deficits, including children with autism spectrum disorder (ASD), attention deficit disorder (ADD), and other developmental delays. The sensory integrative approach is frequently utilized within Occupational therapy with these populations. This elective course is held in the Therapy Institute and includes work in patient care with evaluation, treatment, and home programming for children with sensory processing deficits.

**Credits** 1.0

## **OTHEG 908: Upper Extremity Dissection Elective**

This elective course provides laboratory-based study of detailed upper extremity human anatomy. Students further develop three-dimensional anatomical knowledge that is necessary for occupational therapy practice areas that involve the upper extremity. Case studies are used to foster familiarity with typical clinical presentations, and to learn how to approach diagnoses unique to the upper extremity from an anatomical perspective. Laboratory sessions include complete dissection of the upper extremity from the brachial plexus distally to the hand.

**Credits** 1.0



## OTHEG 909: Pelvic Health Elective

The Pelvic Health elective explores occupational therapy's role in pelvic health for the adult and older adults. The course will include advanced training on pelvic floor as it relates to clients participation in daily occupations. Students engaged in this course will participate in experiential learning opportunities, including but not limited too hands-on lab experiences, case-based learning, and simulation learning experiences to provide a comprehensive and holistic examination of pelvic floor therapy.

**Credits** 1.0

## OTHEG 910: Pediatric Group-Based Intervention Elective

This elective offers a comprehensive approach to pediatric care through group-based interventions. The elective emphasizes building collaboration skills both intraprofessionally and interprofessionally, fostering a holistic, team-based approach to support the diverse needs of children. Participants may engage in one of various specialized groups, including:

- **Interprofessional Group with Speech-Language Pathologists (SLP):** Focuses on enhancing communication and engagement skills through collaborative efforts.
- **Handwriting:** Aims to improve fine motor skills and handwriting proficiency.
- **Life Skills:** Supports essential daily living skills to foster independence.
- **Interprofessional Group with PT to support Vocational Skill Development:** Prepares children for future employment opportunities by developing job-related skills.

**Credits** 1.0

# Cardiovascular Science Program

## Mission

The Midwestern University Cardiovascular Science Program educates students to be compassionate, behaviorally competent, clinically proficient and professional members of the cardiac surgery team in the practice of cardiovascular perfusion.

## Accreditation

The Cardiovascular Science Program is accredited by the Commission on Accreditation of Allied Health Education Programs ([www.caahep.org](http://www.caahep.org)) upon the recommendation of the Accreditation Committee-Perfusion Education ([www.ac-pe.org](http://www.ac-pe.org)). The Commission on Accreditation of Allied Health Education Programs is located at 25400 U.S. Highway 19 North, Suite 158, Clearwater, FL 33763, phone number 727/210-2350.

Midwestern University is accredited by the Higher Learning Commission, 230 South LaSalle Street, Suite 7- 500, Chicago, IL 60604-1411; 800/621-7440.

## Degree Description

Program graduates are provided with the knowledge and skills necessary to meet the demands that will be placed upon the graduate in an ever-changing field where surgical, technological, and basic sciences are rapidly changing.

The 21-month curriculum leading to a Master of Science in Cardiovascular Science degree is a full-time professional program of seven continuous quarters. The program begins with three quarters of didactic and laboratory education at the Glendale campus. The student is exposed to cardiac surgery during the second and third quarters through clinical observation at affiliated hospitals in the Phoenix area.

The clinical rotation segment commences the student's second year. The clinical rotations are off campus at various affiliated hospitals located across the country. Relocation during clinical rotations will be necessary. This is a rigorous and demanding program; however, graduates are rewarded with the satisfaction that comes with accomplishment and an excellent start to a professional career.

## Admissions

The Cardiovascular Science Program currently uses a modified rolling admissions process. Completed applications are reviewed and decisions are made at regular intervals during the admissions cycle until the class is filled. The admissions process is highly selective and applicants are encouraged to apply within the priority or standard application deadlines in the cycle listed below.

### Priority Application Deadline - October 1

Applicants who submit completed materials on or before October 1 will be given first consideration for admissions and will be notified of the application decision on or before January 31. Applicants who are not accepted in the program at this time will be rolled over into the Standard Application Deadline.

### Standard Application Deadline - March 1

Applicants who submit completed application materials on or before March 1 will be considered for admissions and will be notified of the application decision on or before May 31. Students are encouraged to apply during the Priority or Standard Application

Deadlines. Applications received between March 1 and May 31 will be considered on a rolling basis for seats that may be available or placement on the alternate list.

Admission to the Cardiovascular Science Program at Midwestern University is considered on a competitive basis for prospective students who hold a bachelor's level (or its equivalent) or higher degree from a regionally accredited college or university. Applications are reviewed by the Office of Admissions for completeness and referred to the Admissions Committee to determine eligibility for applicant interviews. Final acceptance into the Cardiovascular Science Program is determined by the Admissions Committee with the approval of both the Director of the Cardiovascular Science Program and the Dean.

The Dean, via Office of Admissions, notifies applicants

in writing of the admission action/decision. Decisions on acceptance are made until the maximum enrollment for each class is reached.

## Admission Requirements

To be considered for admission to the Cardiovascular Science Program, applicants must submit documentation of the following:

1. Completion of a bachelor's level or higher degree from a regionally accredited college or university.
2. Minimum cumulative grade point average (GPA) of 2.75 and minimum cumulative science GPA of 2.75 on a scale of 4.00.
3. Completion of the Application for Admission.
4. Completion of the minimum number of prerequisite courses at a regionally accredited college or university.
  - All prerequisites must be completed with a grade of C or better
  - Grades of C- are not acceptable for any prerequisite courses
5. Completion of the Program's interview process (by invitation only).
6. Passage of the Midwestern University criminal background check.
7. Commitment to abide by the Midwestern University Drug-Free Workplace and Substance Abuse Policy.

## Prerequisite Courses

Course	Sem. Hrs.	Qtr. Hrs.
Social and Behavioral Sciences (e.g., sociology, psychology, anthropology)	6	9
Biology (must include laboratory)	8	12
General Chemistry (inorganic; must include laboratory)*	4	6
Anatomy	3	4
Physiology	3	4
Physics*	3	4
Biochemistry	3	4
Applied Mathematics (college algebra or higher)	3	4
English (emphasizing composition, communication, and language skills)	6	9
General Education electives (recommended courses include fine arts, humanities, ethics, philosophy, foreign language, business principles, computer information systems, economics, and cultural anthropology.)	25	38
Total Credit Hours	64	94

\* *Physics II and General Chemistry II is not required but strongly recommended.*

## Application Process

To be considered for admission into the Cardiovascular Science Program, applicants must submit the following to the Office of Admissions:

1. A completed Application for Admission to be submitted online through [https://apply.midwestern.edu/portal/mwu\\_app](https://apply.midwestern.edu/portal/mwu_app)
2. Two signed and sealed letters of recommendation. Electronic submissions will be accepted via email directly from the letter writer in PDF format
3. Official transcripts from each college or university attended post-high school

All supporting documents should be sent to:

Office of Admissions  
Midwestern University  
19555 North 59th Avenue  
Glendale, AZ 85308  
623/572-3215 or 888/247-9277  
Fax 623/572-3229  
[admissaz@midwestern.edu](mailto:admissaz@midwestern.edu)

*Please note:* Applicants may track the receipt of application materials and the status of the applicant's files on the University's website with the instructions for accessing account information that will be sent by the Office of Admissions after receipt of the application. Applicants are responsible for notifying the Office of Admissions of any changes in mailing address and/or e-mail address. All requests for application withdrawals must be made in writing via e-mail, fax or letter to the Office of Admissions at the above address.

## Technical Standards, CVSP

### Technical Standards

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the college.

Candidates must be able to perform the following abilities and skills:

1. Observation: The candidate must be able to accurately make observations at a distance and close at hand, including those on a computer screen or electronic device. Observation necessitates the functional use of vision and sense of touch and is enhanced by the functional use of all of the other senses.
2. Communication: The candidate must be able to communicate in English, proficiently and sensitively, in verbal and written form, and be able to perceive nonverbal communication.
3. Motor: Candidates must be able to coordinate both gross and fine muscular movements, maintain equilibrium and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control and eye-to-hand coordination to perform profession-specific skills and tasks. Candidates must be able to lift 20lbs vertically and must be able to move at least 50lbs horizontally.
4. Intellectual, Conceptual, Integrative and Quantitative Abilities: The candidate must be able to problem solve, measure, calculate, reason, analyze, record and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
5. Behavioral and Social Attributes: The candidate must possess the emotional health required for full utilization of intellectual abilities, the exercise of good judgment, the consistent, prompt completion of all responsibilities, and the development of mature, sensitive and effective relationships. Candidates must be able to tolerate physically, mentally and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to

changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn are all personal qualities required during the educational process.

Candidates are required to verify an understanding and ability to meet these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet Technical Standards with accommodation, must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

## **Academic and Administrative Policies**

The following academic policies apply to all students who matriculate during the academic year of this catalog publication. These policies will apply throughout the entire time a student is enrolled in the college. In the event that these policies need to be revised as the result of new accreditation requirements, mandates by the United States Department of Education, or other unforeseen circumstances, students will be notified in writing prior to the effective date of the new policy.

Faculty and students should also refer to the University Academic Policy section for additional policies that apply to all students at Midwestern University.

### **Extended Program**

For various reasons, a restructuring of a student's academic course load may be necessary. If qualified, an individual's academic course load may be reduced so that the student enters an extended track program. Such a program rearranges the course schedule so that the normal time period for the program is extended, usually by an additional year. A student is placed on an extended program by the Academic Review Committee.

## **Graduation Requirements**

To qualify for graduation with the Master of Science in Cardiovascular Science degree, students must:

1. Follow an approved course of study leading to the successful completion of a master's project;
2. Satisfactorily complete the required 101.5 quarter-credit hours in the overall course of study with a minimum cumulative grade point average of 2.75;
3. Perform the minimum of seventy five (75) primary clinical perfusion activities, including a minimum of ten (10) clinical pediatric cases as required by the American Board of Cardiovascular Perfusion;
4. Receive a favorable recommendation for master's degree conferral from the Program Student Academic Review Committee and the College of Health Sciences Student Promotion and Graduation Committee and the University Faculty Senate;
5. Settle all financial accounts with the University; and
6. Complete all graduation clearance requirements as instructed by the Office of the Registrar.

# Licensure Requirements

Licensure is not required in all states, including Arizona. In those states requiring licensure, a perfusionist must be a certified clinical perfusionist. Certification is achieved by passing the certifying examination administered by the American Board of Cardiovascular Perfusion (ABCP).

Midwestern University's Cardiovascular Science program meets the educational requirements to become certified by the American Board of Cardiovascular Perfusion (ABCP) to practice as a certified clinical perfusionist (CCP) in the following states and territories: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, District of Columbia, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, U.S. Virgin Islands, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

Each student should check the additional licensure and/or certification requirements for the state, district or territory in which they intend to pursue employment.

For further information regarding the ABCP certifying examination, contact:

The American Board of Cardiovascular Perfusion  
555 East Wells Street, Suite 1100  
Milwaukee, WI 53202-3823 414/918-3008  
[www.abcp.org](http://www.abcp.org)

## Cardiovascular Curriculum

The Cardiovascular Science Program reserves the right to alter its curriculum, however and whenever it deems appropriate. This catalog does not establish a contractual relationship between MWU and the student.

Total Quarter Credits in the Professional Program: 101.5\*

\*In addition to the required curriculum, students may complete elective or remedial coursework, including CVSP 800 (independent study), CVSP 809 (Research I), CVSP 810 (Research II), and CVSP 811 (Research III).

## First Professional Year

### Fall Quarter

Course Code	Title	Credits
COREG 1560E	Interprofessional Healthcare	0.5
CVSPG 551	Anatomy for Cardiovascular Sciences	2.0
CVSPG 553	Monitoring and the Cardiovascular Patient	3.0
CVSPG 555	Applied Physiology & Pathophysiology for Cardiovascular Sciences I	4.0
CVSPG 561	Cardiovascular Perfusion Technology I	4.0
CVSPG 591	Cardiovascular Perfusion Practical Laboratory I	3.0
<b>Sub-Total Credits</b>		<b>16.50</b>

## Winter Quarter

Course Code	Title	Credits
COREG 1570E	Interprofessional Healthcare	0.5
CVSPG 534	Cardiovascular Sciences Masters Project I	1.0
CVSPG 556	Applied Physiology & Pathophysiology for Cardiovascular Sciences II	4.0
CVSPG 562	Cardiovascular Perfusion Technology II	4.5
CVSPG 571	Clinical Observations & Seminars for Cardiovascular Sciences2.0 I	
CVSPG 581	Applied Pharmacology for CV Sciences I	2.0
CVSPG 592	Cardiovascular Perfusion Practical Laboratory II	2.0
<b>Sub-Total Credits</b>		<b>16.00</b>

## Spring Quarter

Course Code	Title	Credits
COREG 1580E	Interprofessional Healthcare	0.5
CVSPG 535	Cardiovascular Sciences Masters Project II	1.0
CVSPG 544	Quality & Risk Management for Cardiovascular Sciences	1.0
CVSPG 557	Cardiac Congenital Defects & Cardiac Pediatric Perfusion	4.0
CVSPG 563	Cardiovascular Perfusion Technology III	4.5
CVSPG 572	Clinical Observations & Seminars for Cardiovascular Sciences2.0 II	
CVSPG 582	Applied Pharmacology for CV Sciences II	2.0
CVSPG 593	Cardiovascular Perfusion Practical Laboratory III	2.0
<b>Sub-Total Credits</b>		<b>17.00</b>

## Second Professional Year

### Summer Quarter

Course Code	Title	Credits
CVSPG 601	Clinical Practicum I	6.0
CVSPG 602	Clinical Practicum II	6.0
CVSPG 661	Developmental Skills for Clinical Rotations and Professional Practice	1.0
<b>Sub-Total Credits</b>		<b>13.00</b>

### Fall Quarter

Course Code	Title	Credits
CVSPG 603	Clinical Practicum III	6.0
CVSPG 604	Clinical Practicum IV	6.0
CVSPG 662	Special Techniques in Cardiopulmonary Bypass	1.0
<b>Sub-Total Credits</b>		<b>13.00</b>

### Winter Quarter

Course Code	Title	Credits
CVSPG 605	Clinical Practicum V	6.0
CVSPG 606	Clinical Practicum VI	6.0
CVSPG 663	Clinical Modules in Perfusion	1.0
<b>Sub-Total Credits</b>		<b>13.00</b>

## Spring Quarter

Course Code	Title	Credits
CVSPG 607	Clinical Practicum VII	6.0
CVSPG 608	Clinical Practicum VIII	6.0
CVSPG 664	Current Trends in Perfusion	1.0
<b>Sub-Total Credits</b>		<b>13.00</b>
Total Credits		101.5

## Cardiovascular Science Program Calendar

### CVSP-I

#### Summer 2025

Event	Date
<b>Memorial Day *No Classes*</b>	<b>May 26, 2025</b>
<b>Juneteenth (Observed) *No Classes*</b>	<b>June 19, 2025</b>
<b>Independence Day (Observed) *No Classes*</b>	<b>July 4, 2025</b>

#### Fall 2025

Event	Date
Orientation	August 18 - 20, 2025
Classes Begin	August 25, 2025
Last Day to Add/Drop Classes	August 29, 2025
<b>Labor Day *No Classes*</b>	<b>September 1, 2025</b>
Last Day of Classes	October 31, 2025
Quarterly Exams	November 3 - 7, 2025
Thanksgiving Break	November 10 - 28, 2025

#### Winter 2025

Event	Date
Classes Begin	December 1, 2025
Last Day to Add/Drop Classes	December 5, 2025
Winter Break	December 22, 2025 - January 2, 2026
Classes Resume	January 5, 2026
<b>Martin Luther King/ Jr. Day *No Classes*</b>	<b>January 19, 2026</b>
Last Day of Classes	February 20, 2026
Quarterly Exams	February 23 - 27, 2026
Spring Break	March 2 - 6, 2026

#### Spring 2026

Event	Date
Classes Begin	March 9, 2026
Last Day to Add/Drop Classes	March 13, 2026
Last Day of Classes	May 15, 2026
Quarterly Exams	



Event	Date
Prep for Clinical Practice	May 22, 26 - 27, 2026
<b>Memorial Day *No Classes*</b>	<b>May 25, 2026</b>
Quarter Break	June 1 - 5, 2026

## CVSP-II Summer 2025

Event	Date
Clinical Orientation (CVSP-II) On Campus	May 23, 27, 28, 2025
<b>Memorial Day *No Classes*</b>	<b>May 26, 2025</b>
CVSP 601 Clinical	June 9 - July 18, 2025
<b>Juneteenth (Observed) *No Classes*</b>	<b>June 19, 2025</b>
CVSP 661 Online	June 30 - August 8, 2025
<b>Independence Day (Observed) *No Classes*</b>	<b>July 4, 2025</b>
CVSP 602 Clinical	July 21 - August 29, 2025

## Fall 2025

Event	Date
CVSP 662 Online	August 25 - October 31, 2025
<b>Labor Day *No Classes*</b>	<b>September 1, 2025</b>
CVSP 603 Clinical	September 2 - October 10, 2025
CVSP 604 Clinical	October 13 - November 21, 2025

## Winter 2025

Event	Date
CVSP 605 Clinical	November 24, 2025 - January 16, 2026
CVSP 663 Online	December 1, 2025 - February 20, 2026
Winter Break	December 22, 2025 - January 2, 2026
<b>Martin Luther King/ Jr. Day *No Classes*</b>	<b>January 19, 2026</b>
CVSP 606 Clinical	January 20 - February 27, 2026

## Spring 2026

Event	Date
CVSP 607 Clinical	March 2 - April 10, 2026
CVSP 664 Online	April 13 - May 22, 2026
CVSP 608 Clinical	April 13 - May 22, 2026
<b>Memorial Day *No Classes*</b>	<b>May 25, 2026</b>
Summative Evaluation	May 28, 2026
Program Completion	May 28, 2026
Commencement	June 3, 2026 9:00 a.m.

Last Revision: 08/28/2024



## Faculty

**Zachary Archer, M.S., CCP**

University of Arizona  
Assistant Professor

**Kyle W. Dana, D.C., CP**

Parker University  
Program Director and Associate Professor

**Nathaniel H. Darban, Ph.D., CP**

University of Arizona  
Assistant Professor

**Chelsea Furnish, M.S., CP**

Midwestern University  
Assistant Professor

**Harry R. Hoerr, Jr., M.S., CCT**

National University  
Clinical Coordinator and Associate Professor

**Benjamin C. Mills, M.S., CCP**

University of Arizona  
Assistant Professor

**Thomas Rath, M.S., CCP Emeritus**

University of Nebraska  
Assistant Director and Assistant Professor

**Julie A. Steele-Pruett, M.S., CP**

Midwestern University  
Assistant Professor

## Cardiovascular Science Program Courses

### COREG 1560E: Interprofessional Healthcare

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

### COREG 1570E: Interprofessional Healthcare

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

### COREG 1580E: Interprofessional Healthcare

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

## **CVSPG 534: Cardiovascular Sciences Masters Project I**

This course applies the theory and principles presented in CVSPG 560 series Perfusion Technology courses and applies to a perfusion project. Students will conduct a literature review and design their conclusions on a given perfusion protocol topic.

**Credits** 1.0

### **Prerequisites**

[CVSPG 561](#) Cardiovascular Perfusion Technology I; [CVSPG 591](#) Cardiovascular Perfusion Practical Laboratory I

## **CVSPG 535: Cardiovascular Sciences Masters Project II**

This course takes the theory and principles presented in CVSPG 591 and 592, CVSPG 561 and 562, and has students integrate the material in a clinically relevant patient care plan. Students will use references from the literature to develop a Perfusion Care Plan for a simulated patient.

**Credits** 1.0

### **Prerequisites**

[CVSPG 534](#) Cardiovascular Sciences Masters Project I

## **CVSPG 544: Quality & Risk Management for Cardiovascular Sciences**

This course covers topics related to quality management and risk management in cardiovascular perfusion. The quality management course will instruct the student in setting-up a quality management program for a perfusion department. The curriculum will incorporate the continuous quality improvement cycle including process improvement. The risk management segment covers topics related to risk management in cardiovascular perfusion. The course will instruct the student in risk management in perfusion technology.

**Credits** 1.0

## **CVSPG 551: Anatomy for Cardiovascular Sciences**

This course examines cardiac, vascular, renal, and respiratory anatomy as they are applied to cardiovascular science and perfusion technology in particular. Emphasis is placed on normal structure and function and the current techniques used to visualize and analyze each of the structures.

**Credits** 2.0

## **CVSPG 553: Monitoring and the Cardiovascular Patient**

This course provides an overview of patient monitoring, especially the critically ill patient. The course also provides introduction to all aspects of the cardiac surgery suite. The course takes an in-depth look at these monitors and analyzers. The student will learn how each device and system operates, the strengths and limitations of each, how to troubleshoot each system, and how to interpret the clinical data.

**Credits** 3.0

## **CVSPG 555: Applied Physiology & Pathophysiology for Cardiovascular Sciences I**

This course is the first in the series of two courses that take an in-depth look at the physiology and pathophysiology of the major organ systems of the human body. Emphasis is on the interaction of cardiopulmonary bypass with the systems' normal physiology and how the systems' pathophysiology affects the conduct of bypass. This course covers blood, the heart, and the vascular system.

**Credits** 4.0

## **CVSPG 556: Applied Physiology & Pathophysiology for Cardiovascular Sciences II**

This course is the second in the series of two courses that take an in-depth look at the physiology and pathophysiology of the major organ systems of the human body. Emphasis is on the interaction of cardiopulmonary bypass with the systems' normal physiology and how the systems' pathophysiology affects the conduct of bypass. This course covers the autonomic nervous system, the immune system and inflammation, the lungs, the kidneys, and fluid and acid-base balance.

**Credits** 4.0

**Prerequisites**

[CVSPG 555](#) Applied Physiology & Pathophysiology for Cardiovascular Sciences I

## **CVSPG 557: Cardiac Congenital Defects & Cardiac Pediatric Perfusion**

This course prepares students for participation in their pediatric rotations by providing an in-depth study of the cardiac congenital defects, the surgical procedures used to palliate and/or correct each defect, and a general overview of pediatric perfusion techniques. Emphasis is also placed on the physiological differences between adult and pediatric patients, device selection, volume management, cannulation techniques, temperature management, deep hypothermic circulatory arrest, and cerebral protection.

**Credits** 4.0

**Prerequisites**

[CVSPG 555](#), 556 Applied Physiology & Pathophysiology for Cardiovascular Sciences I, II; [CVSPG 581](#) Applied Pharmacology for CV Sciences I; [CVSPG 561](#), 562 Cardiovascular Perfusion Technology I, II

## **CVSPG 561: Cardiovascular Perfusion Technology I**

This is the first in the series of three courses that explore the technology, techniques, and issues associated with cardiovascular perfusion and how the extracorporeal circuit is used in today's healthcare setting. This course provides an overview of the evolution of cardiopulmonary bypass, an introduction to the operating room and its environment including sterile technique, blood-borne pathogens, personal protection equipment, and an in-depth look at the components that comprise the extracorporeal circuit.

**Credits** 4.0

## **CVSPG 562: Cardiovascular Perfusion Technology II**

This is the second in the series of three courses that explore the technology, techniques, and issues associated with cardiovascular perfusion and how the extracorporeal circuit is used in today's healthcare setting. This course looks at the technology and techniques associated with the conduct of cardiopulmonary bypass. This includes hemodilution, hypothermia, anticoagulation, myocardial protection, the interaction of blood with a foreign surface, and the pathophysiology associated with cardiopulmonary bypass.

**Credits** 4.5

**Prerequisites**

[CVSPG 553](#) Monitoring and the Cardiovascular Patient; [CVSPG 561](#) Cardiovascular Perfusion Technology I; [CVSPG 591](#) Cardiovascular Perfusion Practical Laboratory I

## **CVSPG 563: Cardiovascular Perfusion Technology III**

This is the third in the series of three courses that explore the technology, techniques, and issues associated with cardiovascular perfusion and how the extracorporeal circuit is used in today's healthcare setting. This course looks at specific techniques and current applications of extracorporeal circulation, various adjunct procedures, support of the failing heart and/or the failing lungs, and future applications and techniques.

**Credits** 4.5

### **Prerequisites**

[CVSPG 562](#) Cardiovascular Perfusion Technology II; [CVSPG 592](#) Cardiovascular Perfusion Practical Laboratory II

## **CVSPG 571: Clinical Observations & Seminars for Cardiovascular Sciences I**

These courses present procedures and topics in cardiovascular medicine through direct clinical observation, seminar presentations, or by independent study. Students are assigned to observation sessions in the cardiac operating room or catheterization lab at local affiliate hospitals. All students participate in weekly seminars which present a technology, technique, or device currently in clinical use.

**Credits** 2.0

## **CVSPG 572: Clinical Observations & Seminars for Cardiovascular Sciences II**

These courses present procedures and topics in cardiovascular medicine through direct clinical observation, seminar presentations, or by independent study. Students are assigned to observation sessions in the cardiac operating room or catheterization lab at local affiliate hospitals. All students participate in weekly seminars which present a technology, technique, or device currently in clinical use.

**Credits** 2.0

## **CVSPG 581: Applied Pharmacology for CV Sciences I**

This course provides an introduction and basic foundation for Clinical Pharmacology to the Cardiovascular Perfusion student. The student will be able to describe the different physiological receptors and the mechanism of actions of the pharmaceuticals utilized to treat a patient with cardiovascular disease. Students will also be required to develop and demonstrate an understanding of the pharmacological agents routinely utilized or encountered by perfusionists.

**Credits** 2.0

## **CVSPG 582: Applied Pharmacology for CV Sciences II**

This course expands upon the basic foundations of Clinical Pharmacology previously mastered in [CVSPG 581](#) by the Cardiovascular Perfusion student. Students will be expected to demonstrate the ability to recognize and evaluate the impact of medications on specific patient disease processes and determine how those effects impact the patient's functional status. The core concentration of this course will be on the pharmacology most relevant to the cardiovascular patient, with a strong emphasis on the pathophysiological basis for drug therapy.

**Credits** 2.0

### **Prerequisites**

[CVSPG 581](#) Applied Pharmacology for CV Sciences I

## **CVSPG 591: Cardiovascular Perfusion Practical Laboratory I**

This is the first in the series of three laboratory courses that provide hands-on experience with the extracorporeal circuit and related perfusion technologies. This course introduces the heart-lung machines currently available in the Cardiovascular Science's laboratory, provides hands-on experience with the design and assembly of an extracorporeal circuit tubing pack, and provides hands-on experience with setting up and priming a simple extracorporeal circuit.

**Credits** 3.0

## **CVSPG 592: Cardiovascular Perfusion Practical Laboratory II**

This is the second in the series of three laboratory courses that provide hands-on experience with the extracorporeal circuit and related perfusion technologies. This course continues the hands-on experience circuit setup and introduces conduct of cardiopulmonary bypass via weekly hands-on simulations. Emphasis is on preparation of patient information, initiation and termination of bypass, anticoagulation management, patient management during cardiopulmonary bypass, and effective communication.

**Credits** 2.0

### **Prerequisites**

[CVSPG 561](#) Cardiovascular Perfusion Technology I; [CVSPG 591](#) Cardiovascular Perfusion Practical Laboratory I

## **CVSPG 593: Cardiovascular Perfusion Practical Laboratory III**

This is the third in the series of three laboratory courses that provide hands-on experience with the extracorporeal circuit and related perfusion technologies. This course continues the hands-on experiences involving circuit setup and simulation. Simulation emphasis is on the operation of cell salvage devices, operation of the intra-aortic balloon pump, recognition and correction of problems potentially encountered during cardiopulmonary bypass, troubleshooting, and crisis resource management.

**Credits** 2.0

### **Prerequisites**

[CVSPG 562](#) Cardiovascular Perfusion Technology II; [CVSPG 592](#) Cardiovascular Perfusion Practical Laboratory II

## **CVSPG 601: Clinical Practicum I**

The curriculum for Year Two features four quarters of clinical rotations including a one-week Orientation and a one-week Summative Evaluation. During these rotations, students are expected to achieve specific competencies in cardiovascular perfusion and related technologies of open-heart surgery, including proficiency in managing patient problems, handling issues of quality assurance, utilization review, continuity of care and appropriate treatment plans. At least one clinical rotation will be pediatrics. Text reading assignments, journal review, and other online activities are required for each clinical rotation.

**Credits** 6.0

### **Prerequisites**

Completion of all first year courses through Spring quarter first year and successful completion of the Orientation to the Clinical Rotations program

## **CVSPG 602: Clinical Practicum II**

The curriculum for Year Two features four quarters of clinical rotations including a one-week Orientation and a one-week Summative Evaluation. During these rotations, students are expected to achieve specific competencies in cardiovascular perfusion and related technologies of open-heart surgery, including proficiency in managing patient problems, handling issues of quality assurance, utilization review, continuity of care and appropriate treatment plans. At least one clinical rotation will be pediatrics. Text reading assignments, journal review, and other online activities are required for each clinical rotation.

**Credits** 6.0

### **Prerequisites**

Completion of all first year courses through Spring quarter first year and successful completion of the Orientation to the Clinical Rotations program

## **CVSPG 603: Clinical Practicum III**

The curriculum for Year Two features four quarters of clinical rotations including a one-week Orientation and a one-week Summative Evaluation. During these rotations, students are expected to achieve specific competencies in cardiovascular perfusion and related technologies of open-heart surgery, including proficiency in managing patient problems, handling issues of quality assurance, utilization review, continuity of care and appropriate treatment plans. At least one clinical rotation will be pediatrics. Text reading assignments, journal review, and other online activities are required for each clinical rotation.

**Credits** 6.0

### **Prerequisites**

Completion of all first year courses through Spring quarter first year and successful completion of the Orientation to the Clinical Rotations program

## **CVSPG 604: Clinical Practicum IV**

The curriculum for Year Two features four quarters of clinical rotations including a one-week Orientation and a one-week Summative Evaluation. During these rotations, students are expected to achieve specific competencies in cardiovascular perfusion and related technologies of open-heart surgery, including proficiency in managing patient problems, handling issues of quality assurance, utilization review, continuity of care and appropriate treatment plans. At least one clinical rotation will be pediatrics. Text reading assignments, journal review, and other online activities are required for each clinical rotation.

**Credits** 6.0

### **Prerequisites**

Completion of all first year courses through Spring quarter first year and successful completion of the Orientation to the Clinical Rotations program

## **CVSPG 605: Clinical Practicum V**

The curriculum for Year Two features four quarters of clinical rotations including a one-week Orientation and a one-week Summative Evaluation. During these rotations, students are expected to achieve specific competencies in cardiovascular perfusion and related technologies of open-heart surgery, including proficiency in managing patient problems, handling issues of quality assurance, utilization review, continuity of care and appropriate treatment plans. At least one clinical rotation will be pediatrics. Text reading assignments, journal review, and other online activities are required for each clinical rotation.

**Credits** 6.0

### **Prerequisites**

Completion of all first year courses through Spring quarter first year and successful completion of the Orientation to the Clinical Rotations program



## **CVSPG 606: Clinical Practicum VI**

The curriculum for Year Two features four quarters of clinical rotations including a one-week Orientation and a one-week Summative Evaluation. During these rotations, students are expected to achieve specific competencies in cardiovascular perfusion and related technologies of open-heart surgery, including proficiency in managing patient problems, handling issues of quality assurance, utilization review, continuity of care and appropriate treatment plans. At least one clinical rotation will be pediatrics. Text reading assignments, journal review, and other online activities are required for each clinical rotation.

**Credits** 6.0

### **Prerequisites**

Completion of all first year courses through Spring quarter first year and successful completion of the Orientation to the Clinical Rotations program

## **CVSPG 607: Clinical Practicum VII**

The curriculum for Year Two features four quarters of clinical rotations including a one-week Orientation and a one-week Summative Evaluation. During these rotations, students are expected to achieve specific competencies in cardiovascular perfusion and related technologies of open-heart surgery, including proficiency in managing patient problems, handling issues of quality assurance, utilization review, continuity of care and appropriate treatment plans. At least one clinical rotation will be pediatrics. Text reading assignments, journal review, and other online activities are required for each clinical rotation.

**Credits** 6.0

### **Prerequisites**

Completion of all first year courses through Spring quarter first year and successful completion of the Orientation to the Clinical Rotations program

## **CVSPG 608: Clinical Practicum VIII**

The curriculum for Year Two features four quarters of clinical rotations including a one-week Orientation and a one-week Summative Evaluation. During these rotations, students are expected to achieve specific competencies in cardiovascular perfusion and related technologies of open-heart surgery, including proficiency in managing patient problems, handling issues of quality assurance, utilization review, continuity of care and appropriate treatment plans. At least one clinical rotation will be pediatrics. Text reading assignments, journal review, and other online activities are required for each clinical rotation.

**Credits** 6.0

### **Prerequisites**

Completion of all first year courses through Spring quarter first year and successful completion of the Orientation to the Clinical Rotations program

## **CVSPG 661: Developmental Skills for Clinical Rotations and Professional Practice**

This on-line course is designed to provide second year students the tools and information to excel in clinical rotations and beyond. The course includes skills to provide students ample information in seeking employment, information for relationship building in the clinical setting, and knowledge to successfully transition into the cardiovascular operating room. The course will also educate students on how to use social media to their advantage, the importance of diversity in the workplace, and how to identify key personnel.

**Credits** 1.0

## **CVSPG 662: Special Techniques in Cardiopulmonary Bypass**

This on-line course is divided into ten separate conditions requiring special and unusual techniques for cardiopulmonary bypass. The class is highly interactive with discussion on each subject.

**Credits** 1.0

## **CVSPG 663: Clinical Modules in Perfusion**

This on-line course consists of a series of three (3) learning modules designed to: (1) allow the student to review and correct physiological parameters for the patient on cardiopulmonary bypass; (2) introduce/review characteristics of various mechanical circulatory assist devices; (3) appreciate input of multiple disciplines allowing the perfusion student to make a number of choices based on the appropriateness, available capital equipment and disposables. A resource library is also provided to support the learning process.

**Credits** 1.0

## **CVSPG 664: Current Trends in Perfusion**

This on-line course is divided into ten separate discussions. Ten different topics will be discussed on-line, each representing a current trend in perfusion.

**Credits** 1.0

## **CVSPG 800: Independent Study**

The independent study style course is designed to provide students the opportunity to explore topics of didactic and/or clinical interest as needed to enhance student's learning.

**Credits** 1.0

-6

## **CVSPG 809: Research I**

This elective course is designed to provide the student with the initial skills to perform a research project. The student will work with a faculty advisor to identify an area for research, explore scientific articles relating to the research subject, and develop a research hypothesis. Additionally, laboratory safety will be a part of the training (CITI), an IRB will be developed with the faculty member as well as any grant applications that may be available. The student will work with the Research Committee for guidance and approval of the research project.

**Credits** 1.0

## **CVSPG 810: Research II**

This elective course provides the student with the foundation for understanding and applying quantitative research within the context of evidence-based practice in cardiac perfusion. Students are encouraged to share their results with the perfusion community via a poster or oral presentation at a national meeting. Basic research skills shall be utilized for the project. The student will investigate existing scientific literature and provide a research design for the implementation of the research study.

**Credits** 1.5

## **CVSPG 811: Research III**

This course is a continuation of [CVSPG 810](#) Research Elective. Following the initial investigation of the research topic, the student will implement the research protocol and initiate the process of data collection. Statistical analysis of the data, creation of a scientific paper/poster will be required for students final reporting.

**Credits** 2.0

# Doctor of Nurse Anesthesia Practice Completion Program

## Mission

The mission of the Midwestern University Doctor of Nurse Anesthesia Practice Completion program is aligned with the mission of Midwestern University in meeting the needs of those seeking to embrace scholarship, leadership, and holistic understanding of the practice of nurse anesthesia.

## Accreditation

The Doctor of Nurse Anesthesia Practice Completion Program is accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs (COA), 10275 W. Higgins Rd., Suite 906, Rosemont, IL 60018- 5603, 224-275-9130. Accreditation was granted for the period of October 15, 2021 through October 15, 2031. [www.coacrna.org](http://www.coacrna.org)

Midwestern University is accredited by The Higher Learning Commission, 230 South LaSalle Street, Suite 7- 500, Chicago, IL 60604-1413.

## Degree Description

The Post-Master's Doctor of Nurse Anesthesia Practice Completion (D.N.A.P.) program for Certified Registered Nurse Anesthetists (CRNAs) is offered as a full-time (one-year) curriculum designed for working CRNAs.

- This program is delivered online.
- The healthcare focus of Midwestern University gives students numerous opportunities for collaboration across disciplines, demonstrating how a team- oriented focus creates a patient-oriented practice.
- The diverse curriculum includes coursework in leadership, healthcare policy, ethics, research, and process improvement, along with advanced nurse anesthesia practice. A scholarly project is required.

## Admissions

Admission to the Post-Master's Doctor of Nurse Anesthesia Practice Completion (D.N.A.P.) program for Certified Registered Nurse Anesthetists (CRNAs) is considered on a competitive basis for Certified Registered Nurse Anesthetists (CRNAs) or Graduate Registered Nurse Anesthetists (GRNAs). The Post-Master's Doctor of Nurse Anesthesia Practice Completion (D.N.A.P.) program at Midwestern University uses a rolling admissions process.

Completed applications are reviewed and decisions to interview individual candidates are made at regular intervals during the admission cycle. Telephone interviews are conducted and the selection process of each candidate for admission is made until the class is filled. Applicants are notified of selection status within two weeks after the applicant's interview date.

Typically, a class is filled by mid-June but applications are accepted continuously. Applications received are reviewed by the Office of Admissions for completeness and referred to the coordinator of the Post-Master's Doctor of Nurse Anesthesia Practice Completion (D.N.A.P.) program to determine

applicant eligibility for an interview. The Admissions Committee determines acceptance into the D.N.A.P. Completion Program. Admission decisions are made on a rolling basis until the maximum enrollment for the Program is reached.

## Admission Requirements

To be considered for admission to the Post-Master's Doctor of Nurse Anesthesia Practice

Completion (D.N.A.P.) program for CRNAs or GRNAs at Midwestern University, students must:

1. Successfully complete an accredited graduate degree program in nurse anesthesia and submit CRNA school transcript.
2. Have active clinical or educational practice.
3. Have completed a telephone interview.
4. Must pass the National Certifying Exam (NCE) prior to the start of the second quarter of the D.N.A.P. Program in order to advance.

## Application Process and Deadlines

To be considered for admission into the Post-Masters Doctor of Nurse Anesthesia Practice

Completion (D.N.A.P.) completion degree program for Certified Registered Nurse Anesthetists (CRNAs), applicants must submit to the Office of Admissions application packets that include:

1. A completed online application.
2. A nonrefundable, non-waivable application fee of \$50.
3. Official transcripts verifying completion of an accredited graduate degree program in nurse anesthesia.
4. Official final transcripts from all colleges attended post high school must be submitted.

Complete application online and mail supporting documents to:

Midwestern University Office of Admissions  
19555 North 59th Avenue  
Glendale, AZ 85308  
888-247-9277 or 623-572-3215  
[admissaz@midwestern.edu](mailto:admissaz@midwestern.edu)

Admissions decisions are made on a rolling basis until the maximum enrollment for the program is reached. Students are advised to complete the application file as early as possible to ensure timely consideration.

*Please Note: The receipt of the application materials and the status of the file can be tracked on the University's web site. Upon receipt of the application the Office of Admissions will send instructions for accessing the student's account information. Please notify Midwestern University of any changes to the mailing address and e-mail address.*

All requests for withdrawing an application must be done in writing.

## Transfer Policy

The Post-Masters Doctor of Nurse Anesthesia Practice Completion (D.N.A.P.) degree program for Certified Registered Nurse Anesthetists (CRNAs) may elect to accept transfer students. Transfer students must apply to the program and if qualified, must participate in an admissions interview. The Admissions Committee must approve all transfer students and will determine the number of graduate transfer credits allowed.

# Technical Standards, DNAP Completion

## Technical Standards

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the college.

Candidates must be able to perform the following abilities and skills:

1. Observation: The candidate must be able to accurately make observations at a distance and close at hand, including those on a computer screen or electronic device. Observation necessitates the functional use of the sense of vision and sense of touch and is enhanced by the functional use of all of the other senses. The candidate must be able to accurately auscultate lung/breath, heart and bowel sounds to complete the curricular requirement to individually complete physical examination of a patient/client.
2. Communication: The candidate must be able to communicate in English, proficiently and sensitively in verbal and written form, and be able to perceive nonverbal communication.
3. Motor: Candidates must be able to coordinate both gross and fine muscular movements, maintain equilibrium and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control and eye-to-hand coordination to perform profession-specific skills and tasks. Candidates must be able to move at least 50 lbs. vertically and horizontally.
4. Intellectual, Conceptual, Integrative and Quantitative Abilities: The candidate must be able to problem solve, measure, calculate, reason, analyze, record and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
5. Behavioral and Social Attributes: The candidate must possess the emotional health required for full utilization of the candidate's intellectual abilities, the exercise of good judgment, the consistent, prompt completion of all responsibilities and the development of mature, sensitive and effective relationships. Candidates must be able to tolerate physically, mentally and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn are all personal qualities required during the educational process. The candidate must agree to participate in touching/palpating on the skin and being touched/palpated on the skin by individuals regardless of gender in all academic settings, including dental head/neck exams, including intra- and extra- oral examinations. These activities will take place in large and small group settings as directed by the Program's curricular requirements

Candidates are required to verify that the candidate understands and meets these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet the Technical Standards with accommodation, must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean and Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

# Doctor of Nurse Anesthesia Curriculum

Please note that information provided in the catalog does not establish a contractual relationship between MWU and the student. The Post-Master's Doctor of Nurse Anesthesia Practice Completion (D.N.A.P.) program reserves the right to alter its curriculum, however and whenever it deems appropriate.

Method of Delivery: Online.

Total Quarter Credits in the Professional Program: 45

## First Professional Year

### Fall Quarter

Course Code	Title	Credits
DNAP 1510	Foundations of Clinical Practice	4.0
DNAP 1511	Systems Thinking and Organizational Leadership	3.0
DNAP 1512	Scholarly Project I	4.0
<b>Sub-Total Credits</b>		<b>11.00</b>

### Winter Quarter

Course Code	Title	Credits
DNAP 1520	Healthcare Policy	3.0
DNAP 1521	Ethics and Informatics	3.0
DNAP 1522	Scholarly Project II	4.0
<b>Sub-Total Credits</b>		<b>10.00</b>

### Spring Quarter

Course Code	Title	Credits
DNAP 1530	Biostatistics and Research: Generating Evidence for Practice	4.0
DNAP 1531	Patient Safety and Health Promotion	3.0
DNAP 1532	Scholarly Project III	4.0
<b>Sub-Total Credits</b>		<b>11.00</b>

### Summer Quarter

Course Code	Title	Credits
DNAP 1540	Education Process and Research	3.0
DNAP 1541	Population Based Care	3.0
DNAP 1542	Scholarly Project IV	4.0
DNAP 1543	Healthcare Administration and Advanced Business Principles for the Anesthesia Professional	3.0
<b>Sub-Total Credits</b>		<b>13.00</b>
Total Credits		45

## Graduation Requirements

To qualify for graduation with a Doctor of Nurse Anesthesia Practice Completion (D.N.A.P.) degree from the Nurse Anesthesia D.N.A.P. Completion Program of Midwestern University, students must:

1. Follow an approved course of study approved by the program Education Committee.
2. Satisfactorily complete the required number of 45 credit hours, pass all courses with a cumulative GPA of 2.75 or higher, and achieve a "B-" or higher in all DNAPG courses.

3. Receive a favorable recommendation from the Nurse Anesthesia Program, Student Academic Review Committee, and the College of Health Sciences Student Promotion and Graduation Committee.
4. Be recommended for conferral of the doctoral degree by the University Faculty Senate.
5. Settle all financial accounts with the University.
6. Complete all graduation clearance requirements as instructed by the Office of the Registrar.

## Licensure and Certification Requirements

Students must have a current (unencumbered) licensure to practice as a Registered Nurse and Certified Registered Nurse Anesthetist in at least one legal jurisdiction in the United States or its territories.

## Nurse Anesthesia Program Calendar

### Summer 2025

Event	Class	Date
<b>Memorial Day *No Classes*</b>		<b>May 26, 2025</b>
Orientation	DNAP-III	May 27 - 30, 2025
Classes Begin	DNAP-II	June 2, 2025
Classes Resume	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	June 2, 2025
Last Day to Add/Drop Classes	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	June 6, 2025
<b>Juneteenth (Observed)</b>	<b>*No Classes*</b>	<b>June 19, 2025</b>
<b>Independence Day (Observed)</b>	<b>*No Classes*</b>	<b>July 4, 2025</b>
Last Day of Class	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	August 8, 2025
Quarterly Exams	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	August 11 - 15, 2025
Quarter Break	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	August 18 - 22, 2025
<b>Commencement CHS</b>	<b>DNAPE-III DNAPC</b>	<b>TBA</b>

### Fall 2025

Event	Class	Date
Orientation	DNAPC, DNAPE-I	August 18 - 20, 2025
Classes Begin	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	August 25, 2025
Last Day to Add/Drop Classes	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	August 29, 2025
<b>Labor Day</b>	<b>*No Classes*</b>	<b>September 1, 2025</b>
<b>White Coat Ceremony</b>		<b>September 27, 2025</b>
Last Day of Classes	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	October 31, 2025
Quarterly Exams	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	November 3 - 7, 2025
Thanksgiving Break	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	November 10 - 28, 2025

### Winter 2025

Event	Class	Date
Classes Begin	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	December 1, 2025
Last Day to Add/Drop Classes	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	December 5, 2025
Winter Break	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	December 22, 2025 - January 2, 2026
Classes Resume	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	January 5, 2026

Event	Class	Date
<b>Martin Luther King/ Jr. Day *No Classes*</b>		<b>January 19, 2026</b>
Last Day of Classes	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	February 20, 2026
Quarterly Exams	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	February 23 - 27, 2026
Spring Break	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	March 2 - 6, 2026

## Spring 2026

Event	Class	Date
Classes Begin	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	March 9, 2026
Last Day to Add/Drop Classes	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	March 13, 2026
Last Day of Classes	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	May 15, 2026
Quarterly Exams	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	May 18 - 22, 2026
<b>Memorial Day</b>	<b>*No Classes*</b>	<b>May 25, 2026</b>
Quarter Break	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	May 26 - 29, 2026
Commencement		June 3, 2026 9:00 a.m.

## Rotations

### DNAP III

Term	Rotation	Date
Summer	Rotation 1	June 2 - August 15, 2025
Fall	Rotation 2	August 25 - November 26, 2025
Winter	Rotation 3	December 1, 2025 - February 27, 2026
Spring	Rotation 4	March 9 - May 22, 2026

### DNAP II

Term	Rotation	Date
Summer	Rotation 5	June 2 - August 15, 2025
Fall	Rotation 6	August 25 - November 26, 2025

Last Revision 05/5/2025



## Faculty

**Shari M. Burns, Ed.D., CRNA**

University of Phoenix

DNAP Program Coordinator and Professor

**Joseph Bailon, DNP, CRNA**

University of Arizona

Program Director and Assistant Professor

## Doctor Of Nurse Anesthesia Practice Completion Program Courses

### DNAP 1510: Foundations of Clinical Practice

This course affords students the opportunity to evaluate and analyze their clinical or educational nurse anesthesia practice and determine strategies for improvement. Evidence derived from a substantive literature review forms the underpinnings for the improvement process for patients, populations, clinical or educational settings.

**Credits** 4.0

### DNAP 1511: Systems Thinking and Organizational Leadership

This course examines organizational management of local and national healthcare delivery systems. Examination of systems analysis frames leadership influence in the modern, diverse healthcare environment. The course also explores health and illness, anesthesia providers and other members of the healthcare team with emphasis on interdisciplinary approaches.

**Credits** 3.0

### DNAP 1512: Scholarly Project I

Scholarly Project I is the first of a 4-course sequence that introduces the student to the D.N.A.P. scholarly project. Students identify a clinical or educational problem that requires systematic inquiry to build a research utilization project or research study proposal. The problem and significance as well as the conceptual or theoretical framework and initial literature search are included. Quantitative and qualitative research methodologies as well as the research utilization process are examined.

**Credits** 4.0

### DNAP 1520: Healthcare Policy

Political advocacy is highly valued in the nurse anesthesia profession. This course analyzes issues and policies that affect nurse anesthesia practice and healthcare at local, state and national levels. Change theory and leadership models are examined in the context of how nurse anesthetists influence healthcare policy. The course includes interdisciplinary, intraprofessional and interprofessional models for examining healthcare policy. Leadership development to address and influence health policy development for patients and the profession is included.

**Credits** 3.0

### DNAP 1521: Ethics and Informatics

This course explores informatics and the use of technology including data identification, data collection, processing data management of data that supports nurse anesthesia practice and nurse anesthesia education. Ethical and legal issues surrounding patient information in the digital world are explored.

**Credits** 3.0

## **DNAP 1522: Scholarly Project II**

This scholarly project course focuses on completion of a substantive literature review. The literature is organized, analyzed, integrated and synthesized.

**Credits** 4.0

## **DNAP 1530: Biostatistics and Research: Generating Evidence for Practice**

Statistical analysis of qualitative and quantitative research designs is explored.

**Credits** 4.0

## **DNAP 1531: Patient Safety and Health Promotion**

Analyzes human error, patient safety and quality assurance using a collaborative model. The course also examines crisis resource management, simulation, and other aspects of anesthesia practice as related to risk management.

**Credits** 3.0

## **DNAP 1532: Scholarly Project III**

The course includes research study methodology consistent with the research question and/or aim of the scholarly project. Methodology addresses the specific type of study, measurement tools, data collection, data management and data analysis. For research utilization projects, a plan for evaluation of outcomes is included. Data analysis explores proposed methods for analyzing the study or project findings. Preparation of an IRB application is included.

**Credits** 4.0

## **DNAP 1540: Education Process and Research**

This course provides strategies in teacher/learner communication and application of educational concepts of curriculum, instruction, and evaluation. These fundamental concepts will facilitate the student to become familiar with the educational concepts of a didactic and/or clinical educator in a nurse anesthesia program. Course content includes curriculum development, instruction, and evaluation as well as reflection. Principles of teaching and learning applicable to the anesthesia didactic and clinical environment.

**Credits** 3.0

## **DNAP 1541: Population Based Care**

This course focuses on Anesthesia as it pertains to the family units, the aging population and anesthesia as a contributor to the larger health system.

**Credits** 3.0

## **DNAP 1542: Scholarly Project IV**

This is the final capstone course. A professional poster is completed based on the key elements of the study proposal or research utilization project. Students will submit the final product as a manuscript for publication, a poster at a local or national meeting, or as a platform presentation.

**Credits** 4.0

## **DNAP 1543: Healthcare Administration and Advanced Business Principles for the Anesthesia Professional**

This course provides a framework for starting and managing a business in the healthcare environment. It incorporates the preparation of a business plan including contract negotiation, legal considerations, financial planning and corporate structure, enabling the Nurse Anesthetist to successfully navigate the anesthesia marketplace.

**Credits** 3.0

# Doctor of Nurse Anesthesia Practice - Entry Into Practice

## Mission

The mission of the Midwestern University Doctor of Nurse Anesthesia Program is to educate nurses through academic and clinical experiences to prepare the students to become safe, professional, and competent nurse anesthesiologists who meet the anesthesia healthcare needs of society.

## Degree Description

The entry-into-practice Doctor of Nurse Anesthesia Practice (D.N.A.P.) is offered as a full-time thirty-six month (three-year) curriculum divided into three distinct phases: an online didactic phase (3 quarters), a face-to-face didactic phase (4 quarters), and a clinical phase (5 quarters). The initial online component introduces students to topics such as professional development, leadership, and healthcare policy.

Following the online component, the face-to-face didactic phase of the program provides a strong foundation of the basic sciences upon which the student will build a framework of basic and advanced principles of pharmacology, pathophysiology, and anesthesia knowledge and skills.

The clinical phase of the program begins in the second summer quarter of the program. Each clinical rotation is 8-weeks in duration. This phase provides students with the necessary hands-on experience to develop the knowledge, skills, and attitudes essential to the practice of nurse anesthesia in a variety of practice settings. Additionally, scholarly project and online didactic component coursework is integrated during the clinical rotations. All students may rotate at clinical sites that include but are not limited to: Arizona, California, Colorado, Louisiana, Montana, New Mexico, Ohio, Texas, Utah, and Washington State. These sites provide students with a broad scope of experiences in rural, urban, and suburban hospitals, as well as specialty rotations in cardiac surgery, pediatrics, obstetrics and neurosurgery. Thus, a student may be assigned to rotations in any combination of these states as needed to ensure the best quality set of clinical experiences. For a current list of the Program's clinical sites see Clinical Practicum I - VII under Course Descriptions or contact the Program at 623-572-3760. The Program adds new clinical sites on an ongoing basis. It will be necessary for students to make arrangements for transportation and lodging at these clinical sites. The University does not provide for the cost of transportation or lodging during the program.

Students who successfully complete the program will receive a Doctor of Nurse Anesthesia Practice degree.

## Accreditation

The Doctor of Nurse Anesthesia Practice Program is accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs (COA), 10275 W. Higgins Rd., Suite 906, Rosemont, IL 60018-5603, (224) 275-9130. Accreditation was granted for the period of October 15, 2021 through October 15, 2031. [www.coacrna.org](http://www.coacrna.org)

Midwestern University is accredited by The Higher Learning Commission, 230 South LaSalle Street, Suite 7- 500, Chicago, IL 60604-1413.

## Admissions

Admission to the Doctor of Nurse Anesthesia Practice (D.N.A.P.) - Entry into Practice program is considered on a competitive basis for prospective students who are registered nurses and hold a baccalaureate or graduate degree in nursing or an appropriate major with an unencumbered license

as a registered professional nurse and/or an advanced practice registered nurse in the United States or its territories. Applicants must also have a minimum of 1 year full-time work experience as a registered nurse in a critical care setting (see options below). Applicants will submit the initial application through the NursingCAS system. Applications are then reviewed by the Office of Admissions for completeness and referred to the Nurse Anesthesia Program Admissions Committee Chair to determine applicant eligibility for an interview. The Admissions Committee meets after the interviews and reviews the full application file for applicants who were interviewed.

The Admissions Committee will determine which applicants will be accepted. The Office of Admissions notifies each applicant in writing of the admission action/decision. Decisions on acceptance are made until the maximum enrollment for the Nurse Anesthesia Program is reached.

The Doctor of Nurse Anesthesia Practice (D.N.A.P.) Program uses a rolling admissions process. Completed applications are reviewed and decisions to interview individual candidates are made at regular intervals during the admission cycle. Interviews are conducted and the selection process of each candidate for admission is made until the cohort is filled. Typically, the applicant is notified of selection status within a day after the applicant's interview date, but this is subject to change.

## Admission Requirements

To be considered for admission to The Doctor of Nurse Anesthesia Practice (D.N.A.P.) Program at Midwestern University, students must submit the following documented evidence:

1. Minimum cumulative grade point average (GPA) of 3.00 on a 4.00 scale.
2. Minimum science GPA of 3.00 on a 4.00 scale.
  - Courses included in the calculation of the science GPA include anatomy, physiology, pharmacology, chemistry, physics, and microbiology.
3. Completion of a baccalaureate or graduate degree in nursing or an appropriate major, granted by a regionally accredited U.S. college or university.
4. Satisfactory completion with a C or better of all prerequisite coursework prior to the application (grades of C- are not acceptable).
5. Licensure to practice as a registered nurse: an unencumbered/unrestricted license to practice in at least one legal jurisdiction in the United States or its territories. The applicant possesses no previous sanctions or restrictions on the RN license.
6. Minimum of one year of full-time critical care registered nursing experience prior to application. Critical care experience includes all types of Adult ICU (Intensive Care Unit), Pediatric ICU, and Emergency Room. Neonatal intensive care unit experience does not meet this requirement. Experience should include management of mechanical ventilation, invasive monitoring, and vasoactive medication infusions.
7. Demonstration of sincere understanding of and interest in nurse anesthesiology.
8. Oral and written communication skills necessary to interact with faculty, patients, and colleagues.

## Prerequisite Courses

Course	Sem. Hrs.	Qtr. Hrs
Anatomy & Physiology	8	12
General Chemistry (1 course)	3	4
<ul style="list-style-type: none"> <li>• Anatomy recommended within 5 years</li> <li>• Biochemistry is not required, but strongly recommended</li> </ul>		

## Application Process and Deadlines

To be considered for admission into the Doctor of Nurse Anesthesia Practice Program, applicants must complete an application through the NursingCAS portal (see link below).

[Apply here](#)

Nursing CAS Application: Application portal in NursingCAS opens September 1st and closes January 1st. Please refer to the NursingCAS application instructions for specific details about completing the application, required documents, and processing time. Due to the large number of applications and the limited number of seats available, applicants are strongly encouraged to complete their NursingCAS application early in the cycle.

All requests for withdrawal of an application must be done in writing via e-mail, fax or letter submitted to the Office of Admissions.

## Transfer Policy

The Doctor of Nurse Anesthesia Practice Program may elect to accept transfer students during the didactic phase of the program. Transfer students must apply to the program and, if qualified, must participate in an admission interview. The Admissions Committee must approve all transfer students and will determine the number of graduate transfer credits allowed. In addition, a letter from a student's former program director must accompany the application explaining the reason for the transfer.

Transfer students are not accepted during the clinical phase of the program.

# Technical Standards, DNAP Entry into Practice

## Technical Standards

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the college.

Candidates must be able to perform the following abilities and skills:

1. Observation: The candidate must be able to accurately make observations at a distance and close at hand, including those on a computer screen or electronic device. Observation necessitates the functional use of the sense of vision and sense of touch and is enhanced by the functional use of all of the other senses. The candidate must be able to accurately auscultate lung/breath, heart and bowel sounds to complete the curricular requirement to individually complete a physical examination of a patient/client.
2. Communication: The candidate must be able to communicate in English, proficiently and sensitively in verbal and written form, and be able to perceive nonverbal communication.
3. Motor: Candidates must be able to coordinate both gross and fine muscular movements, maintain equilibrium and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control and eye-to-hand coordination to perform profession-specific skills and tasks. Candidates must be able to move at least 50 lbs. vertically and horizontally.
4. Intellectual, Conceptual, Integrative and Quantitative Abilities: The candidate must be able to problem solve, measure, calculate, reason, analyze, record and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
5. Behavioral and Social Attributes: The candidate must possess the emotional health required for full utilization of the candidate's intellectual abilities, the exercise of good judgment, the consistent, prompt completion of all responsibilities and the development of mature, sensitive and effective relationships. Candidates must be able to tolerate physically, mentally and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of noisy, complex environments and uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn are all personal qualities required during the educational process. The candidate must agree

to participate in touching/palpating on the skin and being touched/palpated on the skin by individuals regardless of gender in all academic settings, including dental head/neck exams, including intra- and extra-oral examinations. These activities will take place in large and small group settings as directed by the Program's curricular requirements.

Candidates are required to verify that the candidate understands and meets these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet the Technical Standards with accommodation, must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean and Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

## Graduation Requirements

To qualify for the Doctor of Nurse Anesthesia Practice (D.N.A.P.) Program, students must:

1. Follow an approved course of study acceptable to the Program Student Academic Review Committee.
2. Satisfactorily complete the required number of 181 credit hours, pass all courses with a cumulative GPA of 2.75 or higher, and achieve a "B-" or higher in all DNAPG courses.
3. Receive a favorable recommendation from the Nurse Anesthesia Program, Student Academic Review Committee, and the College of Health Sciences Student Promotion and Graduation Committee.
4. Be recommended for conferral of the doctoral degree by the University Faculty Senate.
5. Settle all financial accounts with the University.
6. Complete all graduation clearance requirements as instructed by the Office of the Registrar

## Licensure and Certification Requirements

Students must have a current unrestricted and unencumbered Arizona registered nursing license or a current unrestricted and unencumbered license from one of the states in the nursing compact at the time the student enters the program. Students from a non-compact state will have to obtain licensure in Arizona. During the didactic year, students will apply for and secure licenses for all states required for rotations. Additional state nursing licensing costs are the responsibility of the student. ACLS and PALS certification are required and are the responsibility of the student.

Midwestern University's Nurse Anesthesia program meets the educational requirements to become certified to practice as a certified registered nurse anesthesiologist in the following states and US territories: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, District of Columbia, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, U.S. Virgin Islands, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

Each student should check the additional requirements to obtain certification in the state, district or territory in which the student intends to pursue employment.

# Doctor of Nurse Anesthesia - Entry Into Practice 36 Month Curriculum

Please note that information provided in the catalog does not establish a contractual relationship between MWU and the student. The Nurse Anesthesia Program reserves the right to alter its curriculum, however and whenever it deems appropriate.

\*The following curriculum applies to the 2027 and 2028 graduating classes. Students graduating in 2025 and 2026 should refer to the previous catalog.

Total Quarter Credits in the Professional Program: 181

## First Professional Year

### Fall Quarter

Course Code	Title	Credits
NAPDG 1510	Foundations of Clinical Practice	4.0
NAPDG 1511	Systems Thinking and Organizational Leadership	3.0
NAPDG 1540	Education Process and Research	3.0
NAPDG 1570	Professional Aspects of Nurse Anesthesia I	2.0
<b>Sub-Total Credits</b>		<b>12.00</b>

### Winter Quarter

Course Code	Title	Credits
NAPDG 1521	Ethics and Informatics	3.0
NAPDG 1530	Biostatistics and Research: Generating Evidence for Practice	4.0
NAPDG 1541	Population Based Care	3.0
NAPDG 1571	Professional Aspects of Nurse Anesthesia II	2.5
<b>Sub-Total Credits</b>		<b>12.50</b>

### Spring Quarter

Course Code	Title	Credits
NAPDG 1520	Healthcare Policy	3.0
NAPDG 1531	Patient Safety and Health Promotion	3.0
NAPDG 1543	Healthcare Administration and Advanced Business Principles for the Anesthesia Professional	3.0
NAPDG 1560	Research Methods	3.0
<b>Sub-Total Credits</b>		<b>12.00</b>

### Summer Quarter

Course Code	Title	Credits
NAPDG 1500	Introduction to Principles & Pathophysiology of Anesthesia	2.0
BIOCG 1550	Biochemistry for Nurse Anesthetists	4.0
ANATG 1552	Human Anatomy and Embryology (with Gross Anatomy Lab)	7.0
<b>Sub-Total Credits</b>		<b>13.00</b>



## Second Professional Year

### Fall Quarter

Course Code	Title	Credits
NAPDG 1640	Advanced Principles & Pathophysiology of Anesthesia I	4.0
NAPDG 1640L	Advanced PPOA I	2.0
NAPDG 1651	Advanced Pharmacology of Anesthesia I	4.0
COREG 1660F	Interprofessional Healthcare	0.5
PASSG 1668	Advanced Physical Assessment Across the Lifespan	4.0
PHYSG 1673	Human Physiology I	4.0
<b>Sub-Total Credits</b>		<b>18.50</b>

### Winter Quarter

Course Code	Title	Credits
NAPDG 1641	Advanced Principles & Pathophysiology of Anesthesia II	6.0
NAPDG 1641L	Advanced PPOA II	2.0
NAPDG 1652	Advanced Pharmacology of Anesthesia II	4.0
COREG 1670F	Interprofessional Healthcare	0.5
PHYSG 1684	Human Physiology II	4.0
<b>Sub-Total Credits</b>		<b>16.50</b>

### Spring Quarter

Course Code	Title	Credits
NAPDG 1630	Advanced Physiology and Pathophysiology Across the Lifespan	3.0
NAPDG 1642	Advanced Principles & Pathophysiology of Anesthesia III	6.0
NAPDG 1642L	Advanced PPOA III	2.0
NAPDG 1653	Advanced Pharmacology of Anesthesia III	4.0
COREG 1680F	Interprofessional Healthcare	0.5
<b>Sub-Total Credits</b>		<b>15.50</b>

### Summer Quarter

Course Code	Title	Credits
NAPDG 1612	Scholarly Project I	4.0
NAPDG 1615	Clinical Rotation I	11.0
NAPDG 1620	Clinical Rotation Didactic Component I	2.0
<b>Sub-Total Credits</b>		<b>17.00</b>

## Third Professional year

### Fall Quarter

Course Code	Title	Credits
NAPDG 1712	Scholarly Project II	4.0
NAPDG 1716	Clinical Rotation II	11.0
NAPDG 1721	Clinical Rotation Didactic Component II	2.0
<b>Sub-Total Credits</b>		<b>17.00</b>

### Winter Quarter

Course Code	Title	Credits
NAPDG 1717	Clinical Rotation III	11.0
NAPDG 1722	Clinical Rotation Didactic Component III	2.0
NAPDG 1732	Scholarly Project III	4.0
<b>Sub-Total Credits</b>		<b>17.00</b>

## Spring Quarter

Course Code	Title	Credits
NAPDG 1718	Clinical Rotation IV	11.0
NAPDG 1723	Clinical Rotation Didactic Component IV	2.0
NAPDG 1742	Scholarly Project IV	4.0
<b>Sub-Total Credits</b>		<b>17.00</b>

## Summer Quarter

Course Code	Title	Credits
NAPDG 1719	Clinical Rotation V	11.0
NAPDG 1724	Clinical Rotation Didactic Component V	2.0
<b>Sub-Total Credits</b>		<b>13.00</b>
Total Credits		181

# Nurse Anesthesia Program Calendar

## Summer 2025

Event	Class	Date
<b>Memorial Day *No Classes*</b>		<b>May 26, 2025</b>
Orientation	DNAP-III	May 27 - 30, 2025
Classes Begin	DNAP-II	June 2, 2025
Classes Resume	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	June 2, 2025
Last Day to Add/Drop Classes	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	June 6, 2025
<b>Juneteenth (Observed)</b>	<b>*No Classes*</b>	<b>June 19, 2025</b>
<b>Independence Day (Observed)</b>	<b>*No Classes*</b>	<b>July 4, 2025</b>
Last Day of Class	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	August 8, 2025
Quarterly Exams	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	August 11 - 15, 2025
Quarter Break	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	August 18 - 22, 2025
<b>Commencement CHS</b>	<b>DNAPE-III DNAPC</b>	<b>TBA</b>

## Fall 2025

Event	Class	Date
Orientation	DNAPC, DNAPE-I	August 18 - 20, 2025
Classes Begin	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	August 25, 2025
Last Day to Add/Drop Classes	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	August 29, 2025
<b>Labor Day</b>	<b>*No Classes*</b>	<b>September 1, 2025</b>
<b>White Coat Ceremony</b>		<b>September 27, 2025</b>
Last Day of Classes	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	October 31, 2025
Quarterly Exams	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	November 3 - 7, 2025
Thanksgiving Break	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	November 10 - 28, 2025

## Winter 2025

Event	Class	Date
Classes Begin	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	December 1, 2025
Last Day to Add/Drop Classes	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	December 5, 2025

Event	Class	Date
Winter Break	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	December 22, 2025 - January 2, 2026
Classes Resume	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	January 5, 2026
<b>Martin Luther King/ Jr. Day *No Classes*</b>		<b>January 19, 2026</b>
Last Day of Classes	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	February 20, 2026
Quarterly Exams	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	February 23 - 27, 2026
Spring Break	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	March 2 - 6, 2026

## Spring 2026

Event	Class	Date
Classes Begin	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	March 9, 2026
Last Day to Add/Drop Classes	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	March 13, 2026
Last Day of Classes	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	May 15, 2026
Quarterly Exams	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	May 18 - 22, 2026
<b>Memorial Day</b>	<b>*No Classes*</b>	<b>May 25, 2026</b>
Quarter Break	DNAPC, DNAPE-I, DNAPE-II, DNAPE-III	May 26 - 29, 2026
Commencement		June 3, 2026 9:00 a.m.

## Rotations

### DNAP III

Term	Rotation	Date
Summer	Rotation 1	June 2 - August 15, 2025
Fall	Rotation 2	August 25 - November 26, 2025
Winter	Rotation 3	December 1, 2025 - February 27, 2026
Spring	Rotation 4	March 9 - May 22, 2026

### DNAP II

Term	Rotation	Date
Summer	Rotation 5	June 2 - August 15, 2025
Fall	Rotation 6	August 25 - November 26, 2025

Last Revision 05/5/2025

## Faculty

**Joseph Bailon, DNP, CRNA**

University of Arizona  
Program Director and Assistant Professor

**Angela Burgess, DNAP, MSN, CRNA**

Midwestern University  
Assistant Professor

**Rodney Fisher, Ph.D., CRNA**

University of Kansas Medical Center  
Professor

**Vincent Ford, DNAP, CRNA**

Midwestern University  
Assistant Professor

**David Good, DNP, CRNA**

University of New Mexico  
Assistant Professor

**F. Scott Imus, Ed.D., CRNA**

University of Phoenix  
Associate Professor

**Kelly Ann Larsen, DNAP, CRNA**

Midwestern University Assistant Professor

**Morgan Morrow, DNAP, CRNA**

Midwestern University  
Associate Professor

**Lee Ranalli, DNP, CRNA**

University of Alabama  
Associate Professor

**Melissa Ranalli, DNP, CRNA**

University of Alabama  
Associate Professor

**Janet Vaughn, DNAP, MS, CRNA**

Midwestern University  
Program Clinical Coordinator and Assistant Professor

**Deanna Villalino, DNAP, CRNA**

Midwestern University  
Assistant Professor

## Doctor Of Nurse Anesthesia Practice Entry Into Practice Courses

### ANATG 1552: Human Anatomy and Embryology (with Gross Anatomy Lab)

This course presents lectures and laboratory (human cadaver dissection and prosection, microscopy) sessions emphasizing the embryologic development of the human body, the relationship between body structure and function, and the use of gross human anatomy in physical diagnosis.

**Credits** 7.0

### BIOCG 1550: Biochemistry for Nurse Anesthetists

Biochemistry is concerned with the functioning of cellular constituents at the molecular level in health and how their functions are altered in disease. Biochemistry is fundamental to understanding all branches of the life sciences. Topics include cellular energy metabolism, signal transduction, cell biology, medical genetics, complete blood count, anemias, diabetes, and hemostasis tests.

**Credits** 4.0

## **COREG 1660F: Interprofessional Healthcare**

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

## **COREG 1670F: Interprofessional Healthcare**

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

## **COREG 1680F: Interprofessional Healthcare**

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

## **NAPDG 1300: Independent Study**

This independent study course provides an opportunity for didactic, simulation or clinical inquiry to supplement the required course of study.

**Credits** 0.5

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## **NAPDG 1500: Introduction to Principles & Pathophysiology of Anesthesia**

The course introduces the student to the scope and complexity of anesthesia management. Introduction to Principles and Pathophysiology of Anesthesia focuses on general principles, related to anesthesia equipment, monitoring, perioperative patient assessment, basic anesthesia care, documentation of care, airway management, regional anesthesia, and methods for pain management.

**Credits** 2.0

## **NAPDG 1510: Foundations of Clinical Practice**

This course affords students the opportunity to evaluate and analyze clinical or educational nurse anesthesia practice and determine strategies for improvement. Evidence derived from a substantive literature review forms the underpinnings for the improvement process for patients, populations, clinical or educational settings.

**Credits** 4.0

## **NAPDG 1511: Systems Thinking and Organizational Leadership**

This course examines organizational management of local and national healthcare delivery systems. Examination of systems analysis frames leadership influence in the modern, diverse healthcare environment. The course also explores health and illness, anesthesia providers and other members of the healthcare team with emphasis on interdisciplinary approaches.

**Credits** 3.0

## **NAPDG 1520: Healthcare Policy**

Political advocacy is highly valued in the nurse anesthesia profession. This course analyzes issues and policies that affect nurse anesthesia practice and healthcare at local, state, and national levels. Change theory and leadership models are examined in the context of how nurse anesthetists influence healthcare policy. The course includes interdisciplinary, intraprofessional and interprofessional models for examining healthcare policy. Leadership development to address and influence health policy development for patients and the profession is included.

**Credits** 3.0

## **NAPDG 1521: Ethics and Informatics**

This course explores informatics and the use of technology including data identification, data collection, processing data that supports nurse anesthesia practice and nurse anesthesia education. Ethical and legal issues surrounding patient information in the digital world are explored.

**Credits** 3.0

## **NAPDG 1530: Biostatistics and Research: Generating Evidence for Practice**

Statistical analysis of qualitative and quantitative research designs is explored.

**Credits** 4.0

## **NAPDG 1531: Patient Safety and Health Promotion**

This course helps students analyze human error, patient safety and quality assurance using a collaborative model. The course also examines crisis resource management, simulation, and other aspects of anesthesia practice as related to risk management.

**Credits** 3.0

## **NAPDG 1540: Education Process and Research**

This course provides strategies in teacher/learner communication and application of education concepts of curriculum, instruction, and evaluation as well as reflection. These fundamental concepts and principles will facilitate the student to become familiar with the educational concepts of a didactic and/or clinical educator in a nurse anesthesia program. Course content includes curriculum development, instruction, and evaluation.

**Credits** 3.0

## **NAPDG 1541: Population Based Care**

This course focuses on anesthesia as it pertains to the family units, the aging population and anesthesia as a contributor to the larger health system.

**Credits** 3.0

## **NAPDG 1543: Healthcare Administration and Advanced Business Principles for the Anesthesia Professional**

This course provides a framework for starting and managing a business in the healthcare environment. It incorporates the preparation of a business plan including contract negotiation, legal considerations, financial planning and corporate structure, enabling the Nurse Anesthetist to successfully navigate the anesthesia marketplace.

**Credits** 3.0

## **NAPDG 1560: Research Methods**

This course provides an overview of research designs used in basic science, applied, and descriptive research. The course is intended to teach research skills used in all of the health professions and to aid in the interpretation of published research reports.

**Credits** 3.0

## **NAPDG 1570: Professional Aspects of Nurse Anesthesia I**

This course will present material concerning professional issues surrounding the practice of Nurse Anesthesia. The student will be introduced to the professional associations of the nurse anesthesia profession. Also included are the topics of wellness and cultural diversity.

**Credits** 2.0

## **NAPDG 1571: Professional Aspects of Nurse Anesthesia II**

This course continues to present material concerning professional issues surrounding the practice of Nurse Anesthesia. Other topics addressed include the business practice of anesthesia, professional regulation and credentialing, healthcare policy, and wellness and addiction.

**Credits** 2.5

### **Prerequisites**

[NAPDG 1570](#) Professional Aspects of Nurse Anesthesia I

## **NAPDG 1612: Scholarly Project I**

Scholarly Project I is the first of a 4-course sequence that includes the elements of the Doctor of Nurse Anesthesia Practice (DNAP) scholarly project. This course introduces the student to the scholarly project. Students identify a clinical, educational, administrative, or professional problem that requires systematic inquiry to build a research utilization or quality improvement project. The problem and significance as well as the conceptual or theoretical framework and initial literature search to determine existing evidence are included. A proposal outline and timeline are developed. The research utilization and quality improvement processes is examined in this course.

**Credits** 4.0

## **NAPDG 1615: Clinical Rotation I**

Students will begin the clinical practicum in the summer of their second year in the program. Students will rotate to a variety of hospitals in Arizona, California, Colorado, Florida, Louisiana, Montana, Nevada, New Mexico, Ohio, Texas, Utah, and Washington State. These rotations will include specialty rotations in cardiac surgery, neurosurgery, pediatrics, and obstetrics.

**Credits** 11.0

### **Prerequisites**

Completion of all didactic course work through Spring quarter of second year.

## **NAPDG 1620: Clinical Rotation Didactic Component I**

This course comprises the didactic component of NAPDG 1620 and NAPDG 1721 through NAPDG 1724. The student's retention of didactic information will be evaluated and a professional case report will be presented by the student.

**Credits** 2.0

### **Prerequisites**

Completion of all didactic course work through Spring quarter of second year

## **NAPDG 1630: Advanced Physiology and Pathophysiology Across the Lifespan**

This course focuses on advanced physiology and pathophysiology across the human lifespan. Each content area will explore normal physiology and abnormal pathophysiology that may impact each of the major body systems. Knowledge learned from the course will help guide clinical decision-making and overall management of patient care.

**Credits** 3.0

## **NAPDG 1640: Advanced Principles & Pathophysiology of Anesthesia I**

This course continues to build upon the scope and complexity of anesthesia management taught in the Introduction course. Advanced Principles and Pathophysiology of Anesthesia I focuses on general principles of basic and advanced airway management techniques, fluid and blood replacement therapy, EKG, basic cardiac and pulmonary physiology and pathophysiology, pain theory, radiology, and positioning.

**Credits** 4.0

### **Prerequisites**

[NAPDG 1500](#) Introduction to Principles & Pathophysiology of Anesthesia

## **NAPDG 1640L: Advanced PPOA I**

These laboratory courses accompany the Advanced Principles and Pathophysiology of Anesthesia I, II, and III course series. The content focuses on the application of skills and knowledge needed to conduct the administration of general, regional and MAC anesthesia. Application of the theoretical principles to individual patient scenarios is emphasized. Students complete the course series in the spring with weekly high-fidelity simulation to apply previous knowledge to simulated real-life scenarios to develop critical thinking skills. Students will also explore current research regarding anesthesia practice and novel anesthesia techniques.

**Credits** 2.0

## **NAPDG 1641: Advanced Principles & Pathophysiology of Anesthesia II**

These courses continue to build upon the scope and complexity of anesthesia management over a wide range of patient ages, co-morbidities, procedures, and anesthesia techniques. Advanced Principles and Pathophysiology of Anesthesia II introduces the management of patients with coexisting disease that complicate anesthesia management, and the anesthetic management of specific types of procedures. The course also introduces the principles of regional anesthesia. The final course ([NAPDG 1642](#)) in this series focuses on more complex anesthesia management scenarios including the specialty practice of cardiac, neurologic, obstetric, and pediatric anesthesia.

**Credits** 6.0



## **NAPDG 1641L: Advanced PPOA II**

These laboratory courses accompany the Advanced Principles and Pathophysiology of Anesthesia I, II, and III course series. The content focuses on the application of skills and knowledge needed to conduct the administration of general, regional and MAC anesthesia. Application of the theoretical principles to individual patient scenarios is emphasized. Students complete the course series in the spring with weekly high-fidelity simulation to apply previous knowledge to simulated real-life scenarios to develop critical thinking skills. Students will also explore current research regarding anesthesia practice and novel anesthesia techniques.

**Credits** 2.0

## **NAPDG 1642: Advanced Principles & Pathophysiology of Anesthesia III**

These courses continue to build upon the scope and complexity of anesthesia management over a wide range of patient ages, co-morbidities, procedures, and anesthesia techniques. Advanced Principles and Pathophysiology of Anesthesia II introduces the management of patients with coexisting disease that complicate anesthesia management, and the anesthetic management of specific types of procedures. The course also introduces the principles of regional anesthesia. The final course ([NAPDG 1642](#)) in this series focuses on more complex anesthesia management scenarios including the specialty practice of cardiac, neurologic, obstetric, and pediatric anesthesia.

**Credits** 6.0

## **NAPDG 1642L: Advanced PPOA III**

These laboratory courses accompany the Advanced Principles and Pathophysiology of Anesthesia I, II, and III course series. The content focuses on the application of skills and knowledge needed to conduct the administration of general, regional and MAC anesthesia. Application of the theoretical principles to individual patient scenarios is emphasized. Students complete the course series in the spring with weekly high-fidelity simulation to apply previous knowledge to simulated real-life scenarios to develop critical thinking skills. Students will also explore current research regarding anesthesia practice and novel anesthesia techniques.

**Credits** 2.0

## **NAPDG 1651: Advanced Pharmacology of Anesthesia I**

These courses focus on drugs and delivery systems used for anesthesia. The major emphasis is on inhalational agents, local anesthetics, muscle relaxants and reversal agents, narcotics and induction agents. General principles of drug action, drug dynamics and kinetics, toxicities and therapeutic uses are included for all drug groups. Students are exposed to drugs affecting major organ systems of the body. Applications using real anesthesia scenarios are included to translate pharmacology theory to anesthesia practice. Drug calculations, conversion, preparing and administering medications, IV fluid management, documentation, and anesthetic planning are included.

**Credits** 4.0

## **NAPDG 1652: Advanced Pharmacology of Anesthesia II**

These courses focus on drugs and delivery systems used for anesthesia. The major emphasis is on inhalational agents, local anesthetics, muscle relaxants and reversal agents, narcotics and induction agents. General principles of drug action, drug dynamics and kinetics, toxicities and therapeutic uses are included for all drug groups. Students are exposed to drugs affecting major organ systems of the body. Applications using real anesthesia scenarios are included to translate pharmacology theory to anesthesia practice. Drug calculations, conversion, preparing and administering medications, IV fluid management, documentation, and anesthetic planning are included.

**Credits** 4.0

## **NAPDG 1653: Advanced Pharmacology of Anesthesia III**

These courses focus on drugs and delivery systems used for anesthesia. The major emphasis is on inhalational agents, local anesthetics, muscle relaxants and reversal agents, narcotics and induction agents. General principles of drug action, drug dynamics and kinetics, toxicities and therapeutic uses are included for all drug groups. Students are exposed to drugs affecting major organ systems of the body. Applications using real anesthesia scenarios are included to translate pharmacology theory to anesthesia practice. Drug calculations, conversion, preparing and administering medications, IV fluid management, documentation, and anesthetic planning are included.

**Credits** 4.0

## **NAPDG 1712: Scholarly Project II**

This scholarly project course focuses on a substantive literature review. The literature is organized, analyzed, and integrated to prepare for synthesis. The written literature review is submitted to the Scholarly Project Advisory Team for review. Following the review, the student completes revisions.

**Credits** 4.0

### **Prerequisites**

Successful completion of [NAPDG 1612](#) Scholarly Project I

## **NAPDG 1716: Clinical Rotation II**

Students will begin the clinical practicum in the summer of their second year in the program. Students will rotate to a variety of hospitals in Arizona, California, Colorado, Florida, Louisiana, Montana, Nevada, New Mexico, Ohio, Texas, Utah, and Washington State. These rotations will include specialty rotations in cardiac surgery, neurosurgery, pediatrics, and obstetrics.

**Credits** 11.0

### **Prerequisites**

Completion of all didactic course work through Spring quarter of second year; successful completion of previous clinical rotation.

## **NAPDG 1717: Clinical Rotation III**

Students will begin the clinical practicum in the summer of their second year in the program. Students will rotate to a variety of hospitals in Arizona, California, Colorado, Florida, Louisiana, Montana, Nevada, New Mexico, Ohio, Texas, Utah, and Washington State. These rotations will include specialty rotations in cardiac surgery, neurosurgery, pediatrics, and obstetrics.

**Credits** 11.0

### **Prerequisites**

Completion of all didactic course work through Spring quarter of second year; successful completion of previous clinical rotation.

## **NAPDG 1718: Clinical Rotation IV**

Students will begin the clinical practicum in the summer of their second year in the program. Students will rotate to a variety of hospitals in Arizona, California, Colorado, Florida, Louisiana, Montana, Nevada, New Mexico, Ohio, Texas, Utah, and Washington State. These rotations will include specialty rotations in cardiac surgery, neurosurgery, pediatrics, and obstetrics.

**Credits** 11.0

### **Prerequisites**

Completion of all didactic course work through Spring quarter of second year; successful completion of previous clinical rotation.

## **NAPDG 1719: Clinical Rotation V**

Students will begin the clinical practicum in the summer of their second year in the program. Students will rotate to a variety of hospitals in Arizona, California, Colorado, Florida, Louisiana, Montana, Nevada, New Mexico, Ohio, Texas, Utah, and Washington State. These rotations will include specialty rotations in cardiac surgery, neurosurgery, pediatrics, and obstetrics.

**Credits** 11.0

### **Prerequisites**

Completion of all didactic course work through Spring quarter of second year; successful completion of previous clinical rotation.

## **NAPDG 1721: Clinical Rotation Didactic Component II**

This course comprises the didactic component of [NAPDG 1620](#) and NAPDG 1721 through NAPDG 1724. The student's retention of didactic information will be evaluated and a professional case report will be presented by the student.

**Credits** 2.0

### **Prerequisites**

Completion of all didactic course work through Spring quarter of second year; successful completion of previous Clinical Rotation Didactic Component class.

## **NAPDG 1722: Clinical Rotation Didactic Component III**

This course comprises the didactic component of [NAPDG 1620](#) and [NAPDG 1721](#) through NAPDG 1724. The student's retention of didactic information will be evaluated and a professional case report will be presented by the student.

**Credits** 2.0

### **Prerequisites**

Completion of all didactic course work through Spring quarter of second year; successful completion of previous Clinical Rotation Didactic Component class.

## **NAPDG 1723: Clinical Rotation Didactic Component IV**

This course comprises the didactic component of [NAPDG 1620](#) and [NAPDG 1721](#) through NAPDG 1724. The student's retention of didactic information will be evaluated and a professional case report will be presented by the student.

**Credits** 2.0

### **Prerequisites**

Completion of all didactic course work through Spring quarter of second year; successful completion of previous Clinical Rotation Didactic Component class.

## **NAPDG 1724: Clinical Rotation Didactic Component V**

This course comprises the didactic component of [NAPDG 1620](#) and [NAPDG 1721](#) through NAPDG 1724. The student's retention of didactic information will be evaluated and a professional case report will be presented by the student.

**Credits** 2.0

### **Prerequisites**

Completion of all didactic course work through Spring quarter of second year; successful completion of previous Clinical Rotation Didactic Component class.

## **NAPDG 1732: Scholarly Project III**

In this third scholarly project course, a proposed methodology that is consistent with the research utilization or quality improvement processes is developed. The course includes research study methodology consistent with the research question and/or aim of the scholarly project. Methodology addresses the specific type of study design and synthesis of the literature to explore the problem and develop solutions. An analysis and synthesis of the evidence is completed. A plan for evaluation of expected outcomes is also developed for the project. The written analysis and synthesis of the literature is submitted to the Scholarly Project Advisory Team for review. Following the review, the student completes revisions.

**Credits** 4.0

### **Prerequisites**

Successful completion of [NAPDG 1712](#) Scholarly Project II

## **NAPDG 1742: Scholarly Project IV**

This is the final scholarly project course. The written research utilization or quality improvement project is revised and completed following approval of the Scholarly Project Advisory Team. Plans for dissemination of the project are formulated and shared with the communities of interest. A professional poster is completed based on the key elements of the research utilization or quality improvement project. Presentation of the final scholarly product to the faculty, DNAP degree nurse anesthesia students and invited guests is required. Students may submit the final product as a manuscript for publication, a poster at a local or national meeting, or as a platform presentation.

**Credits** 4.0

### **Prerequisites**

Successful completion of [NAPDG 1732](#) Scholarly Project III

## **PASSG 1668: Advanced Physical Assessment Across the Lifespan**

This course is designed to teach the student the art and technique of physical assessment. Course content includes lectures and reading assignments covering normal and abnormal physical findings. In addition, there are weekly physical exam laboratory sessions designed to provide the student with hands-on practice in exam techniques. At the conclusion of the course the student will be expected to pass a written final exam and satisfactorily perform a complete physical examination.

**Credits** 4.0

## **PHYSG 1673: Human Physiology I**

In this two-quarter series, students are introduced through didactic instruction and clinical case sessions to the basic physiologic principles that underline the normal function of the various organs and organ systems. These core principles provide the foundation through which the student develops an understanding of health in physiologic terms and appreciation of diverse regulatory processes that maintain the homeostasis of the human body.

**Credits** 4.0

## **PHYSG 1684: Human Physiology II**

In this two-quarter series, students are introduced through didactic instruction and clinical case sessions to the basic physiologic principles that underline the normal function of the various organs and organ systems. These core principles provide the foundation through which the student develops an understanding of health in physiologic terms and appreciation of diverse regulatory processes that maintain the homeostasis of the human body.

**Credits** 4.0

# Clinical Psychology Program

## Mission

The Midwestern University Doctor of Psychology (Psy.D.) in Clinical Psychology Program educates students in the general practice of evidence-based clinical psychology serving a diverse population.

## Accreditation

The Clinical Psychology Program is accredited by the American Psychological Association (APA). Clinical Psychology accreditation information can be obtained from the Commission on Accreditation of the American Psychological Association, 750 First Street NE; Washington, DC 20002-4242. Phone: 202/336-5979. Website: <http://www.apa.org/ed/accreditation/index.aspx>.

Midwestern University is accredited by The Higher Learning Commission, 230 South LaSalle Street, Suite 7- 500, Chicago, IL 60604-1413; 800/621-7440.

## Degree Description

The Clinical Psychology (Psy.D.) Program emphasizes a broad and general training in psychology, through which students will develop the essential diagnostic, therapeutic, and consultative skills for a successful career as a Clinical Psychologist. Because the Clinical Psychology Program is at a healthcare university, students have the opportunity to interact with many healthcare professionals. As part of an interprofessional approach, training provides opportunities for professional interaction and collaboration with other health care professionals through various formal and informal activities such as research forums and community outreach and involvement activities.

The Midwestern University Clinical Psychology Program's central purpose is to train students using a Practitioner-Scholar model of training through an academic curriculum designed to integrate discipline- specific knowledge in psychology and theory with the practice and delivery of evidenced-based psychological interventions, diagnostics, assessments, and scholarship. Training and education within the program emphasizes the application of psychological knowledge and skills and the integration between science and practice in a manner that is respectful and appreciative of diversity and contextual factors.

## Program Aim

To provide broad and general training in clinical psychology that is empirically-based and diversity-informed to be able to practice as health service psychologists who deliver psychological services in intervention and assessment in a manner consistent with accepted ethical and legal practices; account for appropriate diversity and contextual factors in application; and incorporate scientific and evidentiary knowledge in practice using accepted profession wide competencies and discipline specific knowledge.

## Program Competencies

The Program assesses student competency using a portfolio-based system (the Comprehensive Assessment Method in Psychology [CAMP]) to evaluate work samples throughout the Program for demonstrations of competency. The CAMP serves as the Program's focal point for information regarding its effectiveness in training students on the nine Health Service Psychology Profession-wide Competencies outlined in the Standards of Accreditation for Health Service Psychology approved by the American Psychological Association in 2015. These areas include:

- Research
- Ethical and legal standards

- Individual and cultural diversity
- Professional values, attitudes, and behaviors
- Communication and interpersonal skills
- Assessment
- Intervention
- Supervision
- Consultation and interprofessional/interdisciplinary skills.

The profession-wide competencies demonstrate functional abilities and skills essential to the professional practice of health service psychology. CAMP was developed to evaluate competency through portfolios of student work samples, such as literature reviews, intervention tapes, and testing reports. Many of the CAMP assignments are included in course requirements and are therefore reflected in course grades. Course grades provide a general measure of developmental progress, knowledge, and skills, while CAMP assignments provide assessment of student achievement of competency. In addition to gauging how students are progressing along Program competencies, the CAMP system provides a concrete method for students to assess and monitor their own unique strengths and weaknesses as they progress in a sequential, and increasingly complex manner through the curriculum.

The profession-wide competencies are predicated on the acquisition of discipline specific knowledge that serves as the foundation for the identity and orientation to health service psychology. These core areas of knowledge base and foundation are acquired through the Program's curriculum and include: History and Systems of Psychology, Basic Content Areas (Affective, Biological, Cognitive, Developmental, and Social Aspects of Behavior), Research Methods, Statistical Analysis, and Psychometrics.

The foundational courses expose students to knowledge through learning experiences with primary source materials, critical thinking and communication at an advanced level, and integration of discipline- specific knowledge with practice. Diversity and culture as well as scientific and evidence bases of psychology are incorporated throughout the foundational classes through primary source articles and class activities. The student's knowledge is assessed by course grades as well as a capstone project or specific class assignment in the competency areas identified above.

The Program views self-reflection as a critical element in adopting a commitment to life-long learning and interest in scholarly activity. The developmental nature of competency achievement in a cumulative progression from basic- to intermediate-level tasks allows students first to acquire knowledge and skills in distinct areas of competency, followed by opportunities to demonstrate competency through integration and application of knowledge and skills on more complex tasks required within the profession.

## Program Requirements

The Psy.D. Program is designed to be completed in four years. Full-time students will take three years of coursework, during which they will complete in succession a two-quarter clerkship, two years of practicum training, and a year-long predoctoral internship. In addition to coursework and clinical training requirements, students are required to pass all competency assignments, including the Comprehensive Exam and Dissertation. Five year and neuropsychology curricula (each of which requires an additional year of practicum training) are also offered.

## Clerkship

Students benefit from early exposure to clinical and professional roles. Students participate in an observational learning field experience called Clerkship beginning in the Winter quarter of their first year, after successfully completing Professional Development (PSYCG 1581) in Fall quarter of the first year. Clerkship students shadow, interact, assist and collaborate with health and mental health professionals in a clinical setting during their first year in the program. This introduction to clinical practice provides opportunities to observe the delivery of healthcare services with clients in a variety of mental health settings.

## Practicum

Practicum is a 16-20 hour/week clinical training experience in which second and third year students are placed at a Program-approved field placement site. Students learn to deliver psychological services under the supervision of a licensed psychologist in a variety of settings with diverse clinical populations. Each 12-month field experience is coupled with an on-campus seminar course to process and reflect on clinical training experiences, and to integrate science and theory with their applied experiences.

## Comprehensive Examination

The Comprehensive Examination (CAMP 3-0), Intake and Analysis of Psycho-Diagnostic Interview, Case Conceptualization, and Intervention Strategy, is comprised of two parts. Part 1 consists of viewing of a psycho-diagnostic interview and compiling a summary and analysis. Part 2 of the exam includes discussion of a chosen theoretical orientation, case conceptualization, and an intervention strategy.

## Internship

Successful completion of the doctoral internship experience is an essential Program requirement toward degree attainment. The predoctoral internship is a 2,000-hour requirement at an approved site over a 12-month (full-time) or 24-month (part-time) period. The internship is designed to provide intensive advanced clinical training that builds upon the coursework and practicum experiences. Students are eligible to apply for an internship after successfully passing the Qualifying Examination, the Comprehensive Exam, and Dissertation Proposal, by the dates specified in program materials.

## Dissertation

A Dissertation is required for graduation. This is intended as a scholarly work that permits the student an opportunity to enhance their knowledge about a particular clinical area. Under the guidance of a faculty committee, students are required to pass the dissertation proposal defense before the project is implemented. The student then completes data collection and analysis required for the project and completes the dissertation document. Each student must present an oral defense of the project upon its completion. Following the defense, and after all revisions are completed, the student must provide the program with a bound copy in order to graduate from the Program. With the Program Director's approval, students needing additional time to complete the Dissertation following completion of their internship must register for PSYCG1820 Dissertation Continuation, a 1 credit course.

## Qualifying Exam

The Qualifying Examination (CAMP 2-4), provides an opportunity for students to demonstrate their skills in analysis and synthesis of information, self-evaluation and reflective thinking, self-direction in their own learning, professional identity, commitment to growth, creativity, ownership of their own work, and understanding of strengths and areas in need of development. Successful completion of the Qualifying Exam signals the official acceptance of the student into doctoral candidacy, provided that they have completed all other program requirements, including successful completion of coursework and practicum experiences, up to that point in the Program. Failure of the Qualifying Exam has implications for M.A. degree conferral - students must successfully complete the CAMP 2-4 in order to graduate with their M.A degree.

# Admissions

The Clinical Psychology Program considers applicants who possess the academic and professional promise necessary for development as competent, caring members of the healthcare community. The Program requires an interview with applicants before decisions are made concerning admission into the Program. The program values and encourages students from all backgrounds to apply.

## Admission Requirements

To be considered for admission, applicants must have met the following requirements:

1. Completion of a bachelor's degree from a regionally accredited college or university.
  - A minimum cumulative undergraduate grade point average (GPA) of 3.00 on a 4.00 scale.
  - If the applicant has graduate courses, but no degree granted, this will be viewed as an extension of the undergraduate work and will be evaluated as part of a cumulative GPA.
  - If the applicant has a conferred graduate degree in psychology or a related mental health field from a regionally accredited university, the GPA from that graduate program will be weighted more heavily than the undergraduate GPA.
2. Completion of 18 semester hours or equivalent of prerequisite coursework in psychology with a grade of B- or better including: Introduction to General Psychology, Human Growth & Development or Personality Theory, Abnormal Psychology, Statistics or Tests and Measurements.
3. Demonstration of community service or extracurricular activities.
4. Motivation for and commitment to healthcare as demonstrated by previous work, volunteer work, or other life experiences.
5. Oral and written communication skills necessary to interact with patients and colleagues.
6. Commitment to abide by Midwestern University's Drug-Free Workplace and Substance Abuse Policy.
7. Passage of the Midwestern University criminal background check.

## Application Process and Deadlines

To be considered for admission to the Clinical Psychology Program, students must submit the following:

1. Completed online application at <https://psycas.liaisoncas.com/applicant-ux/#/login>.
2. Three letters of recommendation from professionals who know the student well (teachers, advisors, professional colleagues or supervisors). One letter must be from an academic reference.
3. A personal statement that reflects the educational and career goals of applicants and provides a self-appraisal of their qualifications for the Program and profession. Applicants are encouraged to include explanations of any factors in their application materials that might impact evaluation of their application.
4. Current resume/Curriculum Vitae.
5. Official transcripts from all postsecondary schools attended. **All transcripts need to be submitted directly to PsyCAS to complete the application.**

\*Note: GRE general test scores are optional.

## Priority Application Deadline - December 10th

Applicants who submit their complete application on or before December 10th will be given first consideration for admission and will be notified of the admissions decision on or before February 16th. Those who are not accepted into the Program at this time will have the option of forwarding their application into the standard deadline (see below).

## Standard Application Deadline - March 31st

Applicants who submit their complete application on or before March 31st will be considered for admission and will be notified of the admissions decision no later than May 15th. Applications received after March 31st will be considered on a rolling basis for seats that may be available or placement on the alternate list.

Applicants may track the receipt of their completed application materials and the status of their files on the University's website with the instructions for accessing account information that will be sent by the Office of Admissions after receipt of their application.

*Please note:* Applicants are responsible for notifying the Office of Admissions of any changes in their mailing address and e-mail address. All requests for application withdrawals must be made in writing to the Office of Admissions (address above).



## Interview and Selection Process

Completed applications are reviewed to determine the applicant's eligibility for interviews, which are conducted on the Midwestern University campus or virtually during several admission days throughout the admissions cycle. The interview is the final step in the application process. Upon completion of the interview, the Program makes admissions recommendations and the Dean, via the Office of Admissions, notifies applicants of admissions recommendations.

## Reapplication Process

After receiving either a denial or end-of-cycle letter, prospective students may reapply for the following year's admissions cycle. To initiate the reapplication process, prospective students must complete and submit new applications and proceed through the standard application process.

## Transfer Policy

In order to receive credit for previous coursework completed at other institutions, students must submit a Transfer of Credit Request Application to be evaluated by the Admissions Committee. The transfer of credit has the following conditions:

1. A maximum of 40 quarter hours of credit for coursework completed prior to matriculation may be considered according to CHS policy for advanced placement.
2. Transferred course credit is limited to graduate level courses from recognized, regionally accredited degree granting institutions.
3. Credit is not transferred for a clinical practicum or an internship.
4. Credit may be awarded for required courses from other doctoral programs.
5. Credit may only be awarded for courses in which grades of B- or better were attained.
6. The Program may require a competency examination to determine satisfactory performance before awarding credit for a course.
7. Credit can only be awarded for courses completed within the seven-year period prior to matriculation.
8. Transfer of Credit Request Applications must be submitted by August 15th.
9. Please contact the program for a list of eligible courses for transfer. In general, intervention, assessment, and elective courses are not eligible for transfer.

## Graduation Requirements

Doctoral students may elect to earn a M.A. degree while pursuing the Psy.D. degree after completion of the first two years of coursework, clerkship, and practicum experiences. Students are only admitted into the Psy.D. Program and there is no separate master degree program.

The Master of Arts (M.A.) in Clinical Psychology is awarded if the following conditions are fulfilled by students in the Psy.D. Program:

1. Satisfactory completion of all required 1500 and 1600 level courses.
2. Attainment of a cumulative grade point average of 3.00 or higher and a minimum of B- or P in all required courses, seminars, and practica.
3. Satisfactory completion of Qualifying Exam.
4. Full payment of all outstanding tuition and fees.
5. Favorable recommendation for master's degree conferral from the Clinical Psychology Program Student Academic Review Committee and the CHS Student Promotion and Graduation Committee.
6. Recommendation for conferral of the master's degree by the University Faculty Senate.

To receive the Psy.D. in Clinical Psychology, the student must complete the following requirements within six years (standard track) or seven years (Neuropsychology or Health Psychology concentration) of matriculation:

1. Satisfactory completion of a minimum of 219.5 - 220.5 (depending on year of matriculation) credit hours (Core Curriculum Sequence).
2. Attainment of a cumulative grade point average of 3.00 or higher and a minimum of B- or P in all required courses, seminars, and practica.
3. Successful completion of the Qualifying Exam.
4. Satisfactory completion of the Comprehensive Exam and all other competency assignments.
5. Satisfactory completion of an approved one-year internship.
6. Satisfactory completion of a Dissertation including a successful oral defense and the submission of a bound copy.
7. Favorable recommendation for doctoral degree conferral from the Clinical Psychology Program Student Academic Review Committee and the CHS Student Promotion and Graduation Committee.
8. Recommendation for conferral of the doctoral degree by the University Faculty Senate.
9. Full payment of all outstanding tuition and fees.
10. Completion of all graduation clearance requirements as instructed by the Office of the Registrar.

#### *Requirement for Full-Time Study in Residence*

At least one full year of full time study on campus must be satisfied as a condition of graduation. The requirement can be satisfied in either of the following ways:

1. The successful completion with a minimum of twelve quarter hours of credit per term for three consecutive quarters, or
2. The successful completion of 40 quarter hours within one twelve-month period including the summer quarter.

## **Licensure Requirements**

Licensure requirement and standards for professional practice vary from state to state and prospective students are urged to examine the requirements of the specific state in which they plan to practice. The Association of State and Provincial Psychology Boards can provide useful information on this issue.

This program meets the "Guidelines for Defining 'Doctoral Degree in Psychology'" as implemented by the Association for State and Provincial Psychology Boards (ASPPB)/National Register Designation Project.

Therefore, a graduate of this program who decides to apply for licensure as a psychologist will typically meet the jurisdictional educational requirements for licensing. Please contact the state / provincial / territorial licensing board in the jurisdiction in which you plan to apply for information about additional licensure requirements. Additional information including links to jurisdictions is available on the ASPPB's web site: [www.asppb.org](http://www.asppb.org).

Once licensed, a graduate of a designated program is eligible to apply for credentialing as a Health Service Psychologist by the National Register of Health Service Psychologists. Graduation from a designated program typically ensures that the program completed meets the educational requirements for the National Register credential. However, individual circumstances vary, and, there are additional requirements that must be satisfied prior to being credentialed by the National Register of Health Service Psychologists and listed on the FindaPsychologist.org database. Doctoral students may apply to have their credentials banked and reviewed prior to licensure. For further information about the National Psychologist's Trainee Register and the National Register application process, consult the National Register's web site: [www.nationalregister.org](http://www.nationalregister.org).

Midwestern University's Doctor of Psychology (Glendale) program meets the educational requirements for licensure to practice as a psychologist in the following states and territories: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, District of Columbia, Delaware, Florida, Georgia, Guam, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New

Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, U.S. Virgin Islands, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

Each student should check the additional licensure requirements for the state, district or territory in which they intend to pursue employment.

*Special Note:* Licensure in California requires additional hours of coursework in the following areas: Human Sexuality (10 hours); Child Abuse and Reporting (7 hours); Spousal or partner abuse assessment, detection, and intervention (2 hours).

Midwestern University's Doctor of Psychology (Glendale) program has not made a determination that its Doctor of Psychology Program curriculum meets the territorial educational requirements for licensure or certification in Puerto Rico.

## Neuropsychology Concentration

The Clinical Psychology Program offers a 5-year Neuropsychology Concentration that tailors the student's program of study through elective courses, practice field experiences, and research and scientific inquiry to concentrate in the area of clinical neuropsychology. The Neuropsychology Concentration is based on the APA Division 40 and Houston Conference Guidelines with the goal of providing students with training that will serve as a foundation for internship and post-doctoral neuropsychology training. Students do not receive a neuropsychology designation, or a separate degree in neuropsychology. Students who elect the Neuropsychology Concentration will earn a degree in Clinical Psychology, which appears on all transcripts and diplomas. Students in the Clinical Psychology Program apply to the Neuropsychology Concentration in the first year of study; acceptance into the Program does not guarantee acceptance into the Neuropsychology Concentration.

Neuropsychology Concentration Requirements:

- Four neuropsychology courses which typically include:
  - Introduction to Neuropsychological Assessment
  - Clinical Neuroscience
  - Clinical Neuroanatomy
  - Advanced Neuropsychological Assessment
- Two, year-long practica at Neuropsychology based sites
- Approved Dissertation on neuropsychology topic
- Completion of Internship

## Health Psychology Concentration

The Clinical Psychology Program offers a five-year Health Psychology Concentration, allowing students to focus on health psychology through elective courses, field experiences, and research. This concentration follows the Council of Clinical Health Psychology Training Programs' major area of study designation. Students do not receive a separate degree or designation in health psychology; those who complete the concentration earn a degree in Clinical Psychology, which is reflected on their transcripts and diplomas. Students can apply for the Health Psychology Concentration during their first year in the Clinical Psychology Program, but acceptance into the program does not guarantee admission into the concentration.

Health Psychology Concentration Requirements:

- Three health psychology courses which typically include:
  - Integrated Healthcare
  - Human Sexuality
  - Clinical Neuroanatomy
- Two, year-long practica at health psychology-based sites

- Approved Dissertation on health psychology topic
- Completion of Internship

## Clinical Psychology Curriculum

Total Quarter Credits in the Professional Program: 220.5

The following curriculum is for the starting classes 2024 and 2025. For the starting classes 2020-2023, please refer to the 2023-2024 course catalog.

### First Year

#### Fall Quarter

Course Code	Title	Credits
COREG 1560H	Interprofessional Healthcare	0.5
PSYCG 1509	Fundamentals of Graduate Level Writing	1.0
PSYCG 1515	Tests and Measurements	3.0
PSYCG 1524	Intelligence Testing I	3.0
PSYCG 1525	Intelligence Testing II	2.0
PSYCG 1572	Psychopathology: Adult Disorders I	3.0
PSYCG 1573	Psychopathology: Adult Disorders II	3.0
PSYCG 1581	Professional Development	1.0
<b>Sub-Total Credits</b>		<b>16.50</b>

#### Winter Quarter

Course Code	Title	Credits
COREG 1570H	Interprofessional Healthcare	0.5
PSYCG 1501	Professional Issues and Ethics	3.0
PSYCG 1502	Life Span Development I	3.0
PSYCG 1508	Fundamentals of APA Style	1.0
PSYCG 1520	Clinical Appraisal and Interviewing I	3.0
PSYCG 1521	Clinical Appraisal and Interviewing II	1.0
PSYCG 1526	Personality Assessment I	4.0
PSYCG 1582	Clerkship I	1.0
<b>Sub-Total Credits</b>		<b>16.50</b>

#### Spring Quarter

Course Code	Title	Credits
COREG 1580H	Interprofessional Healthcare	0.5
PSYCG 1514	Research Methods and Design	3.0
PSYCG 1527	Personality Assessment II: Projective Techniques	4.0
PSYCG 1530	Introduction to Psychotherapy	3.0
PSYCG 1565	Professional Writing	1.0
PSYCG 1570	Psychopathology: Child and Adolescent	3.0
PSYCG 1583	Clerkship II	1.0
<b>Sub-Total Credits</b>		<b>15.50</b>

## Summer Quarter

Course Code	Title	Credits
PSYCG 1528	Advanced Assessment	3.0
PSYCG 1539	Integrated Behavioral Healthcare	3.0
PSYCG 1540	Introduction to Neuropsychology	3.0
PSYCG 1553	Existential and Humanistic Theory and Therapy	3.0
PSYCG 1580	Research Seminar	2.0
<b>Sub-Total Credits</b>		<b>14.00</b>

## Second Year

### Fall Quarter

Course Code	Title	Credits
PSYCG 1651	Biological Bases of Behavior	3.0
PSYCG 1631	Cognitive Behavioral Approaches to Psychotherapy	3.0
PSYCG 1609	Statistics	3.0
PSYCG 1610	Diversity in Clinical Psychology	3.0
PSYCG 1682	Practicum I	3.0
PSYCG 1683	Practicum Seminar I	1.0
<b>Sub-Total Credits</b>		<b>16.00</b>

### Winter Quarter

Course Code	Title	Credits
PSYCG 1602	Cognitive Affective Bases of Behavior	3.0
PSYCG 1635	Marriage and Family Counseling and Therapy	3.0
PSYCG 1649	Group Therapy	3.0
PSYCG 1684	Practicum II	3.0
PSYCG 1685	Practicum Seminar II	1.0
<b>Sub-Total Credits</b>		<b>13.00</b>

### Spring Quarter

Course Code	Title	Credits
PSYCG 1603	Life Span Development II	3.0
PSYCG 1632	Psychodynamic Approaches to Psychotherapy	3.0
PSYCG 1650	Psychopharmacology	3.0
PSYCG 1655	History and Systems	3.0
PSYCG 1686	Practicum III	3.0
PSYCG 1687	Practicum Seminar III	1.0
<b>Sub-Total Credits</b>		<b>16.00</b>

## Summer Quarter

Course Code	Title	Credits
PSYCG 1670	Advanced Psychotherapy Practice	3.0
PSYCG 1671	Advanced Psychopathology	2.0
PSYCG 1688	Practicum IV	3.0
PSYCG 1689	Practicum Seminar IV	1.0
PSYCG 1794	Dissertation	2.0-3
<b>Sub-Total Credits</b>		<b>12.00</b>

## Third Year

### Fall Quarter

Course Code	Title	Credits
PSYCG 1711	Advanced Statistics	3.0
PSYCG 1754	Social and Cultural Bases of Behavior	3.0
PSYCG 1782	Advanced Practicum I	3.0
PSYCG 1783	Advanced Practicum Seminar I	1.0
PSYCG 1795	Dissertation	2.0-3
	Elective (3 Credits)	3
	<b>Sub-Total Credits</b>	<b>15.00</b>

### Winter Quarter

Course Code	Title	Credits
PSYCG 1701	Advanced Professional Development and Ethics	3.0
PSYCG 1739	Issues in Substance Abuse	3.0
PSYCG 1784	Advanced Practicum II	3.0
PSYCG 1785	Advanced Practicum Seminar II	1.0
PSYCG 1796	Dissertation	2.0-3
	Elective (3 Credits)	3
	<b>Sub-Total Credits</b>	<b>15.00</b>

### Spring Quarter

Course Code	Title	Credits
PSYCG 1732	Supervision and Consultation Models & Practice	3.0
PSYCG 1786	Advanced Practicum III	3.0
PSYCG 1787	Advanced Practicum Seminar III	1.0
PSYCG 1797	Dissertation	2.0-3
	Elective (3 Credits)	3
	Elective (3 Credits)	3
	<b>Sub-Total Credits</b>	<b>15.00</b>

### Summer Quarter

Course Code	Title	Credits
PSYCG 1788	Advanced Practicum IV	3.0
PSYCG 1798	Dissertation	2.0-3
	<b>Sub-Total Credits</b>	<b>6.00</b>

## Fourth Year

Course Code	Title	Credits
PSYCG 1800	Internship	50.0
	<b>Sub-Total Credits</b>	<b>50.00</b>
	Total Credits	220.5

## Clinical Psychology 5 Year Curriculum

TOTAL QUARTER CREDITS IN THE PROFESSIONAL PROGRAM: 235.5

For those students who choose to pursue an advanced elective practicum year prior to internship, the curriculum sequence is the same for the first two years excluding the Dissertation credit sequence. The curriculum sequence for years 3, 4, and 5 follows:

## Third Year

### Fall Quarter

Course Code	Title	Credits
PSYCG 1711	Advanced Statistics	3.0
PSYCG 1754	Social and Cultural Bases of Behavior	3.0
PSYCG 1782	Advanced Practicum I	3.0
PSYCG 1783	Advanced Practicum Seminar I	1.0
	Elective (3 Credits)	3
	<b>Sub-Total Credits</b>	<b>13.00</b>

### Winter Quarter

Course Code	Title	Credits
PSYCG 1701	Advanced Professional Development and Ethics	3.0
PSYCG 1739	Issues in Substance Abuse	3.0
PSYCG 1784	Advanced Practicum II	3.0
PSYCG 1785	Advanced Practicum Seminar II	1.0
	Elective (3 Credits)	3
	<b>Sub-Total Credits</b>	<b>13.00</b>

### Spring Quarter

Course Code	Title	Credits
PSYCG 1732	Supervision and Consultation Models & Practice	3.0
PSYCG 1786	Advanced Practicum III	3.0
PSYCG 1787	Advanced Practicum Seminar III	1.0
	Elective (3 Credits)	3
	Elective (3 Credits)	3
	<b>Sub-Total Credits</b>	<b>13.00</b>

### Summer Quarter

Course Code	Title	Credits
PSYCG 1788	Advanced Practicum IV	3.0
PSYCG 1794	Dissertation	2.0-3
	<b>Sub-Total Credits</b>	<b>6.00</b>

## Fourth Year

### Fall Quarter

Course Code	Title	Credits
PSYCG 1795	Dissertation	2.0-3
PSYCG 1882	Advanced Elective Practicum I	3.0
PSYCG 1883	Advanced Elective Practicum Seminar I	1.0
	<b>Sub-Total Credits</b>	<b>6.00</b>

### Winter Quarter

Course Code	Title	Credits
PSYCG 1796	Dissertation	2.0-3
PSYCG 1884	Advanced Elective Practicum II	3.0
PSYCG 1885	Advanced Elective Practicum Seminar II	1.0
	<b>Sub-Total Credits</b>	<b>6.00</b>

## Spring Quarter

Course Code	Title	Credits
PSYCG 1797	Dissertation	2.0-3
PSYCG 1886	Advanced Elective Practicum III	3.0
PSYCG 1887	Advanced Elective Practicum Seminar III	1.0
<b>Sub-Total Credits</b>		<b>6.00</b>

## Summer Quarter

Course Code	Title	Credits
PSYCG 1798	Dissertation	2.0-3
PSYCG 1888	Advanced Elective Practicum IV	3.0
<b>Sub-Total Credits</b>		<b>6.00</b>

## Fifth Year

Course Code	Title	Credits
PSYCG 1800	Internship	50.0
<b>Sub-Total Credits</b>		<b>50.00</b>
Total Credits		235.5

# Neuropsychology Curriculum

Total Quarter Credits in the Professional Program: 235.5

The following curriculum applies to the starting classes of 2024 and 2025. For curricula for starting classes 2020-2023, please see the 2023-2024 catalog.

## First Year

### Fall Quarter

Course Code	Title	Credits
COREG 1560H	Interprofessional Healthcare	0.5
PSYCG 1509	Fundamentals of Graduate Level Writing	1.0
PSYCG 1515	Tests and Measurements	3.0
PSYCG 1524	Intelligence Testing I	3.0
PSYCG 1525	Intelligence Testing II	2.0
PSYCG 1572	Psychopathology: Adult Disorders I	3.0
PSYCG 1573	Psychopathology: Adult Disorders II	3.0
PSYCG 1581	Professional Development	1.0
<b>Sub-Total Credits</b>		<b>16.50</b>

### Winter Quarter

Course Code	Title	Credits
COREG 1570H	Interprofessional Healthcare	0.5
PSYCG 1501	Professional Issues and Ethics	3.0
PSYCG 1508	Fundamentals of APA Style	1.0
PSYCG 1520	Clinical Appraisal and Interviewing I	3.0
PSYCG 1521	Clinical Appraisal and Interviewing II	1.0
PSYCG 1526	Personality Assessment I	4.0
PSYCG 1530	Introduction to Psychotherapy	3.0
PSYCG 1582	Clerkship I	1.0
<b>Sub-Total Credits</b>		<b>16.50</b>



## Spring Quarter

Course Code	Title	Credits
COREG 1580H	Interprofessional Healthcare	0.5
PSYCG 1502	Life Span Development I	3.0
PSYCG 1514	Research Methods and Design	3.0
PSYCG 1527	Personality Assessment II: Projective Techniques	4.0
PSYCG 1565	Professional Writing	1.0
PSYCG 1570	Psychopathology: Child and Adolescent	3.0
PSYCG 1583	Clerkship II	1.0
<b>Sub-Total Credits</b>		<b>15.50</b>

## Summer Quarter

Course Code	Title	Credits
PSYCG 1528	Advanced Assessment	3.0
PSYCG 1553	Existential and Humanistic Theory and Therapy	3.0
PSYCG 1539	Integrated Behavioral Healthcare	3.0
PSYCG 1540	Introduction to Neuropsychology	3.0
PSYCG 1580	Research Seminar	2.0
<b>Sub-Total Credits</b>		<b>14.00</b>

## Second Year

### Fall Quarter

Course Code	Title	Credits
PSYCG 1651	Biological Bases of Behavior	3.0
PSYCG 1631	Cognitive Behavioral Approaches to Psychotherapy	3.0
PSYCG 1609	Statistics	3.0
PSYCG 1610	Diversity in Clinical Psychology	3.0
PSYCG 1682	Practicum I	3.0
PSYCG 1683	Practicum Seminar I	1.0
<b>Sub-Total Credits</b>		<b>16.00</b>

### Winter Quarter

Course Code	Title	Credits
PSYCG 1602	Cognitive Affective Bases of Behavior	3.0
PSYCG 1635	Marriage and Family Counseling and Therapy	3.0
PSYCG 1649	Group Therapy	3.0
PSYCG 1684	Practicum II	3.0
PSYCG 1685	Practicum Seminar II	1.0
<b>Sub-Total Credits</b>		<b>13.00</b>

### Spring Quarter

Course Code	Title	Credits
PSYCG 1632	Psychodynamic Approaches to Psychotherapy	3.0
PSYCG 1603	Life Span Development II	3.0
PSYCG 1650	Psychopharmacology	3.0
PSYCG 1686	Practicum III	3.0
PSYCG 1687	Practicum Seminar III	1.0
	Elective (3 Credits)	3
<b>Sub-Total Credits</b>		<b>16.00</b>

## Summer Quarter

Course Code	Title	Credits
PSYCG 1670	Advanced Psychotherapy Practice	3.0
PSYCG 1671	Advanced Psychopathology	2.0
PSYCG 1688	Practicum IV	3.0
PSYCG 1689	Practicum Seminar IV	1.0
<b>Sub-Total Credits</b>		<b>9.00</b>

## Third Year

### Fall Quarter

Course Code	Title	Credits
PSYCG 1711	Advanced Statistics	3.0
PSYCG 1754	Social and Cultural Bases of Behavior	3.0
PSYCG 1782	Advanced Practicum I	3.0
PSYCG 1783	Advanced Practicum Seminar I	1.0
	Elective (3 Credits)	3
<b>Sub-Total Credits</b>		<b>13.00</b>

### Winter Quarter

Course Code	Title	Credits
PSYCG 1701	Advanced Professional Development and Ethics	3.0
PSYCG 1739	Issues in Substance Abuse	3.0
PSYCG 1784	Advanced Practicum II	3.0
PSYCG 1785	Advanced Practicum Seminar II	1.0
	Elective (3 Credits)	3
<b>Sub-Total Credits</b>		<b>13.00</b>

### Spring Quarter

Course Code	Title	Credits
PSYCG 1655	History and Systems	3.0
PSYCG 1732	Supervision and Consultation Models & Practice	3.0
PSYCG 1786	Advanced Practicum III	3.0
PSYCG 1787	Advanced Practicum Seminar III	1.0
	Elective (3 Credits)	3
<b>Sub-Total Credits</b>		<b>13.00</b>

## Summer Quarter

Course Code	Title	Credits
PSYCG 1788	Advanced Practicum IV	3.0
PSYCG 1794	Dissertation	2.0-3
<b>Sub-Total Credits</b>		<b>6.00</b>

## Fourth Year

### Fall Quarter

Course Code	Title	Credits
PSYCG 1795	Dissertation	2.0-3
PSYCG 1882	Advanced Elective Practicum I	3.0
PSYCG 1883	Advanced Elective Practicum Seminar I	1.0
<b>Sub-Total Credits</b>		<b>6.00</b>

## Winter Quarter

Course Code	Title	Credits
PSYCG 1796	Dissertation	2.0-3
PSYCG 1884	Advanced Elective Practicum II	3.0
PSYCG 1885	Advanced Elective Practicum Seminar II	1.0
<b>Sub-Total Credits</b>		<b>6.00</b>

## Spring Quarter

Course Code	Title	Credits
PSYCG 1797	Dissertation	2.0-3
PSYCG 1886	Advanced Elective Practicum III	3.0
PSYCG 1887	Advanced Elective Practicum Seminar III	1.0
<b>Sub-Total Credits</b>		<b>6.00</b>

## Summer Quarter

Course Code	Title	Credits
PSYCG 1798	Dissertation	2.0-3
PSYCG 1888	Advanced Elective Practicum IV	3.0
<b>Sub-Total Credits</b>		<b>6.00</b>

## Fifth Year

Course Code	Title	Credits
PSYCG 1800	Internship	50.0
<b>Sub-Total Credits</b>		<b>50.00</b>
Total Credits		235.5

# Clinical Psychology Program Calendar

## Summer 2025

Event	Class	Date
<b>Memorial Day</b>	<b>*No Classes*</b>	<b>May 26, 2025</b>
Classes Begin	CP-I, CP-II, CP-III	June 2, 2025
Last Day to Add/Drop Classes	CP-I, CP-II, CP-III	June 6, 2025
<b>Juneteenth (Observed)</b>	<b>*No Classes*</b>	<b>June 19, 2025</b>
<b>Independence Day (Observed)</b>	<b>*No Classes*</b>	<b>July 4, 2025</b>
Last Day of Class	CP-I, CP-II, CP-III	August 8, 2025
Quarterly Exams	CP-I, CP-II, CP-III	August 11 - 15, 2025
Program Completion		August 15, 2025
Quarter Break	CP-I, CP-II, CP-III	August 18 - 22, 2025

## Fall 2025

Event	Class	Date
Classes Begin	CP-I, CP-II, CP-III	August 25, 2025
Last Day to Add/Drop Classes	CP-I, CP-II, CP-III	August 29, 2025
<b>Labor Day</b>		<b>September 1, 2025</b>
<b>White Coat Ceremony</b>		<b>September 27, 2025</b>

Event	Class	Date
Last Day of Classes	CP-I, CP-II, CP-III	October 31, 2025
Quarterly Exams	CP-I, CP-II, CP-III	November 3 - 7, 2025
Thanksgiving Break	CP-I, CP-II, CP-III	November 10 - 28, 2025

## Winter 2025

Event	Class	Date
Classes Begin	CP-I, CP-II, CP-III	December 1, 2025
Last Day to Add/Drop Classes	CP-I, CP-II, CP-III	December 5, 2025
Winter Break	CP-I, CP-II, CP-III	December 22, 2025 - January 2, 2026
Classes Resume	CP-I, CP-II, CP-III	January 5, 2026
<b>Martin Luther King/ Jr. Day *No Classes*</b>	<b>*No Classes*</b>	<b>January 19, 2026</b>
Last Day of Classes	CP-I, CP-II, CP-III	February 20, 2026
Quarterly Exams	CP-I, CP-II, CP-III	February 23 - 27, 2026
Spring Break	CP-I, CP-II, CP-III	March 2 - 6, 2026

## Spring 2026

Event	Class	Date
Classes Begin	CP-I, CP-II, CP-III	March 9, 2026
Last Day to Add/Drop Classes	CP-I, CP-II, CP-III	March 13, 2026
Last Day of Classes	CP-I, CP-II, CP-III	May 15, 2026
Quarterly Exams	CP-I, CP-II, CP-III	May 18 - 22, 2026
<b>Memorial Day *No Classes*</b>	<b>*No Classes*</b>	<b>May 25, 2026</b>
Quarter Break	CP-I, CP-II, CP-III	May 26 - 29, 2026
Commencement		June 3, 2026 9:00 a.m.

## Rotations

Class	Rotation	Term
<b>Class of 2026</b>	Internship (off campus field work only)	All year (start dates for each student will vary)
<b>Class of 2027</b>	Advanced Practicum (integrated class work and field work)	Fall, winter, spring, summer quarters
<b>Class of 2028</b>	Practicum (integrated class work and field work)	Fall, winter, spring, summer quarters
<b>Class of 2029</b>	Clerkship (integrated class work and field work)	Winter, spring, quarters

Class Revision 08/28/2024

## Faculty

**Angela M. Breitmeyer, Psy.D.**

Arizona School of Professional Psychology  
Associate Professor

**Bhupin Butaney, Ph.D.**

St. Johns University  
Associate Director and Professor

**Jared Chamberlain, Ph.D.**

University of Nevada, Reno  
Professor

**Shannon Dodani, Psy.D.**

Midwestern University  
Assistant Clinical Professor, Clinical Faculty

**Melissa Flint, Psy.D.**

Arizona School of Professional Psychology  
Professor

**Adam Fried, Ph.D.**

Fordham University  
Program Director and Associate Professor

**Shefali Gandhi, Psy.D.**

Arizona School of Professional Psychology  
Director of Clinical Training and  
Assistant Professor

**Kate Jansen, Ph.D.**

University of Toledo  
Associate Professor

**Brad MacNeil, Ph.D.**

University of New Brunswick, Fredericton  
Assistant Professor

**Marisa Menchola, Ph.D.**

University of Arizona  
Associate Professor

**Alexander Piatka, Ph.D.**

University of Cincinnati  
Assistant Clinical Professor, Clinical Faculty

**Thomas B. Virden III, Ph.D.**

Western Michigan University  
Professor

## Clinical Psychology Program Courses

### COREG 1560H: Interprofessional Healthcare

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

### COREG 1570H: Interprofessional Healthcare

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

## **COREG 1580H: Interprofessional Healthcare**

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

## **PSYCG 1501: Professional Issues and Ethics**

The legal, ethical, and professional issues are discussed in the context of the delivery of mental health services. These issues include APA ethical standards, privacy issues, confidentiality, mental health codes, mental health law and legislation, certification and licensure, ethical standards in research, confidentiality in insurance and managed care contexts, and ethical standards in private practice, schools, hospitals and clinics, community settings, and government.

**Credits** 3.0

## **PSYCG 1502: Life Span Development I**

This course examines the major developmental issues from birth through adolescence. The topics include normal and abnormal development in the context of physical, biological, cognitive, social, and emotional functioning. Other topics include a study of models of development including learning theory, cognitive theory (Piaget), and other theories. Speech and language development are also examined as a basis for later human cognition. Developmental factors related to issues of culture, ethnicity, disabilities, and gender are addressed.

**Credits** 3.0

## **PSYCG 1508: Fundamentals of APA Style**

This course introduces the student to the basic guidelines for the correct usage of the APA style in writing. The course provides a comprehensive overview of the Publication Manual of the American Psychological Association, Seventh Edition. Throughout the quarter, participants in this course will increase their familiarity with the APA style guidelines through an in-depth examination of each chapter of the manual.

**Credits** 1.0

## **PSYCG 1509: Fundamentals of Graduate Level Writing**

This course serves as a broad overview of basic skills necessary for graduate-level writing; it provides a review of fundamental grammatical rules and principles, including but not limited to: sentence structure, spelling, punctuation, tense shifting, transitions, subject-pronoun agreement, and use of formal tone. Participants in this course will have the opportunity for in-class writing as well as peer editing.

**Credits** 1.0

## **PSYCG 1514: Research Methods and Design**

This course is a survey of the methods used in empirical clinical research, program evaluation, and clinical outcomes studies. Students will learn both experimental and quasi-experimental designs. Strategies for research design, subject selection, and statistical analysis will also be examined.

**Credits** 3.0

## **PSYCG 1515: Tests and Measurements**

This course examines the philosophical, historical, and methodological foundations of psychological testing, assessment, and measurement. The course focuses on the statistical basis of validity, reliability, tests of intelligence, personality assessment, counseling and assessment, neuropsychological assessment, computer-assisted assessment, and the assessment of persons with disabilities.

**Credits** 3.0

## **PSYCG 1520: Clinical Appraisal and Interviewing I**

This course provides the student with basic principles and techniques of clinical interviewing and assessment. The approach is both didactic and experiential with the student conducting mock interviews of patients. Emphasis is placed not only on understanding verbal information but also on meta-communication including body language, voice quality, and pacing, and other aspects of nonverbal interpersonal interaction. Students are introduced to differential diagnosis, report writing, inferential analysis, diversity issues related to appraisal and interviewing, and psychological inference.

**Credits** 3.0

### **Prerequisites**

[PSYCG 1572](#) Psychopathology: Adult Disorders I; [PSYCG 1573](#) Psychopathology: Adult Disorders II. Must be taken concurrently with [PSYCG 1521](#).

## **PSYCG 1521: Clinical Appraisal and Interviewing II**

This course is to supplement the concepts and knowledge on psychodiagnostic interviewing with practice skills and applications of concepts in psychodiagnostic interviewing. The format of the course is lab-based, allowing for a safe environment for students to develop competency in psychodiagnostic interviewing.

**Credits** 1.0

### **Prerequisites**

[PSYCG 1572](#) Psychopathology: Adult Disorders I; [PSYCG 1573](#) Psychopathology: Adult Disorders II. Must be taken concurrently with [PSYCG 1520](#) Clinical Appraisal and Interviewing I.

## **PSYCG 1524: Intelligence Testing I**

This course introduces the student to the theory, administration, scoring, and interpretation of standard intelligence tests. Intellectual assessment scales examined including special attention to various Wechsler Scales. Basic interpretation and report writing skills are developed. Biopsychosocial, cultural, ethnic, and disability factors affecting test validity and interpretation are also examined.

**Credits** 3.0

## **PSYCG 1525: Intelligence Testing II**

The purpose of this course is to focus on administration of clinical instruments to assess cognitive functioning of children and adults. The course is designed to develop competency in administration and report writing and consists of lecture, demonstration, practice administrations, and individual checkouts of competencies in test administration. Students receive constructive feedback in the areas of test administration, scoring, interpretation of results and report writing.

**Credits** 2.0

### **Prerequisites**

Must be taken concurrently with [PSYCG 1524](#) Intelligence Testing I

## **PSYCG 1526: Personality Assessment I**

This course introduces the student to the administration, interpretation, and scoring of the objective tests for personality assessment. Tests examined include the MMPI-3, PAI, and Millon Scales. Basic interpretation and report writing skills are taught for the objective personality assessment instruments. Biopsychosocial, cultural, ethnic, gender, and disability factors affecting assessment validity and interpretation are also examined.

**Credits** 4.0

### **Prerequisites**

[PSYCG 1572](#) Psychopathology: Adults Disorders I, [PSYCG 1573](#) Psychopathology: Adult Disorders II

## **PSYCG 1527: Personality Assessment II: Projective Techniques**

This course provides the clinical psychology student with instruction and practice in the administration, scoring, and interpretation of the projective techniques including the Rorschach, TAT, and projective drawings. The course addresses relevant cultural, ethnic, gender, and disability factors in considering interpretation of results and in the development of integrative report writing.

**Credits** 4.0

### **Prerequisites**

[PSYCG 1572](#) Psychopathology: Adult Disorders I; [PSYCG 1573](#) Psychopathology: Adult Disorders II

## **PSYCG 1528: Advanced Assessment**

This course concentrates on the development of skills needed in the interpretation of test findings. Emphasis is placed on a synergistic understanding of the contributions of various test findings to the formulation of a valid diagnostic impression. Students are expected to continue development of skills in formulating diagnostic conclusions, clinical report writing, research report writing, and examination of differential diagnoses. Previously PSYCG 1620.

**Credits** 3.0

### **Prerequisites**

[PSYCG 1524](#) Intelligence Testing I; [PSYCG 1525](#) Intelligence Testing II; [PSYCG 1526](#) Personality Assessment I; [PSYCG 1527](#) Personality Assessment II

## **PSYCG 1530: Introduction to Psychotherapy**

This course introduces the student to the various psychotherapeutic traditions. Treatment approaches examined include psychoanalytic, psychodynamic, Gestalt, behavioral, cognitive/behavioral, interpersonal, and others. Through both didactic and experiential means, the student will be exposed to the fundamental aspects of each treatment approach. The current literature on empirically supported treatment approaches as well as issues related to culture, ethnicity, gender, and ability are also reviewed.

**Credits** 3.0

## **PSYCG 1539: Integrated Behavioral Healthcare**

This course focuses on the skills needed to provide psychological services in primary care settings. Topics include consultation and collaboration with primary care physicians; improving patient adherence to medical treatment regimens; flexibility of scheduling to match services to patients' identified needs; brief, focused assessment and intervention strategies; and health behaviors for lifestyle changes.

**Credits** 3.0

### **Prerequisites**

[PSYCG 1520](#) Clinical Appraisal and Interviewing I; [PSYCG 1521](#) Clinical Appraisal and Interviewing II



## **PSYCG 1540: Introduction to Neuropsychology**

This course reviews the major systems and structures of the brain and central nervous system. In addition to examining normal neurological functioning, the course discusses common impairments in cognition, language, and perception with a neurological base. Topics covered include neurological syndromes such as cerebral vascular accidents, head trauma and concomitant brain injury, seizure disorders, and various forms of dementia. A variety of neuropsychological assessment instruments will also be introduced.

**Credits** 3.0

## **PSYCG 1553: Existential and Humanistic Theory and Therapy**

This course covers principles and techniques of Existential and Humanistic (E-H) models of therapy through an examination of the history, theoretical framework, and practical applications of E-H therapy with clientele. There will be a focus on Person-Centered Therapy, Contemporary Gestalt Therapy, Existential and Emotion-focused therapies, among others. This course includes both didactic and experiential approaches. Through video demonstrations, role-play, and structured exercises, students practice and further develop their intervention skills within an E-H framework. Previously Humanistic and Experiential Theory and Therapy (PSYCG 1753).

**Credits** 3.0

### **Prerequisites**

[PSYCG 1530](#) Introduction to Psychotherapy

## **PSYCG 1565: Professional Writing**

Building upon concepts introduced in the Fundamentals of Graduate Level Writing and Fundamentals of APA Style classes, this course examines applications of writing style to a diverse array of professional documents, including empirical article reviews, psychotherapy documentation, and psychodiagnostic report writing.

**Credits** 1.0

## **PSYCG 1570: Psychopathology: Child and Adolescent**

This course provides the student with a basic understanding of the major psychological disorders of childhood and adolescence. Topics include an examination of developmental disorders, impulse disorders, eating disorders, and disorders of behavior and affect. Theories on the etiology of the disorders are reviewed in the context of both diagnosis and treatment.

**Credits** 3.0

## **PSYCG 1572: Psychopathology: Adult Disorders I**

This course reviews the theory and research underlying anxiety-based, personality, and other disorders. Topics include anxiety disorders, trauma and stressor-related disorders, obsessive-compulsive disorders, dissociative, somatic symptom disorders, personality disorders, disruptive impulse control disorders, and sexual dysfunctions.

**Credits** 3.0

## **PSYCG 1573: Psychopathology: Adult Disorders II**

This course reviews the theory and research underlying the psychotic and mood disorders. Topics include symptoms and symptom presentations of schizophrenia, depressive and bipolar disorders, other psychotic disorders, cognitive disorders, and substance abuse and dependence. The importance of cultural, gender, ethnic, and disability factors will be discussed in relation to the psychiatric disorders.

**Credits** 3.0

## PSYCG 1580: Research Seminar

This course facilitates mentorship for the student in the development and analysis of student-based research. The faculty advisor provides advanced understanding and ability to formulate research questions, design research methods, and analysis to prepare a professional manuscript. This course will also examine concepts related to research ethics and cross-cultural and diversity considerations in research.

**Credits** 2.0

**Prerequisites**

[PSYCG 1514](#) Research Methods and Design

## PSYCG 1581: Professional Development

This lecture course is meant to prepare students for didactic and clinical experiences in the Program. The course will focus on graduate students' rights and responsibilities, professional behavior and expectations, difference between administrative and clinical supervision, and peer mentorship. This course will also introduce students to the Comprehensive Assessment Method in Psychology (CAMP), including profession-wide competencies in Clinical Psychology, and how they relate to field training experiences.

**Credits** 1.0

## PSYCG 1582: Clerkship I

Clerkship is a weekly seminar to discuss practice-based issues such as professional identity, ethics, diversity, and how to be a supervisee. It also includes a supervised, observational learning field experience, focusing on the development of clinical inquiry skills, assessment ability, knowledge of community resources, diversity issues, and consultation skills. The field experience may take place at hospitals, clinics, human service agencies, schools, or practices. Students participate in field experience under the direct supervision of a site supervisor and receive feedback from faculty in the clinical psychology program.

**Credits** 1.0

**Prerequisites**

Approval of Program Director

## PSYCG 1583: Clerkship II

This is a continuation of [PSYCG 1582](#). Clerkship is a weekly seminar to discuss practice-based issues such as professional identity, ethics, diversity, and how to be a supervisee. It is also comprised of a supervised observational learning field experience, focusing on developing [clinical inquiry skills](#), [assessment ability](#), [knowledge of community resources](#), diversity considerations, and consultation skills. The field experience may take place at hospitals, clinics, human service agencies, schools, or practices. Students participate in the field experience under the direct supervision of a site supervisor and receive feedback from faculty in the clinical psychology program.

**Credits** 1.0

**Prerequisites**

[PSYCG 1582](#) Clerkship I and Approval of Program Director

## PSYCG 1584: Clerkship III

This is a continuation of [PSYCG 1583](#).

**Credits** 1.0

**Prerequisites**

[PSYCG 1583](#) Clerkship II and Approval of Program Director

## **PSYCG 1602: Cognitive Affective Bases of Behavior**

This course explores the role of cognition (including topics such as learning, memory, thought processes, and decision-making) and emotion (including topics such as affect, mood, and emotion) in determining human behavior. Normative cognitive and affective processes are examined, including major theoretical perspectives, research findings, and controversies. Historic and current research is examined in support of various models as well as gender, cultural, ethnic, and disability issues. Previously PSYCG 1560.

**Credits** 3.0

## **PSYCG 1603: Life Span Development II**

This course examines the biopsychosocial factors in adult development and aging. Topics include physical and psychological changes that occur from early adulthood through senescence, and normal and abnormal changes through this cycle including cognitive changes. The course examines the role of work and career as it impacts on basic adult life processes. Retirement is examined as it relates to psychological consolidation and the prospect of death and dying. Cross-cultural, gender, familial, and gender perspectives are included.

**Credits** 3.0

### **Prerequisites**

[PSYCG 1502](#) Life Span Development I

## **PSYCG 1609: Statistics**

The course examines basic statistical measures, on both theoretical and applied levels, utilized in data analysis within clinical research. Topics covered include measures of distribution, mean comparisons, ANOVA, including repeated measures, correlations, power analysis and regression analyses. Discussion will be given to how gender and diversity factors may contextualize statistical plans of analysis and the interpretation of results. This course is designed to introduce students to necessary concepts and techniques to begin clinical research.

**Credits** 3.0

## **PSYCG 1610: Diversity in Clinical Psychology**

This course examines the impact of culture, race, ethnicity, gender, sexual identity, disability and religion on theory and practice in clinical psychology. The course looks at the interaction between the clinician's own perceptions of culture and that of the patient. The impact of these issues is also discussed as it affects the delivery of psychological and psychiatric services. The societal impact due to differential access to services is also examined along with possible solutions to this problem.

**Credits** 3.0

## **PSYCG 1631: Cognitive Behavioral Approaches to Psychotherapy**

From the pioneering work of Beck and Ellis to the current theory and practice, this course examines the history and theoretical foundations of cognitive behavioral therapy (CBT) and its application as an empirically validated treatment for mood and anxiety disorders. It also reviews the current research supporting the use of cognitive behavioral approaches with specific diagnostic conditions and populations. Previously Cognitive Theories and Approaches to Psychotherapy

**Credits** 3.0

### **Prerequisites**

[PSYCG 1530](#) Introduction to Psychotherapy

## **PSYCG 1632: Psychodynamic Approaches to Psychotherapy**

This course is designed to introduce students to the theory and practice of psychodynamic psychotherapy. Focus is placed on understanding the dynamic unconscious, transference, countertransference, defense mechanisms and other key psychodynamic concepts underlying a psychodynamic therapeutic frame. Models, including brief therapy models, will be examined along with the evidence bases for interventions. Special attention will be given to case formulation and to adapting techniques to account for cultural and diversity factors.

**Credits** 3.0

### **Prerequisites**

[PSYCG 1530](#) Introduction to Psychotherapy

## **PSYCG 1635: Marriage and Family Counseling and Therapy**

This course examines core marriage and family therapy treatment models and systems theories while considering the biopsychosocial perspective. Using core readings, empirical studies, case studies, videos, and therapy demonstrations, the course examines fundamental techniques of both therapy and diagnostic evaluation from various family systems perspectives. This course will also explore ways to apply marriage and family models to diverse groups and cultures.

**Credits** 3.0

### **Prerequisites**

[PSYCG 1530](#) Introduction to Psychotherapy

## **PSYCG 1649: Group Therapy**

This course includes the history and current models and theories of group therapy. Both didactic and experiential methods are used to introduce the student to different kinds of group interventions. The recommended uses of group interventions for different types of problems, settings, and age groups are included.

**Credits** 3.0

### **Prerequisites**

[PSYCG 1530](#) Introduction to Psychotherapy

## **PSYCG 1650: Psychopharmacology**

This course examines the development and use of pharmacological agents in the treatment of psychopathology. Further, the course examines the use of medication with empirically verified therapy approaches. All classes of psychopharmacological agents are reviewed including neuroleptics, anxiolytics, mood stabilizers, and antidepressants.

**Credits** 3.0

### **Prerequisites**

[PSYCG 1651: Biological Bases of Behavior](#)

## **PSYCG 1651: Biological Bases of Behavior**

This course examines the historical and current understandings of the physical and biological underpinnings of human behavior. Recent advances in imaging techniques are examined as they relate to our understanding of the structure and function of anatomical structures and the neurological substrate in human functioning and behavior.

**Credits** 3.0

## PSYCG 1655: History and Systems

This course is a survey of the historical development of both experimental and clinical psychology. Major systems of psychology include sensory-perceptual psychology (Gestalt), Freudian, psychodynamic, behavioral, cognitive, social, family, humanistic, and existential psychology. Major theorists such as Wundt, Watson, James, Freud, Jung, Sumner, Maslow, Rogers, Skinner, Piaget, Gilligan, and Beck are examined. This course will also discuss the field's history of discrimination, racism, bias and pathologizing of diverse sexual and gender identities.

**Credits** 3.0

## PSYCG 1670: Advanced Psychotherapy Practice

The course is designed to assist the student in developing a personal approach to psychotherapy practice, based upon their training in theoretical models and treatment, and their individual personality, preferences, and values. The course focuses on using the students' theoretical model to conceptualize their clients and to provide appropriate treatment interventions within that theoretical model. Case management, formulation, and ongoing evaluation are discussed. Previously PSYCG 1730.

**Credits** 3.0

### Prerequisites

PSYCG 1631: Cognitive Behavioral Approaches to Psychotherapy

PSYCG 1632: Psychodynamic Approaches to Psychotherapy

PSYCG 1649: Group Therapy

PSYCG 1635: Marriage and Family Counseling and Therapy

PSYCG 1553: Existential and Humanistic Theory and Therapy

PSYCG 1671: Advanced Psychopathology

## PSYCG 1671: Advanced Psychopathology

This psychopathology course focuses on complex case studies to provide greater breadth and depth of knowledge in the areas of clinical theory, research findings, co-morbidity, and socio-cultural diversity. Special consideration is given to conceptualization of problems from diverse theoretical orientations and perspectives. The course will be taught through lectures, class discussions, readings, and group presentations. Class assignments will incorporate differential diagnosis, case formulation, and socio-cultural considerations designed to mirror activities of practicing psychologists. Previously PSYCG 1771.

**Credits** 2.0

### Prerequisites

Successful completion of all Psychopathology courses ([PSYCG 1570](#); 1572; 1573); Must be taken concurrently with [PSYCG 1670](#) Advanced Psychotherapy Practice

## PSYCG 1682: Practicum I

This course is designed to provide the practical experiences in psychodiagnostics and psychotherapeutics that are appropriate for the training of practitioners in the human services.

**Credits** 3.0

### Prerequisites

Approval of Program Director and [PSYCG 1501](#) Professional Issues and Ethics; [PSYCG 1530](#) Introduction to Psychotherapy; [PSYCG 1520](#) Clinical Appraisal and Interviewing; PSYCG 1524 Intelligence Testing I; [PSYCG 1525](#) Intelligence Testing II

## **PSYCG 1683: Practicum Seminar I**

In a four quarter sequence, students meet on campus to discuss training experiences and progress at their practicum training site during their first year of practicum training. Students receive feedback on cases with the goal of integrating theory with practice to supplement direct supervision received by site supervisors. Seminar discussion focuses on psycho-diagnostic formulation, case conceptualization, treatment processes, and review of peer cases. Administrative and organizational issues are discussed to develop a professional attitude and capacity for problem solving.

**Credits** 1.0

### **Prerequisites**

Approval of Program Director and [PSYCG 1501](#) Professional Issues and Ethics; [PSYCG 1530](#) Introduction to Psychotherapy; [PSYCG 1520](#) Clinical Appraisal and Interviewing; [PSYCG 1524](#) Intelligence Testing I; [PSYCG 1525](#) Intelligence Testing II

## **PSYCG 1684: Practicum II**

This is a continuation of [PSYCG 1682](#).

**Credits** 3.0

### **Prerequisites**

[PSYCG 1682](#) Practicum I and Approval of Program Director

## **PSYCG 1685: Practicum Seminar II**

This is a continuation of [PSYCG 1683](#).

**Credits** 1.0

### **Prerequisites**

[PSYCG 1683](#) Practicum Seminar I and Approval of Program Director

## **PSYCG 1686: Practicum III**

This is a continuation of [PSYCG 1684](#).

**Credits** 3.0

### **Prerequisites**

[PSYCG 1684](#) Practicum II and Approval of Program Director

## **PSYCG 1687: Practicum Seminar III**

This is a continuation of [PSYCG 1685](#).

**Credits** 1.0

### **Prerequisites**

[PSYCG 1685](#) Practicum Seminar II and Approval of Program Director

## **PSYCG 1688: Practicum IV**

This is a continuation of [PSYCG 1686](#).

**Credits** 3.0

### **Prerequisites**

[PSYCG 1686](#) Practicum III and Approval of Program Director

## **PSYCG 1689: Practicum Seminar IV**

This is a continuation of [PSYCG 1687](#).

**Credits** 1.0

### **Prerequisites**

[PSYCG 1687](#) Practicum Seminar III and Approval of Program Director

## **PSYCG 1701: Advanced Professional Development and Ethics**

This course examines advanced ethical, legal, and regulatory topics in professional psychology across difference areas of practice. Topics include (i) licensure and regulatory processes, (ii) professional and ethical standards of practice, (iii) risk and liability management, (iv) laws and regulations that affect practice, (v) court-related testimony and evaluations, and (vi) documentation, record keeping, and information protection.

**Credits** 3.0

### **Prerequisites**

[PSYCG 1501](#) Professional Issues and Ethics

## **PSYCG 1708: Mental Health Law**

This course provides an overview of the judicial/legal aspects as they pertain to the practice of psychology. Risk management considerations, forensic psychological issues, and other mental health law issues will be explored.

**Credits** 3.0

## **PSYCG 1709: Forensic Psychology**

Building on basic information of the legal system and mental health law, students will gain a broad understanding of the ways in which psychologists interact with the legal system. This may include assessment, evaluation, treatment, testimony, and consultation.

**Credits** 3.0

### **Prerequisites**

[PSYCG 1701](#) Advanced Professional Development and Ethics

## **PSYCG 1711: Advanced Statistics**

This course focuses on advanced quantitative, mathematical modeling and analysis of psychological data, including statistical description and inference. It will also examine clinical research with emphasis on research design and multivariate statistical analysis. Particular attention will be given to the application of research methodology, and psychometric issues regarding theory and practice. The course will examine how statistical approaches have been misapplied by not adequately considering culture and diversity contextual factors.

**Credits** 3.0

### **Prerequisites**

PSYCG 1510 Statistics; [PSYCG 1514](#) Research Methods and Design

## **PSYCG 1712: Grief and Loss**

This course focuses on the concepts of grief and loss in psychology. Major issues as established by the Association for Death Education and Counseling (ADEC) will be covered including: Dying, End-of-Life Decision Making, Loss, Grief and Mourning, Assessment and Intervention, Traumatic Death and Death Education. Both didactic and experiential methods of instruction will be used to expose students to the vast body of knowledge covering this area.

**Credits** 3.0

## **PSYCG 1713: Psychology of Aging/ Geropsychology**

The course examines the biopsychosocial factors in aging/geropsychology. Topics include history of aging studies, biological underpinnings of aging, psychological components of aging, as well as social aspects of aging. Cross-cultural, familial, and gender perspectives are included. The goal of this class is to provide an introduction to the specialty field of geropsychology and to help students gain an understanding of both the conceptual and empirical foundations underlying the practice of clinical geropsychology in today's society.

**Credits** 3.0



## **PSYCG 1715: Animal Assisted Psychotherapy**

Animal Assisted Psychotherapies (AAT), as well as their theoretical foundations, are reviewed in this course. Both canine assisted psychotherapy (CAP) and equine assisted psychotherapy (EAP) approaches will be addressed as well as brief discussions of AAT with other animals. There is an emphasis on developing skills in case analysis and treatment, with special attention to the development and processing of treatment activities.

**Credits** 3.0

## **PSYCG 1721: Human Sexuality**

The purpose of this course is to provide the Clinical Psychology student with an introduction to human sexuality throughout the life-cycle. Sexual development, sexual and gender identity, and issues affecting individuals and couples will be examined. Sexual dysfunctions will be reviewed along with treatment modalities for the most common disorders. Upon completion of the course the student will be able to recognize and address the range of sexual and sexuality issues which they may encounter in a clinical practice.

**Credits** 3.0

## **PSYCG 1732: Supervision and Consultation Models & Practice**

This course focuses on supervision and consultation in psychology. Major models of supervision and consultation will be presented. Both didactic and experiential methods of instruction will be used to expose students to the implementation and practices of supervision and consultation.

**Credits** 3.0

## **PSYCG 1735: Practice Management Issues**

This course will introduce students to business principles as they apply to professional psychology. Students will be exposed to various business-of-practice issues and decisions, such as starting, managing, marketing, and diversifying a psychology practice, and will consider the related ethical, legal, and financial issues involved.

**Credits** 3.0

## **PSYCG 1736: Behavioral Therapy**

Beginning with the work of the major learning theorists such as Pavlov, Hull, Thorndike, and Skinner the course examines the basic theories and techniques that underlie the behavioral therapy approach in clinical psychology. Using recent studies in empirical verification of therapeutic approaches, the course will review the use of specific behavioral interventions with such disorders as anxiety, behavior problems, phobia, and obsessive-compulsive disorder. Previously PSYCG 1636.

**Credits** 3.0

### **Prerequisites**

[PSYCG 1530](#) Introduction to Psychotherapy; [PSYCG 1602](#) Cognitive-Affective Bases of Behavior

## **PSYCG 1739: Issues in Substance Abuse**

This course presents major theories of etiology and treatment of substance abuse and dependence. Addictions to different classes of substances, intoxication and withdrawal effects, and methods of assessment, diagnosis, treatment, management, and relapse prevention will be discussed.

**Credits** 3.0

### **Prerequisites**

[PSYCG 1573](#) Psychopathology: Adult Disorders II



## **PSYCG 1741: Health Psychology**

This course serves as a study of theory, research, and applications of health psychology including the psychological factors that influence physical health and illness and the application of behavioral principles to the prevention and treatment of illness and the promotion of health.

**Credits** 3.0

## **PSYCG 1742: Advanced Health Psychology**

This course serves as a study of applications of health psychology including the psychological factors that influence physical health and illness and the application of specific behavioral principles to the prevention and treatment of illness and the promotion of health.

**Credits** 3.0

## **PSYCG 1743: Introduction to Neuropsychological Assessment**

This course is for intermediate students in the neuropsychology concentration. This course provides an introduction to the assessment of brain-behavior relationships. A variety of neuropsychological tests will be introduced, covering the major cognitive domains in Human Neuropsychology, with an emphasis on the process by which such tests are interpreted, in light of all the data available, including historical, interview, observational, and test data.

**Credits** 3.0

### **Prerequisites**

[PSYCG 1524: Intelligence Testing I](#)

[PSYCG 1525: Intelligence Testing II](#)

[PSYCG 1540: Introduction to Neuropsychology](#)

## **PSYCG 1744: Clinical Neuroanatomy**

The focus of this course is the gross anatomy of the human brain and spinal cord, and the functional organization of the central nervous system. The major neuroanatomic structures including the motor system, somatosensory system, cranial nerves, cerebellum, basal ganglia, limbic structures, ventricles, meninges, and the vascular supply of the brain will be discussed. The functionality of these systems as well as the consequences of damage to that system will be presented.

**Credits** 3.0

### **Prerequisites**

[PSYCG 1640](#) Introduction to Neuropsychology

## **PSYCG 1745: Advanced Neuropsychological Assessment**

This advanced assessment course will use a case conference format to explore advanced topics in neuropsychological assessment including a more comprehensive understanding of functional neuroanatomy and central nervous system functioning, treatment and assessment of diverse populations, clinical ethics, clinical interventions for neuropsychological conditions and other special topics. Emphasis is on exploration of special topics using a single case format with each student presenter responsible for helping to guide discussion for that week.

**Credits** 3.0

## **PSYCG 1746: Clinical Neuroscience**

This course will cover the neuroscience basis for important aspects of behavior. Neurobiological, genetic, and neurochemical etiology of neurological and psychological disorders will be discussed. Students will gain a more comprehensive understanding of the fundamental mechanisms that underlie normal neurological functioning as well as diseases and disorder of the central nervous system.

**Credits** 3.0

### **Prerequisites**

Introduction to Neuropsychology

## **PSYCG 1747: Advanced Practicum Seminar Neuropsychological Track**

This is a supervised field experience for students in the neuropsychology track, designed to integrate field training with course content. It focuses on the development of clinical inquiry skills, knowledge of interventions, assessment ability, knowledge of community resources, diversity issues, and consultation skills with an emphasis on neuropsychological assessment. The practicum is a supervised experience that may take place at hospitals, clinics, human service agencies, schools, or appropriate organizations. Students are under the direct supervision of a site supervisor and receive feedback from faculty and advanced students in the Program.

**Credits** 1.0

### **Prerequisites**

[PSYCG 1540: Introduction to Neuropsychology](#)

[PSYCG 1683: Practicum Seminar I](#)

[PSYCG 1685: Practicum Seminar II](#)

[PSYCG 1687: Practicum Seminar III](#)

[PSYCG 1689: Practicum Seminar IV](#)

## **PSYCG 1748: Bullying and Interpersonal Violence**

Students will become aware of the causes of violence, the impact on victims of violence, and programmatic attempts to reduce violence. Students will explore current research regarding violence and learn prevention and treatment strategies.

**Credits** 3.0

## **PSYCG 1749: Psychological Management of Chronic Pain**

This course presents major theories and techniques of chronic pain management from the psychological perspective. Varying pain disorders, co-occurring disorders, treatment and management modalities, special populations, and relapse prevention will be explored.

**Credits** 3.0

## **PSYCG 1750: Stress Management, Relaxation and Hypnotherapy Techniques**

This course surveys stress management, relaxation and other techniques across theoretical orientations and philosophies that may be useful and effective in interventions to manage stress, reduce anxiety, and promote relaxation. Complementary and alternative medicine approaches, such as yoga and meditation, psychoneuroimmunology and its relationship to health, self-care skills, and health behavior change will be included.

**Credits** 3.0

## **PSYCG 1752: Trauma and Recovery**

This course covers fundamental skills in assessment and conceptualization of traumatic stress reactions and provides evidence-based treatments to those affected by trauma. The course materials include readings and discussion on the physiological, cognitive, emotional, and behavioral impact of traumatic stress as well as instruction and practice on the application of treatment techniques, including cognitive-behavioral therapies and complementary and alternative medicine interventions. Students are exposed to principles of psychological first aid to trauma victims and early intervention in crisis situations. All of the course material is presented in light of the cultural and contextual factors that influence the onset, course, and outcomes of psychological distress that results from exposure to traumatic events.

**Credits** 3.0

## **PSYCG 1754: Social and Cultural Bases of Behavior**

This course examines how individuals impact and are impacted by, their social, cultural, economic, and political environments. Topics covered will include social cognition, attribution theory, social influence, attitudes, and attitude change, conformity, attraction and relationships, aggression, and stereotypes, and prejudice. Classic research in the field will be explored to establish core social psychological principles and theories, and current research will be examined to provide a contemporary view of the field and its various applications. Emphasis will be placed on the application of social psychological principles, theory, and research to a clinical context. Previously PSYCG 1654

**Credits** 3.0

## **PSYCG 1760: Advanced Child Therapy**

This course provides exposure, practice, and research on therapeutic orientation and techniques with children and adolescents. Focus will be on how to incorporate developmental models into conceptualization, treatment planning, and treatment outcome, and on current evidence-based counseling and intervention methods. Additional areas of focus will include discussion about ethical issues in treatment with minors, involving family/caregivers/school-based systems, accessing community supports, and the impact of diversity on the child's functioning and treatment.

**Credits** 3.0

### **Prerequisites**

[PSYCG 1502](#) Life Span Development I and [PSYCG 1530](#) Introduction to Psychotherapy

## **PSYCG 1770: Adjunctive Intervention Modalities**

This course will assist students in expanding approaches to psychotherapy practice through the incorporation of adjunctive forms of intervention. The course builds upon the students' pre-existing theoretical models for conceptualization and intervention, addressing empirical support for creative therapeutic techniques. Within the context of clinical, developmental, and cultural considerations, various adjunctive interventions will be discussed, including art therapy, play therapy, music therapy, and animal-assisted therapy.

**Credits** 3.0

## **PSYCG 1775: Advanced Independent Study**

This course permits the student to pursue individualized study in a relevant area of clinical psychology under the direct supervision of program faculty. A study plan is developed in consultation with program faculty and with the approval of the Program Director.

**Credits** 1.0

-3

### **Prerequisites**

Approval of Program Director

## **PSYCG 1776: Advanced Independent Study**

This course permits the student to pursue individualized study in a relevant area of clinical psychology under the direct supervision of program faculty. A study plan is developed in consultation with program faculty and with the approval of the Program Director.

**Credits** 1.0

-3

### **Prerequisites**

Approval of Program Director

## **PSYCG 1777: Advanced Independent Study**

This course permits the student to pursue individualized study in a relevant area of clinical psychology under the direct supervision of program faculty. A study plan is developed in consultation with program faculty and with the approval of the Program Director.

**Credits** 1.0

-3

### **Prerequisites**

Approval of Program Director

## **PSYCG 1778: Directed Readings in Clinical Psychology**

This course permits extensive exploration of an approved topic in clinical psychology. With the consultation of a program faculty member, a reading list is developed around a relevant issue. The readings focus on the interchange between theory, research, diversity issues, and clinical practice.

**Credits** 3.0

### **Prerequisites**

Approval of Program Director

## **PSYCG 1780: Dissertation Seminar I**

This course focuses on the development of the dissertation prior to the proposal defense. Students will meet regularly with their dissertation chair to make progress toward the completion of their dissertation proposals. Matriculating class of 2017 only.

**Credits** 1.0

### **Prerequisites**

Approval of Program Director

## **PSYCG 1781: Dissertation Seminar II**

This course focuses on the development of the dissertation after the proposal defense. Students will meet with their dissertation chair on a regular basis to make progress toward data collection and analysis (for empirical projects). Students completing empirical projects will begin data collection during the quarter with the goal of starting data analysis by the start of the following quarter. Students completing non-empirical projects will work with their dissertation chair to ensure that significant progress is made. Matriculating class of 2017 only.

**Credits** 1.0

### **Prerequisites**

[PSYCG 1780](#) Dissertation Development

## **PSYCG 1782: Advanced Practicum I**

This practicum experience offers the opportunity to enhance the student's skills in a particular area of interest.

**Credits** 3.0

### **Prerequisites**

[PSYCG 1688](#) Practicum IV and Approval of Program Director

## **PSYCG 1783: Advanced Practicum Seminar I**

In a three-quarter sequence, students meet on campus to discuss training experiences and progress at their practicum training site during their second year of practicum training. Students receive feedback on cases with the goal of integrating theory with practice to supplement direct supervision received by site supervisors. Seminar discussion focuses on conceptualizing cases and treatment through peer case review. Administrative and organizational issues are also discussed to develop an effective professional attitude and capacity for pragmatic problem-solving.

**Credits** 1.0

### **Prerequisites**

[PSYCG 1689](#) Practicum Seminar IV and Approval of Program Director

## **PSYCG 1784: Advanced Practicum II**

This is a continuation of [PSYCG 1782](#).

**Credits** 3.0

### **Prerequisites**

[PSYCG 1782](#) Advanced Practicum I and Approval of Program Director

## **PSYCG 1785: Advanced Practicum Seminar II**

This is a continuation of [PSYCG 1783](#).

**Credits** 1.0

### **Prerequisites**

[PSYCG 1783](#) Advanced Practicum Seminar I and Approval of Program Director

## **PSYCG 1786: Advanced Practicum III**

This is a continuation of [PSYCG 1784](#).

**Credits** 3.0

### **Prerequisites**

[PSYCG 1784](#) Advanced Practicum II and Approval of Program Director

## **PSYCG 1787: Advanced Practicum Seminar III**

This is a continuation of [PSYCG 1785](#).

**Credits** 1.0

### **Prerequisites**

[PSYCG 1785](#) Advanced Practicum Seminar II and Approval of Program Director

## **PSYCG 1788: Advanced Practicum IV**

This is a continuation of [PSYCG 1786](#).

**Credits** 3.0

### **Prerequisites**

[PSYCG 1786](#) Advanced Practicum III and Approval of Program Director

## PSYCG 1794: Dissertation

Successful graduation from the Program requires completion of a Dissertation, an essential component of a student's academic and clinical education. The Dissertation is intended as a doctoral level scholarly work that permits students to enhance their understanding about a particular clinical issue; its completion permits the Program to evaluate the student's ability to apply theory, research, and practice in the area of clinical psychology. This is typically offered as a three credit class.

**Credits** 2.0

-3

### **Prerequisites**

[PSYCG 1580: Research Seminar](#)

## PSYCG 1795: Dissertation

Successful graduation from the Program requires completion of a Dissertation, an essential component of a student's academic and clinical education. The Dissertation is intended as a doctoral level scholarly work that permits students to enhance their understanding about a particular clinical issue; its completion permits the Program to evaluate the student's ability to apply theory, research, and practice in the area of clinical psychology. This is typically offered as a two credit class.

**Credits** 2.0

-3

### **Prerequisites**

[PSYCG 1580: Research Seminar](#)

## PSYCG 1796: Dissertation

Successful graduation from the Program requires completion of a Dissertation, an essential component of a student's academic and clinical education. The Dissertation is intended as a doctoral level scholarly work that permits students to enhance their understanding about a particular clinical issue; its completion permits the Program to evaluate the student's ability to apply theory, research, and practice in the area of clinical psychology. This is typically offered as a two credit class.

**Credits** 2.0

-3

### **Prerequisites**

[PSYCG 1580: Research Seminar](#)

## PSYCG 1797: Dissertation

Successful graduation from the Program requires completion of a Dissertation, an essential component of a student's academic and clinical education. The Dissertation is intended as a doctoral level scholarly work that permits students to enhance their understanding about a particular clinical issue; its completion permits the Program to evaluate the student's ability to apply theory, research, and practice in the area of clinical psychology. This is typically offered as a two credit class.

**Credits** 2.0

-3

### **Prerequisites**

[PSYCG 1580: Research Seminar](#)

## PSYCG 1798: Dissertation

Successful graduation from the Program requires completion of a Dissertation, an essential component of a student's academic and clinical education. The Dissertation is intended as a doctoral level scholarly work that permits students to enhance their understanding about a particular clinical issue; its completion permits the Program to evaluate the student's ability to apply theory, research, and practice in the area of clinical psychology. This is typically offered as a three credit class.

**Credits** 2.0

-3

### **Prerequisites**

[PSYCG 1580: Research Seminar](#)

## PSYCG 1799: Dissertation

Successful graduation from the Program requires completion of a Dissertation, an essential component of a student's academic and clinical education. The Dissertation is intended as a doctoral level scholarly work that permits students to enhance their understanding about a particular clinical issue; its completion permits the Program to evaluate the student's ability to apply theory, research, and practice in the area of clinical psychology.

**Credits** 2.0

-3

### **Prerequisites**

[PSYCG 1580: Research Seminar](#)

## PSYCG 1800: Internship

The internship is a 12-24 month commitment (2,000 hours) that is designed to provide an intensive clinical experience expanding upon the required didactic and the practicum experiences.

**Credits** 50.0

### **Prerequisites**

Approval of Program Director

## PSYCG 1811: Dissertation Continuation I

This course sequence is reserved for students needing additional time for completion of the required Dissertation.

**Credits** 0.5

### **Prerequisites**

[PSYCG 1798](#) Dissertation; and Approval of Program director.

## PSYCG 1812: Dissertation Continuation II

This course sequence is reserved for students needing additional time for completion of the required Dissertation.

**Credits** 0.5

### **Prerequisites**

[PSYCG 1798](#) Dissertation; and Approval of Program director.

## PSYCG 1813: Dissertation Continuation III

This course sequence is reserved for students needing additional time for completion of the required Dissertation.

**Credits** 0.5

### **Prerequisites**

[PSYCG 1798](#) Dissertation; and Approval of Program director.

## **PSYCG 1814: Dissertation Continuation IV**

This course sequence is reserved for students needing additional time for completion of the required Dissertation.

**Credits** 0.5

**Prerequisites**

[PSYCG 1798](#) Dissertation; and Approval of Program director.

## **PSYCG 1820: Dissertation Advanced Continuation**

This course is reserved for students needing additional quarters beyond the internship year in the program to complete the required Dissertation.

**Credits** 1.0

**Prerequisites**

[PSYCG 1798](#) Dissertation or [PSYCG 1799](#) Dissertation and Approval of Program director.

## **PSYCG 1821: Internship Continuation**

This course is reserved for students requiring additional time to complete internship requirements beyond the fourth year in the program.

**Credits** 0.5

**Prerequisites**

[PSYCG 1800](#) Internship and Approval from Program Director

## **PSYCG 1882: Advanced Elective Practicum I**

This elective practicum experience offers the opportunity to enhance the student's skills in a particular area of interest.

**Credits** 3.0

## **PSYCG 1883: Advanced Elective Practicum Seminar I**

As a part of a three-quarter sequence, students meet on campus to discuss their training experiences and progress at their practicum training site placement during their third year of practicum training. Students receive feedback on cases with the primary goal of integrating theory with practice to supplement direct supervision received by site supervisors. Seminar discussion focuses on conceptualizing cases and treatment through peer review of cases. Administrative and organizational issues are also discussed to develop an effective professional attitude and capacity for pragmatic problem-solving.

**Credits** 1.0

## **PSYCG 1884: Advanced Elective Practicum II**

This elective practicum experience offers the opportunity to enhance the student's skills in a particular area of interest.

**Credits** 3.0

## **PSYCG 1885: Advanced Elective Practicum Seminar II**

As a part of a three-quarter sequence, students meet on campus to discuss their training experiences and progress at their practicum training site placement during their third year of practicum training. Students receive feedback on cases with the primary goal of integrating theory with practice to supplement direct supervision received by site supervisors. Seminar discussion focuses on conceptualizing cases and treatment through peer review of cases. Administrative and organizational issues are also discussed to develop an effective professional attitude and capacity for pragmatic problem-solving.

**Credits** 1.0



## **PSYCG 1886: Advanced Elective Practicum III**

This elective practicum experience offers the opportunity to enhance the student's skills in a particular area of interest.

**Credits** 3.0

## **PSYCG 1887: Advanced Elective Practicum Seminar III**

As a part of a three-quarter sequence, students meet on campus to discuss their training experiences and progress at their practicum training site placement during their third year of practicum training. Students receive feedback on cases with the primary goal of integrating theory with practice to supplement direct supervision received by site supervisors. Seminar discussion focuses on conceptualizing cases and treatment through peer review of cases. Administrative and organizational issues are also discussed to develop an effective professional attitude and capacity for pragmatic problem-solving.

**Credits** 1.0

## **PSYCG 1888: Advanced Elective Practicum IV**

This elective practicum experience offers the opportunity to enhance the student's skills in a particular area of interest.

**Credits** 3.0

## **PSYCG 1889: Advanced Elective Practicum V**

This elective practicum experience offers the opportunity to enhance the student's skills in a particular area of interest.

**Credits** 3.0

### **Prerequisites**

PSYCG 1888 and Approval of Program director.

## **PSYCG 1890: Advanced Elective Practicum VI**

This elective practicum experience offers the opportunity to enhance the student's skills in a particular area of interest.

**Credits** 3.0

### **Prerequisites**

PSYCG 1889 and Approval of Program director.

## **PSYCG 1891: Advanced Elective Practicum VII**

This elective practicum experience offers the opportunity to enhance the student's skills in a particular area of interest.

**Credits** 3.0

### **Prerequisites**

PSYCG 1890 and Approval of Program director.

## **PSYCG 1892: Advanced Elective Practicum VIII**

This elective practicum experience offers the opportunity to enhance the student's skills in a particular area of interest.

**Credits** 3.0

### **Prerequisites**

PSYCG 1891 and Approval of Program director.

# Physical Therapy Program (Residential)

## Mission

The Midwestern University Physical Therapy Program will use the highest educational and professional standards to prepare physical therapists who can provide quality physical therapy services to a diverse population across all levels of the healthcare continuum.

## Accreditation

The Residential and Hybrid Physical Therapy Programs at Midwestern University, Glendale, Arizona are accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 3030 Potomac Avenue, Suite 100, Alexandria, VA 22305-3085; telephone: 703/706-3245; email: [accreditation@apta.org](mailto:accreditation@apta.org); website: <http://www.capteonline.org>. If needing to contact the program/institution directly, please call 623/572-3920 or email [azpt@midwestern.edu](mailto:azpt@midwestern.edu).

Midwestern University is accredited by The Higher Learning Commission, 230 South LaSalle Street, Suite 7- 500, Chicago, IL 60604-1413; 800/621-7440.

## Degree Description (Residential)

Midwestern University's Physical Therapy Program offers a course of study leading to the Doctor of Physical Therapy (D.P.T.) degree for qualified students. The full-time, continuous, 30-month, entry-level Doctor of Physical Therapy curriculum is designed to deliver the academic and clinical education required to prepare students for their professional role as key members of the healthcare team and as an integral part of the healthcare delivery system. The general education, professional training, experience, and personal character development of physical therapists uniquely prepare them to coordinate care related to functional improvement and functional ability. The clinical phase of the program provides the students with necessary hands-on experience to develop the knowledge, skills and attitudes essential to practice physical therapy in a variety of settings. All students will be required to travel for clinical education experiences. The focus of the professional clinical doctorate degree program is to prepare entry-level practitioners to provide physical therapy services in large, small, traditional, and nontraditional community and institutional practice settings that require independent judgment, leadership, and autonomous practice. The program also provides the foundation for graduates to identify and contribute to effecting solutions to the major, emergent health issues of our society and to contribute to the academic and clinical education of future practitioners. The graduate will be prepared to make valuable, ongoing contributions to society, healthcare, and the profession through leadership and collaborative, intra- and inter-professional efforts.

## Time Limit for Completion of Coursework

The Doctor of Physical Therapy Program is a continuous, full-time program for 30 months. The maximum allotted time for completion of the doctorate program is 45 months.

## Program Goals and Expected Outcomes

Based on its mission, the Physical Therapy Program has developed goals for students, graduates, faculty members, and the Program.

1. Graduates and students will be prepared to provide culturally competent, whole-person physical therapy services to a diverse population across all levels of the healthcare continuum.
2. Graduates will demonstrate a commitment to professional development in the areas of clinical practice, service, and advocacy.

3. Graduates will have the ability to contribute to the educational growth of future practitioners and to the body of knowledge in the profession.
4. Graduates and students will participate in inter-professional education and/or inter-professional collaborative practice.
5. Faculty will provide high-quality teaching and professional standards.
6. Faculty will participate in scholarship activities which may include the scholarship of discovery, integration, application, or teaching.
7. Faculty will be engaged in service to the Department, College, University, community, or profession.
8. The collective core faculty will demonstrate expertise in contemporary, evidence-based clinical practice in a variety of settings across the continuum of care.
9. The Program will contribute to meeting the needs of the physical therapy workforce that supports a diverse population across all levels of the health care continuum.
10. The Program will create post-professional educational opportunities for faculty, graduates, clinical instructors and the greater physical therapy community to facilitate continuous professional development in areas such as teaching, research, leadership, practice, service, and advocacy.
11. The Program will collaborate with other health professional programs, community partners and clinical sites to support the development of inter-professional collaborative practice across the curriculum.
12. The Program will cultivate a culture of diversity and inclusivity that benefits students, faculty, staff, patients, caregivers, and communities that we serve.
13. The Program will provide an innovative curriculum that integrates the highest educational standards and contemporary practice.

## Admissions

The College of Health Sciences Physical Therapy Program uses a holistic admissions process for students who possess the academic and professional promise necessary for development as competent, caring members of the healthcare community. The Doctor of Physical Therapy Program is open on a competitive admissions basis to applicants having bachelor's degrees in any field but who have not completed an accredited physical therapy program. To select these candidates, a competitive admissions framework has been established. Within this competitive admissions framework, multiple criteria are used to select the most qualified candidates from an applicant pool that exceeds the number of seats available. The Physical Therapy Program uses the Centralized Application Service for Physical Therapy Schools (PTCAS). The Physical Therapy Program Admissions Committee reviews completed applications throughout the admissions cycle to determine the applicant's eligibility for an interview. Interviews are typically conducted during the fall, winter, and spring. Admission decisions are made on a rolling basis.

### Admission Requirements

Students seeking admission to the Physical Therapy Program must submit the following documented evidence:

1. Completion of a bachelor's degree from a regionally accredited college or university.
2. Minimum cumulative grade point average (GPA) of 3.0 and a minimum science GPA of 2.9 on a 4.0 scale. A pre-requisite GPA of 3.0 or greater may be considered for admission if the cumulative and/or science GPA(s) is(are) below the minimum criteria.
3. Completion of prerequisite courses totaling 46 semester/66 quarter credits as listed below from a regionally accredited college or university.
  - Grades of C or better (grades of C- are NOT acceptable) in each course.

4. Completion of a total of 30 hours of observation, volunteerism or paid work in a physical therapy setting is required for admission. These hours must be verified by a Physical Therapist. Additional hours will not strengthen an application.
5. Demonstration of a people or service orientation through community service or extracurricular activities.
6. Motivation for and commitment to healthcare as demonstrated by previous work, volunteer work, or other life experiences.
7. Motivation and commitment to learning, including self-directed learning.
8. Ability to meet the Technical Standards with or without reasonable accommodations.
9. Oral and written communication skills necessary to interact with patients and colleagues.
10. Commitment to abide by the Midwestern University Drug-Free Workplace and Substance Abuse Policy.
11. Passage of the Midwestern University criminal background check.
12. Provision of additional documentation needed to meet specific program requirements.

## Prerequisite Courses

<b>Courses:</b>	<b>Sem. Hrs.</b>	<b>Qtr. Hrs.</b>
<i>Science Courses:</i>		
Biology with lab	4	6
Vertebrate Anatomy with lab	3	4
Physiology	3	4
General Chemistry with lab	4	6
General Physics with lab	8	12
<i>General Courses:</i>		
Math (college algebra or above)	3	4
Statistics (should include inferential statistics)	3	4
English—must include at least one composition course (oral communication/public speaking recommended)	6	9
Social & Behavioral Sciences (including at least one psychology course)	6	9

## Application Process and Deadlines

To be considered for admission to the Physical Therapy Program, applicants must submit the following to the Midwestern University Office of Admissions.

1. PTCAS Application  
Applicants are required to submit their applications to PTCAS at <http://www.ptcas.org> by April 15th. Please refer to the PTCAS application instructions for specific details about completing the application, required documents, and processing time. The PTCAS application should be available for applicants during the summer months. The Midwestern University Physical Therapy Program reviews completed applications throughout the admissions cycle. Candidates seeking admission into the hybrid pathway must complete the supplemental questions on the PTCAS application.
2. Completed Applications  
The Office of Admissions will send emails verifying receipt of PTCAS applications with all required materials to all applicants who submit an application. The emails will also include instructions on checking the status of the required application materials online. Applicants are responsible for tracking the receipt of their application materials and ensuring the submission of all required documents. Only applicants who submit completed applications with all required application materials by April 15th will be considered for potential entrance into the program.

Graduate Record Examination (GRE) general test scores using the Midwestern University institution code of 4160 are strongly recommended for candidates with a cumulative GPA below a 3.2, although not required. **GRE scores can only strengthen an application in the case of a lower GPA. GRE scores cannot weaken an application for any candidate.** Only test scores earned during the previous five years and sent directly from the Educational Testing Service (ETS) will be

accepted. The Office of Admissions must receive official GRE scores no later than April 15th. For more information about the GRE, contact Educational Testing Services (ETS) at 609/771-7670 or 866/473-4373 or visit [www.gre.org](http://www.gre.org)

*Please note:* Applicants are responsible for notifying the Office of Admissions of any changes in their mailing address or email address. All application withdrawal requests must be made in writing via e-mail, fax, or letter to:

Office of Admissions Midwestern University  
19955 N. 59th Avenue  
Glendale, AZ 85308  
888/247-9277 or 623/572-3215  
[admissaz@midwestern.edu](mailto:admissaz@midwestern.edu)

## Interview and Selection Process

When applicants are considered eligible for interviews after review of their completed admissions files, they are notified of available interview dates and invited by the Office of Admissions to schedule a virtual interview. A typical interview day involves virtual participation in the following activities, which are coordinated by the Office of Admissions: an interview with at least two interviewers, interaction with Midwestern University physical therapy students, a virtual campus tour, and an opportunity to meet with program faculty, alumni, and an admissions counselor. During interview sessions, the interviewer questions applicants about their academic, personal, and professional experiences, aspirations and preparedness for admission to the Physical Therapy Program. Each interviewer is blinded from the candidates PTCAS application. Each interviewer rates prospective students on a standardized evaluation form. These evaluations are included in the applicant files provided to the Physical Therapy Admissions Committee. The Physical Therapy Admissions Committee meets after each interview panel to review the files of applicants who have been interviewed. The committee reviews the full application files for interviewed applicants and then formulates and submits recommendations to the Dean for final approval. The Dean, via the Office of Admissions, notifies applicants in writing of admission decisions.

## Reapplication Process

Students who receive either denial or end-of-cycle letters may reapply for the following year's admissions cycle. Before reapplying, individuals contemplating reapplication should seek the advice of an admissions counselor.

To initiate the reapplication process, prospective students must complete and submit a new application through the standard application process.

## Transfer Process

The Physical Therapy Program does not accept transfer students.

# Technical Standards, PT Residential

## Technical Standards

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the college.

Candidates must be able to perform the following abilities and skills with or without reasonable accommodation:

1. Observation: The candidate must be able to accurately make observations at a distance and close at hand. The candidate must be able to learn to use observational skills to make correct

interpretations about patient health, impairments, movement, functional capacity, participation, and contextual factors to meet the curriculum requirement to individually complete a physical therapy evaluation. Candidates must be willing to learn to make observations through palpation of a patient.

2. Communication: Communication includes speech, language, reading, writing and computer literacy. The candidate must be able to communicate in English proficiently and sensitively in verbal and written form and be able to perceive nonverbal communication.
3. Motor: Candidates must be able to coordinate both gross and fine muscular movements, and possess sufficient postural control and neuromuscular control to perform profession-specific skills and tasks, including the ability to direct or execute immediate care to an ill or injured patient during an emergency situation. Candidates must be able to learn to safely mobilize patients using techniques consistent with standards of physical therapy practice, which may include the need to move 50 pounds vertically and/or horizontally.
4. Intellectual, Conceptual, Integrative and Quantitative Abilities: The candidate must be able to problem solve, measure, calculate, reason, analyze, record and synthesize large amounts of information. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships. The candidate must have the ability to use computers to meet program requirements.
5. Behavioral and Social Attributes: The candidate must possess the emotional health required for full utilization of their intellectual abilities, the exercise of good judgment and the consistent, prompt completion of all responsibilities and the development of mature, sensitive and effective relationships. Candidates must be able to tolerate physically, mentally and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn are all personal qualities required during the educational process.

Candidates who are accepted into the Doctor of Physical Therapy program are required to verify that they understand and are able to meet these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may require accommodation to meet Technical Standards must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

## Graduation Requirements

To qualify for the degree Doctor of Physical Therapy (D.P.T.), students must:

1. Satisfactorily complete all courses with a minimum cumulative grade point average of 2.75.
2. Satisfactorily complete the required minimum of 141 quarter credit hours in the curriculum.
3. Receive a favorable recommendation for doctoral degree conferral from the Physical Therapy Academic Review Committee and the CHS Student Promotion and Graduation Committee.
4. Receive a favorable recommendation for doctoral degree conferral from the University Faculty Senate.
5. Settle all financial accounts with the institution.
6. Complete all graduation clearance requirements as instructed by the Office of the Registrar.

# Licensure Requirements

After graduating from an accredited physical therapist education program, a student must pass a national examination and meet licensure requirements of the state in which the graduate wishes to practice.

Graduation and degree conferral do not guarantee passing the national examination or passing the licensure requirements of the state.

Midwestern University's Doctor of Physical Therapy Program meets the educational requirements for licensure to practice as a physical therapist in the following states and territories: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, District of Columbia, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, U.S. Virgin Islands, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

Each student should check the additional licensure requirements for the state, district or territory in which they intend to pursue employment.

## Physical Therapy Residential Curriculum

The Physical Therapy Program reserves the right to alter the curriculum whenever it deems appropriate. This catalog does not establish a contractual relationship between Midwestern University and the student.

The Class of 2025 and Class of 2026: Spring will utilize the curriculum listed in the academic year 2023-2024 catalog.

Total Quarter Credits in the Professional Program: 141\*

\*In addition to the required curriculum, students may complete elective (see PTHEG 1311R-1317R in Courses tab) or remedial (see PTHEG 1310R in Courses tab) coursework.

## First Professional Year

### Summer Quarter

Course Code	Title	Credits
PTHEG 1502R	Clinical Education Symposium I	0.5
PTHEG 1507R	Human Anatomy and Embryology	5.0
PTHEG 1509R	Professional Roles and Issues	4.0
PTHEG 1531R	Evidence Based Practice	3.0
PTHEG 1574R	Physical Therapy Evaluation	3.0
<b>Sub-Total Credits</b>		<b>15.50</b>

### Fall Quarter

Course Code	Title	Credits
PTHEG 1506R	Patient Management I	3.0
PTHEG 1508R	Exercise Physiology	3.0
PTHEG 1519R	Pathophysiology I	3.0
PTHEG 1580R	Kinesiology/Biomechanics I	4.0
COREG 1560K	Interprofessional Healthcare	0.5
<b>Sub-Total Credits</b>		<b>13.50</b>

## Winter Quarter

Course Code	Title	Credits
PTHEG 1503R	Clinical Education Symposium II	0.5
PTHEG 1510R	Medical Imaging	2.0
PTHEG 1541R	Neuromuscular Rehabilitation I	4.0
PTHEG 1556R	Patient Management II	3.0
PTHEG 1581R	Kinesiology/Biomechanics II	4.0
COREG 1570K	Interprofessional Healthcare	0.5
<b>Sub-Total Credits</b>		<b>14.00</b>

## Spring Quarter

Course Code	Title	Credits
PTHEG 1512R	Pharmacology	2.0
PTHEG 1520R	Pathophysiology II	3.0
PTHEG 1542R	Neuromuscular Rehabilitation II	5.0
PTHEG 1561R	Musculoskeletal Rehabilitation I	5.0
<b>Sub-Total Credits</b>		<b>15.50</b>

## Second Professional Year

### Summer Quarter

Course Code	Title	Credits
PTHEG 1606R	Cardiopulmonary Rehabilitation	5.0
PTHEG 1649R	Management & Reimbursement in Healthcare Systems	3.0
PTHEG 1656R	Patient Management III	3.0
PTHEG 1661R	Musculoskeletal Rehabilitation II	5.0
<b>Sub-Total Credits</b>		<b>16.00</b>

### Fall Quarter

Course Code	Title	Credits
PTHEG 1602R	Orthotics and Prosthetics	4.0
PTHEG 1605R	Health Promotion and Exercise Prescription	3.0
PTHEG 1620R	Integrated Clinical Experience I	1.0
PTHEG 1641R	Neuromuscular Rehabilitation III	5.0
PTHEG 1642R	Pediatric Rehabilitation	3.0
<b>Sub-Total Credits</b>		<b>16.00</b>

## Winter Quarter

Course Code	Title	Credits
PTHEG 1609R	Clinical Education Symposium III	0.5
PTHEG 1618R	Clinical Conditions and Differential Screening	2.0
PTHEG 1621R	Integrated Clinical Experience II	1.0
PTHEG 1643R	Acute Care Rehabilitation	4.0
PTHEG 1663R	Musculoskeletal Rehabilitation III	3.0
PTHEG 1682R	Geriatric Rehabilitation	4.0
<b>Sub-Total Credits</b>		<b>14.50</b>

## Spring Quarter

Course Code	Title	Credits
PTHEG 1645R	Capstone I	1.0
PTHEG 1695R	Clinical Experience I	11.0
<b>Sub-Total Credits</b>		<b>12.00</b>



## Third Professional Year

### Summer Quarter

Course Code	Title	Credits
PTHEG 1708R	Clinical Experience II	11.0
PTHEG 1798R	Capstone II	1.0
<b>Sub-Total Credits</b>		<b>12.00</b>

### Fall Quarter

Course Code	Title	Credits
PTHEG 1709R	Clinical Experience III	11.0
PTHEG 1799R	Capstone III	1.0
<b>Sub-Total Credits</b>		<b>12.00</b>
Total Credits		141

## Student Academic Policies

### Academic Progress

The academic standing of a student is determined by the student's cumulative grade point average. To progress to the next quarter, a student must satisfactorily complete all didactic courses and academic requirements for the preceding quarter.

## Physical Therapy Program Calendar

### Summer 2025

Event	Class	Date
<b>Memorial Day *No Classes*</b>	<b>*No Classes*</b>	<b>May 26, 2025</b>
Orientation	PT-I	May 27 - 30, 2025
Classes Begin	PT-I	June 2, 2025
Classes Resume	PT-II, PT-III	June 2, 2025
Last Day to Add/Drop Classes	PT-I, PT-II, PT-III	June 6, 2025
<b>Juneteenth (Observed)</b>	<b>*No Classes*</b>	<b>June 19, 2025</b>
<b>Independence Day (Observed)</b>	<b>*No Classes*</b>	<b>July 4, 2025</b>
Last Day of Class	PT-I, PT-II, PT-III	August 8, 2025
Quarterly Exams	PT-I, PT-II, PT-III	August 11 - 15, 2025
Quarter Break	PT-I, PT-II, PT-III	August 18 - 22, 2025

### Fall 2025

Event	Class	Date
Clinical Experience I	PT-III	August 25 - November 14, 2025
Classes Begin	PT-I, PT-II	August 25, 2025
Last Day to Add/Drop Classes	PT-I, PT-II	August 29, 2025
<b>Labor Day</b>	<b>*No Classes*</b>	<b>September 1, 2025</b>
<b>White Coat Ceremony</b>		<b>September 27, 2025</b>
Last Day of Classes	PT-I, PT-II	October 31, 2025
Quarterly Exams	PT-I, PT-II	November 3 - 7, 2025
Thanksgiving Break	PT-I, PT-II	November 10 - 28, 2025

## Winter 2025

Event	Class	Date
Clinical Experience II	PT-III	December 1, 2025 - February 20, 2026
Classes Begin	PT-I, PT-II	December 1, 2025
Last Day to Add/Drop Classes	PT-I, PT-II	December 5, 2025
Winter Break	PT-I, PT-II	December 22, 2025 - January 2, 2026
Classes Resume	PT-I, PT-II	January 5, 2026
<b>Martin Luther King/ Jr. Day</b>	<b>*No Classes*</b>	<b>January 19, 2026</b>
Last Day of Classes	PT-I, PT-II	February 20, 2026
Quarterly Exams	PT-I, PT-II	February 23 - 27, 2026
Spring Break	PT-III	February 23 - 27, 2026
Spring Break	PT-I, PT-II	March 2 - 6, 2026

## Spring 2026

Event	Class	Date
Clinical Experience III	PT-III	March 2 - May 22, 2026
Classes Begin	PT-I, PT-II	March 9, 2026
Last Day to Add/Drop Classes	PT-I, PT-II	March 13, 2026
Last Day of Classes	PT-I, PT-II	May 15, 2026
Quarterly Exams	PT-I, PT-II	May 18 - 22, 2026
<b>Memorial Day</b>	<b>*No Classes*</b>	<b>May 25, 2026</b>
Program Completion Date	PT-III	May 26, 2026
Quarter Break	PT-I, PT-II	May 26 - 29, 2026
Commencement		June 3, 2026 9:00 a.m.

Last Revision 08/28/2024

# Faculty

**Rita Ator, PT, DPT, OCS, ATC**

University of Illinois  
Director of Clinical Education and Assistant Professor

**Patrice Ayala, PT, DPT, GCS, CEEAA**

A.T. Still University  
Assistant Director of Clinical Education and Assistant Professor

**Roi Dennis A. Cayetano, PT, DPT**

Northeastern University  
Assistant Professor

**Megan Eikenberry, PT, DPT, EdD, NCS**

Bellarmino University  
Associate Professor

**Mia Erickson, PT, EdD, CHT**

West Virginia University  
Assistant Director and Professor

**Lacey Frankland, PT, DPT, ATC, OCS, SCS**

Washington University School of Medicine  
Assistant Professor

**Jennifer Gruenhagen, PT, DPT, PhD**

University of Miami  
Assistant Professor

**Rebecca Johnson, PT, DPT, CCS**

Indiana University  
Assistant Professor

**Maggie Klausing, PT, DPT, MSCI, OCS**

Washington University in St. Louis  
Assistant Professor

**Michael T. Lebec, PT, PhD**

University of Arizona  
Professor

**Andrea Lopes Sauer, PT, PhD**

Federal University of Sao Paulo  
Assistant Professor

**Myles Melyon, PT, DPT, CCS**

Midwestern University  
Assistant Professor

**Suzanne O'Neal, PT, DPT, DHSc, NCS**

University of Indianapolis  
Associate Professor

**Byron E. Russell, PT, PhD**

Texas Woman's University  
Director and Associate Professor

**Kylie Scott, PT, DPT, EdD, OCS, CMPT**

Northern Arizona University  
Associate Professor

**Josh Subialka, PT, DPT, DHSc, OCS, FAAOMPT**

College of St. Scholastica  
Assistant Professor

## Physical Therapy Program (Residential) Courses

### COREG 1560K: Interprofessional Healthcare

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

## **COREG 1570K: Interprofessional Healthcare**

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

## **COREG 1580K: Interprofessional Healthcare**

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

## **PTHEG 1305R: Hand Therapy**

This course is designed to facilitate additional didactic and laboratory experiences related to hand therapy practice. Students will be exposed to advanced concepts in pathology, imaging, examination, differential diagnosis, and intervention that will expand their knowledge and skills in this specialty area of practice. Content will be supported by current, best evidence, and students will apply concepts of evidence-based practice to areas of patient-client management. Lecture material will be supported by lab and case discussions.

**Credits** 1.0

### **Prerequisites**

Permission of Course Director. This course is subject to a minimum of 2 and maximum of 20 enrollees and may not be offered each year.

## **PTHEG 1306R: Vestibular Rehabilitation**

This elective will expand on vestibular concepts covered in PTHEG 1541/1542 Neuromuscular Rehabilitation I & II. Topics will include assessment, differential diagnosis, and treatment approaches for vestibular disorders, including peripheral hypofunction, bilateral vestibular loss, benign paroxysmal positional vertigo, vestibular migraines, persistent postural perceptual dizziness, and Meniere's disease.

**Credits** 2.0

### **Prerequisites**

Permission of Course Director. This course is subject to a minimum of 4 and maximum of 20 enrollees and may not be offered each year.

## **PTHEG 1311R: Regenerative Rehabilitation Research**

In this elective course, students have the opportunity to assist physical therapy faculty with research projects pertaining to the faculty member's research agenda. Students obtain individual faculty member approval to assist with research prior to enrollment in this course.

**Credits** 1.0

-6

### **Prerequisites**

[PTHEG 1531R: Evidence Based Practice](#)

Permission of Course Director. This course is subject to enrollment restrictions and may not be offered each year.

## **PTHEG 1312R: Adaptive Sports Research**

In this elective course, students have the opportunity to assist physical therapy faculty with research projects pertaining to the faculty member's research agenda. Students obtain individual faculty member approval to assist with research prior to enrollment in this course.

**Credits** 1.0

-6

### **Prerequisites**

[PTHEG 1531R: Evidence Based Practice](#)

Permission of Course Director. This course is subject to enrollment restrictions and may not be offered each year.

## **PTHEG 1313R: Gait and Human Movement Research**

In this elective course, students have the opportunity to assist physical therapy faculty with research projects pertaining to the faculty member's research agenda. Students obtain individual faculty member approval to assist with research prior to enrollment in this course.

**Credits** 1.0

-6

### **Prerequisites**

[PTHEG 1531R: Evidence Based Practice](#)

Permission of Course Director. This course is subject to enrollment restrictions and may not be offered each year.

## **PTHEG 1314R: Clinical Research Using the Computer Assisted Rehabilitation Environment**

In this elective course, students have the opportunity to assist physical therapy faculty with research projects pertaining to the faculty member's research agenda. Students obtain individual faculty member approval to assist with research prior to enrollment in this course.

**Credits** 1.0

-6

### **Prerequisites**

[PTHEG 1531R: Evidence Based Practice](#)

Permission of Course Director. This course is subject to enrollment restrictions and may not be offered each year.

## **PTHEG 1315R: Neurologic PT Research**

In this elective course, students have the opportunity to assist physical therapy faculty with research projects pertaining to the faculty member's research agenda. Students obtain individual faculty member approval to assist with research prior to enrollment in this course.

**Credits** 1.0

-6

### **Prerequisites**

[PTHEG 1531R: Evidence Based Practice](#)

Permission of Course Director. This course is subject to enrollment restrictions and may not be offered each year.

## **PTHEG 1316R: Research Examining the DPT Student Experience**

In this elective course, students have the opportunity to assist physical therapy faculty with research projects pertaining to the faculty member's research agenda. Students obtain individual faculty member approval to assist with research prior to enrollment in this course.

**Credits** 1.0

-6

### **Prerequisites**

[PTHEG 1531R: Evidence Based Practice](#)

Permission of Course Director. This course is subject to enrollment restrictions and may not be offered each year.

## **PTHEG 1317R: Upper Extremity Research**

In this elective course, students have the opportunity to assist physical therapy faculty with research projects pertaining to the faculty member's research agenda. Students obtain individual faculty member approval to assist with research prior to enrollment in this course.

**Credits** 1.0

-6

### **Prerequisites**

[PTHEG 1531R: Evidence Based Practice](#)

Permission of Course Director. This course is subject to enrollment restrictions and may not be offered each year.

## **PTHEG 1320R: Pelvic Health Physical Therapy**

This course is designed to facilitate additional didactic or clinical endeavors related to pelvic floor physical therapy theory and/or practice. The course is designed to assist students with integration of didactic content related to pelvic floor physical therapy.

**Credits** 1.0

### **Prerequisites**

Permission of Course Director. This course is subject to enrollment restrictions and may not be offered each year.

## **PTHEG 1321R: Advanced Manual Therapy**

This course is designed to facilitate additional didactic or clinical endeavors related to orthopedic and sports physical therapy, particularly within the subset of orthopedic manual physical therapy. The course will emphasize lab practice to improve student comfort with patient handling and performance of manual therapy techniques. Techniques will include novel manual therapy interventions and review and refinement of previously learned techniques commonly performed in musculoskeletal practice. Labs will also include clinical reasoning related to patient presentations, incorporating concepts from previous musculoskeletal related courses.

**Credits** 1.0

### **Prerequisites**

Permission of Course Director. This course is subject to enrollment restrictions and may not be offered each year.

## **PTHEG 1322R: Dry Needling**

This course will consist of review of the history of dry needling origins, mechanisms of manual therapy and dry needling, OSHA bloodborne pathogens, indications and contraindications to dry needling, safety considerations for manual therapy and dry needling, and lab practice of techniques for commonly needled muscles. Relevant anatomy and muscle functions, as well as additional material on diagnoses and/or conditions that may be appropriate for dry needling intervention will also be reviewed.

**Credits** 1.0

### **Prerequisites**

Permission of Course Director. This course is subject to enrollment restrictions and may not be offered each year.

## **PTHEG 1323R: Para Sports and Adaptive Recreation**

This course introduces students to para sports and accessible recreational activities. The various pathways for healthcare professionals to participate will be outlined. An overview of different para sport models and organizations will be presented, including the Special Olympics, Paralympics, and Military Adaptive Sports. Students will recognize how impairments impact movement and skill acquisition in competitive and recreational sport.

**Credits** 1.0

### **Prerequisites**

Permission of Course Director. This course is subject to enrollment restrictions and may not be offered each year.

## **PTHEG 1502R: Clinical Education Symposium I**

Clinical Education Symposium I is the first of three courses preparing students for integrated and full-time clinical experiences. This course provides an overview of the requirements for participation in clinical education and focuses on the development of professional accountability and conduct. Resources are provided to allow students to develop organizational strategies that assist students to meet all requirements prior to the integrated and full-time clinical experiences.

**Credits** 0.5

## **PTHEG 1503R: Clinical Education Symposium II**

Clinical Education Symposium II is the second of three courses preparing students for integrated and full-time clinical experiences. This course addresses clinical education policies relevant to the integrated clinical experiences, jurisdictional law, the role of the physical therapist assistant, and the various collaborative models of clinical education students may encounter during clinical experiences.

**Credits** 0.5

## **PTHEG 1506R : Patient Management I**

Students will learn the fundamental principles and skills for patient care with emphasis on safety and patient mobility. Topics include universal precautions, body mechanics, draping, and patient positioning. Other topics include selection, adjustment, and prescription of assistive and adaptive devices; patient mobilization techniques; and basic wheelchair skills including sizing, parts management, and propulsion.

**Credits** 3.0

## **PTHEG 1507R: Human Anatomy and Embryology**

This course will cover the anatomy of the human body and relevant embryological development in a lecture, discussion, and virtual lab format. The emphasis will be on the relationship to form and function and the use of anatomy in physical therapy diagnosis. Lab sessions will include virtual dissection of the human body with discussion.

**Credits** 5.0

## **PTHEG 1508R: Exercise Physiology**

As cytology is the study of structure of the cell, and physiology is the study of how the cell works, exercise physiology can be defined as the effects of exercise and other stresses on the cell and ultimately the human body. This course provides the student a basic understanding of the effects of exercise and stresses on the human body as it relates to physical therapy practice.

**Credits** 3.0

## **PTHEG 1509R : Professional Roles and Issues**

This course explores professionalism, core values, and professional roles in physical therapy practice. Students are introduced to legal and ethical issues and learn to problem solve using ethical decision-making models. Students are introduced to concepts related to professional communication, teaching, and learning and apply these concepts to different populations. The role of professional advocacy is developed through an understanding of professional organizations and through an introduction to health policies influencing physical therapy practice. Students learn to work with individuals from different backgrounds and develop cultural competence.

**Credits** 4.0

## **PTHEG 1510R: Medical Imaging**

This course will introduce students to various forms of medical imaging and relate their use to the neuromusculoskeletal system contextualized within the health care delivery system. Examples of imaging modalities to be covered include plain film radiography, MRI, CT scan, bone scintigraphy, and diagnostic ultrasound. Implications for physical therapy management and decision making will be discussed.

**Credits** 2.0

## **PTHEG 1512R: Pharmacology**

This course will introduce students to pharmacological interventions in patient-client management. It will introduce categories of drugs affecting individual body systems and provide information on pharmacokinetics and pharmacodynamics. Drug effects on the body as they relate to exercise and drug interactions will be discussed. Implications for physical therapy management and decision making will be discussed.

**Credits** 2.0



## **PTHEG 1519R: Pathophysiology I**

This course provides foundational material on the concepts of pain, injury, the inflammatory response, and tissue healing. Students also cover normal physiology and pathophysiology, epidemiology, clinical signs and symptoms, prognosis, and medical management of both acquired and hereditary conditions and disorders relevant to physical therapy practice. Diagnostic imaging, laboratory values, and pharmaceutical management will also be presented. Implications for physical therapy management and decision making will be discussed.

**Credits** 3.0

## **PTHEG 1520R: Pathophysiology II**

This course is a continuation of Pathophysiology I. Students continue learning normal physiology and the pathophysiology, epidemiology, clinical signs and symptoms, prognosis, and medical management of both acquired and hereditary conditions and disorders relevant to physical therapy practice. Diagnostic imaging, laboratory values, and pharmaceutical management will also be presented. Implications for physical therapy management and decision making will be discussed.

**Credits** 3.0

## **PTHEG 1531R: Evidence Based Practice**

This course is designed to provide students with foundational knowledge and skills needed to provide evidence-based patient care. This course covers study design, formulation of research questions and hypotheses, types of data, sampling methodology, statistics, measurement, variables, and interpretation of research findings. An introduction to the five steps of the evidence-based practice process is presented in this course.

**Credits** 3.0

## **PTHEG 1541R: Neuromuscular Rehabilitation I**

This course will introduce common pathologies of the neurological system, including the involved neuroanatomy, associated clinical findings, and basic medical management. Students will learn neurological examination techniques at the body structures and functions level of the International Classification of Functioning framework and be introduced to concepts of neuroplasticity, motor control, and motor learning.

**Credits** 4.0

## **PTHEG 1542R: Neuromuscular Rehabilitation II**

This course presents clinical decision-making conceptual frameworks to guide the evaluation and management of patients with neurologic conditions. Pathology, medical management, and physical therapy evaluation and treatment of patients with stroke, vestibular, and Parkinson's Disease will be presented. Movement analysis strategies and motor learning principles will be applied to assess movement dysfunction, and intervention strategies to address impairments will be introduced. Students will learn to develop an evidence-informed, patient-specific plan of care, apply learned treatment techniques, and document neurological examination and treatments in a manner suitable for the medical record.

**Credits** 5.0

## **PTHEG 1556R: Patient Management II**

Patient Management II introduces concepts of therapeutic exercise intervention for physical therapists. Therapeutic exercise prescription is a fundamental skill in physical therapist practice. This course will provide students with foundations and techniques associated with exercise prescription to improve flexibility, range of motion, endurance, and strength. Exercises specific to each body region and common conditions encountered in physical therapy practice will be covered.

**Credits** 3.0

## **PTHEG 1561R: Musculoskeletal Rehabilitation I**

Building on the principles of evaluation including all elements of the ICF and the patient/client management model introduced in PTHEG 1574, this course introduces students to evidence-based evaluation methods for pathologies of the cervical, thoracic spine and upper extremity. Pharmacological and non-pharmacological medical management of upper quadrant musculoskeletal disorders will be covered. Students will continue to refine their ability to perform a subjective examination, propose a hypothesis, and conduct a physical examination of persons with musculoskeletal disorders of the upper quadrant.

**Credits** 5.0

## **PTHEG 1574R: Physical Therapy Evaluation**

This course introduces students to the International Classification of Functioning (ICF) framework and theoretical frameworks for clinical problem solving and hypothesis development central to a high-quality physical therapy evaluation. Students will learn the patient/client management model with emphasis on history taking, screening for all body systems, and identification of red flags requiring referral. Physical therapy documentation and medical terminology, abbreviations, and symbols will be covered.

**Credits** 3.0

## **PTHEG 1580R: Kinesiology/Biomechanics I**

Physical therapists must understand the biomechanics of normal movement and the pathomechanics of the musculoskeletal system to prevent, evaluate, and recommend appropriate intervention for patients with movement dysfunction. Course content includes biomechanical principles and the structure and function of the upper quadrant joints. Students will assess the static posture and movement patterns of all joints in the upper quadrant, measure range of motion at each of the joints and test the strength of the muscles surrounding the joint.

**Credits** 4.0

## **PTHEG 1581R: Kinesiology/Biomechanics II**

Physical therapists must understand the biomechanics of normal movement and the pathomechanics of the musculoskeletal system to prevent, evaluate, and recommend appropriate intervention for patients with movement dysfunction. Course content includes biomechanical principles and the structure and function of the lower quadrant joints. Students will assess the static posture and movement patterns of all joints in the lower quadrant, measure range of motion at each of the joints and test the strength of the muscles surrounding the joint.

**Credits** 4.0

## **PTHEG 1602R: Orthotics and Prosthetics**

This course introduces students to the use of upper and lower extremity prosthetic and orthotic devices. Prosthetic components, materials, design, fitting, alignment, prescription, training, and total patient management are discussed. Emphasis is placed on development of basic analytical and psychomotor skills for improving patient function. The use of orthoses for the upper extremity, lower extremity, and spine is also introduced. Description of how orthotic devices are fabricated and used to improve function as a result of impairment will be presented. Course material will address components of orthotic design, fitting, alignment, prescription, and training as related to physical therapy patient management. Coordination of patient management by physicians, orthotists, and physical therapists related to orthotic and prosthetic devices use will also be covered.

**Credits** 4.0

## **PTHEG 1605R: Health Promotion and Exercise Prescription**

Physical therapists have a role in the prevention of disease and promotion of health and wellness for individuals and communities. In this course students will learn principles of clinical exercise testing and prescription with emphasis on aerobic fitness. This course will build on principles of strength and flexibility from PTHEG 1556 Patient Management II. Concepts will be applied to healthy individuals, individuals with special considerations, and to communities. This class will also include basic principles of nutrition as they relate to health promotion and wellness.

**Credits** 3.0

## **PTHEG 1606R: Cardiopulmonary Rehabilitation**

This course provides students with knowledge and skills to evaluate and treat clients with cardiopulmonary disorders. Cardiopulmonary pathology and pathophysiology, pharmacotherapeutics, and other medical management of the cardiopulmonary system are presented. The effect of exercise on the cardiopulmonary system, exercise prescription, and indications for physical therapy are discussed. Students will integrate this information to formulate individualized plans for management of patients with cardiopulmonary disorders.

**Credits** 5.0

## **PTHEG 1609R: Clinical Education Symposium III**

Clinical Education Symposium III is the third of three courses preparing students for clinical experiences. This course reinforces professional responsibilities related to certifications and immunizations and prepares students for full-time clinical experiences.

**Credits** 0.5

## **PTHEG 1618R: Clinical Conditions and Differential Screening**

This course provides a comprehensive overview of the pathophysiology, epidemiology and clinical signs and symptoms associated with disorders of the various bodily systems and the musculoskeletal pathologies that manifest from them. The implications for physical therapy, medical management and pharmaceutical interventions of these disorders will be discussed. Students will apply clinical reasoning and the latest research and evidence to differentiate disorders that originate within the neuro-musculoskeletal system, in addition to screening for serious pathology.

**Credits** 2.0

## **PTHEG 1620R: Integrated Clinical Experience I**

This is the first of two part-time integrated clinical experiences. Students are provided the opportunity to apply select components of the patient/client management model and professional practice expectations to patients/clients in a clinical setting under the direct supervision of a licensed physical therapist. Minimum GPA requirements apply.

**Credits** 1.0

## **PTHEG 1621R: Integrated Clinical Experience II**

This is the second of two part-time integrated clinical experiences. Students are provided the opportunity to apply select components of the patient/client management model and professional practice expectations to patients/clients in a clinical setting under the direct supervision of a licensed physical therapist. Minimum GPA requirements apply.

**Credits** 1.0

## **PTHEG 1641R: Neuromuscular Rehabilitation III**

This course addresses the pathology, pharmacotherapeutics, examination, evaluation and physical therapy management of individuals experiencing spinal cord injury, traumatic brain injury, multiple sclerosis, degenerative neurological conditions, neuro-oncological conditions, cerebellar dysfunction, and functional neurological disorders. Students are presented standardized examination tools, outcome measures, intervention strategies, tactics, and progression. Students will learn to complete an evaluation of the environment with appropriate therapeutic interventions for individuals with neurological impairments and are also introduced to the roles of PT in obtaining assistive technology, including custom wheelchair seating, neuro-orthotics and other assistive technology as needed. This course introduces the concepts of health promotion and wellness, maximizing participation, and engaging in interprofessional collaboration in the case management of individuals with neurological disorders.

**Credits** 5.0

## **PTHEG 1642R: Pediatric Rehabilitation**

This course introduces principles of physical therapy practice applied to the pediatric population. Students will learn clinical decision-making skills for the examination/evaluation process. The course also consists of evidence-based intervention strategies, including how to evaluate and implement use of adaptive equipment and orthotic devices. Students will learn about the practice of pediatric physical therapy in a variety of settings, such as the neonatal intensive care unit, educational settings, acute care, home care, and outpatient clinics.

**Credits** 3.0

## **PTHEG 1643R: Acute Care Rehabilitation**

Students will be introduced to and learn the basic concepts of physical therapy evaluation and intervention in the acute care setting. Topics include special considerations for infection control and safety procedures, obtaining a subjective history, examination, intervention planning, goal setting, discharge planning, documentation, and interdisciplinary collaboration and communication within the acute care setting. Students will learn a framework for the completion of a medical chart review; applying learned concepts regarding the role of lab values, vital signs, pathology, medical management, pharmacological factors, and interdisciplinary team management in the timing and provision of rehab services in the acute care setting. Students will learn to evaluate the potential for and adapt patient mobility techniques and functional task training to the acute care environment. Students will be introduced to specialized care units within the acute care settings (such as the intensive care unit, burn unit, trauma unit, neurological unit, etc.) and learn the unique rehabilitation nuances and interdisciplinary needs of patients in these environments.

**Credits** 4.0

## **PTHEG 1645R: Capstone I**

This is the first of three Capstone courses. This course will expand on the student's prior knowledge related to evidence-based practice. The students will apply the steps of evidence-based practice with real patients during the clinical experience. They will learn to ask PICO or patient-related questions when given a real patient, identify and appraise the existing literature relevant to their case, and integrate the findings of the literature.

**Credits** 1.0

## **PTHEG 1649R: Management & Reimbursement in Healthcare Systems**

This course will develop the knowledge and skills required for leadership and practice management as well as patient/client management within the various healthcare reimbursement systems. Payment models will be analyzed for their impact on patient services, interprofessional care delivery, organizational operations, major stakeholders, and legal and ethical decision making. Advocacy and health policy as they relate to payment, quality, and access will be covered. Topics of outcome-based quality improvement/assurance processes, risk management, coding, and case/utilization management are highlighted.

**Credits** 3.0

## **PTHEG 1656R: Patient Management III**

This course examines the physiological effects and clinical applications of biophysical agents, focusing on their appropriate use in patient care. It emphasizes integrating current rehabilitative strategies with clinical reasoning and evidence-based practice to equip students for managing diverse and complex clinical cases.

**Credits** 3.0

## **PTHEG 1661R: Musculoskeletal Rehabilitation II**

Building on the principles of evaluation including all elements of the ICF and the patient/client management model introduced in PTHEG 1574, this course introduces students to evidence-based evaluation methods for pathologies of the lumbar spine, pelvis, and lower extremities. Pharmacological and non-pharmacological medical management of lower quadrant musculoskeletal disorders will be covered. Students will continue to refine their ability to perform a subjective examination, propose a hypothesis, and conduct a physical examination of persons with musculoskeletal disorders of the lower quadrant.

**Credits** 5.0

## **PTHEG 1663R: Musculoskeletal Rehabilitation III**

Students will use evidence-based treatment approaches and other patient management models to guide clinical decision making for patients with complex musculoskeletal complaints, including, but not limited to spinal pathologies. Students will enhance the skills taught in PTHEG 1561 and 1661 to perform more complex treatments, including high velocity, low amplitude thrust manipulation and soft tissue and neural tissue mobilizations. Students will also learn the basic components of ergonomic and workplace assessments.

**Credits** 3.0

## **PTHEG 1682R: Geriatric Rehabilitation**

This course will focus on physical therapy management of the well and medically complex older adult. It incorporates evidence-based practice and knowledge of lifespan development into clinical decision making. Emphasis is placed on the selection of screening, examination, and outcome measurement tools, determination of medical necessity, prognosis, care coordination and plan of care development. Additional emphasis is placed on disease prevention and safety, differentiating normal and abnormal aging, interprofessional communication, and the selection, progression, and modification of interventions.

**Credits** 4.0

## **PTHEG 1695R: Clinical Experience I**

This is the first in a series of three full-time clinical experiences. Students participate in eleven weeks of full-time, supervised clinical practice to refine patient/client management skills and professional behaviors assigned to a different clinical site, clinical instructor, and/or patient population. Students continue to apply the process of clinical problem solving in the evaluation and treatment of patients/clients, display appropriate professional attitudes and behaviors, and effectively integrate current research into the clinical decision-making process to further improve clinical skills.

**Credits** 11.0

### **Prerequisites**

Successful completion of all prior coursework in the curriculum.

## **PTHEG 1708R: Clinical Experience II**

This is the second in a series of three full-time clinical experiences. Students participate in eleven weeks of full-time, supervised clinical practice to refine patient/client management skills and professional behaviors assigned to a different clinical site, clinical instructor, and/or patient population. Students continue to apply the process of clinical problem solving in the evaluation and treatment of patients/clients, display appropriate professional attitudes and behaviors, and effectively integrate current research into the clinical decision-making process to further improve clinical skills.

**Credits** 11.0

### **Prerequisites**

Successful completion of all prior coursework in the curriculum.

## **PTHEG 1709R: Clinical Experience III**

This is the third in a series of three full-time clinical experiences. Students participate in eleven weeks of full-time, supervised clinical practice to refine patient/client management skills and professional behaviors assigned to a different clinical site, clinical instructor, and/or patient population. Students continue to apply the process of clinical problem solving in the evaluation and treatment of patients/clients, display appropriate professional attitudes and behaviors, and effectively integrate current research into the clinical decision-making process to further improve clinical skills.

**Credits** 11.0

### **Prerequisites**

Successful completion of all prior coursework in the curriculum.

## **PTHEG 1798R: Capstone II**

This is the second of three Capstone courses. This course will expand on evidence-based practice by discussing key elements of knowledge translation. Students will learn to critique pre-appraised evidence such as systematic reviews and clinical practice guidelines. Students will learn different knowledge translation frameworks and examine examples of knowledge translation in the healthcare setting. Students will be exposed to concepts on the interrelatedness of knowledge translation, reimbursement, quality improvement, advocacy, and health policy.

**Credits** 1.0

## **PTHEG 1799R: Capstone III**

This is the third of three Capstone courses. This course will expand on the concepts of evidence-based practice, knowledge translation, and dissemination of evidence. Students will work with a faculty mentor to identify a patient case, clinical problem, issue related to health policy, or advocacy effort that will be addressed using best evidence. Student projects will be prepared to disseminate to a professional audience.

**Credits** 1.0

# Physical Therapy Program (Hybrid)

## Mission

The Midwestern University Physical Therapy Program will use the highest educational and professional standards to prepare physical therapists who can provide quality physical therapy services to a diverse population across all levels of the healthcare continuum.

## Accreditation

The Residential and Hybrid Physical Therapy Programs at Midwestern University, Glendale, Arizona are accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 3030 Potomac Avenue, Suite 100, Alexandria, VA 22305-3085; telephone: 703/706-3245; email: [accreditation@apta.org](mailto:accreditation@apta.org); website: <http://www.capteonline.org>. If needing to contact the program/institution directly, please call 623/572-3920 or email [azpt@midwestern.edu](mailto:azpt@midwestern.edu).

Midwestern University is accredited by The Higher Learning Commission, 230 South LaSalle Street, Suite 7- 500, Chicago, IL 60604-1413; 800/621-7440.

## Degree Description

Midwestern University's Physical Therapy Hybrid Program offers a course of study leading to the Doctor of Physical Therapy (D.P.T.) degree for qualified students using a blended learning model. The didactic phase of the Hybrid Program is delivered online using asynchronous and synchronous learning and includes seven in-person, immersive lab experiences on the Glendale Campus. The full-time, continuous, 30-month, entry-level Doctor of Physical Therapy curriculum is designed to deliver the academic and clinical education required to prepare students for their professional role as key members of the healthcare team and as an integral part of the healthcare delivery system. The general education, professional training, experience, and personal character development of physical therapists uniquely prepare them to coordinate care related to functional improvement and functional ability. The clinical phase of the program provides the students with necessary hands-on experience to develop the knowledge, skills and attitudes essential to practice physical therapy in a variety of settings. All students will be required to travel for clinical education experiences. The focus of the professional clinical doctorate degree program is to prepare entry-level practitioners to provide physical therapy services in large, small, traditional, and nontraditional community and institutional practice settings that require independent judgment, leadership, and autonomous practice. The program also provides the foundation for graduates to identify and contribute to effecting solutions to the major, emergent health issues of our society and to contribute to the academic and clinical education of future practitioners. The graduate will be prepared to make valuable, ongoing contributions to society, healthcare, and the profession through leadership and collaborative, intra- and inter-professional efforts.

## Time Limit for Completion of Coursework

The Doctor of Physical Therapy Program is a continuous, full-time program for 30 months. The maximum allotted time for completion of the doctorate program is 45 months.

## Program Goals and Expected Outcomes

Based on its mission, the Physical Therapy Program has developed goals for students, graduates, faculty members, and the Program.

1. Graduates and students will be prepared to provide culturally competent, whole-person physical therapy services to a diverse population across all levels of the healthcare continuum.

2. Graduates will demonstrate a commitment to professional development in the areas of clinical practice, service, and advocacy.
3. Graduates will have the ability to contribute to the educational growth of future practitioners and to the body of knowledge in the profession.
4. Graduates and students will participate in inter-professional education and/or inter-professional collaborative practice.
5. Faculty will provide high-quality teaching and professional standards.
6. Faculty will participate in scholarship activities which may include the scholarship of discovery, integration, application, or teaching.
7. Faculty will be engaged in service to the Department, College, University, community, or profession.
8. The collective core faculty will demonstrate expertise in contemporary, evidence-based clinical practice in a variety of settings across the continuum of care.
9. The Program will contribute to meeting the needs of the physical therapy workforce that supports a diverse population across all levels of the health care continuum.
10. The Program will create post-professional educational opportunities for faculty, graduates, clinical instructors and the greater physical therapy community to facilitate continuous professional development in areas such as teaching, research, leadership, practice, service, and advocacy.
11. The Program will collaborate with other health professional programs, community partners and clinical sites to support the development of inter-professional collaborative practice across the curriculum.
12. The Program will cultivate a culture of diversity and inclusivity that benefits students, faculty, staff, patients, caregivers, and communities that we serve.
13. The Program will provide an innovative curriculum that integrates the highest educational standards and contemporary practice.

## Admissions

The College of Health Sciences Physical Therapy Program uses a holistic admissions process for students who possess the academic and professional promise necessary for development as competent, caring members of the healthcare community. The Doctor of Physical Therapy Program is open on a competitive admissions basis to applicants having bachelor's degrees in any field but who have not completed an accredited physical therapy program. To select these candidates, a competitive admissions framework has been established. Within this competitive admissions framework, multiple criteria are used to select the most qualified candidates from an applicant pool that exceeds the number of seats available. The Physical Therapy Program uses the Centralized Application Service for Physical Therapy Schools (PTCAS). The Physical Therapy Program Admissions Committee reviews completed applications throughout the admissions cycle to determine the applicant's eligibility for an interview. Interviews are typically conducted during the fall, winter, and spring. Admission decisions are made on a rolling basis.

### Admission Requirements

Students seeking admission to the Physical Therapy Program must submit the following documented evidence:



1. Completion of a bachelor's degree from a regionally accredited college or university.
2. Minimum cumulative grade point average (GPA) of 3.0 and a minimum science GPA of 2.9 on a 4.0 scale. A pre-requisite GPA of 3.0 or greater may be considered for admission if the cumulative and/or science GPA(s) is(are) below the minimum criteria.
3. Completion of prerequisite courses totaling 46 semester/66 quarter credits as listed below from a regionally accredited college or university.
  - Grades of C or better (grades of C- are NOT acceptable) in each course.
4. Completion of a total of 30 hours of observation, volunteerism or paid work in a physical therapy setting is required for admission. These hours must be verified by a Physical Therapist. Additional hours will not strengthen an application.
5. Demonstration of a people or service orientation through community service or extracurricular activities.
6. Motivation for and commitment to healthcare as demonstrated by previous work, volunteer work, or other life experiences.
7. Motivation and commitment to learning, including self-directed learning.
8. Ability to meet the Technical Standards with or without reasonable accommodations.
9. Oral and written communication skills necessary to interact with patients and colleagues.
10. Commitment to abide by the Midwestern University Drug-Free Workplace and Substance Abuse Policy.
11. Passage of the Midwestern University criminal background check.
12. Provision of additional documentation needed to meet specific program requirements.

## Prerequisite Courses

<b>Courses:</b>	<b>Sem. Hrs.</b>	<b>Qtr. Hrs.</b>
<i>Science Courses:</i>		
Biology with lab	4	6
Vertebrate Anatomy with lab	3	4
Physiology	3	4
General Chemistry with lab	4	6
General Physics with lab	8	12
<i>General Courses:</i>		
Math (college algebra or above)	3	4
Statistics (should include inferential statistics)	3	4
English—must include at least one composition course (oral communication/public speaking recommended)	6	9
Social & Behavioral Sciences (including at least one psychology course)	6	9

## Application Process and Deadlines

To be considered for admission to the Physical Therapy Program, applicants must submit the following to the Midwestern University Office of Admissions.

### 1. PTCAS Application

Applicants are required to submit their applications to PTCAS at <http://www.ptcas.org> by April 15th. Please refer to the PTCAS application instructions for specific details about completing the application, required documents, and processing time. The PTCAS application should be available for applicants during the summer months. The Midwestern University Physical Therapy Program reviews completed applications throughout the admissions cycle. Candidates seeking admission into the hybrid pathway must complete the supplemental questions on the PTCAS application.

### 2. Completed Applications

The Office of Admissions will send emails verifying receipt of PTCAS applications with all required materials to all applicants who submit an application. The emails will also include instructions on checking the status of the required application materials online. Applicants are responsible for tracking the receipt of their application materials and ensuring the submission of all required documents. Only applicants who submit completed applications with all required application materials by April 15th will be considered for potential entrance into the program.

Graduate Record Examination (GRE) general test scores using the Midwestern University institution code of 4160 are strongly recommended for candidates with a cumulative GPA below a

3.2, although not required. **GRE scores can only strengthen an application in the case of a lower GPA. GRE scores cannot weaken an application for any candidate.** Only test scores earned during the previous five years and sent directly from the Educational Testing Service (ETS) will be accepted. The Office of Admissions must receive official GRE scores no later than April 15th. For more information about the GRE, contact Educational Testing Services (ETS) at 609/771-7670 or 866/473-4373 or visit [www.gre.org](http://www.gre.org)

*Please note:* Applicants are responsible for notifying the Office of Admissions of any changes in their mailing address or email address. All application withdrawal requests must be made in writing via e-mail, fax, or letter to:

Office of Admissions Midwestern University  
19955 N. 59th Avenue  
Glendale, AZ 85308  
888/247-9277 or 623/572-3215  
[admissaz@midwestern.edu](mailto:admissaz@midwestern.edu)

## Interview and Selection Process

When applicants are considered eligible for interviews after review of their completed admissions files, they are notified of available interview dates and invited by the Office of Admissions to schedule a virtual interview. A typical interview day involves virtual participation in the following activities, which are coordinated by the Office of Admissions: an interview with at least two interviewers, interaction with Midwestern University physical therapy students, a virtual campus tour, and an opportunity to meet with program faculty, alumni, and an admissions counselor. During interview sessions, the interviewer questions applicants about their academic, personal, and professional experiences, aspirations and preparedness for admission to the Physical Therapy Program. Each interviewer is blinded from the candidates PTCAS application. Each interviewer rates prospective students on a standardized evaluation form. These evaluations are included in the applicant files provided to the Physical Therapy Admissions Committee. The Physical Therapy Admissions Committee meets after each interview panel to review the files of applicants who have been interviewed. The committee reviews the full application files for interviewed applicants and then formulates and submits recommendations to the Dean for final approval. The Dean, via the Office of Admissions, notifies applicants in writing of admission decisions.

## Reapplication Process

Students who receive either denial or end-of-cycle letters may reapply for the following year's admissions cycle. Before reapplying, individuals contemplating reapplication should seek the advice of an admissions counselor.

To initiate the reapplication process, prospective students must complete and submit a new application through the standard application process.

## Transfer Process

The Physical Therapy Program does not accept transfer students.

# Technical Standards, PT Hybrid

## Technical Standards

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the college.

Candidates must be able to perform the following abilities and skills with or without reasonable accommodation:

1. **Observation:** The candidate must be able to accurately make observations at a distance and close at hand. The candidate must be able to learn to use observational skills to make correct interpretations about patient health, impairments, movement, functional capacity, participation, and contextual factors to meet the curriculum requirement to individually complete a physical therapy evaluation. Candidates must be willing to learn to make observations through palpation of a patient.
2. **Communication:** Communication includes speech, language, reading, writing and computer literacy. The candidate must be able to communicate in English proficiently and sensitively in verbal and written form and be able to perceive nonverbal communication.
3. **Motor:** Candidates must be able to coordinate both gross and fine muscular movements, and possess sufficient postural control and neuromuscular control to perform profession-specific skills and tasks, including the ability to direct or execute immediate care to an ill or injured patient during an emergency situation. Candidates must be able to learn to safely mobilize patients using techniques consistent with standards of physical therapy practice, which may include the need to move 50 pounds vertically and/or horizontally.
4. **Intellectual, Conceptual, Integrative and Quantitative Abilities:** The candidate must be able to problem solve, measure, calculate, reason, analyze, record and synthesize large amounts of information. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships. The candidate must have the ability to use computers to meet program requirements.
5. **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of their intellectual abilities, the exercise of good judgment and the consistent, prompt completion of all responsibilities and the development of mature, sensitive and effective relationships. Candidates must be able to tolerate physically, mentally and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn are all personal qualities required during the educational process.

Candidates who are accepted into the Doctor of Physical Therapy program are required to verify that they understand and are able to meet these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may require accommodation to meet Technical Standards must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

## Graduation Requirements

To qualify for the degree Doctor of Physical Therapy (D.P.T.), students must:

1. Satisfactorily complete all courses with a minimum cumulative grade point average of 2.75.
2. Satisfactorily complete the required minimum of 141 quarter credit hours in the curriculum.
3. Receive a favorable recommendation for doctoral degree conferral from the Physical Therapy Academic Review Committee and the CHS Student Promotion and Graduation Committee.
4. Receive a favorable recommendation for doctoral degree conferral from the University Faculty Senate.
5. Settle all financial accounts with the institution.
6. Complete all graduation clearance requirements as instructed by the Office of the Registrar.

# Licensure Requirements

After graduating from an accredited physical therapist education program, a student must pass a national examination and meet licensure requirements of the state in which the graduate wishes to practice.

Graduation and degree conferral do not guarantee passing the national examination or passing the licensure requirements of the state.

Midwestern University's Doctor of Physical Therapy Program meets the educational requirements for licensure to practice as a physical therapist in the following states and territories: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, District of Columbia, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, U.S. Virgin Islands, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

Each student should check the additional licensure requirements for the state, district or territory in which they intend to pursue employment.

## Physical Therapy Hybrid Curriculum

The Physical Therapy Program reserves the right to alter the curriculum whenever it deems appropriate. This catalog does not establish a contractual relationship between Midwestern University and the student.

The Class of 2025 and Class of 2026: Spring will utilize the curriculum listed in the academic year 2023-2024 catalog.

Total Quarter Credits in the Professional Program: 141\*

\*In addition to the required curriculum, students may complete elective (see PTHEG 1311H-1317H in Courses tab) or remedial (see PTHEG 1310H in Courses tab) coursework.

## First Professional Year

### Summer Quarter

Course Code	Title	Credits
PTHEG 1502H	Clinical Education Symposium I	0.5
PTHEG 1507H	Human Anatomy and Embryology	5.0
PTHEG 1509H	Professional Roles and Issues	4.0
PTHEG 1531H	Evidence Based Practice	3.0
PTHEG 1574H	Physical Therapy Evaluation	3.0
<b>Sub-Total Credits</b>		<b>15.50</b>

### Fall Quarter

Course Code	Title	Credits
PTHEG 1506H	Patient Management I	3.0
PTHEG 1508H	Exercise Physiology	3.0
PTHEG 1519H	Pathophysiology I	3.0
PTHEG 1580H	Kinesiology/Biomechanics I	4.0
COREG 1560N	Interprofessional Healthcare	0.5
<b>Sub-Total Credits</b>		<b>13.50</b>

## Winter Quarter

Course Code	Title	Credits
PTHEG 1503H	Clinical Education Symposium II	0.5
PTHEG 1510H	Medical Imaging	2.0
PTHEG 1541H	Neuromuscular Rehabilitation I	4.0
PTHEG 1556H	Patient Management II	3.0
PTHEG 1581H	Kinesiology/Biomechanics II	4.0
COREG 1570N	Interprofessional Healthcare	0.5
<b>Sub-Total Credits</b>		<b>14.00</b>

## Spring Quarter

Course Code	Title	Credits
PTHEG 1512H	Pharmacology	2.0
PTHEG 1520H	Pathophysiology II	3.0
PTHEG 1542H	Neuromuscular Rehabilitation II	5.0
PTHEG 1561H	Musculoskeletal Rehabilitation I	5.0
COREG 1580N	Interprofessional Healthcare	0.5
<b>Sub-Total Credits</b>		<b>15.50</b>

## Second Professional Year

### Summer Quarter

Course Code	Title	Credits
PTHEG 1606H	Cardiopulmonary Rehabilitation	5.0
PTHEG 1649H	Management & Reimbursement in Healthcare Systems	3.0
PTHEG 1656H	Patient Management III	3.0
PTHEG 1661H	Musculoskeletal Rehabilitation II	5.0
<b>Sub-Total Credits</b>		<b>16.00</b>

### Fall Quarter

Course Code	Title	Credits
PTHEG 1602H	Orthotics and Prosthetics	4.0
PTHEG 1605H	Health Promotion and Exercise Prescription	3.0
PTHEG 1620H	Integrated Clinical Experience I	1.0
PTHEG 1641H	Neuromuscular Rehabilitation III	5.0
PTHEG 1642H	Pediatric Rehabilitation	3.0
<b>Sub-Total Credits</b>		<b>16.00</b>

## Winter Quarter

Course Code	Title	Credits
PTHEG 1609H	Clinical Education Symposium III	0.5
PTHEG 1618H	Clinical Conditions and Differential Screening	2.0
PTHEG 1621H	Integrated Clinical Experience II	1.0
PTHEG 1643H	Acute Care Rehabilitation	4.0
PTHEG 1663H	Musculoskeletal Rehabilitation III	3.0
PTHEG 1682H	Geriatric Rehabilitation	4.0
<b>Sub-Total Credits</b>		<b>14.50</b>

## Spring Quarter

Course Code	Title	Credits
PTHEG 1645H	Capstone I	1.0
PTHEG 1695H	Clinical Experience I	11.0
<b>Sub-Total Credits</b>		<b>12.00</b>

## Third Professional Year

### Summer Quarter

Course Code	Title	Credits
PTHEG 1708H	Clinical Experience II	11.0
PTHEG 1798H	Capstone II	1.0
<b>Sub-Total Credits</b>		<b>12.00</b>

### Fall Quarter

Course Code	Title	Credits
PTHEG 1709H	Clinical Experience III	11.0
PTHEG 1799H	Capstone III	1.0
<b>Sub-Total Credits</b>		<b>12.00</b>
Total Credits		141

## Student Academic Policies

### Academic Progress

The academic standing of a student is determined by the student's cumulative grade point average. To progress to the next quarter, a student must satisfactorily complete all didactic courses and academic requirements for the preceding quarter.

## Physical Therapy Program Calendar

### Summer 2025

Event	Class	Date
<b>Memorial Day *No Classes*</b>	<b>*No Classes*</b>	<b>May 26, 2025</b>
Orientation	PT-I	May 27 - 30, 2025
Classes Begin	PT-I	June 2, 2025
Classes Resume	PT-II, PT-III	June 2, 2025
Last Day to Add/Drop Classes	PT-I, PT-II, PT-III	June 6, 2025
<b>Juneteenth (Observed)</b>	<b>*No Classes*</b>	<b>June 19, 2025</b>
<b>Independence Day (Observed)</b>	<b>*No Classes*</b>	<b>July 4, 2025</b>
Last Day of Class	PT-I, PT-II, PT-III	August 8, 2025
Quarterly Exams	PT-I, PT-II, PT-III	August 11 - 15, 2025
Quarter Break	PT-I, PT-II, PT-III	August 18 - 22, 2025

### Fall 2025

Event	Class	Date
Clinical Experience I	PT-III	August 25 - November 14, 2025
Classes Begin	PT-I, PT-II	August 25, 2025
Last Day to Add/Drop Classes	PT-I, PT-II	August 29, 2025
<b>Labor Day</b>	<b>*No Classes*</b>	<b>September 1, 2025</b>
<b>White Coat Ceremony</b>		<b>September 27, 2025</b>
Last Day of Classes	PT-I, PT-II	October 31, 2025
Quarterly Exams	PT-I, PT-II	November 3 - 7, 2025
Thanksgiving Break	PT-I, PT-II	November 10 - 28, 2025

## Winter 2025

Event	Class	Date
Clinical Experience II	PT-III	December 1, 2025 - February 20, 2026
Classes Begin	PT-I, PT-II	December 1, 2025
Last Day to Add/Drop Classes	PT-I, PT-II	December 5, 2025
Winter Break	PT-I, PT-II	December 22, 2025 - January 2, 2026
Classes Resume	PT-I, PT-II	January 5, 2026
<b>Martin Luther King/ Jr. Day</b>	<b>*No Classes*</b>	<b>January 19, 2026</b>
Last Day of Classes	PT-I, PT-II	February 20, 2026
Quarterly Exams	PT-I, PT-II	February 23 - 27, 2026
Spring Break	PT-III	February 23 - 27, 2026
Spring Break	PT-I, PT-II	March 2 - 6, 2026

## Spring 2026

Event	Class	Date
Clinical Experience III	PT-III	March 2 - May 22, 2026
Classes Begin	PT-I, PT-II	March 9, 2026
Last Day to Add/Drop Classes	PT-I, PT-II	March 13, 2026
Last Day of Classes	PT-I, PT-II	May 15, 2026
Quarterly Exams	PT-I, PT-II	May 18 - 22, 2026
<b>Memorial Day</b>	<b>*No Classes*</b>	<b>May 25, 2026</b>
Program Completion Date	PT-III	May 26, 2026
Quarter Break	PT-I, PT-II	May 26 - 29, 2026
Commencement		June 3, 2026 9:00 a.m.

Last Revision 08/28/2024

# Faculty

**Rita Ator, PT, DPT, OCS, ATC**

University of Illinois  
Director of Clinical Education and Assistant Professor

**Patrice Ayala, PT, DPT, GCS, CEEAA**

A.T. Still University  
Assistant Director of Clinical Education and Assistant Professor

**Roi Dennis A. Cayetano, PT, DPT**

Northeastern University  
Assistant Professor

**Megan Eikenberry, PT, DPT, EdD, NCS**

Bellarmino University  
Associate Professor

**Mia Erickson, PT, EdD, CHT**

West Virginia University  
Assistant Director and Professor

**Lacey Frankland, PT, DPT, ATC, OCS, SCS**

Washington University School of Medicine  
Assistant Professor

**Jennifer Gruenhagen, PT, DPT, PhD**

University of Miami  
Assistant Professor

**Rebecca Johnson, PT, DPT, CCS**

Indiana University  
Assistant Professor

**Maggie Klausing, PT, DPT, MSCI, OCS**

Washington University in St. Louis  
Assistant Professor

**Michael T. Lebec, PT, PhD**

University of Arizona  
Professor

**Andrea Lopes Sauer, PT, PhD**

Federal University of Sao Paulo  
Assistant Professor

**Myles Melyon, PT, DPT, CCS**

Midwestern University  
Assistant Professor

**Suzanne O'Neal, PT, DPT, DHSc, NCS**

University of Indianapolis  
Associate Professor

**Byron E. Russell, PT, PhD**

Texas Woman's University  
Director and Associate Professor

**Kylie Scott, PT, DPT, EdD, OCS, CMPT**

Northern Arizona University  
Associate Professor

**Josh Subialka, PT, DPT, DHSc, OCS, FAAOMPT**

College of St. Scholastica  
Assistant Professor

## Physical Therapy Program (Hybrid) Courses

### COREG 1560N: Interprofessional Healthcare

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5



## **COREG 1570N: Interprofessional Healthcare**

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

## **COREG 1580N: Interprofessional Healthcare**

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

## **PTHEG 1305H: Hand Therapy**

This course is designed to facilitate additional didactic and laboratory experiences related to hand therapy practice. Students will be exposed to advanced concepts in pathology, imaging, examination, differential diagnosis, and intervention that will expand their knowledge and skills in this specialty area of practice. Content will be supported by current, best evidence, and students will apply concepts of evidence-based practice to areas of patient-client management. Lecture material will be supported by lab and case discussions.

**Credits** 1.0

### **Prerequisites**

Permission of Course Director. This course is subject to a minimum of 2 and maximum of 20 enrollees and may not be offered each year.

## **PTHEG 1306H: Vestibular Rehabilitation**

This elective will expand on vestibular concepts covered in PTHEG 1541/1542 Neuromuscular Rehabilitation I & II. Topics will include assessment, differential diagnosis, and treatment approaches for vestibular disorders, including peripheral hypofunction, bilateral vestibular loss, benign paroxysmal positional vertigo, vestibular migraines, persistent postural perceptual dizziness, and Meniere's disease.

**Credits** 2.0

### **Prerequisites**

Permission of Course Director. This course is subject to a minimum of 4 and maximum of 20 enrollees and may not be offered each year.

## **PTHEG 1311H: Regenerative Rehabilitation Research**

In this elective course, students have the opportunity to assist physical therapy faculty with research projects pertaining to the faculty member's research agenda. Students obtain individual faculty member approval to assist with research prior to enrollment in this course.

**Credits** 1.0

-6

### **Prerequisites**

[PTHEG 1531H: Evidence Based Practice](#)

Permission of Course Director. This course is subject to enrollment restrictions and may not be offered each year.

## **PTHEG 1312H: Adaptive Sports Research**

In this elective course, students have the opportunity to assist physical therapy faculty with research projects pertaining to the faculty member's research agenda. Students obtain individual faculty member approval to assist with research prior to enrollment in this course.

**Credits** 1.0

-6

### **Prerequisites**

[PTHEG 1531H: Evidence Based Practice](#)

Permission of Course Director. This course is subject to enrollment restrictions and may not be offered each year.

## **PTHEG 1313H: Gait and Human Movement Research**

In this elective course, students have the opportunity to assist physical therapy faculty with research projects pertaining to the faculty member's research agenda. Students obtain individual faculty member approval to assist with research prior to enrollment in this course.

**Credits** 1.0

-6

### **Prerequisites**

[PTHEG 1531H: Evidence Based Practice](#)

Permission of Course Director. This course is subject to enrollment restrictions and may not be offered each year.

## **PTHEG 1314H: Clinical Research Using the Computer Assisted Rehabilitation Environment**

In this elective course, students have the opportunity to assist physical therapy faculty with research projects pertaining to the faculty member's research agenda. Students obtain individual faculty member approval to assist with research prior to enrollment in this course.

**Credits** 1.0

-6

### **Prerequisites**

[PTHEG 1531H: Evidence Based Practice](#)

Permission of Course Director. This course is subject to enrollment restrictions and may not be offered each year.

## **PTHEG 1315H: Neurologic PT Research**

In this elective course, students have the opportunity to assist physical therapy faculty with research projects pertaining to the faculty member's research agenda. Students obtain individual faculty member approval to assist with research prior to enrollment in this course.

**Credits** 1.0

-6

### **Prerequisites**

[PTHEG 1531H: Evidence Based Practice](#)

Permission of Course Director. This course is subject to enrollment restrictions and may not be offered each year.

## **PTHEG 1316H: Research Examining the DPT Student Experience**

In this elective course, students have the opportunity to assist physical therapy faculty with research projects pertaining to the faculty member's research agenda. Students obtain individual faculty member approval to assist with research prior to enrollment in this course.

**Credits** 1.0

-6

### **Prerequisites**

[PTHEG 1531H: Evidence Based Practice](#)

Permission of Course Director. This course is subject to enrollment restrictions and may not be offered each year.

## **PTHEG 1317H: Upper Extremity Research**

In this elective course, students have the opportunity to assist physical therapy faculty with research projects pertaining to the faculty member's research agenda. Students obtain individual faculty member approval to assist with research prior to enrollment in this course.

**Credits** 1.0

-6

### **Prerequisites**

[PTHEG 1531H: Evidence Based Practice](#)

Permission of Course Director. This course is subject to enrollment restrictions and may not be offered each year.

## **PTHEG 1320H: Pelvic Health Physical Therapy**

This course is designed to facilitate additional didactic or clinical endeavors related to pelvic floor physical therapy theory and/or practice. The course is designed to assist students with integration of didactic content related to pelvic floor physical therapy.

**Credits** 1.0

### **Prerequisites**

Permission of Course Director. This course is subject to enrollment restrictions and may not be offered each year.

## **PTHEG 1321H: Advanced Manual Therapy**

This course is designed to facilitate additional didactic or clinical endeavors related to orthopedic and sports physical therapy, particularly within the subset of orthopedic manual physical therapy. The course will emphasize lab practice to improve student comfort with patient handling and performance of manual therapy techniques. Techniques will include novel manual therapy interventions and review and refinement of previously learned techniques commonly performed in musculoskeletal practice. Labs will also include clinical reasoning related to patient presentations, incorporating concepts from previous musculoskeletal related courses.

**Credits** 1.0

### **Prerequisites**

Permission of Course Director. This course is subject to enrollment restrictions and may not be offered each year.

## **PTHEG 1322H: Dry Needling**

This course will consist of review of the history of dry needling origins, mechanisms of manual therapy and dry needling, OSHA bloodborne pathogens, indications and contraindications to dry needling, safety considerations for manual therapy and dry needling, and lab practice of techniques for commonly needled muscles. Relevant anatomy and muscle functions, as well as additional material on diagnoses and/or conditions that may be appropriate for dry needling intervention will also be reviewed.

**Credits** 1.0

### **Prerequisites**

Permission of Course Director. This course is subject to enrollment restrictions and may not be offered each year.

## **PTHEG 1323H: Para Sports and Adaptive Recreation**

This course introduces students to para sports and accessible recreational activities. The various pathways for healthcare professionals to participate will be outlined. An overview of different para sport models and organizations will be presented, including the Special Olympics, Paralympics, and Military Adaptive Sports. Students will recognize how impairments impact movement and skill acquisition in competitive and recreational sport.

**Credits** 1.0

### **Prerequisites**

Permission of Course Director. This course is subject to enrollment restrictions and may not be offered each year.

## **PTHEG 1502H: Clinical Education Symposium I**

Clinical Education Symposium I is the first of three courses preparing students for integrated and full-time clinical experiences. This course provides an overview of the requirements for participation in clinical education and focuses on the development of professional accountability and conduct. Resources are provided to allow students to develop organizational strategies that assist students to meet all requirements prior to the integrated and full-time clinical experiences.

**Credits** 0.5

## **PTHEG 1503H: Clinical Education Symposium II**

Clinical Education Symposium II is the second of three courses preparing students for integrated and full-time clinical experiences. This course addresses clinical education policies relevant to the integrated clinical experiences, jurisdictional law, the role of the physical therapist assistant, and the various collaborative models of clinical education students may encounter during clinical experiences.

**Credits** 0.5

## **PTHEG 1506H : Patient Management I**

Students will learn the fundamental principles and skills for patient care with emphasis on safety and patient mobility. Topics include universal precautions, body mechanics, draping, and patient positioning. Other topics include selection, adjustment, and prescription of assistive and adaptive devices; patient mobilization techniques; and basic wheelchair skills including sizing, parts management, and propulsion.

**Credits** 3.0

## **PTHEG 1507H: Human Anatomy and Embryology**

This course will cover the anatomy of the human body and relevant embryological development in a lecture, discussion, and virtual lab format. The emphasis will be on the relationship to form and function and the use of anatomy in physical therapy diagnosis. Lab sessions will include virtual dissection of the human body with discussion.

**Credits** 5.0

## **PTHEG 1508H: Exercise Physiology**

As cytology is the study of structure of the cell, and physiology is the study of how the cell works, exercise physiology can be defined as the effects of exercise and other stresses on the cell and ultimately the human body. This course provides the student a basic understanding of the effects of exercise and stresses on the human body as it relates to physical therapy practice.

**Credits** 3.0

## **PTHEG 1509H: Professional Roles and Issues**

This course explores professionalism, core values, and professional roles in physical therapy practice. Students are introduced to legal and ethical issues and learn to problem solve using ethical decision-making models. Students are introduced to concepts related to professional communication, teaching, and learning and apply these concepts to different populations. The role of professional advocacy is developed through an understanding of professional organizations and through an introduction to health policies influencing physical therapy practice. Students learn to work with individuals from different backgrounds and develop cultural competence.

**Credits** 4.0

## **PTHEG 1510H: Medical Imaging**

This course will introduce students to various forms of medical imaging and relate their use to the neuromusculoskeletal system contextualized within the health care delivery system. Examples of imaging modalities to be covered include plain film radiography, MRI, CT scan, bone scintigraphy, and diagnostic ultrasound. Implications for physical therapy management and decision making will be discussed.

**Credits** 2.0

## **PTHEG 1512H: Pharmacology**

This course will introduce students to pharmacological interventions in patient-client management. It will introduce categories of drugs affecting individual body systems and provide information on pharmacokinetics and pharmacodynamics. Drug effects on the body as they relate to exercise and drug interactions will be discussed. Implications for physical therapy management and decision making will be discussed.

**Credits** 2.0

## **PTHEG 1519H: Pathophysiology I**

This course provides foundational material on the concepts of pain, injury, the inflammatory response, and tissue healing. Students are also introduced to the normal physiology and pathophysiology, epidemiology, clinical signs and symptoms, prognosis, and medical management of both acquired and hereditary conditions and disorders relevant to physical therapy practice. Diagnostic imaging, laboratory values, and pharmaceutical management will also be presented. Implications for physical therapy management and decision making will be discussed.

**Credits** 3.0

## **PTHEG 1520H: Pathophysiology II**

This course is a continuation of Pathophysiology I. Students continue learning normal physiology and the pathophysiology, epidemiology, clinical signs and symptoms, prognosis, and medical management of both acquired and hereditary conditions and disorders relevant to physical therapy practice. Diagnostic imaging, laboratory values, and pharmaceutical management will also be presented. Implications for physical therapy management and decision making will be discussed.

**Credits** 3.0

## **PTHEG 1531H: Evidence Based Practice**

This course is designed to provide students with foundational knowledge and skills needed to provide evidence-based patient care. This course covers study design, formulation of research questions and hypotheses, types of data, sampling methodology, statistics, measurement, variables, and interpretation of research findings. An introduction to the five steps of the evidence-based practice process is presented in this course.

**Credits** 3.0

## **PTHEG 1541H: Neuromuscular Rehabilitation I**

This course will introduce common pathologies of the neurological system, including the involved neuroanatomy, associated clinical findings, and basic medical management. Students will learn neurological examination techniques at the body structures and functions level of the International Classification of Functioning framework and be introduced to concepts of neuroplasticity, motor control, and motor learning.

**Credits** 4.0

## **PTHEG 1542H: Neuromuscular Rehabilitation II**

This course presents clinical decision-making conceptual frameworks to guide the evaluation and management of patients with neurologic conditions. Pathology, medical management, and physical therapy evaluation and treatment of patients with stroke, vestibular, and Parkinson's Disease will be presented. Movement analysis strategies and motor learning principles will be applied to assess movement dysfunction, and intervention strategies to address impairments will be introduced. Students will learn to develop an evidence-informed, patient-specific plan of care, apply learned treatment techniques, and document neurological examination and treatments in a manner suitable for the medical record.

**Credits** 5.0

## **PTHEG 1556H: Patient Management II**

Patient Management II introduces concepts of therapeutic exercise intervention for physical therapists. Therapeutic exercise prescription is a fundamental skill in physical therapist practice. This course will provide students with foundations and techniques associated with exercise prescription to improve flexibility, range of motion, endurance, and strength. Exercises specific to each body region and common conditions encountered in physical therapy practice will be covered.

**Credits** 3.0

## **PTHEG 1561H: Musculoskeletal Rehabilitation I**

Building on the principles of evaluation including all elements of the ICF and the patient/client management model introduced in PTHEG 1574, this course introduces students to evidence-based evaluation methods for pathologies of the cervical, thoracic spine and upper extremity. Pharmacological and non-pharmacological medical management of upper quadrant musculoskeletal disorders will be covered. Students will continue to refine their ability to perform a subjective examination, propose a hypothesis, and conduct a physical examination of persons with musculoskeletal disorders of the upper quadrant.

**Credits** 5.0

## **PTHEG 1574H: Physical Therapy Evaluation**

This course introduces students to the International Classification of Functioning (ICF) framework and theoretical frameworks for clinical problem solving and hypothesis development central to a high-quality physical therapy evaluation. Students will learn the patient/client management model with emphasis on history taking, screening for all body systems, and identification of red flags requiring referral. Physical therapy documentation and medical terminology, abbreviations, and symbols will be covered.

**Credits** 3.0

## **PTHEG 1580H: Kinesiology/Biomechanics I**

Physical therapists must understand the biomechanics of normal movement and the pathomechanics of the musculoskeletal system to prevent, evaluate, and recommend appropriate intervention for patients with movement dysfunction. Course content includes biomechanical principles and the structure and function of the upper quadrant joints. Students will assess the static posture and movement patterns of all joints in the upper quadrant, measure range of motion at each of the joints and test the strength of the muscles surrounding the joint.

**Credits** 4.0

## **PTHEG 1581H: Kinesiology/Biomechanics II**

Physical therapists must understand the biomechanics of normal movement and the pathomechanics of the musculoskeletal system to prevent, evaluate, and recommend appropriate intervention for patients with movement dysfunction. Course content includes biomechanical principles and the structure and function of the lower quadrant joints. Students will assess the static posture and movement patterns of all joints in the lower quadrant, measure range of motion at each of the joints and test the strength of the muscles surrounding the joint.

**Credits** 4.0

## **PTHEG 1602H: Orthotics and Prosthetics**

This course introduces students to the use of upper and lower extremity prosthetic and orthotic devices. Prosthetic components, materials, design, fitting, alignment, prescription, training, and total patient management are discussed. Emphasis is placed on development of basic analytical and psychomotor skills for improving patient function. The use of orthoses for the upper extremity, lower extremity, and spine is also introduced. Description of how orthotic devices are fabricated and used to improve function as a result of impairment will be presented. Course material will address components of orthotic design, fitting, alignment, prescription, and training as related to physical therapy patient management. Coordination of patient management by physicians, orthotists, and physical therapists related to orthotic and prosthetic devices use will also be covered.

**Credits** 4.0

## **PTHEG 1605H: Health Promotion and Exercise Prescription**

Physical therapists have a role in the prevention of disease and promotion of health and wellness for individuals and communities. In this course students will learn principles of clinical exercise testing and prescription with emphasis on aerobic fitness. This course will build on principles of strength and flexibility from PTHEG 1556 Patient Management II. Concepts will be applied to healthy individuals, individuals with special considerations, and to communities. This class will also include basic principles of nutrition as they relate to health promotion and wellness.

**Credits** 3.0

## **PTHEG 1606H: Cardiopulmonary Rehabilitation**

This course provides students with knowledge and skills to evaluate and treat clients with cardiopulmonary disorders. Cardiopulmonary pathology and pathophysiology, pharmacotherapeutics, and other medical management of the cardiopulmonary system are presented. The effect of exercise on the cardiopulmonary system, exercise prescription, and indications for physical therapy are discussed. Students will integrate this information to formulate individualized plans for management of patients with cardiopulmonary disorders.

**Credits** 5.0

## **PTHEG 1609H: Clinical Education Symposium III**

Clinical Education Symposium III is the third of three courses preparing students for clinical experiences. This course reinforces professional responsibilities related to certifications and immunizations and prepares students for full-time clinical experiences.

**Credits** 0.5

## **PTHEG 1618H: Clinical Conditions and Differential Screening**

This course provides a comprehensive overview of the pathophysiology, epidemiology and clinical signs and symptoms associated with disorders of the various bodily systems and the musculoskeletal pathologies that manifest from them. The implications for physical therapy, medical management and pharmaceutical interventions of these disorders will be discussed. Students will apply clinical reasoning and the latest research and evidence to differentiate disorders that originate within the neuro-musculoskeletal system, in addition to screening for serious pathology.

**Credits** 2.0

## **PTHEG 1620H: Integrated Clinical Experience I**

This is the first of two part-time integrated clinical experiences. Students are provided the opportunity to apply select components of the patient/client management model and professional practice expectations to patients/clients in a clinical setting under the direct supervision of a licensed physical therapist. Minimum GPA requirements apply.

**Credits** 1.0

## **PTHEG 1621H: Integrated Clinical Experience II**

This is the second of two part-time integrated clinical experiences. Students are provided the opportunity to apply select components of the patient/client management model and professional practice expectations to patients/clients in a clinical setting under the direct supervision of a licensed physical therapist. Minimum GPA requirements apply.

**Credits** 1.0



## **PTHEG 1641H: Neuromuscular Rehabilitation III**

This course addresses the pathology, pharmacotherapeutics, examination, evaluation and physical therapy management of individuals experiencing spinal cord injury, traumatic brain injury, multiple sclerosis, degenerative neurological conditions, neuro-oncological conditions, cerebellar dysfunction, and functional neurological disorders. Students are presented standardized examination tools, outcome measures, intervention strategies, tactics, and progression. Students will learn to complete an evaluation of the environment with appropriate therapeutic interventions for individuals with neurological impairments and are also introduced to the roles of PT in obtaining assistive technology, including custom wheelchair seating, neuro-orthotics and other assistive technology as needed. This course introduces the concepts of health promotion and wellness, maximizing participation, and engaging in interprofessional collaboration in the case management of individuals with neurological disorders.

**Credits** 5.0

## **PTHEG 1642H: Pediatric Rehabilitation**

This course introduces principles of physical therapy practice applied to the pediatric population. Students will learn clinical decision-making skills for the examination/evaluation process. The course also consists of evidence-based intervention strategies, including how to evaluate and implement use of adaptive equipment and orthotic devices. Students will learn about the practice of pediatric physical therapy in a variety of settings, such as the neonatal intensive care unit, educational settings, acute care, home care, and outpatient clinics.

**Credits** 3.0

## **PTHEG 1643H: Acute Care Rehabilitation**

Students will be introduced to and learn the basic concepts of physical therapy evaluation and intervention in the acute care setting. Topics include special considerations for infection control and safety procedures, obtaining a subjective history, examination, intervention planning, goal setting, discharge planning, documentation, and interdisciplinary collaboration and communication within the acute care setting. Students will learn a framework for the completion of a medical chart review; applying learned concepts regarding the role of lab values, vital signs, pathology, medical management, pharmacological factors, and interdisciplinary team management in the timing and provision of rehab services in the acute care setting. Students will learn to evaluate the potential for and adapt patient mobility techniques and functional task training to the acute care environment. Students will be introduced to specialized care units within the acute care settings (such as the intensive care unit, burn unit, trauma unit, neurological unit, etc.) and learn the unique rehabilitation nuances and interdisciplinary needs of patients in these environments.

**Credits** 4.0

## **PTHEG 1645H: Capstone I**

This is the first of three Capstone courses. This course will expand on the student's prior knowledge related to evidence-based practice. The students will apply the steps of evidence-based practice with real patients during the clinical experience. They will learn to ask PICO or patient-related questions when given a real patient, identify and appraise the existing literature relevant to their case, and integrate the findings of the literature.

**Credits** 1.0

## **PTHEG 1649H: Management & Reimbursement in Healthcare Systems**

This course will develop the knowledge and skills required for leadership and practice management as well as patient/client management within the various healthcare reimbursement systems. Payment models will be analyzed for their impact on patient services, interprofessional care delivery, organizational operations, major stakeholders, and legal and ethical decision making. Advocacy and health policy as they relate to payment, quality, and access will be covered. Topics of outcome-based quality improvement/assurance processes, risk management, coding, and case/utilization management are highlighted.

**Credits** 3.0

## **PTHEG 1656H: Patient Management III**

This course examines the physiological effects and clinical applications of biophysical agents, focusing on their appropriate use in patient care. It emphasizes integrating current rehabilitative strategies with clinical reasoning and evidence-based practice to equip students for managing diverse and complex clinical cases.

**Credits** 3.0

## **PTHEG 1661H: Musculoskeletal Rehabilitation II**

Building on the principles of evaluation including all elements of the ICF and the patient/client management model introduced in PTHEG 1574, this course introduces students to evidence-based evaluation methods for pathologies of the lumbar spine, pelvis, and lower extremities. Pharmacological and non-pharmacological medical management of lower quadrant musculoskeletal disorders will be covered. Students will continue to refine their ability to perform a subjective examination, propose a hypothesis, and conduct a physical examination of persons with musculoskeletal disorders of the lower quadrant.

**Credits** 5.0

## **PTHEG 1663H: Musculoskeletal Rehabilitation III**

Students will use evidence-based treatment approaches and other patient management models to guide clinical decision making for patients with complex musculoskeletal complaints, including, but not limited to spinal pathologies. Students will enhance the skills taught in PTHEG 1561 and 1661 to perform more complex treatments, including high velocity, low amplitude thrust manipulation and soft tissue and neural tissue mobilizations. Students will also learn the basic components of ergonomic/workplace assessments.

**Credits** 3.0

## **PTHEG 1682H: Geriatric Rehabilitation**

This course will focus on physical therapy management of the well and medically complex older adult. It incorporates evidence-based practice and knowledge of lifespan development into clinical decision making. Emphasis is placed on the selection of screening, examination, and outcome measurement tools, determination of medical necessity, prognosis, care coordination and plan of care development. Additional emphasis is placed on disease prevention and safety, differentiating normal and abnormal aging, interprofessional communication, and the selection, progression, and modification of interventions.

**Credits** 4.0

## **PTHEG 1695H: Clinical Experience I**

This is the first in a series of three full-time clinical experiences. Students participate in eleven weeks of full-time, supervised clinical practice to refine patient/client management skills and professional behaviors assigned to a different clinical site, clinical instructor, and/or patient population. Students continue to apply the process of clinical problem solving in the evaluation and treatment of patients/clients, display appropriate professional attitudes and behaviors, and effectively integrate current research into the clinical decision-making process to further improve clinical skills.

**Credits** 11.0

## **PTHEG 1708H: Clinical Experience II**

This is the second in a series of three full-time clinical experiences. Students participate in eleven weeks of full-time, supervised clinical practice to refine patient/client management skills and professional behaviors assigned to a different clinical site, clinical instructor, and/or patient population. Students continue to apply the process of clinical problem solving in the evaluation and treatment of patients/clients, display appropriate professional attitudes and behaviors, and effectively integrate current research into the clinical decision-making process to further improve clinical skills.

**Credits** 11.0

## **PTHEG 1709H: Clinical Experience III**

This is the third in a series of three full-time clinical experiences. Students participate in eleven weeks of full-time, supervised clinical practice to refine patient/client management skills and professional behaviors assigned to a different clinical site, clinical instructor, and/or patient population. Students continue to apply the process of clinical problem solving in the evaluation and treatment of patients/clients, display appropriate professional attitudes and behaviors, and effectively integrate current research into the clinical decision-making process to further improve clinical skills.

**Credits** 11.0

## **PTHEG 1798H: Capstone II**

This is the second of three Capstone courses. This course will expand on evidence-based practice by discussing key elements of knowledge translation. Students will learn to critique pre-appraised evidence such as systematic reviews and clinical practice guidelines. Students will learn different knowledge translation frameworks and examine examples of knowledge translation in the healthcare setting. Students will be exposed to concepts on the interrelatedness of knowledge translation, reimbursement, quality improvement, advocacy, and health policy.

**Credits** 1.0

## **PTHEG 1799H: Capstone III**

This is the third of three Capstone courses. This course will expand on the concepts of evidence-based practice, knowledge translation, and dissemination of evidence. Students will work with a faculty mentor to identify a patient case, clinical problem, issue related to health policy, or advocacy effort that will be addressed using best evidence. Student projects will be prepared to disseminate to a professional audience.

**Credits** 1.0

# Speech-Language Pathology Program

## Mission

The Midwestern University Speech-Language Pathology Program's mission is to mentor intellectually curious and compassionate students to be effective, reflective, and collaborative Speech-Language Pathologists serving their communities.

## Vision

The Midwestern University Speech-Language Pathology program works collaboratively in a health-oriented university to integrate academic teaching and diverse clinical experiences to develop effective clinicians through:

- Interprofessional practice
- Innovative technology experiences
- Clinical simulation opportunities
- Culturally and linguistically diverse clinical experiences
- Scholarly activity
- Individualized, intentional mentorship
- Comprehensive and dynamic instruction
- Clinical, academic, and community partnership

## Accreditation

The Master of Science (M.S.) education program in Speech-Language Pathology (SLP) {residential} at Midwestern University (MWU), Glendale is accredited by the Council of Academic Accreditation in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association, 2200 Research Boulevard, #310, Rockville, MD 20850; 800-498-2071 or 301-296-5700.

Midwestern University is accredited by [The Higher Learning Commission, a Commission of the North Central Association of Colleges and Schools \(HLC/NCA\)](#), 230 South LaSalle Street, Suite 7-500, Chicago, IL 60604-1413.

## Degree Description

The Speech-Language Pathology Program provides academic and clinical experiences that culminate in the Master of Science (M.S.) in Speech-Language Pathology degree. The curriculum is designed to prepare students for a professional role as a speech-language pathologist (SLP). Graduates of this program will be poised to assume positions as entry-level clinicians as part of a healthcare or educational team. The Speech-Language Pathology degree program is a continuous, full-time program of study that spans seven quarters, or 21 months from admission to graduation (Traditional Track). The degree program offers an additional full-time program of study option that spans 8 quarters, or 24 months from admission to graduation (Leveling Track). The maximum allotted time for completion of the program is 3 years.

The Speech-Language Pathology Program offers a balanced curriculum to prepare future SLPs to work with both children and adults with communication and swallowing disorders. Course elements are designed to imbue students with the knowledge base pertinent to the field, while simultaneously fostering the critical thinking, problem solving, and self-confidence that contributes to effective independent clinical practice. Students will also develop skills in self-reflection and collaboration which contribute to life-long learning, hallmark traits of a master clinician.

The Speech-Language Pathology Program curriculum incorporates academic, research, and clinical experiences. The curriculum includes basic science and research coursework, in addition to courses that focus on specific communication disorders. Each student will explore the evidence base of speech-language pathology and related professions, and will apply knowledge gained to clinical practices. All students will learn about basic research methods within the discipline, and can elect to complete research that culminates in a master's thesis. Students may alternatively elect to complete a capstone project (non-thesis track). Students will engage in clinical practica at the Midwestern University Speech-Language Institute, local schools and healthcare facilities. Each student will complete two advanced practica of at least 10 weeks duration. These involve full-time work in an educational facility, hospital or clinic. Students will gain clinical experiences with a wide variety of clients with communication and swallowing impairment.

The Speech-Language Pathology Program is designed to prepare students for work in educational or healthcare settings as entry-level speech-language pathologists. Graduates will be able to demonstrate evidence of all knowledge and skill requirements to begin a Clinical Fellowship Year (CFY). At the completion of the CFY, graduates will be eligible to apply for the Certificate of Clinical Competence from the American Speech-Language-Hearing Association. Students will also be eligible to apply for state licensure through the Arizona Department of Health Services, Office of Special Licensing, or other state licensing agency.

## Program Objectives

The Master of Science in Speech-Language Pathology Program seeks to:

1. Foster a supportive learning environment for students;
2. Foster a collaborative and compassionate approach to patient care;
3. Graduate competent speech-language pathologists who possess the levels of clinical judgment, knowledge, empathy, technical skills, and confidence to begin professional practice with a culturally and linguistically diverse society;
4. Foster a philosophy of lifelong learning in speech-language pathology students;
5. Expand clinical practice in the Midwestern University Speech-Language Institute to provide speech-language pathology students with a broad range of evidence-based and interprofessional practice experiences;
6. Advance the knowledge base of the profession through research and support of students' scholarly activities;
7. Contribute to the overall growth and academic excellence of Midwestern University by supporting its Mission and Vision.

## Admissions

The College of Health Sciences Speech-Language Pathology Program considers admission of those applicants who demonstrate academic and clinical aptitude coupled with professionalism. The program admits only full-time students. A competitive admissions framework is implemented to select program candidates. Each file is evaluated by a faculty committee using a specific program rubric that assesses academic ability, writing, pre-clinical experiences, and a variety of other factors.

The Midwestern University Speech-Language Pathology Program uses the Communication Sciences and Disorders Centralized Application Service (CSDCAS) for students applying to the program. Applicants should submit all materials by March 1 in order to be considered (<http://www.capcsd.org/csdcas>). Please refer to the CSDCAS website for instructions on submission of application materials.

The Speech-Language Pathology Program operates on a rolling admissions cycle. Completed applications are reviewed throughout the cycle to determine applicant eligibility for interviews. Interviews are typically conducted during the winter and spring quarters.

Admissions decisions are generally made within one month of the interview until the class is filled.

## Admission Requirements

The SLP Program offers incoming students the opportunity to matriculate into two different tracks: Traditional Track and Leveling Track. The Leveling Track is for students with baccalaureate degrees in an area other than Communication Sciences and Disorders and/or for those who lack the starred SLP specific prerequisite coursework included below. Admission requirements for each track are detailed below.

### Traditional Track

To apply for admission to the College of Health Sciences Speech-Language Pathology Program Traditional Track, individuals must submit documentation of the following minimum requirements before the academic year commences for the incoming class:

1. Completion of a baccalaureate degree from a regionally-accredited institution in Communication Sciences and Disorders, inclusive of the courses listed below, or
2. Completion of a baccalaureate degree from a regionally-accredited institution in an area other than Communication Sciences and Disorders with completion of prerequisite coursework in the following areas:

Prerequisites	Semester Hours	Quarter Hours
Anatomy and Physiology of Communication Mechanisms*	3	4
Phonetics*	3	4
Speech-Language Development*	3	4
Speech and/or Hearing Science*	3	4
Statistics	3	4
Biological Sciences	3	4
Physics or Chemistry	3	4
Social Sciences	3	4

3. Minimum undergraduate cumulative grade point average (CGPA) of 2.75 on a 4.0 scale; and minimum major grade point average (MGPA) in all speech- language pathology coursework of 3.0 on a 4.0 scale. Grades of C or better for prerequisite courses; grades of C- are not acceptable for the prerequisite courses listed above.
4. Oral and written communication skills necessary to interact with patients and colleagues.
5. Two letters of recommendation from individuals who can comment on academic, clinical, and professional experiences of the applicant.
6. A completed CSDCAS application.
7. An interview with faculty (invitation only).
8. During the interview day, write an essay given a clinical writing prompt (for interview candidates only).
9. Commitment to abide by the Midwestern University Drug-Free Workplace and Substance Abuse Policy.
10. Passage of the Midwestern University criminal background check.

### Graduate Record Examination Scores (GRE; optional)

Applicants who choose to submit official GRE general test and writing scores should send scores directly to Midwestern University. The MWU institutional code for submitting scores is 4160.

### Leveling Track

Individuals who completed a baccalaureate degree in an area other than Communication Sciences and Disorders and/or who do not meet the minimum requirements for the Traditional Track may apply for admission to the College of Health Sciences Speech- Language Pathology Program Leveling Track. To

select this track, individuals must designate this option during the application process, and submit documentation of the following minimum requirements before the academic year commences for the incoming class:

1. Completion of a baccalaureate degree from a regionally-accredited institution with completion of prerequisite coursework in the following areas:

Prerequisites	Semester Hours	Quarter Hours
Statistics	3	4
Biological Sciences	3	4
Physics or Chemistry	3	4
Social Sciences	3	4

2. Minimum undergraduate cumulative grade point average (GPA) of 2.75 on a 4.0 scale. Grades of C or better for prerequisite courses; grades of C- are not acceptable for the prerequisite courses listed above.
3. Oral and written communication skills necessary to interact with patients and colleagues.
4. Two letters of recommendation from individuals who can comment on academic, clinical, and professional experiences of the applicant.
5. A completed CSDCAS application.
6. An interview with faculty (invitation only).
7. During the interview day, write an essay given a clinical writing prompt (for interview candidates only).
8. Commitment to abide by the Midwestern University Drug-Free Workplace and Substance Abuse Policy.
9. Passage of the Midwestern University criminal background check.

### Graduate Record Examination Scores (GRE; optional)

Applicants who choose to submit official GRE general test and writing scores should send scores directly to Midwestern University. The MWU institutional code for submitting scores is 4160.

## Application Process

To be considered for admission to the Speech-Language Pathology Program, applicants must submit the following to the Office of Admissions:

1. CSDCAS Application  
Applicants are required to submit their applications to CSDCAS at <http://www.capcsd.org/csdcas> by March 1. Please refer to the CSDCAS application instructions for specific details about completing the application, required documents, and processing time. Due to the large number of applications and the limited number of seats available, applicants are encouraged to complete their CSDCAS application early in the cycle. An advantage of a centralized application service is that students can monitor the status of their applications online.
2. Letters of Recommendation  
Applicants are required to submit a minimum of two letters of recommendation to CSDCAS (<http://www.capcsd.org/csdcas>). The Office of Admissions will accept only letters of recommendation received via CSDCAS. Letters should be contributed from professors, speech-language pathologists, or other professionals with whom the applicant has interacted. They should address academic, clinical and professional qualities that will contribute to the applicant's readiness for graduate study. Please refer to the CSDCAS application instructions for specific guidelines and requirements for submitting letters of recommendation.
3. GRE Scores (optional)  
Applicants who choose to submit official GRE general test and writing scores should send scores directly to Midwestern University. The MWU institutional code for submitting scores is 4160.
4. Completed Applications  
The Office of Admissions will send a letter verifying receipt of completed CSDCAS application to

applicants who meet the minimum cumulative GPA requirement of 3.00. The letters will include instructions for checking the status of the required application materials online. Applicants are responsible for tracking the receipt of their application materials and ensuring the submission of all required documents.

Only applicants who submit complete application packages will be considered for potential entrance into the Program.

*Please note:* Applicants are responsible for notifying the Office of Admissions of any changes in their mailing address or email address. All application withdrawal requests must be made in writing via e-mail, fax, or letter to:

Midwestern University Office of Admissions  
19555 N. 59th Ave.  
Glendale, AZ 85308  
Phone: 623/572-3275 Fax: 623/572-3229  
[admissaz@midwestern.edu](mailto:admissaz@midwestern.edu)

## Interview and Selection Process

When applicants are considered eligible for interviews after review of their completed files, they will be notified of available interview dates and invited by the Office of Admissions to schedule an interview. A typical interview day involves participation in the following activities coordinated by the Office of Admissions: an interview with two program faculty, a campus tour, and consultation with a counselor from the Office of Admissions. Virtual and in-person interview dates will be offered.

During interview sessions, program faculty will engage students in conversation regarding topics relevant to educational or healthcare settings. Students will also be asked to provide a writing sample in response to a clinical prompt. Interview and writing sample responses will be evaluated using rubrics established for this purpose. Prospective students' applications, interviews, and writing samples are evaluated using rubrics that were developed by the SLP Program. The Speech-Language Pathology Admissions Committee makes admission recommendations to the Program Director. The Dean, via the Office of Admissions, notifies each applicant in writing of the admission action/decision.

## Reapplication Process

Students who receive denial or end-of-cycle letters may reapply for the following year's admissions cycle.

Before reapplying, however, individuals contemplating reapplication should seek the advice of an admissions counselor or the SLP Program Director. To initiate the reapplication process, prospective students must complete and submit a new application and proceed through the standard application process.

# Technical Standards, SLP

## Technical Standards

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the College.

Candidates must be able to perform the following abilities and skills:

1. Observation: The candidate must be able to accurately make observations at a distance and close at hand. Observation necessitates the functional use of the sense of vision and sense of touch and is enhanced by the functional use of all of the other senses.



2. Communication: The candidate must be able to communicate effectively, efficiently and sensitively in both oral and written form and be able to perceive and interpret nonverbal communication.
3. Motor: Candidates must be able to coordinate both gross and fine muscular movements, maintain equilibrium and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control and eye-to-hand coordination to perform profession-specific skills and tasks.
4. Intellectual, Conceptual, Integrative and Quantitative Abilities: The candidate must be able to problem solve, measure, calculate, reason, analyze, record and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
5. Behavioral and Social Attributes: The candidate must possess the emotional health required for full utilization of the candidate's intellectual abilities, the exercise of good judgment and the consistent, prompt, completion of all responsibilities and the development of mature, sensitive, and effective relationships. Candidates must be able to tolerate physically, mentally, and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn are all personal qualities required during the educational process. The candidate must agree to participate in touching/palpating on the skin and being touched/palpated on the skin by individuals regardless of gender in all academic settings, including dental head/neck exams, including intra- and extra-oral examinations. These activities will take place in large and small group settings as directed in the College's curricular requirements.

Candidates are required to certify that they understand and meet these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet Technical Standards with accommodation, must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

## **Transfer Policy**

The Speech-Language Pathology Program does not accept students seeking to transfer credit from another speech-language pathology master's program. These students may apply for admission to the SLP Program, but will be required to complete all program requirements at Midwestern University.

Students on the leveling track may transfer in undergraduate courses for one or more of the four courses offered in the first quarter of the leveling track. Only grades of B or better will be considered for transfer.

## **Evaluation of Student Performance**

Students in the Speech-Language Pathology Program will be evaluated based upon academic and clinical performance at regular intervals during each quarter of study and throughout their program. Both formative and summative assessment techniques will be applied.

Summative assessment will include traditional grades, written feedback for individual assignments, and final course grades at the end of a term or practicum experience. Formative assessment will include regular evaluation of student performance relative to learning objectives that reflect entry-level knowledge and skills as outlined by the Council for Clinical Certification in Audiology and Speech-Language Pathology (CFCC), an independent affiliate of the American Speech-Language-Hearing Association (ASHA). The use of both summative and formative assessments across academic and clinical curricula will ensure student learning and preparation to enter the field of speech-language pathology.

## Graduation Requirements

To qualify for graduation with the Master of Science in Speech-Language Pathology degree (M.S.), students must:

1. Satisfactorily complete all courses with a minimum cumulative GPA of 3.0;
2. Satisfactorily complete the required minimum number of 111.5 (for students who complete the Capstone project) - 112.5 (for students who complete the Thesis project) credit hours in the Traditional Track curriculum; OR satisfactorily complete the required minimum number of 123.5 (for students who complete the Capstone project) - 124.5 (for students who complete the Thesis project) credit hours in the Leveling Track curriculum;
3. Pass the Comprehensive Examination with a minimum score of 70%;
4. Receive a favorable recommendation for master's degree conferral from the Speech-Language Pathology Academic Review Committee and the CHS Student Promotion and Graduation Committee;
5. Receive a favorable recommendation for master's degree conferral from the University Faculty Senate;
6. Settle all financial accounts with the University; and
7. Complete all graduation clearance requirements as instructed by the Office of the Registrar.

## Licensure Requirements

Speech-language pathologists must hold a master's or doctoral degree to be eligible for certification, licensure, and practice as a speech-language pathologist. National certification is obtained through the Council for Clinical Certification in Audiology and Speech-Language Pathology (CFCC) of the American Speech-Language Hearing Association (ASHA), which establishes the standards for certification. The CFCC awards the Certificate of Clinical Competence in Speech-Language Pathology (CCC-SLP), a nationally recognized professional credential.

Requirements for the CCC-SLP include earning a Master's degree from a program accredited by the Council on Academic Accreditation. In addition to coursework and practicum requirements, standards for the CCC-SLP include passing the Praxis II® Exam in Speech-Language Pathology and completing the equivalent of 36 weeks (full time) of professional experience (the "Clinical Fellowship") post graduation. The Praxis II® Exam is administered by the Educational Testing Service (ETS).

Midwestern University Master's Degree in Speech- Language Pathology is designed to meet the educational requirements to become a licensed speech language pathologist in the following states and territories: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, District of Columbia, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

The MWU Glendale SLP program has not made a determination that its Master of Science Program curriculum meets the territorial educational requirements for licensure or certification in the following territories: Puerto Rico and U.S. Virgin Islands.

Each student should check the additional licensure requirements for the state, district or territory in which they intend to pursue employment.

Speech-language pathologists must be licensed to practice in Arizona pursuant to the requirements of the Arizona Practice Act, Chapter 17, Articles 1-4, Sections 36-1901 through 36-1940. Passing the Praxis II® Exam is a requirement for licensure in most states, including Arizona.

The Arizona Department of Education requires that speech-language pathologists working in the public schools obtain the Speech-Language Pathologist Pre-K through 12 Certificate. This credential is necessary to work in Arizona public schools. The requirements for this certification include a master's degree in SLP, at least 250 hours of supervised clinical practice by an SLP-CCC, and a passing score on the Praxis II® Exam in Speech-Language Pathology.

# Speech-Language Pathology Curriculum (Leveling Track)

**Degree Type**  
Master of Science (M.S.)

The Leveling Track curriculum is composed of 67.5 to 68.5 required course credits (quarter hours) for the first academic year, 56 required course credits for the second academic year for a total of 123.5 (for students who complete the Capstone project) to 124.5 (for students who complete the Thesis project) quarter credits. Clinical practica are scheduled in the third, fourth, fifth, and sixth quarters of the curriculum. Advanced practica, or full-time placements in healthcare or educational settings, are secured for the last two quarters of the program.

Students in the Leveling Track begin one quarter early (Summer I) online to complete 12 additional credit hours of leveling courses. Students will resume coursework in the Fall Quarter all on-campus continuing with the first year traditional track curriculum.

## First Professional Year Summer 1 Quarter (Leveling Track Only)

Course Code	Title	Credits
SLPPG 575	Anatomy and Physiology of Communication Mechanisms	3.0
SLPPG 580	Phonetics	3.0
SLPPG 585	Speech and Language Development	3.0
SLPPG 590	Speech and Hearing Science	3.0
Total Credits		12

# Speech-Language Pathology Curriculum

**Degree Type**  
Master of Science (M.S.)

The professional master's curriculum is composed of 55.5 to 56.5 required course credits (quarter hours) for the first academic year, 56 required course credits for the second academic year for a total of 111.5 (for students who complete the Capstone project) - 112.5 (for students who complete the Thesis project) quarter credits. Clinical practica are scheduled in the second, third, fourth, and fifth quarters of the curriculum. Advanced practica, or full-time placements in healthcare or educational settings, are secured for the last two quarters of the program. In addition to the required curriculum, students may complete elective or remedial coursework, including Thesis continuation courses, independent study, or the Dementia Care elective.

The Midwestern University College of Health Sciences Speech-Language Pathology Program reserves the right to alter its curriculum. This catalog does not establish a contractual relationship between Midwestern University and individual students.

The following curriculum applies to the incoming Class of 2027. Enrolled second-year SLP students should refer to the previous catalog.

## First Professional Year

### Fall Quarter

Course Code	Title	Credits
COREG 1560M	Interprofessional Healthcare	0.5
SLPPG 501	Neurological Bases of Communication Disorders	3.0
SLPPG 502	Research Methods in Communication Sciences and Disorders	3.0
SLPPG 507	One Health for SLPs	1.0
SLPPG 520	Disorders of Articulation and Phonology	3.0
SLPPG 521	Child Language and Learning I	4.0
SLPPG 540	Diagnostic Assessment and Treatment Planning	4.0
<b>Sub-Total Credits</b>		<b>18.50</b>

### Winter Quarter

Course Code	Title	Credits
COREG 1570M	Interprofessional Healthcare	0.5
SLPPG 503	Evidence-Based Practice in Communication Sciences and Disorders	2.0
SLPPG 508	Culture and Communication	2.0
SLPPG 522	Child Language and Learning II	4.0
SLPPG 526	Aphasia	4.0
SLPPG 550	Clinical Practicum I	3.0
SLPPG 511	Thesis I	2.0
<b>Sub-Total Credits</b>		<b>15.50-17.50</b>

### Spring Quarter

Course Code	Title	Credits
COREG 1580M	Interprofessional Healthcare	0.5
SLPPG 527	Neurological Disease and Injury	4.0
SLPPG 529	Voice and Resonance Disorders	4.0
SLPPG 533	Child Language and Learning III	4.0
SLPPG 552	Clinical Practicum II	3.0
	SLPPG 505 or SLPPG 512	1-2
<b>Sub-Total Credits</b>		<b>16.50-17.50</b>

## Second Professional Year

### Summer Quarter

Course Code	Title	Credits
SLPPG 602	Dysphagia	4.0
SLPPG 609	Professional Practice in School Settings	1.0
SLPPG 624	Aural Rehabilitation	3.0
SLPPG 628	Motor Speech Disorders	3.0
SLPPG 631	Augmentative and Alternative Communication	3.0
SLPPG 654	Clinical Practicum III	3.0
	SLPPG 606 or SLPPG 613	1
<b>Sub-Total Credits</b>		<b>18.00</b>

### Fall Quarter

Course Code	Title	Credits
SLPPG 604	Professional Issues and Ethics in Speech-Language Pathology	2.0
SLPPG 610	Professional Practice in Healthcare Settings	1.0
SLPPG 623	Communication Disorders in Autism	3.0
SLPPG 630	Fluency Disorders	3.0
SLPPG 632	Advanced Practices in Dysphagia	4.0
SLPPG 656	Clinical Practicum IV	3.0
	SLPPG 607 or SLPPG 614	1
<b>Sub-Total Credits</b>		<b>17.00</b>

### Winter Quarter

Course Code	Title	Credits
	SLPPG 660 or SLPPG 662	12
SLPPG 699	Praxis II® Examination Review	1.0
<b>Sub-Total Credits</b>		<b>13.00</b>

### Spring Quarter

Course Code	Title	Credits
	SLPPG 660 or SLPPG 662	12
<b>Sub-Total Credits</b>		<b>12.00</b>
Total Credits		111.5-112.5

## Speech Language Pathology Program Calendar

### Summer 2025

Event	Class	Date
Classes Begin	SLP-II, SLP-L	June 2, 2025
Last Day to Add/Drop Classes	SLP-II, SLP-L	June 6, 2025
<b>Juneteenth (Observed)</b>	<b>*No Classes*</b>	<b>June 19, 2025</b>
<b>Independence Day (Observed)</b>	<b>*No Classes*</b>	<b>July 4, 2025</b>
Last Day of Class	SLP-II, SLP-L	August 8, 2025
Quarterly Exams	SLP-II, SLP-L	August 11 - 15, 2025
Quarter Break	SLP-II, SLP-L	August 18 - 22, 2025

## Fall 2025

Event	Class	Date
Orientation	SLP-I	August 18 - 20, 2025
Classes Begin	SLP-I, SLP-II	August 25, 2025
Last Day to Add/Drop Classes	SLP-I, SLP-II	August 29, 2025
<b>Labor Day</b>	<b>*No Classes*</b>	<b>September 1, 2025</b>
<b>White Coat Ceremony</b>		<b>September 27, 2025</b>
Last Day of Classes	SLP-I, SLP-II	October 31, 2025
Quarterly Exams	SLP-I, SLP-II	November 3 - 7, 2025
Thanksgiving Break	SLP-I, SLP-II	November 10 - 28, 2025

## Winter 2025

Event	Class	Rotation
Rotation I (Advanced Clinical Practicum I) *	SLP-II	*December 1, 2025 - February 27, 2026
Classes Begin	SLP-I	December 1, 2025
Last Day to Add/Drop Classes	SLP-I	December 5, 2025
Winter Break	SLP-I	December 22, 2025 - January 2, 2026
Variable Winter Break	SLP-II	Winter break schedules may vary depending on site.
Classes Resume	SLP-I	January 5, 2026
<b>Martin Luther King/ Jr. Day</b>	<b>*No Classes*</b>	<b>January 19, 2026</b>
Last Day of Classes	SLP-I	February 20, 2026
Quarterly Exams	SLP-I	February 23 - 27, 2026
Spring Break	SLP-I	March 2 - 6, 2026

## Spring 2026

Event	Class	Date
Rotation II (Advanced Clinical Practicum II) *	SLP-II	*March 2- May 22, 2026
Classes Begin	SLP-I	March 9, 2026
Last Day to Add/Drop Classes	SLP-I	March 13, 2026
Last Day of Classes	SLP-I	May 15, 2026
Quarterly Exams	SLP-I	May 18 - 22, 2026
<b>Memorial Day</b>	<b>*No Classes*</b>	<b>May 25, 2026</b>
Quarter Break	SLP-I	May 26 - 29, 2026
Commencement		June 3, 2026 9:00 a.m.

\*Rotations may be extended for one week beyond stated dates based on agreements with affiliated placement sites and/or the student's clinical needs.

Last Revision 04/11/2025

## Faculty

**Jennifer Buckler, M.S., CCC-SLP**

Arizona State University  
Clinical Associate Professor

**Lisa Bunker, Ph.D., CCC-SLP**

University of Utah  
Assistant Professor

**Stephanie Christensen, Ph.D., CCC-SLP**

Arizona State University  
Program Director and Associate Professor

**Sharon Edwards, M.S., CCC-SLP**

Arizona State University  
Clinical Assistant Professor

**Schea Fissel, Ph.D., CCC-SLP**

Kent State University  
Associate Professor

**Alisha Kleindel, M.S., CCC-SLP**

Eastern Washington University  
Instructor

**Christine Meyer, M.S., CCC-SLP**

Arizona State University  
Clinical Assistant Professor

**A. Danielle Reed, Ed.D., CCC-SLP**

Grand Canyon University  
Assistant Program Director and Assistant Professor

**Melissa Rivera, Ph.D., CCC-SLP**

Arizona State University  
Assistant Professor

**Stephanie Teale-Sanchez, M.S., CCC-SLP**

Baylor University  
Clinic Coordinator and Clinical Associate Professor

**Ethan Wash, M.S., CCC-SLP**

Northern Arizona University  
Clinical Assistant Professor

**Laura Weinrich, M.S., CCC-SLP**

Arizona State University  
Clinical Assistant Professor

## Speech Language Pathology Program Courses

### COREG 1560M: Interprofessional Healthcare

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

### COREG 1570M: Interprofessional Healthcare

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

## **COREG 1580M: Interprofessional Healthcare**

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

## **COREG 1580M: Interprofessional Healthcare**

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

## **SLPPG 501: Neurological Bases of Communication Disorders**

This course covers the neurological and physiological bases of normal and disordered communication. Embryological development of the central nervous system, and neuroanatomy and neurophysiology of the motor and sensory systems, including vision and audition are covered. Brain dissection laboratory experiences enhance mastery of neurological concepts introduced in the course. The course integrates basic neuroanatomy with cognitive neuroscience through assigned readings, lectures, and laboratory experiences.

**Credits** 3.0

## **SLPPG 502: Research Methods in Communication Sciences and Disorders**

This course introduces students to research methods, including basic research concepts, common research designs, and methods of data analysis commonly used in the field of speech-language pathology. Students will learn to critically read and evaluate research manuscripts.

**Credits** 3.0

## **SLPPG 503: Evidence-Based Practice in Communication Sciences and Disorders**

In this course, students will gain experience critiquing professional literature relevant to clinical and/or research practices. They will complete a literature review on a topic of interest and use it to inform evidence-based, clinical decisions.

**Credits** 2.0



## **SLPPG 505: Capstone I**

This course is required for any student not electing the thesis track. It includes independent study with the guidance of a mentor and lectures that will support cohort-level needs across Capstone projects. Students will critically appraise evidence-based practices that are clinically relevant to the scope of practice in speech-language pathology, identify an area of need, and develop methods to address the need in the form of a research or service-learning project. At the end of the quarter, students will have developed a proposal that summarizes their critical appraisals of evidence, justifies the need for the project, identifies a project aim, and describes proposed methods for accomplishing this aim.

**Credits** 2.0

### **Prerequisites**

[SLPPG 502: Research Methods in Communication Sciences and Disorders](#)

[SLPPG 503: Evidence-Based Practice in Communication Sciences and Disorders](#)

## **SLPPG 507: One Health for SLPs**

Today's healthcare practitioners work together to evaluate and treat patients with complex disorders. This course will address the basics of interdisciplinary practice in educational and healthcare settings. Students will evaluate the efficacy of collaborative practice, and will explore the impact of interspecies research upon the treatment of people with communication and swallowing disorders.

**Credits** 1.0

## **SLPPG 508: Culture and Communication**

Communication is shaped within a cultural context. Children understand and produce the language system to which they are exposed, and many learn multiple languages simultaneously. People routinely find themselves in the position of needing to learn a non-native language. This course will address the challenges of multilingualism or second language learning, and will review best practices in assessing and treating individuals who do not use English as their primary language.

**Credits** 2.0

## **SLPPG 511: Thesis I**

This course is required by all students electing the thesis track. It involves independent study overseen by the Thesis Chair and approved by the student's thesis committee. Students will work closely with their Thesis Chair to plan and develop a written Prospectus document including a literature review, research questions, and proposed methodology. The course will culminate in a Prospectus defense presented to the student's thesis committee.

**Credits** 2.0

### **Prerequisites**

[SLPPG 502: Research Methods in Communication Sciences and Disorders](#)

## **SLPPG 512: Thesis II**

This course is for all students on the thesis track. It involves two hours per week of independent study with the Thesis Chair. Students will submit a research proposal to the Internal Review Board at Midwestern University, begin data collection, set up a data management system, and report on their progress at the end of the quarter.

**Credits** 1.0

### **Prerequisites**

[SLPPG 511: Thesis I](#)

## **SLPPG 520: Disorders of Articulation and Phonology**

This course covers speech disorders of developmental or linguistic origin. Students will learn to assess and treat articulation and phonological impairment. Highlights include collecting and analyzing comprehensive speech samples, administering standardized tests, and planning therapeutic interventions specific to individual cases.

**Credits** 3.0

## **SLPPG 521: Child Language and Learning I**

This course provides speech-language pathology students with the knowledge and skills necessary to provide assessment and intervention services to children who are infants, toddlers, or preschoolers. The nature of child language disorders, assessment practice, and intervention approaches for children at developmental ages five and below are covered. Collaboration with families and other professionals will be emphasized.

**Credits** 4.0

## **SLPPG 522: Child Language and Learning II**

This course provides students with a theoretical framework of school-aged child language learning disorders at the language for learning (L4L) stage. Students will apply this framework to understand and apply procedures of evidence-based child language assessment and intervention. Principles of interprofessional collaboration, and culturally and linguistically competent service delivery for school aged children with language learning disorders at the L4L stage are woven throughout the course.

**Credits** 4.0

### **Prerequisites**

[SLPPG 521: Child Language and Learning I](#)

## **SLPPG 526: Aphasia**

This course examines communication disorders that result from acquired conditions, such as left hemisphere strokes or other acquired brain pathologies resulting in aphasia. Etiologies of these conditions, including neurological correlates for presenting symptoms, will be reviewed. Assessment and intervention models will be discussed, with attention to the cognitive, linguistic, and social aspects of resulting communication disorders.

**Credits** 4.0

### **Prerequisites**

[SLPPG 501: Neurological Bases of Communication Disorders](#)

## **SLPPG 527: Neurological Disease and Injury**

The course examines theoretical aspects and clinical management of cognitive and communicative impairments with emphasis on right hemisphere disorder, traumatic brain injury, dementia, and other degenerative neurological conditions. Etiologies of these conditions, including neurological correlates for presenting symptoms, will be reviewed. Assessment and intervention models will be discussed, with attention to the cognitive aspects of resulting communication disorders.

**Credits** 4.0

### **Prerequisites**

[SLPPG 501: Neurological Bases of Communication Disorders](#)

[SLPPG 526: Aphasia](#)

## **SLPPG 529: Voice and Resonance Disorders**

This course teaches evaluative and therapeutic aspects of voice and resonance disorders. Students examine the anatomical and physiological correlates of phonation and oral/nasal resonance. Embryology of the vocal mechanism is reviewed, including nasal, oropharyngeal, laryngeal, and pulmonary regions. Assessment and intervention of a variety of common voice/resonance disorders will be covered, including laryngectomy, cleft lip/palate, vocal fold hyperfunction, and therapies associated with a variety of neurogenic communication disorders.

**Credits** 4.0

## **SLPPG 533: Child Language and Learning III**

This course provides students with a theoretical framework of adolescent language learning disorders at the advanced language stage. Students will apply this framework to understand and apply advanced practices of evidence-based language assessment and intervention. Principles of interprofessional collaboration, and culturally and linguistically competent service delivery for adolescents with language learning disorders at the advanced language stage are woven throughout the course.

**Credits** 4.0

### **Prerequisites**

[SLPPG 521: Child Language and Learning I](#)

[SLPPG 522: Child Language and Learning II](#)

## **SLPPG 540: Diagnostic Assessment and Treatment Planning**

This course prepares the student clinician to conduct diagnostic evaluations of patients with communication disorders and plan their care. Principles of clinical interviewing, formal and informal test selection and administration, interpretation of psychometric data and behavioral observations, and adaptations for cultural and linguistic differences will be addressed. Students will learn the basics of clinical writing, including preparation of diagnostic reports, treatment plans, and progress reports. The use of electronic health records systems will be introduced.

**Credits** 4.0

## **SLPPG 550: Clinical Practicum I**

This is the first supervised speech-language pathology practicum experience in the Speech-Language Institute or other community-based site. Working with a clinical educator who is a licensed speech-language pathologist, student clinicians will plan and conduct assessment and intervention sessions for clients with communication disorders. First clinical experiences are targeted toward assessment and treatment of individuals with articulation, phonology, or language disorders. Students also attend clinical forums to address issues relative to management of clinical cases.

**Credits** 3.0

## **SLPPG 552: Clinical Practicum II**

This is the second supervised speech-language pathology practicum experience at the Speech-Language Institute or other community-based site. Working with a faculty member who is a licensed speech-language pathologist, student clinicians will plan and conduct assessment and intervention sessions for clients with communication and/or swallowing disorders. Clinical experiences may include assessment and treatment of disorders of articulation, language, fluency, voice, cognition, or dysphagia. Students also attend clinical forums to address issues relative to management of clinical cases.

**Credits** 3.0

### **Prerequisites**

[SLPPG 550: Clinical Practicum I](#)

## **SLPPG 575: Anatomy and Physiology of Communication Mechanisms**

This course provides a working knowledge of human anatomy and physiology as it relates to the processes of speech and hearing. The structure and function of the following systems will be covered: respiratory, phonatory, articulatory, and auditory. Areas of study will include musculoskeletal and basic neurological structures involved in speech and hearing.

**Credits** 3.0

## **SLPPG 580: Phonetics**

This course introduces students to the study of the sound system of speech including terminology related to the study of phonetics. An applied component enables students to learn the International Phonetic Alphabet and to develop broad transcription skills at the sound, word, and sentence level. Dialectical variations of Standard American English will be discussed and students will learn about transcription of articulation and phonological disorders.

**Credits** 3.0

## **SLPPG 585: Speech and Language Development**

This course educates students on speech and language acquisition and development for children from birth to school-age. Theories of language acquisition, speech and language developmental milestones, as well as traditional grammar models will be discussed.

**Credits** 3.0

### **Prerequisites**

[SLPPG 575: Anatomy and Physiology of Communication Mechanisms](#)

[SLPPG 580: Phonetics](#)

## **SLPPG 590: Speech and Hearing Science**

This course addresses the fundamentals of the sciences pertaining to articulation and voicing. Students will explore acoustics, respiratory science, voice production, acoustic phonetics, and sound spectrography. Fundamentals of speech perception and instrumentation will also be explored.

**Credits** 3.0

### **Prerequisites**

[SLPPG 575: Anatomy and Physiology of Communication Mechanisms](#)

[SLPPG 580: Phonetics](#)

## **SLPPG 602: Dysphagia**

This course reviews the anatomy and physiology of swallowing, and disorders that impact this vital function in children and adults. Etiologies of swallowing disorders, as well as their evaluation and management will be addressed. Students will appreciate the concomitant conditions that typically accompany dysphagia and learn to prioritize treatment objectives. Ethical considerations in swallowing intervention will also be incorporated.

**Credits** 4.0

### **Prerequisites**

[SLPPG 501: Neurological Bases of Communication Disorders](#)

## **SLPPG 604: Professional Issues and Ethics in Speech-Language Pathology**

This course focuses on the scope of practice for the speech-language pathology profession. Students will explore expectations for professional behavior based upon standards of practice and the ASHA Code of Ethics. Ethical dilemmas will be debated in preparation for a variety of clinical experiences. Procedures for obtaining the ASHA Certificate of Clinical Competence, state licensure, and school certification will be reviewed.

**Credits** 2.0

## **SLPPG 606: Capstone II**

This course is required for all cap stone-track students. Course credit hours are primarily comprised of independent study work, completed with the guidance of a capstone mentor, and 1 -2 lecture hours that emphasize support/troubleshooting for project execution. By the end of the term students will have completed the proposed project methods and presented these to an audience of their peers.

**Credits** 1.0

### **Prerequisites**

[SLPPG 505: Capstone I](#)

OR [SLPPG 511](#) Thesis I

## **SLPPG 607: Capstone III**

This course is required for all capstone students. Coursework is primarily comprised of independent study and supplemented by 1 -2 lecture hours during which students work collaboratively to develop and write their final manuscripts and plan dissemination of project outcomes. By the end of the term students will submit a final manuscript and disseminate project findings to a relevant audience.

**Credits** 1.0

### **Prerequisites**

[SLPPG 505: Capstone I](#)

[SLPPG 606: Capstone II](#)

[SLPPG 512: Thesis II](#)

## **SLPPG 609: Professional Practice in School Settings**

This course will review issues relative to school-based service delivery, including special education law, disability designations, and how students are referred for speech-language services. Development of individualized educational plans (IEPs) and treatment planning for children and adolescents with communication issues will be addressed as well as issues such as caseload size, scheduling, effective therapy models for the school setting, collaborative practice, counseling, and Medicaid billing.

**Credits** 1.0

## **SLPPG 610: Professional Practice in Healthcare Settings**

This course will review issues relative to healthcare service delivery in various healthcare settings. It will include the basics of healthcare law, and healthcare delivery for patients with communication and swallowing impairment in settings such as hospitals, skilled nursing facilities, and private clinics. Students will learn about common instrumentation, medical terminology, coding, billing and reimbursement for services by Medicare and other third party payer sources. Students will also learn about counseling and interprofessional practice in healthcare.

**Credits** 1.0

## **SLPPG 613: Thesis III**

This course is for all students on the thesis track. It involves independent study overseen by the Thesis Chair and approved by the student's thesis committee. Data collection is expected this term. Additionally, students will write a draft of the third chapter of the thesis manuscript.

**Credits** 1.0

**Prerequisites**

[SLPPG 512: Thesis II](#)

## **SLPPG 614: Thesis IV**

This course is required of all students completing a master's thesis. It involves one hour per week of independent study with the Thesis Chair. Completion of data analysis and a draft of the final two chapters of a five chapter manuscript is expected.

**Credits** 1.0

**Prerequisites**

[SLPPG 613: Thesis III](#)

## **SLPPG 623: Communication Disorders in Autism**

This course provides insight into the world of autism, including description of the various autism spectrum disorders and examination of etiological theories and controversies. Procedures used for differential diagnosis of autism spectrum disorders are covered, and a variety of intervention models will be discussed. The role of the SLP in working with educators and families will be addressed. Students will design comprehensive assessment and intervention plans for persons of all ages with autism.

**Credits** 3.0

**Prerequisites**

[SLPPG 521: Child Language and Learning I](#)

[SLPPG 522: Child Language and Learning II](#)

## **SLPPG 624: Aural Rehabilitation**

This course will teach basic methods for addressing the communication needs of individuals with hearing impairment and/or central auditory processing disorders. Students will learn how to read and interpret basic audiometric test results in order to recommend appropriate communication therapy. Communication modalities for individuals with hearing loss, and a variety of therapy methods to enhance language comprehension and production will be covered. Maintenance of amplification devices, collaboration with families and educators, and counseling for individuals with hearing loss will also be included.

**Credits** 3.0

## **SLPPG 628: Motor Speech Disorders**

This course covers assessment and treatment of neurogenic speech disorders, including the various types of dysarthria and apraxia. The complex process of differential diagnosis of these conditions will be addressed, along with numerous treatment approaches designed to target respiration, phonation, articulation, resonance and prosodic components of motor speech disorders.

**Credits** 3.0

**Prerequisites**

[SLPPG 501: Neurological Bases of Communication Disorders](#)

[SLPPG 520: Disorders of Articulation and Phonology](#)

[SLPPG 529: Voice and Resonance Disorders](#)

## **SLPPG 630: Fluency Disorders**

This course describes the nature and proposed etiologies of stuttering and associated disorders. Assessment and treatment of children and adults with fluency disorders will be addressed, including the need for counseling and ongoing management across the lifespan.

**Credits** 3.0

## **SLPPG 631: Augmentative and Alternative Communication**

This course will address the complex communication needs of individuals with severe communication, sensory and/or physical impairments which may necessitate the use of augmentative and alternative communication systems (AAC). Students will become familiar with various types of assistive technologies used for AAC. The course will cover cognitive, educational, physical, psychosocial, and linguistic aspects of human behavior that impact AAC selection and implementation. AAC assessment and intervention strategies will be addressed, including interdisciplinary contributions from physical and occupational therapists.

**Credits** 3.0

## **SLPPG 632: Advanced Practices in Dysphagia**

This course will require students to apply knowledge to clinical cases. Students will be expected to generate diagnostic reports and treatment plans targeting pediatric and adult dysphagia. Interpretation of videofluoroscopic and endoscopic swallowing assessments will assist students in profiling phase-specific sensory and motor swallowing abnormalities. Complex cases will be addressed, including both neurogenic and mechanical disorders of dysphagia (e.g., stroke, laryngectomy, tracheostomy and ventilator dependency).

**Credits** 4.0

### **Prerequisites**

[SLPPG 602: Dysphagia](#)

## **SLPPG 654: Clinical Practicum III**

This is the third supervised speech-language pathology practicum experience at the Speech-Language Institute or other community-based site. Working with a faculty member who is a licensed speech-language pathologist, student clinicians will plan and conduct assessment and intervention sessions for clients with communication and/or swallowing disorders. Clinical experiences may include assessment and treatment of disorders of articulation, language, fluency, voice, cognition, dysphagia, or complex disorders. Students also attend clinical forums to address issues relative to management of clinical cases.

**Credits** 3.0

### **Prerequisites**

[SLPPG 550: Clinical Practicum I](#)

[SLPPG 552: Clinical Practicum II](#)

## **SLPPG 656: Clinical Practicum IV**

This is the fourth supervised speech-language pathology practicum experience at the Speech-Language Institute or other community-based site. Working with a faculty member who is a licensed speech-language pathologist, student clinicians will plan and conduct assessment and intervention sessions for clients with communication and/or swallowing disorders. Clinical experiences may include assessment and treatment of disorders of articulation, language, fluency, voice, cognition, dysphagia, or complex disorders. Students also attend clinical forums to address issues relative to management of clinical cases.

**Credits** 3.0

### **Prerequisites**

[SLPPG 550: Clinical Practicum I](#)

[SLPPG 552: Clinical Practicum II](#)

[SLPPG 654: Clinical Practicum III](#)

## **SLPPG 660: Advanced Practicum in Speech-Language Pathology: Education Setting**

This is a supervised clinical experience in speech-language pathology in an educational setting. Students will acquire experience in individual and group therapy, assessment, and consultation. This course consists of a 12 week, full-time school site placement. May be taken before or after SLPPG 662 Advanced Practicum in Speech-Language Pathology: Medical/Healthcare Setting.

**Credits** 12.0

### **Prerequisites**

[SLPPG 550: Clinical Practicum I](#)

[SLPPG 552: Clinical Practicum II](#)

[SLPPG 654: Clinical Practicum III](#)

[SLPPG 656: Clinical Practicum IV](#)

## **SLPPG 662: Advanced Practicum in Speech-Language Pathology: Medical/Healthcare Setting**

This is a supervised clinical experience in speech-language pathology in a healthcare setting. Students will acquire experience in individual and group therapy, assessment, consultation, and interdisciplinary staffing. This course consists of a 12 week, full-time clinical site placement. May be taken before or after SLPPG 660 Advanced Practicum in Speech-Language Pathology: Education Setting.

**Credits** 12.0

### **Prerequisites**

[SLPPG 550: Clinical Practicum I](#)

[SLPPG 552: Clinical Practicum II](#)

[SLPPG 654: Clinical Practicum III](#)

[SLPPG 656: Clinical Practicum IV](#)

## **SLPPG 670: Thesis Continuation I**

These courses are reserved for SLP students needing additional time to complete and successfully defend their thesis project. Enrollment is necessary only when students have completed other program requirements, and will not be enrolled in other courses. This is considered an extension of the thesis and must be approved by the Program Director. A fee is assessed with enrollment in these courses.

**Credits** 0.5

### **Prerequisites**

[SLPPG 614: Thesis IV](#)



## **SLPPG 671: Thesis Continuation II**

These courses are reserved for SLP students needing additional time to complete and successfully defend their thesis project. Enrollment is necessary only when students have completed other program requirements, and will not be enrolled in other courses. This is considered an extension of the thesis and must be approved by the Program Director. A fee is assessed with enrollment in these courses.

**Credits** 0.5

**Prerequisites**

[SLPPG 614: Thesis IV](#)

## **SLPPG 672: Thesis Continuation III**

These courses are reserved for SLP students needing additional time to complete and successfully defend their thesis project. Enrollment is necessary only when students have completed other program requirements, and will not be enrolled in other courses. This is considered an extension of the thesis and must be approved by the Program Director. A fee is assessed with enrollment in these courses.

**Credits** 0.5

**Prerequisites**

[SLPPG 614: Thesis IV](#)

## **SLPPG 673: Thesis Continuation IV**

These courses are reserved for SLP students needing additional time to complete and successfully defend their thesis project. Enrollment is necessary only when students have completed other program requirements, and will not be enrolled in other courses. This is considered an extension of the thesis and must be approved by the Program Director. A fee is assessed with enrollment in these courses.

**Credits** 0.5

**Prerequisites**

[SLPPG 614: Thesis IV](#)

## **SLPPG 699: Praxis II® Examination Review**

This course reviews topics that will be covered on the Praxis Examination in Speech-Language Pathology. Students will complete practice quizzes and take a full-length practice exam.

**Credits** 1.0

## **SLPPG 800: Independent Study**

This course is designed to facilitate scholarly inquiry into a topic related to a specific component of speech-language pathology theory and practice. Course content, assignments and learning outcomes are developed in collaboration with the faculty mentor and the student, and the Program Director must approve the plan. Course credit is variable depending on the scope of work to be accomplished.

**Credits** 1.0

-6

**Prerequisites**

Permission of the Instructor

## **SLPPG 801: Dementia Care**

This is an elective course focused on advancing the dementia care skills of the therapy practitioner in an individual and public health context. The course will focus on communication with the person living with dementia and their support systems, a deeper understanding of the disease process and the therapeutic role throughout. This course includes classroom and practical hands-on experiences and may include opportunities to work with students from other programs. The importance of the broader social environment in dementia care will also be a focus of the course.

**Credits** 1.0

**Prerequisites**

Permission of the Instructor

# Master of Science in Nursing (MSN)/Nurse Leadership in Global Health Program

## Mission

The Midwestern University Master of Science in Nursing/Nurse Leadership in Global Health Program educates associate degree and baccalaureate-prepared registered nurses to become executive nurse leaders in direct and indirect roles within complex, interprofessional healthcare systems.

## Accreditation

Master of Science in Nursing (MSN)/Adult-Gerontology Primary Care Nurse Practitioner Program at Midwestern University is accredited by the Commission on Collegiate Nursing Education, (<http://www.ccnaccreditation.org>), 202-887-6791. Approved for Accreditation on October 31, 2022 through October 31, 2027

Master of Science in Nursing (MSN)/Adult-Gerontology Primary Care Nurse Practitioner Program at Midwestern University has been approved by the Arizona State Board for Private Postsecondary Education.

Midwestern University is accredited by the Higher Learning Commission (HLC), 230 South LaSalle Street, Suite 7-500, Chicago, IL 60604-1413.

## Degree Description

The Master of Science in Nursing (MSN)/Nurse Leadership in Global Health degree is an 18-month program (6 quarters) of didactic coursework offered in a distance learning format, with a leadership experience component scheduled in the last two-quarters of the curriculum. The degree comprises 45 quarter credits and 160 practicum hours focusing on nursing leadership. The didactic phase emphasizes advanced concepts surrounding healthcare policy, finance, leadership, evidence-based practice, research design, biostatistics, and preventive healthcare practices.

The didactic curriculum and applied practicum experiences allow each student to demonstrate attainment of the American Association of Colleges of Nursing (AACN) Essentials. The leadership experience begins in the Fall Quarter of the program's second year. This program phase provides students with the necessary practicum experience to develop the knowledge, skills, and attitude essential to assume professional roles in leadership within diverse population healthcare settings. Students may rotate through practicum sites within their respective states. These sites allow students to gain practicum experience within complex health systems, city and county health departments, federally operated health organizations, private health agencies, and mobile units.

## Admissions

Admission to the Nurse Leadership in Global Health program is considered on a competitive basis for prospective students who are registered nurses and hold an associates or bachelors degree in nursing. Applications will be received through the Midwestern University website. The University Admission's Team will review each application for completeness and the complete applications will be referred to the Graduate Nursing Program (GNP) Admissions Committee.

## Admission Requirements

To be considered for admission to the Nurse Leadership in Global Health program, applicants must submit the following documented evidence:

1. Completion of an associates or bachelors degree in nursing granted by a regionally accredited college or university.
2. Current and unencumbered license to practice as a registered nurse in at least one legal jurisdiction.
3. Submission of current resume or curriculum vitae to highlight current clinical, educational, or administrative practice related to nursing that can serve to facilitate successful completion of the Nurse Leadership in Global Health program.
4. A cumulative undergraduate grade point average (GPA) of 3.0 or higher on a 4.0 scale.
5. Submission of a personal response in one page or less to "Why am I pursuing this degree?"

## Application Process and Deadlines

To be considered for admission into the Nurse Leadership in Global Health program, applicants must submit to the University's Office of Admissions the following:

1. A completed Application for Admission form.
2. Official transcripts verifying completion of a baccalaureate or higher-level degree in Nursing from a regionally accredited program and satisfactory completion of all prerequisite coursework with a grade of a "C" or higher. "C-" will not be accepted.
3. Official final transcripts from all colleges attended post-high school.

Please be advised that applications are due no later than July 31st through the Midwestern University website. Early submissions are encouraged.

Questions related to the Midwestern University Admissions Portal can be directed to the office of admissions (888/247-9277 or 623/572-3215; [admissaz@midwestern.edu](mailto:admissaz@midwestern.edu)), and general admissions questions can be directed to the Program Director (Dr. Love, [plove@midwestern.edu](mailto:plove@midwestern.edu))

*Please note:* The receipt of the application materials and the file status can be tracked on the University's website. Upon receipt of the application, the Office of Admissions will send instructions for accessing account information. Applicants are responsible for notifying the Office of Admissions, at the above address, of any changes in mailing address and/or e-mail address.

All requests for withdrawal of an application must be submitted in writing via e-mail, fax, or letter to the Office of Admissions.

## Selection Process

The Nurse Leadership in Global Health program at Midwestern University uses a rolling admissions process. Completed applications are reviewed, and decisions to admit candidates are made regularly during the admission cycle until the class is filled. The Admissions Committee reviews all completed applications to the Nurse Leadership in Global Health program and then formulates and submits recommendations to the Dean for final approval. The Dean, via the Office of Admissions, notifies applicants of admission decisions in writing. Applicants are notified of their selection status no later than two weeks after completing their file.

## Reapplication Process

Students who receive denial or end-of-cycle letters may reapply for the following year's admissions cycle. Before reapplying, individuals contemplating reapplication should seek the advice of an admissions counselor. To initiate the reapplication process, prospective students must complete and submit a new application and proceed through the standard application process.

## Transfer Policy

The Nurse Leadership in Global Health program may elect to accept transfer students. Any requests for transfer credit consideration must be provided in writing with the completed application. Supporting documents such as course syllabi must also accompany the request. The Admissions Committee must approve all transfer students and will determine the number of graduate transfer credits granted.

To receive credit for previous coursework completed at other institutions, students must submit a Transfer of Credit Request Application to be evaluated by the Admissions Committee. The transfer of credit has the following conditions:

1. Transferred course credit is limited to graduate-level courses from recognized, regionally accredited degree-granting institutions.
2. Credit is not transferred for a clinical practicum or an internship.
3. Credit may only be awarded for courses with B- or better grades.
4. Credit can only be awarded for courses completed within the seven-year period before matriculation.
5. Transfer of Credit Request Applications must be submitted by July 31<sup>st</sup> (before matriculation into the program).
6. Please contact the program for a list of eligible courses.

## Technical Standards, MSN Nurse Leadership in Global Health

### Technical Standards

Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the College.

Candidates must be able to perform the following abilities and skills:

1. Observation: The candidate must be able to accurately make observations at a distance and close at hand. Observation necessitates the functional use of the sense of vision and sense of touch and is enhanced by the functional use of all of the other senses.
2. Communication: The candidate must be able to communicate in English, proficiently and sensitively, in verbal and written form, and be able to perceive nonverbal communication.
3. Motor: The candidate must be able to coordinate both gross and fine muscular movements, maintain equilibrium and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control and eye-to- hand coordination to perform profession-specific skills and tasks. The candidate must also be able to lift at least 20lbs.
4. Intellectual, Conceptual, Integrative and Quantitative Abilities: The candidate must be able to problem solve, measure, calculate, reason, analyze, record and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
5. Behavioral and Social Attributes: The candidate must possess the emotional health required for full utilization of their intellectual abilities, the exercise of good judgment and the consistent, prompt completion of all responsibilities and the development of mature, sensitive and effective relationships. Candidates must be able to tolerate physically, mentally and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn, are all personal qualities required during the educational process. The candidate must agree to participate in touching/ palpating on the skin and being touched/palpated on the skin by individuals regardless of gender

in all academic settings, including dental head, neck exams, including intra- and extra-oral examinations. These activities will take place in large and small group settings as directed in the College's curricular requirements.

Candidates are required to verify that they understand and are able to meet these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet Technical Standards with accommodation, must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the college. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

## Graduation Requirements

To qualify for graduation with a MSN Nurse Leadership in Global Health, students must:

1. Satisfactory completion of all professional coursework with a minimum cumulative grade point average (GPA) of 3.0.
2. Complete all didactic and practicum courses satisfactorily with a "B—" (or higher) or "Pass" (on a "Pass/Fail" Grading Scale).
3. Satisfactorily complete the required minimum number of quarter-credit hours (45) in the curriculum.
4. Receive a favorable recommendation for Master's degree conferral from the Academic Review Committee and the College of Health Sciences (CHS) Student Promotion and Graduation Committee.
5. Receive a favorable recommendation for a Master's degree conferral from the University Faculty Senate.
6. Settle all financial accounts with the institution.
7. Complete all graduation clearance requirements as instructed by the Office of the Registrar.

## Optional Certifications Post-Graduation

Students who satisfactorily complete the program will graduate with an MSN degree and may elect to prepare for a certification exam offered by the American Organization for Nursing Leadership (AONL)<sup>TM</sup> or the American Nurses Credentialing Center (ANCC). The Certified Nurse Manager and Leader and the Certified Executive Nurse certifications are offered through the American Organization for Nursing Leadership (AONL)<sup>TM</sup>. The Nurse Executive and the Nurse Executive (Advanced) certifications are offered through the American Nurses Credentialing Center (ANCC).

## Master of Science in Nursing (MSN)/Nurse Leadership in Global Health Curriculum

### Degree Type

Master of Science in Nursing (M.S.N)

Master of Science in Nursing (MSN)/Nurse Leadership in Global Health program reserves the right to alter its curriculum however and whenever it deems appropriate. This Catalog does not establish a contractual relationship between Midwestern University and students.

The total quarter credits required for the program is 45.

## First Professional Year

### Fall Quarter

Course Code	Title	Credits
APNLG 500	Trends, Issues, and Perspectives	2.0
APNLG 501	Population Health	3.0
GRNSG 501	Epidemiology and Biostatistics in Nursing Practice I	2.0
<b>Sub-Total Credits</b>		<b>7.00</b>

### Winter Quarter

Course Code	Title	Credits
APNLG 502	Nurse Leadership and Global Health Practice Tools	3.0
GRNSG 502	Epidemiology and Biostatistics in Nursing Practice II	2.0
GRNSG 504	Finance and Healthcare Policy	3.0
<b>Sub-Total Credits</b>		<b>8.00</b>

### Spring Quarter

Course Code	Title	Credits
APNLG 503	Emergency and Humanitarian Situations	3.0
GRNSG 505	Disease Prevention and Health Promotion	3.0
<b>Sub-Total Credits</b>		<b>6.00</b>

### Summer Quarter

Course Code	Title	Credits
APNLG 504	Foundations of the Nurse Leadership Project	2.0
GRNSG 506	Leadership, Communication, and Interprofessional Collaboration	3.0
DRNPG 1500	Quality Improvement Initiatives and Evidence-Based Practice	4.0
<b>Sub-Total Credits</b>		<b>9.00</b>

## Second Professional year

### Fall Quarter

Course Code	Title	Credits
APNLG 600	Quality Improvement and Project Design	3.0
APNLG 601	Nurse Leadership in Global Health I (80 hours)	2.0
DRNPG 1501	Organizational Leadership	4.0
<b>Sub-Total Credits</b>		<b>9.00</b>

### Winter Quarter

Course Code	Title	Credits
APNLG 602	Nurse Leadership in Global Health II (80 hours)	2.0
APNLG 603	Nurse Leadership in Global Health Capstone Project	4.0
<b>Sub-Total Credits</b>		<b>6.00</b>
Total Credits		45

## Student Academic Policies

Please refer to the University Academic Policy section for policies that apply to all students at Midwestern University, in addition to the College of Health Sciences (CHS) Student Academic Policies, and individual course syllabi for more detailed information.

The academic standing of a student is determined by the student's cumulative grade point average. To achieve satisfactory academic progress, a student must pass all required courses and maintain a cumulative grade point average of 3.00 or higher. All students must achieve, at minimum, a "B-" in all coursework

## Nursing Program Calendar

### Summer 2025

Event	Class	Date
<b>Memorial Day</b>	<b>*No Classes*</b>	<b>May 26, 2025</b>
Classes Resume	NPAG-I, NPAG-II, NPNL-I, NPDNP-I	June 2, 2025
Rotation 3	NAG-II	June 2 - August 15, 2025
Practicum I	NPDNP - II	June 2 - August 15, 2025
Last Day to Add/Drop Classes	NPAG-I, NPAG-II, NPNL-I, NPDNP-I	June 6, 2025
<b>Juneteenth (Observed)</b>	<b>*No Classes*</b>	<b>June 19, 2025</b>
<b>Independence Day (Observed)</b>	<b>*No Classes*</b>	<b>July 4, 2025</b>
Last Day of Class	NPAG-I, NPAG-II, NPNL-I, NPDNP-I	August 8, 2025
Program Completion	NPAG	August 15, 2025
Quarter Break	NPAG-I, NPAG-II, NPNL-I, NPDNP-I	August 18 - 22, 2025

### Fall 2025

Event	Class	Date
Orientation	NPAG-I, NPNL-I, NPDNP-I	August 18 - 20, 2025
Classes Begin	NPAG-I, NPNL-I, NPDNP-I	August 25, 2025
Practicum II		August 25 - November 26, 2025
Last Day to Add/Drop Classes	NPAG-I, NPNL-I, NPDNP-I	August 29, 2025
<b>Labor Day</b>	<b>*No Classes*</b>	<b>September 1, 2025</b>
<b>White Coat Ceremony</b>		<b>September 27, 2025</b>
Last Day of Classes	NPAG-I, NPNL-I, NPDNP-I	October 31, 2025
Quarterly Exams	NPAG-I, NPNL-I, NPDNP-I	November 3 - 7, 2025
Thanksgiving Break	NPAG-I, NPNL-I, NPDNP-I	November 10 - 28, 2025

### Winter 2025

Event	Class	Date
Rotation I	NPAG - II	December 1, 2025 - February 27, 2026
Leadership Experience I	NPNL - II	December 1, 2025 - February 27, 2026
Practicum II	NPDNP - II	December 1, 2025 - February 27, 2026
Classes Begin	NPAG-I, NPNL-I, NPDNP-I	December 1, 2025
Last Day to Add/Drop Classes	NPAG-I, NPNL-I, NPDNP-I	December 5, 2025
Winter Break	NPAG-I, NPNL-I, NPDNP-I	December 22, 2025 - January 2, 2026
Classes Resume	NPAG-I, NPNL-I, NPDNP-I	January 5, 2026
<b>Martin Luther King/ Jr. Day</b>	<b>*No Classes*</b>	<b>January 19, 2026</b>
Last Day of Classes	NPAG-I, NPNL-I, NPDNP-I	February 20, 2026
Quarterly Exams	NPAG-I, NPNL-I, NPDNP-I	February 23 - 27, 2026
Program Completion	NPNL, NPDNP	February 27, 2026



Event	Class	Date
Spring Break	NPAG-I, NPNL-I, NPDNP-I	March 2 - 6, 2026

## Spring 2026

Event	Class	Date
Rotation 2	NPAG-II	March 9 - May 22, 2026
Leadership Experience II	NPNL-II	March 9 - May 22, 2026
Practicum III	NPDNP-II	March 9 - May 22, 2026
Classes Begin	NPAG-I, NPNL-I, NPDNP-I	March 9, 2026
Last Day to Add/Drop Classes	NPAG-I, NPNL-I, NPDNP-I	March 13, 2026
Last Day of Classes	NPAG-I, NPNL-I, NPDNP-I	May 15, 2026
Quarterly Exams	NPAG-I, NPNL-I, NPDNP-I	May 18 - 22, 2026
<b>Memorial Day</b>	<b>*No Classes*</b>	<b>May 25, 2026</b>
Quarter Break	NPAG-I, NPNL-I, NPDNP-I	May 26 - 29, 2026
Commencement		June 3, 2026 9:00 a.m.

## Rotations

### NPAG - II

Term	Rotation	Date
Summer	Rotation 3	June 2 - August 15, 2025
Winter	Rotation 1	December 1, 2025 - February 27, 2026
Spring	Rotation 2	March 9 - May 22, 2026

### NPNL - II

Term	Rotation	Date
Winter	Leadership Experience I	December 1, 2025 - February 27, 2026
Spring	Leadership Experience II	March 9 - May 26, 2026

### NPDNP - II

Term	Rotation	Date
Summer	Practicum I	June 2 - August 15, 2025
Fall	Practicum II	August 25 - November 26, 2025
Winter	Practicum III	December 1, 2025 - February 27, 2026

## Legend:

NPAG=Nursing Program Adult Gerontology

NPNL-Nursing Program Nurse Leadership

Last Revision 03/27/2025



# Faculty

**Pamela Love, Ph.D., MSN, RN, CNE**

UT Health Science Center at San Antonio  
Program Director/Professor

**Sandra Summers, DNP, MSN, FNP-BC**

University of Colorado Pueblo  
Director of Practicum Education/Assistant  
Professor

## Master Of Science In Nursing (Msn) Nurse Leadership In Global Health Program Courses

### APNLG 500: Trends, Issues, and Perspectives

The objective of this course is to introduce students to key concepts and topics in global health. This course will provide an overview of population health issues of global importance and the role of key players and influencers in global health. Globalization and disease concepts will also be discussed. Students will explore population health perspectives, including the ideas of universal health coverage, health disparities, and differences in health outcomes among diverse populations.

**Credits** 2.0

### APNLG 501: Population Health

The objective of this course is to examine population health issues from a life-course perspective. The course introduces the learners to global health issues, from preconception through ageing. The content will also include a review of several population health problems that affect health outcomes of people of all ages. Guidelines for improving health using a life course approach will be discussed and the students will review examples of programs and interventions that integrate a life course approach.

**Credits** 3.0

### APNLG 502: Nurse Leadership and Global Health Practice Tools

The objective of this course is to prepare students for a role in interprofessional and global healthcare practice. This course aims to address ethical and theoretical foundations that help to guide interprofessional and global healthcare practice. Students will utilize data to measure population health outcomes while learning more about principles of advocacy in addition to the development of effective healthcare policies and health education programs.

**Credits** 3.0

### APNLG 503: Emergency and Humanitarian Situations

The objective of this course to examine emergency preparedness procedures, including natural disasters, bio terrorism, new or emergent dangers, and methods to address emergency planning and response to catastrophic events.

**Credits** 3.0

### APNLG 504: Foundations of the Nurse Leadership Project

The objective of this course is to examine the synergy and application of practice, theory, and evidence-based research in nursing leadership. This course sets the foundation for the Leadership Capstone Project.

**Credits** 2.0

## **APNLG 600: Quality Improvement and Project Design**

The objective of this course is to prepare students to design, implement, and evaluate interprofessional and global health-based programs. This course will examine the knowledge and skills necessary to critically appraise and synthesize research results and evidence-based methods.

**Credits** 3.0

## **APNLG 601: Nurse Leadership in Global Health I (80 hours)**

This practicum is the first of two leadership experiences. The objective of this course is to emphasize the integration of advanced critical thinking and problem-solving skills as they pertain to nursing leadership, practice and theory. Students incorporate a range of leadership challenges, quality and performance improvement processes, interprofessional collaboration, and workforce development to set the foundation for the Leadership Capstone Project.

**Credits** 2.0

### **Prerequisites**

Successful completion of all prior coursework.

## **APNLG 602: Nurse Leadership in Global Health II (80 hours)**

This practicum is the second leadership experience. The objective of this course is to integrate advanced critical thinking skills to nursing leadership and theory. Students integrate a range of leadership challenges, quality and performance improvement processes, interprofessional collaboration, and workforce development to set the foundation for the Leadership Capstone Project.

**Credits** 2.0

### **Prerequisites**

[APNLG 601](#) Nurse Leadership in Global Health II (80 hours)

## **APNLG 603: Nurse Leadership in Global Health Capstone Project**

This course focuses on synthesizing an evidence-based leadership project based on the interprofessional and global health leadership experiences at the student's designated practicum site.

**Credits** 4.0

### **Prerequisites**

[APNLG 504](#) Foundations of the Nurse Leadership Project

## **DRNPG 1500: Quality Improvement Initiatives and Evidence-Based Practice**

The objective of this course is to critically appraise evidence-based literature in order to efficiently plan, implement, and evaluate cost-containment initiatives and evidence-based outcomes in healthcare systems.

**Credits** 4.0

### **Prerequisites**

[For Master of Science in Nursing \(MSN\) Nurse Leadership in Global Health Program \(1874\)](#), [GRNSG 501](#) Epidemiology and Biostatistics in Nursing Practice I, [GRNSG 502](#) Epidemiology and Biostatistics in Nursing Practice II

## **DRNPG 1501: Organizational Leadership**

The objective of this course is to examine the principles of systems theory, organizational structure, change management, and the role of the advanced practice nurse as a clinical leader in healthcare systems.

**Credits** 4.0

## **GRNSG 501: Epidemiology and Biostatistics in Nursing Practice I**

The objective of this course is to critically appraise data in a quantitative manner while exercising the application of epidemiological methods for the purpose of disease control and prevention.

**Credits** 2.0

### **Prerequisites**

An undergraduate statistics course.

## **GRNSG 502: Epidemiology and Biostatistics in Nursing Practice II**

The objective of this course is to build on concepts and statistical techniques from [GRNSG 501](#) Epidemiology and Biostatistics in Nursing Practice I. This course will cover intermediate and advanced concepts in quantitative data analysis and the application of these concepts in disease control and prevention.

**Credits** 2.0

### **Prerequisites**

[GRNSG 501](#) Epidemiology and Biostatistics in Nursing Practice I

## **GRNSG 504: Finance and Healthcare Policy**

The objective of this course is to examine the principles and theories of interdisciplinary healthcare systems. This will include health care policy, health care finance, and aging resources in health care settings.

**Credits** 3.0

## **GRNSG 505: Disease Prevention and Health Promotion**

The objective of this course is to examine health equity, health disparities, and social determinants. This course will also address the importance of preventative healthcare in vulnerable, underserved, and diverse populations.

**Credits** 3.0

## **GRNSG 506: Leadership, Communication, and Interprofessional Collaboration**

The objective of this course is to examine the importance of leadership, communication, and interprofessional collaboration in healthcare settings. This course will also address effective decision making interactions and the characteristics of a successful interprofessional Team.

**Credits** 3.0

# Master of Science in Nursing (MSN)/Adult-Gerontology Primary Care Nurse Practitioner Program

## Mission

### Master of Science in Nursing (MSN)/Adult-Gerontology Primary Care Nurse Practitioner Program

Midwestern University's Master of Science in Nursing (MSN)/Adult-Gerontology Primary Care Nurse Practitioner Program educates baccalaureate-prepared registered nurses to assess, diagnose, and manage the acute, chronic, and complex health needs of individuals through adolescence (age 13 and older), adulthood, and end-of-life as primary care providers in an interprofessional healthcare system.

## Accreditation

The MSN/Adult-Gerontology Primary Care Nurse Practitioner Program is accredited by the Commission on Collegiate Nursing Education, <http://www.ccnaccreditation.org>. The accreditation was granted from October 31, 2022, through October 31, 2027.

Midwestern University's Master of Science in Nursing (MSN)/Adult-Gerontology Primary Care Nurse Practitioner Program has been approved by the Arizona State Board of Nursing and the **Arizona State Board for Private Postsecondary Education**.

Midwestern University is accredited by the Higher Learning Commission (HLC), 230 South LaSalle Street, Suite 7-500, Chicago, IL 60604-1413.

## Degree Description

### Master of Science in Nursing (MSN)/Adult-Gerontology Primary Care Nurse Practitioner Program

The Master of Science in Nursing (MSN)/Adult-Gerontology Primary Care Nurse Practitioner degree is a 24-month program divided into a blended learning didactic phase (8 quarters), two mandatory on-campus intensives, and an overlapping clinical phase (3 quarters). The degree consists of 72 quarter credits and 640 clinical hours in the area of focus. The initial portion of the didactic phase of the program emphasizes advanced concepts in Biostatistics, Epidemiology, and the "Three Ps" – Advanced Pharmacology, Advanced Physiology and Pathophysiology, and Advanced Physical Examination/Health Assessment.

All nurse practitioner students must attend Residency during the spring quarter of the first year in Advanced Health Assessment I (APRNG 505) and the fall quarter of the second year in Procedures and Skills for Primary Care (APRNG 601). Both residency courses/experiences consists of 5-day on-campus experiences to ensure skills and knowledge competency before progressing to the practicum courses. The Residency is mandatory, and dates are provided early so students can plan well in advance.

The practicum courses begin in the Winter Quarter of the second year. The practicum courses provide students with the necessary hands-on experience to develop the knowledge, skills, and attitude essential to Adult-Gerontology Primary Care Nurse Practitioner practice in various practice settings. The didactic curriculum and applied practicum experiences allow each student to demonstrate attainment of the ten core competencies identified by the American Association of Colleges of Nursing (AACN) Essentials.

Students may be able to rotate to multiple primary care clinical sites. These sites provide students with a broad scope of experiences in rural, urban, and suburban clinics and specialty rotations in internal medicine, long-term care/assisted living, hospice, home health, and pharmacy.

## Admissions

Admission to the Master of Science in Nursing (MSN)/Adult-Gerontology Primary Care Nurse Practitioner Program is considered on a competitive basis for prospective students who are registered nurses and hold a **baccalaureate degree in nursing**.

Applications will be received through the Midwestern University website. The University Admission Team will review each application for completeness and refer complete applications to the Graduate Nursing Program Admission Committee for review.

### Admission Requirements

To be considered for admission to the Master of Science in Nursing (MSN)/Adult-Gerontology Primary Care Nurse Practitioner Program, applicants must submit the following documented evidence:

1. Completion of a baccalaureate degree in nursing granted by a regionally accredited college or university.
2. Current and unencumbered license to practice as a registered nurse in at least one legal jurisdiction in the United States and its territories.
3. Submission of current resume or curriculum vitae (CV) to highlight current clinical, educational, or administrative practice related to nursing that can serve to facilitate the successful completion of an advanced nursing degree.
4. A cumulative undergraduate grade point average (GPA) of 3.0 or higher on a 4.0 scale.
5. Submission of a personal response in one page or less to "Why am I pursuing this degree?"

### Application Process and Deadlines

To be considered for admission into the Master of Science in Nursing (MSN)/Adult-Gerontology Primary Care Nurse Practitioner Program, applicants must submit the following to the University's Office of Admissions:

1. A completed Application for Admission form.
2. Official transcripts verifying completion of a baccalaureate or higher-level degree in Nursing from a regionally accredited program, and satisfactory completion of all prerequisite coursework with a grade of a "C" or higher ("C-" will not be accepted).
3. Official final transcripts from all colleges attended.

Please be advised that applications are due no later than July 31st (early submissions are encouraged) through the Midwestern University website.

Questions related to the Midwestern University Admissions Portal can be directed to the office of admissions (888/247-9277 or 623/572-3215; [admissaz@midwestern.edu](mailto:admissaz@midwestern.edu)) and general admissions questions can be directed to the Program Director (Dr. Love: [plove@midwestern.edu](mailto:plove@midwestern.edu)).

*Please note:* The receipt of the application materials and the file status can be tracked on the University's website. Upon receipt of the application, the Office of Admissions will send instructions for accessing account information. Applicants are responsible for notifying the Office of Admissions, at the above address, of any changes in mailing address and/or e-mail address.

All requests for withdrawal of an application must be submitted in writing via e-mail, fax, or letter to the Office of Admissions.

## Selection Process

The MSN program at Midwestern University uses a rolling admissions process. Completed applications are reviewed, and decisions to admit candidates are made regularly during the admission cycle until the class is filled. The admissions committee reviews all completed applications to the MSN program and formulates and submits a recommendation to the Dean for final approval. The Dean, via the Office of Admissions, notifies applicants in writing of admission decisions. Applicants are required to submit their applications by July 31st. Applicants are notified of their selection status no later than two weeks after completing their file.

## Reapplication Process

After receiving either a denial or an end-of-cycle letter, prospective students may reapply for the following year's admissions cycle. Before reapplying, however, applicants are encouraged to seek input on strengthening their application from a counselor in the Office of Admissions after the admissions cycle is officially over. To initiate the reapplication process, prospective students must complete and submit new applications and proceed through the standard application procedures.

## Transfer Policy

The Master of Science in Nursing (MSN)/Adult-Gerontology Primary Care Nurse Practitioner Program may elect to accept transfer students. Transfer students must apply to the program and, if qualified, participate in an admissions interview. Any requests for consideration of transfer credit must be provided in writing by the student before the interview or by July 31st. Supporting documents, such as course syllabi, must also accompany this request.

Please note that advanced pharmacology, advanced physiology/pathophysiology, advanced physical health assessment, practicum coursework, and tandem didactic courses associated with the practicum courses and skills-based courses will not be considered for transfer credit. The Admissions Committee must approve all transfer students and will determine the number of graduate transfer credits granted (not to exceed 16 credits).

Transfer students are not accepted during the clinical phase of the program.

To receive credit for previous coursework completed at other institutions, students must submit a Transfer of Credit Request Application to be evaluated by the Admissions Committee. The transfer of credit has the following conditions:

1. Transferred course credit is limited to graduate-level courses from recognized, regionally accredited degree-granting institutions.
2. Credit is not transferred for a clinical practicum or an internship.
3. Credit may only be awarded for courses in which B- or better grades were attained.
4. Credit can only be awarded for courses completed within the seven-year period before matriculation.
5. Transfer of Credit Request Applications must be submitted by July 31st.
6. Please contact the program for a list of eligible transfer courses.

# Technical Standards, MSN Adult Gerontology Primary Care NP

## Technical Standards

Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the College.

Candidates must be able to perform the following abilities and skills:



1. Observation: The candidate must be able to accurately make observations at a distance and close at hand. Observation necessitates the functional use of the sense of vision and sense of touch and is enhanced by the functional use of all of the other senses.
2. Communication: The candidate must be able to communicate in English, proficiently and sensitively, in verbal and written form, and be able to perceive nonverbal communication.
3. Motor: The candidate must be able to coordinate both gross and fine muscular movements, maintain equilibrium and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control and eye-to- hand coordination to perform profession-specific skills and tasks. The candidate must also be able to lift at least 20lbs.
4. Intellectual, Conceptual, Integrative and Quantitative Abilities: The candidate must be able to problem solve, measure, calculate, reason, analyze, record and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
5. Behavioral and Social Attributes: The candidate must possess the emotional health required for full utilization of their intellectual abilities, the exercise of good judgment and the consistent, prompt completion of all responsibilities and the development of mature, sensitive and effective relationships. Candidates must be able to tolerate physically, mentally and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn, are all personal qualities required during the educational process. The candidate must agree to participate in touching/ palpating on the skin and being touched/palpated on the skin by individuals regardless of gender in all academic settings, including dental head, neck exams, including intra- and extra-oral examinations. These activities will take place in large and small group settings as directed in the College's curricular requirements.

Candidates are required to verify that they understand and are able to meet these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet Technical Standards with accommodation, must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the college. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

## Graduation Requirements

To qualify for graduation with a Master of Science in Nursing (MSN) degree, students must:

1. Satisfactorily complete all professional coursework with a minimum cumulative grade point average (GPA) of 3.0.
2. Satisfactorily complete all required coursework and practicum experiences with a "B-" or higher, or "Pass" (on a "Pass/Fail" Grading Scale).
3. Satisfactorily complete the required minimum number of quarter-credit hours in the curriculum (72 quarter-credit hours for MSN)
4. Receive a favorable recommendation for a Master's degree conferral from the Academic Review Committee and the College of Health Sciences (CHS) Student Promotion and Graduation Committee.
5. Receive a favorable recommendation for a Master's degree conferral from the University Faculty Senate.
6. Settle all financial accounts with the institution.

7. Complete all graduation clearance requirements as instructed by the Office of the Registrar.

## Certification/Licensure Requirements

Students who satisfactorily complete the program will graduate with a Master of Science in Nursing (MSN) Adult-Gerontology Primary Care Nurse Practitioner degree will qualify to sit for national certification through the American Academy of Nurse Practitioners Certification Board (AANPCB) or the American Nurses Credentialing Center (ANCC). Upon passing the national certification examination to practice as an Adult-Gerontology Primary Care Nurse Practitioner, students will then be eligible to apply for certification as an advanced practice nurse within their respective state board of nursing or U.S. territory.

## Student Academic Policies

Please refer to the University Academic Policy section for policies that apply to all students at Midwestern University, in addition to the College of Health Sciences (CHS) Student Academic Policies, and individual course syllabi for more detailed information.

The academic standing of a student is determined by the student's cumulative grade point average. To achieve satisfactory academic progress, a student must pass all required courses and maintain a cumulative grade point average of 3.00 or higher. All students must achieve, at minimum, a "B-" in all coursework.

## Master of Science in Nursing (MSN)/Adult-Gerontology Primary Care Nurse Practitioner Program

### Degree Type

Master of Science in Nursing (M.S.N)

The Master of Science in Nursing (MSN)/Adult Gerontology Primary Care Nurse Practitioner Program reserves the right to alter its curriculum however and whenever it deems appropriate. This Catalog does not establish a contractual relationship between Midwestern University and students.

### Master of Science in Nursing (MSN)/Adult Gerontology Primary Care Nurse Practitioner Program

Total Credits: 72

### Year 1

#### Fall Quarter

Course Code	Title	Credits
APRNG 500	Advanced Physiology and Pathophysiology I	3.0
GRNSG 500	Roles of Advanced Practice Nurses and Nurse Leaders	2.0
GRNSG 501	Epidemiology and Biostatistics in Nursing Practice I	2.0
GRNSG 503	Principles of Human Resources, Law, and Ethics	3.0
<b>Sub-Total Credits</b>		<b>10.00</b>

## Winter Quarter

Course Code	Title	Credits
APRNG 501	Advanced Physiology and Pathophysiology II	3.0
GRNSG 502	Epidemiology and Biostatistics in Nursing Practice II	2.0
GRNSG 504	Finance and Healthcare Policy	3.0
<b>Sub-Total Credits</b>		<b>8.00</b>

## Spring Quarter

Course Code	Title	Credits
APRNG 502	Pharmacology for Advanced Practice Nurses I	3.0
APRNG 504	Advanced Health Assessment II	3.0
APRNG 505	Advanced Health Assessment I (5-day Residency)	2.0
GRNSG 505	Disease Prevention and Health Promotion	3.0
<b>Sub-Total Credits</b>		<b>11.00</b>

## Summer Quarter

Course Code	Title	Credits
APRNG 503	Pharmacology for Advanced Practice Nurses II	2.0
GRNSG 506	Leadership, Communication, and Interprofessional Collaboration	3.0
DRNPG 1500	Quality Improvement Initiatives and Evidence-Based Practice	4.0
<b>Sub-Total Credits</b>		<b>9.00</b>

## Year 2

### Fall Quarter

Course Code	Title	Credits
APRNG 600	Sociological, Political, and Economical Perspectives in Gerontology	3.0
APRNG 601	Procedures and Skills for Primary Care (5-day Residency)	2.0
DRNPG 1501	Organizational Leadership	4.0
<b>Sub-Total Credits</b>		<b>9.00</b>

### Winter Quarter

Course Code	Title	Credits
APRNG 602	Primary Health Care: Adult Gerontology I (didactic)	3.0
APRNG 603	Primary Health Care: Adult Gerontology I (practicum — 160 hours)	4.0
<b>Sub-Total Credits</b>		<b>7.00</b>

### Spring Quarter

Course Code	Title	Credits
APRNG 604	Primary Health Care: Adult Gerontology II (didactic)	3.0
APRNG 605	Primary Health Care: Adult Gerontology II (practicum — 240 hours)	6.0
<b>Sub-Total Credits</b>		<b>9.00</b>

### Summer Quarter

Course Code	Title	Credits
APRNG 606	Primary Health Care: Adult Gerontology III (didactic)	3.0
APRNG 607	Primary Health Care: Adult Gerontology III (practicum — 240 hours)	6.0
<b>Sub-Total Credits</b>		<b>9.00</b>

# Nursing Program Calendar

## Summer 2025

Event	Class	Date
<b>Memorial Day</b>	<b>*No Classes*</b>	<b>May 26, 2025</b>
Classes Resume	NPAG-I, NPAG-II, NPNL-I, NPDNP-I	June 2, 2025
Rotation 3	NAG-II	June 2 - August 15, 2025
Practicum I	NPDNP - II	June 2 - August 15, 2025
Last Day to Add/Drop Classes	NPAG-I, NPAG-II, NPNL-I, NPDNP-I	June 6, 2025
<b>Juneteenth (Observed)</b>	<b>*No Classes*</b>	<b>June 19, 2025</b>
<b>Independence Day (Observed)</b>	<b>*No Classes*</b>	<b>July 4, 2025</b>
Last Day of Class	NPAG-I, NPAG-II, NPNL-I, NPDNP-I	August 8, 2025
Program Completion	NPAG	August 15, 2025
Quarter Break	NPAG-I, NPAG-II, NPNL-I, NPDNP-I	August 18 - 22, 2025

## Fall 2025

Event	Class	Date
Orientation	NPAG-I, NPNL-I, NPDNP-I	August 18 - 20, 2025
Classes Begin	NPAG-I, NPNL-I, NPDNP-I	August 25, 2025
Practicum II		August 25 - November 26, 2025
Last Day to Add/Drop Classes	NPAG-I, NPNL-I, NPDNP-I	August 29, 2025
<b>Labor Day</b>	<b>*No Classes*</b>	<b>September 1, 2025</b>
<b>White Coat Ceremony</b>		<b>September 27, 2025</b>
Last Day of Classes	NPAG-I, NPNL-I, NPDNP-I	October 31, 2025
Quarterly Exams	NPAG-I, NPNL-I, NPDNP-I	November 3 - 7, 2025
Thanksgiving Break	NPAG-I, NPNL-I, NPDNP-I	November 10 - 28, 2025

## Winter 2025

Event	Class	Date
Rotation I	NPAG - II	December 1, 2025 - February 27, 2026
Leadership Experience I	NPNL - II	December 1, 2025 - February 27, 2026
Practicum II	NPDNP - II	December 1, 2025 - February 27, 2026
Classes Begin	NPAG-I, NPNL-I, NPDNP-I	December 1, 2025
Last Day to Add/Drop Classes	NPAG-I, NPNL-I, NPDNP-I	December 5, 2025
Winter Break	NPAG-I, NPNL-I, NPDNP-I	December 22, 2025 - January 2, 2026
Classes Resume	NPAG-I, NPNL-I, NPDNP-I	January 5, 2026
<b>Martin Luther King/ Jr. Day</b>	<b>*No Classes*</b>	<b>January 19, 2026</b>
Last Day of Classes	NPAG-I, NPNL-I, NPDNP-I	February 20, 2026
Quarterly Exams	NPAG-I, NPNL-I, NPDNP-I	February 23 - 27, 2026
Program Completion	NPNL, NPDNP	February 27, 2026
Spring Break	NPAG-I, NPNL-I, NPDNP-I	March 2 - 6, 2026

## Spring 2026

Event	Class	Date
Rotation 2	NPAG-II	March 9 - May 22, 2026
Leadership Experience II	NPNL-II	March 9 - May 22, 2026
Practicum III	NPDNP-II	March 9 - May 22, 2026
Classes Begin	NPAG-I, NPNL-I, NPDNP-I	March 9, 2026
Last Day to Add/Drop Classes	NPAG-I, NPNL-I, NPDNP-I	March 13, 2026
Last Day of Classes	NPAG-I, NPNL-I, NPDNP-I	May 15, 2026
Quarterly Exams	NPAG-I, NPNL-I, NPDNP-I	May 18 - 22, 2026
<b>Memorial Day</b>	<b>*No Classes*</b>	<b>May 25, 2026</b>
Quarter Break	NPAG-I, NPNL-I, NPDNP-I	May 26 - 29, 2026
Commencement		June 3, 2026 9:00 a.m.

## Rotations

### NPAG - II

Term	Rotation	Date
Summer	Rotation 3	June 2 - August 15, 2025
Winter	Rotation 1	December 1, 2025 - February 27, 2026
Spring	Rotation 2	March 9 - May 22, 2026

### NPNL - II

Term	Rotation	Date
Winter	Leadership Experience I	December 1, 2025 - February 27, 2026
Spring	Leadership Experience II	March 9 - May 26, 2026

### NPDNP - II

Term	Rotation	Date
Summer	Practicum I	June 2 - August 15, 2025
Fall	Practicum II	August 25 - November 26, 2025
Winter	Practicum III	December 1, 2025 - February 27, 2026

## Legend:

NPAG=Nursing Program Adult Gerontology

NPNL-Nursing Program Nurse Leadership

Last Revision 03/27/2025

## Faculty

**Pamela Love, Ph.D., MSN, RN, CNE**

UT Health Science Center at San Antonio  
Program Director/Professor

**Sandra Summers, DNP, MSN, RN, FNP-BC**

University of Colorado

Director of Clinical Education/Assistant Professor

## Master Of Science In Nursing (Msn) Adult Gerontology Primary Care Nurse Practitioner Program Courses

### **APRNG 500: Advanced Physiology and Pathophysiology I**

The objective of this course is to examine advanced anatomy, physiology, and pathophysiology of human body systems across the lifespan. An emphasis will be placed on biological and physiological manifestations in relation to adaptive and maladaptive variations that arise throughout the lifespan. This course provides a foundation for advanced practice nurses in the management of patient-centered care within primary care settings.

**Credits** 3.0

### **APRNG 501: Advanced Physiology and Pathophysiology II**

The objective of this course is to examine advanced anatomy, physiology, and pathophysiology of human body systems across the lifespan. An emphasis will be placed on biological and physiological manifestations in relation to adaptive and maladaptive variations that arise throughout the lifespan. This course builds upon the previous course content of patient management within primary care areas.

**Credits** 3.0

#### **Prerequisites**

[APRNG 500: Advanced Physiology and Pathophysiology I](#)

### **APRNG 502: Pharmacology for Advanced Practice Nurses I**

The objective of this course is to examine the clinical application of advanced pharmacology and prescribing pharmacotherapeutic interventions to address acute, complex, and chronic disease processes encountered in primary care settings. This course will also address principles associated with altered pharmacokinetics and pharmacodynamics in correlation to aging and genetic factors.

**Credits** 3.0

### **APRNG 503: Pharmacology for Advanced Practice Nurses II**

The objective of this course is to examine the clinical application of advanced pharmacology and prescribing pharmacotherapeutic interventions to address acute, complex, and chronic disease processes encountered in primary care settings. This course will also address principles associated with altered pharmacokinetics and pharmacodynamics in correlation to aging and genetics.

**Credits** 2.0

#### **Prerequisites**

[APRNG 502: Pharmacology for Advanced Practice Nurses I](#)

## **APRNG 504: Advanced Health Assessment II**

The objective of this course is to provide a foundation for advanced practice nurses to conduct comprehensive assessments. This course reviews complex patient interviews, thorough documentation, holistic and focused assessments, the use of advanced clinical judgment and diagnostic reasoning to discriminate and analyze abnormal clinical findings, formulation of differential diagnoses, and methods to present clinical findings. There is a companion course that requires a mandatory 5-day Campus Residency with live simulations and diagnostic reasoning.

**Credits** 3.0

## **APRNG 505: Advanced Health Assessment I (5-day Residency)**

This is a companion course to Advanced Health Assessment I. It consists of a mandatory 5-day Campus Residency with laboratory simulations and diagnostic reasoning. Students will perform “head-to-toe” assessments, attend a faculty-led workshop to build confidence and develop competencies, and collaborate with peers and faculty.

**Credits** 2.0

### **Prerequisites**

[APRNG 504: Advanced Health Assessment II](#)

## **APRNG 506: Adolescence to Gerontology: Health Promotion, Disease Prevention, & Medical Challenges**

The objective of this course is to address the role of the Adult-Gerontology Primary Care Nurse Practitioner in health promotion, screening, and disease prevention through evidence-based practices in the population foci (adolescence through gerontology). Major syndromes, complex comorbidities, and other medical challenges are discussed. There is a focus on trends and factors impacting the wellbeing of individuals, families, and populations secondary to demographics and cultural influences.

**Credits** 3.0

## **APRNG 600: Sociological, Political, and Economical Perspectives in Gerontology**

The objective of this course is to examine the economic impact of the aging adult on society. Economic and political topics (e.g. housing options, financial planning, and legal concerns) will also be reviewed during this course.

**Credits** 3.0

## **APRNG 601: Procedures and Skills for Primary Care (5-day Residency)**

This course is a mandatory 5-day Campus Residency in which students will engage with high-fidelity simulators and standardized patients and attend faculty-led workshops. Through concentration and rigor, students will perform advanced clinical skills and procedures before entering clinical rotations in primary care settings. The course objective is for students to gain confidence and develop competencies while collaborating with peers and faculty.

**Credits** 2.0

**Lab Hours** 0

### **Prerequisites**

Completion of all core courses.

## **APRNG 602: Primary Health Care: Adult Gerontology I (didactic)**

The objective of this course is to prepare students in the professional role as an advanced practice nurse. This course places an emphasis on screening guidelines, history & physical assessments, and the development of the culmination/teaching project. This didactic course is the first of three-consecutive didactic courses. It is scheduled in tandem with the Adult-Gerontology Practicum I. Principles taught in this course and the co-requisite course will be utilized to provide the contextual framework for the skills considered.

**Credits** 3.0

### **Prerequisites**

[APRNG 601: Procedures and Skills for Primary Care \(5-day Residency\)](#)

## **APRNG 603: Primary Health Care: Adult Gerontology I (practicum — 160 hours)**

This practicum is the first of three sequential clinical experiences. The objective of this course places an emphasis on screening guidelines across the lifespan of the focused population, the employment of evidence-based practice, history taking and physical examinations, and the incorporation of pharmacology. Principles taught in this course and the co-requisite course will be utilized to provide the contextual framework for the skills considered.

**Credits** 4.0

### **Prerequisites**

[APRNG 601: Procedures and Skills for Primary Care \(5-day Residency\)](#)

## **APRNG 604: Primary Health Care: Adult Gerontology II (didactic)**

The objective of this course is to prepare students in the professional role as an advanced practice nurse. This course builds on previous coursework, in addition to the development and evaluation of tools utilized for patient education and the culmination/teaching project. This didactic course is the second of three-consecutive didactic courses. It is scheduled in tandem with the Adult- Gerontology Practicum II. Principles taught in this course and the corequisite course will be utilized to provide the contextual framework for the skills considered.

**Credits** 3.0

### **Prerequisites**

[APRNG 602: Primary Health Care: Adult Gerontology I \(didactic\)](#)

## **APRNG 605: Primary Health Care: Adult Gerontology II (practicum — 240 hours)**

This practicum is the second of three sequential clinical experiences. The objective of this course places an emphasis on patient education and interventions to improve clinical outcomes, evidence-based practice, comprehensive assessments, diagnostic rationales, and the incorporation of pharmacology. Principles taught in this course and the corequisite course will be utilized to provide the contextual framework for the skills considered.

**Credits** 6.0

### **Prerequisites**

[APRNG 603: Primary Health Care: Adult Gerontology I \(practicum — 160 hours\)](#)



## **APRNG 606: Primary Health Care: Adult Gerontology III (didactic)**

The objective of this course is to prepare students in the professional role as an advanced practice nurse. This course builds on the previous coursework in addition to advanced application of theory into clinical practice, the role and expectations of the novice nurse practitioner, and completion of the culmination/teaching project. This didactic course is the third and final one of three- consecutive didactic courses. It is scheduled in tandem with the Adult-Gerontology Practicum III.

**Credits** 3.0

### **Prerequisites**

[APRNG 604: Primary Health Care: Adult Gerontology II \(didactic\)](#)

## **APRNG 607: Primary Health Care: Adult Gerontology III (practicum — 240 hours)**

This practicum experience is the third of three sequential clinical courses. The objective of this course places an emphasis on multidisciplinary collaboration, interventions to improve clinical outcomes, the management and evaluation of patient care scenarios, evidence-based practice, comprehensive assessments, diagnostic rationales, and the incorporation of pharmacology. This practicum experience continues to build on the foundation of the inherent requirements assumed by the Adult-Gerontology Primary Care Nurse Practitioner.

**Credits** 6.0

### **Prerequisites**

[APRNG 605: Primary Health Care: Adult Gerontology II \(practicum — 240 hours\)](#)

## **DRNPG 1500: Quality Improvement Initiatives and Evidence-Based Practice**

The objective of this course is to critically appraise evidence-based literature in order to efficiently plan, implement, and evaluate cost-containment initiatives and evidence-based outcomes in healthcare systems.

**Credits** 4.0

### **Prerequisites**

[GRNSG 501](#) Epidemiology and Biostatistics in Nursing Practice I, [GRNSG 502](#) Epidemiology and Biostatistics in Nursing Practice II

## **DRNPG 1501: Organizational Leadership**

The objective of this course is to examine the principles of systems theory, organizational structure, change management, and the role of the advanced practice nurse as a clinical leader in global health care systems.

**Credits** 4.0

## **GRNSG 500: Roles of Advanced Practice Nurses and Nurse Leaders**

The objective of this course is to provide an overview of the various roles (e.g. clinical leaders, health care providers, clinical educators/mentors) of advanced practice nurses within global health care systems. Professional collaboration, conflict resolution, and clinical practice initiatives in global health care systems will be addressed throughout this course.

**Credits** 2.0

## **GRNSG 501: Epidemiology and Biostatistics in Nursing Practice I**

The objective of this course is to critically appraise data in a quantitative manner while exercising the application of epidemiological methods for the purpose of disease control and prevention.

**Credits** 2.0

## **GRNSG 502: Epidemiology and Biostatistics in Nursing Practice II**

The objective of this course is to build on concepts and statistical techniques from [GRNSG 501](#) Epidemiology and Biostatistics in Nursing Practice I. This course will cover intermediate and advanced concepts in quantitative data analysis and the application of these concepts in disease control and prevention.

**Credits** 2.0

### **Prerequisites**

[GRNSG 501](#) Epidemiology and Biostatistics in Nursing Practice I

## **GRNSG 503: Principles of Human Resources, Law, and Ethics**

The objective of this course is to examine common legal, ethical, and regulatory issues that impact both health care systems and healthcare providers in interdisciplinary health care settings.

**Credits** 3.0

## **GRNSG 504: Finance, Health Policy, and Management**

The objective of this course is to examine the principles and theories of interdisciplinary healthcare systems. This will include health care policy, health care finance, and aging resources in health care settings.

**Credits** 3.0

## **GRNSG 505: Disease Prevention and Health Promotion**

The objective of this course is to examine health equity, health disparities, and social determinants. This course will also address the importance of preventative healthcare in vulnerable, underserved, and diverse populations.

**Credits** 3.0

## **GRNSG 506: Leadership, Communication, and Interprofessional Collaboration**

The objective of this course is to examine the importance of clinical leadership, communication, and interprofessional collaboration in global health care settings. This course will also address interprofessional decision making interactions and the characteristics of a successful Team in global healthcare settings.

**Credits** 3.0

# Doctor of Nursing Practice (DNP) Program

## Mission

The Midwestern University Doctor of Nursing Practice (DNP) program educates masters-prepared nurses at the doctorate level within direct and indirect clinical roles in interprofessional healthcare systems.

## Accreditation

The Doctor of Nursing Practice Program at Midwestern University is accredited by the Commission on Collegiate Nursing Education, <http://www.ccnaccreditation.org>, 202-887-6791. Approved for Accreditation on October 31, 2022 through October 31, 2027

The Doctor of Nursing Practice Program at Midwestern University has been approved by the Arizona State Board for Private Postsecondary Education.

Midwestern University is accredited by the Higher Learning Commission (HLC), 230 South LaSalle Street, Suite 7-500, Chicago, IL 60604-1413

## Degree Description

The Doctor of Nursing Practice (DNP) degree is an 18-month program in which students complete a standard didactic phase of coursework offered in a distance learning format and a specialty practicum with clinical quality improvement experiences scheduled in the last three-quarters of the curriculum.

Students must have completed an accredited Master of Science in Nursing (MSN) program and will complete at least 600 indirect care hours in the DNP program at Midwestern University. DNP graduates must demonstrate specific foundational and concentration-related competencies encompassing the American Association of Colleges of Nursing (AACN) Essentials.

Students enrolled in the DNP program complete planned, supervised, and evaluated practicum experiences that consist of quality improvement projects within the states where they are licensed. Applied practicums consist of projects tailored to meet the core competencies of doctorally-prepared nurses.

DNP students must conduct translational, evidenced-based quality improvement projects to improve the health of the population foci supervised by a project committee.

## Admissions

Prospective students who are registered nurses and hold a master's degree in nursing are considered for admission to the Doctor of Nursing Practice (DNP) program on a competitive basis. Additional admission requirements are outlined below.

Applications are received through the Midwestern University website. The University Admission Team reviews each application for completeness and refers complete applications to the Graduate Nursing Program Admissions Committee for review.

### Admission Requirements

To be considered for admission to the Doctor of Nursing (DNP) Practice program, applicants must submit the following documented evidence:

1. Completion of a Master's degree in nursing granted by a regionally accredited college or university.

2. Current and unencumbered license to practice as a registered nurse.
3. Submission of current resume or curriculum vitae to highlight current clinical, educational, or administrative practice related to nursing that can serve to facilitate the successful completion of an advanced nursing degree.
4. A cumulative grade point average (GPA) of 3.0 or higher on a 4.0 scale.
5. Submission of a personal response in one page or less to "Why am I pursuing this degree?"

## Application Process and Deadlines

To be considered for admission into the Doctor of Nursing Practice program, applicants must submit to the Office of Admissions the following:

1. A completed Application for Admission form.
2. Official transcripts verifying completion of a master's level degree in nursing from a regionally accredited program and satisfactory completion of all prerequisite coursework with a grade of a "C" or higher. "C-" will not be accepted.
3. Official final transcripts from all colleges attended post-bachelors.

Please be advised that applications are due by July 31st (early submissions are encouraged) through the Midwestern University website.

Questions related to the Midwestern University Admissions Portal can be directed to the office of admissions (888/247-9277 or 623/572-3215; [admissaz@midwestern.edu](mailto:admissaz@midwestern.edu)), and general admissions questions can be directed to the Program Director (Dr. Love; [plove@midwestern.edu](mailto:plove@midwestern.edu))

*Please note:* The receipt of the application materials and the file status can be tracked on the University's website. Upon receipt of the application, the Office of Admissions will send instructions for accessing account information. Applicants are responsible for notifying the Office of Admissions at the above address of any changes in mailing address and/or e-mail address.

All requests for withdrawal of an application must be submitted in writing via e-mail, fax, or letter to the Office of Admissions.

## Selection Process

The DNP program at Midwestern University uses a rolling admissions process. Completed applications are reviewed, and decisions to admit candidates are made regularly during the admission cycle until the class is filled. The admissions committee reviews all completed applications to the DNP program and then formulates and submits a recommendation to the Dean for final approval. The Dean, via the Office of Admissions, notifies applicants in writing of admission decisions. Applicants are notified of their selection status no later than two weeks after completing their file.

## Reapplication Process

After receiving either a denial or an end-of-cycle letter, prospective students may reapply for the following year's admissions cycle. Before reapplying, applicants are encouraged to seek input from a counselor in the Office of Admissions on strengthening their application. To initiate the reapplication process, prospective students must complete and submit new applications and proceed through the standard application procedures.

## Transfer Policy

The Doctor of Nursing Practice program may elect to accept transfer students. Transfer students must apply to the program and, if qualified, must participate in an admission interview. The Admissions Committee must approve all transfer students and will determine the number of graduate transfer credits granted (not to exceed 12 credits).

To receive credit for previous coursework completed at other institutions, students must submit a Transfer of Credit Request Application to be evaluated by the Admissions Committee by no later than July 31st. The transfer of credit has the following conditions:

1. Transferred course credit is limited to graduate-level courses from recognized, regionally accredited degree-granting institutions.
2. Credit is not transferred for a clinical practicum or an internship.
3. Credit may only be awarded for courses in which B- or better grades were attained.
4. Credit can only be awarded for courses completed within the seven-year period before matriculation.
5. Transfer of Credit Request Applications must be submitted by July 31st.
6. Please contact the program for a list of eligible transfer courses.

## Technical Standards, DNP

### Technical Standards

Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the College.

Candidates must be able to perform the following abilities and skills:

1. Observation: The candidate must be able to accurately make observations at a distance and close at hand. Observation necessitates the functional use of the sense of vision and sense of touch and is enhanced by the functional use of all of the other senses.
2. Communication: The candidate must be able to communicate in English, proficiently and sensitively, in verbal and written form, and be able to perceive nonverbal communication.
3. Motor: The candidate must be able to coordinate both gross and fine muscular movements, maintain equilibrium and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control and eye-to-hand coordination to perform profession-specific skills and tasks. The candidate must be able to lift at least 20lbs.
4. Intellectual, Conceptual, Integrative and Quantitative Abilities: The candidate must be able to problem solve, measure, calculate, reason, analyze, record and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
5. Behavioral and Social Attributes: The candidate must possess the emotional health required for full utilization of their intellectual abilities, the exercise of good judgment and the consistent, prompt completion of all responsibilities and the development of mature, sensitive and effective relationships. Candidates must be able to tolerate physically, mentally and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn, are all personal qualities required during the educational process. The candidate must agree to participate in touching/ palpating on the skin and being touched/palpated on the skin by individuals regardless of gender in all academic settings, including dental head, neck exams, including intra- and extra- oral examinations. These activities will take place in large and small group settings as directed in the College's curricular requirements.

Candidates are required to verify that they understand and are able to meet these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet Technical Standards with accommodation, must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the college. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

## Graduation Requirements

To qualify for graduation with a Doctor of Nursing Practice (DNP) degree, students must:

1. Satisfactorily complete all required coursework with a minimum cumulative grade point average (GPA) of 3.0.
2. Complete all required coursework and practicum experiences satisfactorily with a "B—" or higher or "Pass" (on a "Pass/Fail" Grading Scale).
3. Complete a total of 600 practicum hours in the DNP program.
4. Receive a favorable recommendation for doctoral degree conferral from the Academic Review Committee and the College of Health Sciences Student Promotion and Graduation Committee.
5. Receive a favorable recommendation for a doctoral degree conferral from the University Faculty Senate.
6. Settle all financial accounts with the institution.
7. Complete all graduation clearance requirements as instructed by the Office of the Registrar.

## Certification/Licensure Requirements

Doctor of Nursing Practice graduates may elect to prepare for certification via the American Organization for Nursing Leadership (AONL)<sup>TM</sup> or the American Nurses Credentialing Center (ANCC). The Nurse Manager and Leader and the Executive Nurse certifications are offered through the AONL. The Nurse Executive and the Nurse Executive (Advanced) certifications are offered through the ANCC.

## Student Academic Policies

Please refer to the University Academic Policy section for policies that apply to all students at Midwestern University, in addition to the College of Health Sciences (CHS) Student Academic Policies, and individual course syllabi for more detailed information.

The academic standing of a student is determined by the student's cumulative grade point average. To achieve satisfactory academic progress, a student must pass all required courses and maintain a cumulative grade point average of 3.00 or higher. All students must achieve, at minimum, a "B-" in all coursework.

## Doctor of Nursing Practice (DNP) Curriculum

### Degree Type

Doctor of Nursing Practice (D.N.P)

The Doctor of Nursing Practice (DNP) Program reserves the right to alter its curriculum, however and whenever it deems appropriate. This Catalog does not establish a contractual relationship between Midwestern University and students.

Students are required to take 600 practicum hours in DRNPG 1508, DRNPG 1602, and/or DRNPG 1603 to reach the minimum of 1000 post-bachelor's practicum hours required for graduation. The following courses, DRNPG 1500 and DRNPG 1501, will be waived for students who have completed one of the Master of Science in Nursing (MSN) programs at Midwestern University.

Total Credits: 56

## First Professional Year

### Fall Quarter

Course Code	Title	Credits
DRNPG 1501	Organizational Leadership	4.0
DRNPG 1502	The Scientific Underpinnings of the DNP	4.0
DRNPG 1504	Health Science Statistics	3.0
<b>Sub-Total Credits</b>		<b>11.00</b>

### Winter Quarter

Course Code	Title	Credits
DRNPG 1503	Information Systems and the Transformation of Health Care	4.0
DRNPG 1505	Economics and Health Care Policy	4.0
<b>Sub-Total Credits</b>		<b>8.00</b>

### Spring Quarter

Course Code	Title	Credits
DRNPG 1500	Quality Improvement Initiatives and Evidence-Based Practice	4.0
DRNPG 1506	Project Planning and Development	4.0
<b>Sub-Total Credits</b>		<b>8.00</b>

### Summer Quarter

Course Code	Title	Credits
DRNPG 1507	Preventative Care Initiatives and Interprofessional Collaboration	4.0
DRNPG 1508	Quality Improvement in Interdisciplinary Healthcare Practicum (200 hours)	5.0
<b>Sub-Total Credits</b>		<b>9.00</b>

## Second Professional Year

### Fall Quarter

Course Code	Title	Credits
DRNPG 1600	Data Synthesis and Decision Making	4.0
DRNPG 1602	Specialty Focus Residency and Inquiry I (200 hours)	5.0
<b>Sub-Total Credits</b>		<b>9.00</b>

### Winter Quarter

Course Code	Title	Credits
DRNPG 1601	Quality Improvement Outcomes and Program Evaluation	4.0
DRNPG 1603	Specialty Focus Residency and Inquiry II (200 hours)	5.0
DRNPG 1604	Doctor of Nursing Practice Quality Improvement Final Project	2.0
<b>Sub-Total Credits</b>		<b>11.00</b>
Total Credits		56

# Nursing Program Calendar

## Summer 2025

Event	Class	Date
<b>Memorial Day</b>	<b>*No Classes*</b>	<b>May 26, 2025</b>
Classes Resume	NPAG-I, NPAG-II, NPNL-I, NPDNP-I	June 2, 2025
Rotation 3	NAG-II	June 2 - August 15, 2025
Practicum I	NPDNP - II	June 2 - August 15, 2025
Last Day to Add/Drop Classes	NPAG-I, NPAG-II, NPNL-I, NPDNP-I	June 6, 2025
<b>Juneteenth (Observed)</b>	<b>*No Classes*</b>	<b>June 19, 2025</b>
<b>Independence Day (Observed)</b>	<b>*No Classes*</b>	<b>July 4, 2025</b>
Last Day of Class	NPAG-I, NPAG-II, NPNL-I, NPDNP-I	August 8, 2025
Program Completion	NPAG	August 15, 2025
Quarter Break	NPAG-I, NPAG-II, NPNL-I, NPDNP-I	August 18 - 22, 2025

## Fall 2025

Event	Class	Date
Orientation	NPAG-I, NPNL-I, NPDNP-I	August 18 - 20, 2025
Classes Begin	NPAG-I, NPNL-I, NPDNP-I	August 25, 2025
Practicum II		August 25 - November 26, 2025
Last Day to Add/Drop Classes	NPAG-I, NPNL-I, NPDNP-I	August 29, 2025
<b>Labor Day</b>	<b>*No Classes*</b>	<b>September 1, 2025</b>
<b>White Coat Ceremony</b>		<b>September 27, 2025</b>
Last Day of Classes	NPAG-I, NPNL-I, NPDNP-I	October 31, 2025
Quarterly Exams	NPAG-I, NPNL-I, NPDNP-I	November 3 - 7, 2025
Thanksgiving Break	NPAG-I, NPNL-I, NPDNP-I	November 10 - 28, 2025

## Winter 2025

Event	Class	Date
Rotation I	NPAG - II	December 1, 2025 - February 27, 2026
Leadership Experience I	NPNL - II	December 1, 2025 - February 27, 2026
Practicum II	NPDNP - II	December 1, 2025 - February 27, 2026
Classes Begin	NPAG-I, NPNL-I, NPDNP-I	December 1, 2025
Last Day to Add/Drop Classes	NPAG-I, NPNL-I, NPDNP-I	December 5, 2025
Winter Break	NPAG-I, NPNL-I, NPDNP-I	December 22, 2025 - January 2, 2026
Classes Resume	NPAG-I, NPNL-I, NPDNP-I	January 5, 2026
<b>Martin Luther King/ Jr. Day</b>	<b>*No Classes*</b>	<b>January 19, 2026</b>
Last Day of Classes	NPAG-I, NPNL-I, NPDNP-I	February 20, 2026
Quarterly Exams	NPAG-I, NPNL-I, NPDNP-I	February 23 - 27, 2026
Program Completion	NPNL, NPDNP	February 27, 2026
Spring Break	NPAG-I, NPNL-I, NPDNP-I	March 2 - 6, 2026



## Spring 2026

Event	Class	Date
Rotation 2	NPAG-II	March 9 - May 22, 2026
Leadership Experience II	NPNL-II	March 9 - May 22, 2026
Practicum III	NPDNP-II	March 9 - May 22, 2026
Classes Begin	NPAG-I, NPNL-I, NPDNP-I	March 9, 2026
Last Day to Add/Drop Classes	NPAG-I, NPNL-I, NPDNP-I	March 13, 2026
Last Day of Classes	NPAG-I, NPNL-I, NPDNP-I	May 15, 2026
Quarterly Exams	NPAG-I, NPNL-I, NPDNP-I	May 18 - 22, 2026
<b>Memorial Day</b>	<b>*No Classes*</b>	<b>May 25, 2026</b>
Quarter Break	NPAG-I, NPNL-I, NPDNP-I	May 26 - 29, 2026
Commencement		June 3, 2026 9:00 a.m.

## Rotations

### NPAG - II

Term	Rotation	Date
Summer	Rotation 3	June 2 - August 15, 2025
Winter	Rotation 1	December 1, 2025 - February 27, 2026
Spring	Rotation 2	March 9 - May 22, 2026

### NPNL - II

Term	Rotation	Date
Winter	Leadership Experience I	December 1, 2025 - February 27, 2026
Spring	Leadership Experience II	March 9 - May 26, 2026

### NPDNP - II

Term	Rotation	Date
Summer	Practicum I	June 2 - August 15, 2025
Fall	Practicum II	August 25 - November 26, 2025
Winter	Practicum III	December 1, 2025 - February 27, 2026

## Legend:

NPAG=Nursing Program Adult Gerontology

NPNL-Nursing Program Nurse Leadership

Last Revision 03/27/2025

## Faculty

**Pamela Love, Ph.D., MSN, RN, CNE**

UT Health Science Center at San Antonio  
Program Director/Professor

**Sandra Summers, DNP, MSN, RN, FNP-BC**

University of Colorado

Director of Clinical Education/Assistant Professor

## Doctor Of Nursing Practice (Dnp) Program Courses

### **DRNPG 1500: Quality Improvement Initiatives and Evidence-Based Practice**

The objective of this course is to critically appraise evidence-based literature in order to efficiently plan, implement, and evaluate cost-containment initiatives and evidence-based outcomes in healthcare systems.

**Credits** 4.0

### **DRNPG 1501: Organizational Leadership**

The objective of this course is to examine the principles of systems theory, organizational structure, change management, and the role of the advanced practice nurse as a clinical leader in global health care systems.

**Credits** 4.0

### **DRNPG 1502: The Scientific Underpinnings of the DNP**

The objective of this course is to address the integration of theoretical and ethical foundations of nursing, sciences, and humanities in correlation to the role of the Doctor of Nursing Practice. Systematic approaches to the implementation of evidence-based nursing practice are examined. Students identify concepts relevant to their topic of interest in preparation to fulfill the role of the doctoral-prepared advanced practice nurse.

**Credits** 4.0

### **DRNPG 1503: Information Systems and the Transformation of Health Care**

The objective of this course is to examine the utilization of information systems, technology, and data transformation through evidence-based practice to improve patient safety and quality care initiatives in global healthcare settings.

**Credits** 4.0

### **DRNPG 1504: Health Science Statistics**

The objective of this course is to provide an overview of the appropriate use of statistical methods reported in quantitative research literature of health care professions. This course examines parametric and nonparametric procedures, the use and essential assumptions of statistical methods, statistical software utilization and result interpretation, and the evaluation of published data gathered by statistical procedures.

**Credits** 3.0

## **DRNPG 1505: Economics and Health Care Policy**

This objective of this course is to examine the development and implementation of healthcare policy, economic theory, healthcare finance and reimbursement, cost/benefit analysis, market drivers and restraints, and entrepreneurship in global healthcare. Theory and application are integrated to provide students direct or indirect advanced practice nursing roles with the knowledge and attitude required to make influential decisions related to healthcare policy and finance within a complex global healthcare organization.

**Credits** 4.0

## **DRNPG 1506: Project Planning and Development**

The objective of this course is to facilitate the development of an evidence-based DNP scholarly project. This course focuses on project planning, mapping, and proposal development. Students will create a well-constructed PICOT question, generate quality improvement (QI) strategies and subsequent outcomes, determine required project resources, and construct a plan to evaluate and disseminate findings. Before completing this course, students must obtain Institutional Review Board approval for their QI projects.

**Credits** 4.0

## **DRNPG 1507: Preventative Care Initiatives and Interprofessional Collaboration**

The objective of this course is to address fundamental concepts of interprofessional collaborative practice, contemporary issues, and strategies to facilitate interprofessional collaboration in global healthcare settings. This course places an emphasis on health promotion, disease and accident prevention, strategies to eliminate health disparities, social determinants of health in underserved populations, and the use of health surveillance measures.

**Credits** 4.0

## **DRNPG 1508: Quality Improvement in Interdisciplinary Healthcare Practicum (200 hours)**

This is the first of three practicum courses. The objective of this course is to empower students to generate, appraise, and implement practices based on their IRB-approved topic. An emphasis is placed on data collection and analytical measures in consultation with respective faculty advisors. Students are empowered to expand upon their scope of practice to effectively master the DNP competencies.

**Credits** 5.0

## **DRNPG 1600: Data Synthesis and Decision Making**

The objective of this course is to support the proficiency of students in the employment of information systems to evaluate healthcare initiatives and disseminate findings for the purpose of clinical and administrative decision making. Students utilize statistical software to conduct statistical analyses, employ statistical methods to complement research designs, and report subsequent findings.

**Credits** 4.0

## **DRNPG 1601: Quality Improvement Outcomes and Program Evaluation**

The objective of this course is to examine systematic approaches to design, implementation, and evaluation of quality improvement initiatives while reviewing national benchmarks to consider variances in population trends and practice outcomes. Students critically appraise current publications, the latest evidence-based practices, and the application of qualitative, quantitative, and process improvement initiatives to promote safe and efficacious outcomes within healthcare systems.

**Credits** 4.0

## **DRNPG 1602: Specialty Focus Residency and Inquiry I (200 hours)**

This is the second of three practicum courses. This course aims to encourage students to generate, appraise, and implement an evidence-based project on their Institutional Review Board-approved quality improvement topic. An emphasis is placed on data collection and analytical measures in consultation with respective faculty advisors. Students are empowered to expand their practice scope to master the DNP competencies effectively.

**Credits** 5.0

### **Prerequisites**

DRNPG 1508: Quality Improvement in Interdisciplinary Healthcare Practicum

## **DRNPG 1603: Specialty Focus Residency and Inquiry II (200 hours)**

This is the third and final of three practicum courses. This course aims to encourage students to generate, appraise, and implement an evidence-based project on their Institutional Review Board-approved quality improvement topic. An emphasis is placed on data collection and analytical measures in consultation with respective faculty advisors. Students are empowered to expand their practice scope to master the DNP competencies effectively.

**Credits** 5.0

### **Prerequisites**

[DRNPG 1508](#) Specialty Focus Practicum and Quality Improvement in Interdisciplinary Healthcare, [DRNPG 1602](#) Specialty Focus Practicum and Quality Improvement in Interdisciplinary Healthcare

## **DRNPG 1604: Doctor of Nursing Practice Quality Improvement Final Project**

The objective of this course is for DNP students to distribute the results of their project findings through the completion of a robust scholarly project. The emphasis will be placed on the “three Ps of dissemination”: a written manuscript (Paper), a Poster presentation, and a PowerPoint® presentation with voice-over. Reviews are conducted by the DNP Project Committee, respective faculty advisors and peers.

**Credits** 2.0

### **Prerequisites**

[DRNPG 1602](#) Specialty Focus Practicum and Quality Improvement in Interdisciplinary Healthcare, [DRNPG 1603](#) Specialty Focus Practicum and Quality Improvement in Interdisciplinary Healthcare

# College of Graduate Studies

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## Mission

Midwestern University's College of Graduate Studies pursues the advancement of knowledge in the academic triad of teaching, research, and service in order to improve the health of humans, animals, and the environment while emphasizing One Health principles.

## Student Academic Policies

The following academic policies apply to all students who matriculate during the academic year of this catalog publication. These policies will apply throughout the entire time a student is enrolled in the college. In the event these policies need to be revised as the result of new accreditation requirements, mandates by the United States Department of Education, or other unforeseen circumstances, students will be notified in writing prior to the effective date of the new policy.

Faculty and students should also refer to the University Academic Policies section for additional policies that apply to all students at Midwestern University.

## Academic Monitoring

All students enrolled in CGS are expected to:

1. Maintain satisfactory academic progress in their course of study.
2. Understand and meet all established Program/College academic and professional requirements and standards as described in course syllabi, program- related manuals, University Catalog, and Student Handbook.
3. Self-monitor their academic performance in all required courses.
4. Complete all course-related requirements in a timely and satisfactory manner.
5. Seek assistance if encountering academic difficulty.
6. Contact their Program Director and/or course coordinator/director when performance has been unsatisfactory.
7. Check University e-mail account and course management site (e.g., Canvas) daily for information. This is particularly important at the end of the quarter and during quarter breaks when information concerning academic performance may be distributed.

## Academic Review and Progression

The academic progress of each student enrolled in the College is regularly monitored to determine whether the student is making satisfactory academic progress in their program of study based on criteria established by the program/College. The academic review process occurs at two levels: the Student Promotion and Graduation Committee, and the CGS Dean.

## CGS Student Promotion and Graduation Committee

The University Faculty Senate appoints this committee annually as one committee across campuses. The minimum membership consists of two faculty members from each CGS Program (AZ Biomedical Sciences, IL Biomedical Sciences, Master of Public Health, Precision Medicine) with representation from each campus, and at least one basic science faculty member from each campus. The Dean of CGS (or designee), the Dean of Students (or designee), and the Registrar (or designee) are Ex Officio nonvoting members. Each campus has a subcommittee of at least five members from that campus. The CGS Dean appoints a co-chair (program director or faculty member) from each campus. The committee will review and act on the academic progress of students enrolled in a cross-campus program, and the subcommittee will review and act on the academic progress of students enrolled in a campus-specific program. The committee or subcommittee may request that a course director and/or faculty advisor

attend the meeting to provide additional information about the student's case. When the academic status of a dual-degree student is under review, a representative from the respective primary healthcare professional degree program may be invited as a nonvoting member.

At the end of each quarter and more often if necessary, this committee or subcommittee reviews and acts upon the academic progress of each student enrolled in the College as well as other factors such as professionalism. If satisfactory, the committee or subcommittee recommends progression of the student to the next quarter. If unsatisfactory, the committee or subcommittee decides whether a student is placed on academic warning, academic probation, extended program, academic leave of absence, or is dismissed.

These decisions are forwarded to the student and the Dean of CGS. Following notification, a student may appeal the Committee’s decision to the Dean who will make a final determination but may, at their discretion, also form an ad hoc committee to review the appeal.

The CGS Dean is responsible for reviewing all decisions for consistency with stated College academic policies and practices. The Dean makes the final decision on the appeals and action to be taken.

At the end of each academic year, the CGS Student Promotion and Graduation Committee or subcommittee reviews the academic and professional progress and performance of each student. For dual degree students, input from the primary healthcare professional degree program representative will be considered in determining actions, and academic progress in the primary healthcare professional degree program takes precedence over the secondary CGS degree program. If satisfactory, the committee or subcommittee recommends promotion of the student. In addition, the committee or subcommittee meets each spring, or as needed, to recommend for graduation all students who have satisfactorily completed all degree requirements specified by their program. The committee's or subcommittee's recommendations are forwarded to the CGS Dean and the University Faculty Senate for approval. The co-chairs of the committee are responsible for submitting minutes of each meeting to the CGS Dean.

### Satisfactory Academic Progress

To achieve satisfactory academic progress, a student enrolled in a CGS program must pass all required courses and maintain or exceed the following minimum cumulative grade point average (GPA) as established for each CGS program:

- Master of Arts in Biomedical Sciences: 2.75 GPA
- Master of Biomedical Sciences: 2.75 GPA
- Master of Public Health: 2.5 GPA
- Master of Science in Precision Medicine: 2.5 GPA
- Post-Graduate Certificate in Precision Medicine: 2.5 GPA

### Academic Progress

Outcome	Usual Action <sup>1</sup>	Transcript Notation
No course failures; and maintain minimal cumulative GPA <sup>2</sup>	Allowed to progress to the next quarter	---
No course failures; and one quarter of cumulative GPA less than minimum allowed <sup>2</sup>	Academic warning for the subsequent quarter of enrollment	Academic warning is not noted on the transcript.
One course failure; and/or two quarters of cumulative GPA less than minimum allowed <sup>2</sup>	Academic probation for the subsequent quarter or until all academic requirements are met. In addition, one or more of the following may apply:	"F" grade is listed on transcript and is counted toward GPA calculation and total number of accumulated failures. Following successful retake of the course, the original "F" remains on the transcript as an "F" but is no longer factored into the GPA.

Outcome	Usual Action <sup>1</sup>	Transcript Notation
	<ol style="list-style-type: none"> <li>1. Retake of the failed course if eligible and/or if the course is required</li> <li>2. Academic leave of absence for up to one year until course is retaken or any requirements for re-entry established by the program have been met</li> <li>3. Extended program</li> </ol> <p><i>Note:</i> Students on an extended program may be subject to academic LOA or dismissal after additional course failures or failure to maintain the required cumulative GPA.</p>	
Three or more quarters of cumulative GPA less than minimum allowed <sup>2</sup>	<ol style="list-style-type: none"> <li>1. Academic probation for the subsequent quarter or until all academic requirements are met, or</li> <li>2. Academic leave of absence<sup>3</sup> and academic probation, or</li> <li>3. Extended program and academic probation, or</li> <li>4. Dismissal</li> </ol>	Academic probation and extended program are not noted on transcript. Academic leave of absence and dismissal are noted on transcript.
Two or more course failures	<ol style="list-style-type: none"> <li>1. Academic leave of absence<sup>3</sup> and academic probation, or</li> <li>2. Extended program and academic probation, or</li> <li>3. Dismissal</li> </ol> <p><i>Note:</i> Two or more course failures will typically result in dismissal.</p>	Academic probation and extended program are not noted on transcript. Academic leave of absence and dismissal are noted on transcript.

<sup>1</sup>The CGS Student Promotion and Graduation Committee may decide from any of the options listed among the usual actions described for each academic situation under review.

<sup>2</sup>Minimum cumulative GPA for Master of Arts in Biomedical Sciences is 2.75; Minimum cumulative GPA for Master of Biomedical Sciences is 2.75; Minimum cumulative GPA for Master of Public Health is 2.50; Minimum cumulative GPA for Master of Science in Precision Medicine is 2.50; Minimum cumulative GPA for Post-Graduate Certificate in Precision Medicine is 2.50.

<sup>3</sup>May or may not be preceded by academic warning or probation.

## Unsatisfactory Academic Progress

If a student fails to make satisfactory progress in completing the prescribed course of study, the student is placed on academic warning, academic probation, extended program, academic leave of absence, or is dismissed. The CGS Student Promotion and Graduation Committee may recommend any of the options listed among the usual actions described for each academic situation under review.

Additionally, for CGS dual degree students, academic progress in their primary healthcare professional degree program takes precedence over the secondary degree program. Dual degree students not sustaining sufficient academic progress in their primary degree program may be placed on an academic leave of absence from the secondary CGS degree program until academic deficiencies in the primary degree program are corrected, and the student returns to good academic standing, as defined by the primary degree program. The Student Promotion and Graduation Committee for the primary degree program communicates student academic status updates to the CGS Student Promotion and Graduation Committee.

Students will be notified by the CGS Dean when they are placed on academic warning as a result of their failure to achieve the required minimum cumulative GPA established by their program. Any student with academic deficiencies to be addressed by the CGS Student Promotion and Graduation

Committee shall be notified in writing by campus e-mail by the Chair of the CGS Student Promotion and Graduation Committee at least two business days in advance of the scheduled meeting in which the student's case will be heard. The student may request and shall be permitted to appear before the CGS Student Promotion and Graduation Committee (in person or virtually) to present their case in matters that could result in academic probation, academic leave of absence, dismissal or any matter that could result in a permanent annotation on the student's transcript. In such instances, the student shall inform the Chair or Co-Chair of the CGS Student Promotion and Graduation Committee in writing, of their desire to appear before the committee or intent to waive this right. If the student chooses to appear before the committee, this prerogative extends to only the involved student and not to any other individuals. A student whose academic progress will be subject to review by the CGS Student Promotion and Graduation Committee and who wishes to appeal a course grade must do so in an expedited manner prior to the scheduled meeting of the Committee. Please refer to the Midwestern University Catalog Academic Policies section for a complete description of the Grade Appeals Policy.

Within two working days following the committee meeting, the chair of the CGS Student Promotion and Graduation Committee is responsible for providing notification via campus email, informing the involved student, of the committee's decision. In all instances, the chair of the CGS Student Promotion and Graduation Committee shall be responsible for informing the CGS Dean of each decision made by the committee.

Following notification of the decision by the CGS Student Promotion and Graduation Committee, a student may appeal the decision to the CGS Dean (see Appeal Process). The Dean is responsible for reviewing all decisions for consistency with stated College academic policies and practices. The Chair of the CGS Student Promotion and Graduation Committee is responsible for providing written notification of the decision to all appropriate academic support offices (e.g., Registrar, Student Financial Services, etc.).

## Academic Warning

Academic warning is a formal notification of substandard academic performance and cautions the student that continued performance at this level might result in academic probation or other academic disciplinary action. An academic warning is issued when a student earns a cumulative GPA below the minimum required by the student's respective program for one quarter and/or when the student fails to meet any other established program academic requirements. An academic warning is in effect for the subsequent quarter of enrollment. Academic warning is not noted on the student's transcript but is noted in the student's academic file that is kept in the Program office. If the student achieves the minimum standard of academic performance required by the program during the quarter of academic warning, the student is returned to good academic standing. This is also noted in the student's file.

## Academic Probation

Academic probation represents notice of unsatisfactory academic progress. Academic probation typically occurs when the student fails a class during their academic program and/or earns a cumulative GPA below the minimum required by the student's respective program for two quarters (which do not have to be consecutive) and/or when the student fails to meet any other established program academic requirements. Academic probation is not noted on the student's transcript but is noted in the student's academic file in the Program office. The student remains on academic probation until the failure is successfully repeated and/or the cumulative GPA is at or above the program's required minimum and all deficiencies have been corrected. Subsequently, when the student is returned to good academic standing, this is also noted in the student's file.

## Extended Program

When a student is not allowed to progress in the standard program curriculum due to course failure; failure to maintain the required cumulative GPA for two or more quarters; failure to meet any other established program academic requirement; or upon request due to extenuating personal circumstances, the CGS Student Promotion and Graduation Committee may place the student on an



extended program. While on an extended program, students may be permitted to take courses and/or to retake courses in which they have received a grade of "C" or less, as approved by their CGS program. Students will be able to resume the standard program curriculum upon successful completion of all programmatic requirements. Extended program is not noted on the student's transcript. Leave of absence will be noted on the transcript for periods of non-enrollment during the extended program period for stand-alone degree students. No notation will be made on transcripts of a dual degree student who is concurrently taking coursework in their primary healthcare professional degree program.

## Academic Leave of Absence

Academic leave of absence may occur when a student has failed one or more courses, has accumulated two or more quarters with a cumulative GPA less than required by the student's program, or has not met programmatic criteria required to proceed in the curriculum. Academic leave of absence may or may not be preceded by academic probation. This action results in the suspension of the student from all academic courses for a period of up to one year, or until all program requirements for re-entry have been fully met. A mandatory academic leave of absence is noted on the student's transcript.

The student who has been placed on a mandatory academic leave of absence does not have to re-apply for admission and is guaranteed reentry into their academic program upon successful completion of all failed required courses and/or when all programmatic requirements are met. Upon re-entry to the academic program, the student is routinely placed on academic probation for the following quarter.

## Academic Dismissal

A student may be dismissed from the College for academic reasons upon the decision of the CGS Student Promotion and Graduation Committee. The dismissal is based on the determination that the student has not satisfactorily demonstrated that the student can successfully achieve the standards and requirements set forth in the academic policies and professional expectations for the program (see "Professional Conduct"). Students who accumulate two or more failures or three quarters below the minimum required grade point average may be dismissed. The course failures and/or the three-quarters with less than the required minimum cumulative GPA do not have to be consecutive.

## Retake of a Failed Course

If a student passes a repeated course, the original failure remains on the transcript as an "F" grade and is included in the total number of accumulated failures in the student's academic record. The grade from the original failed course is no longer used in the computation of the GPA following repeat of the course. The grade from the repeated course will be factored into the overall GPA.

Students may retake a Midwestern University course in which they have earned a "C" if the student's GPA is below the Program's minimum requirement. The Program Director and the CGS Dean must approve this retake option. Typically, a maximum of three courses with "C" grades can be retaken, and a course may only be retaken once. The original "C" grade will remain on the transcript but will not be used in the computation of the GPA following the completion of the repeated course. The new grade will be factored into the overall GPA. All repeated courses are subject to additional tuition. Students should consult with their financial aid advisor regarding the financial implications of repeated coursework.

With program approval, the CGS may allow students to take equivalent courses at an accredited university as a replacement for a failed course or for the purpose of raising their cumulative GPA to the Program minimum. In order to qualify as replacement credits, such courses must be at the graduate level and must be approved by the CGS Program Education Committee and Program Director before the grades can be accepted for transfer. These courses and assigned grades will be recorded on the

transcript along with the equivalent Midwestern University courses and assigned grades. The original "C" and "F" grades will remain on the transcript but only the new grades will be factored into the overall GPA.

## Readmission After Dismissal for Poor Academic Performance

It is at the discretion of the Program to readmit a student who has been dismissed for poor academic performance. To initiate the reapplication process, candidates must complete and submit a new application and proceed through the standard application process established by the program. Before reapplying, however, individuals should seek the advice of an admissions counselor. It is expected that the individual would have addressed documented deficiencies before reapplication and be able to demonstrate that they meet all admission requirements and technical standards of the program.

The program's Admissions Committee will review completed applications of candidates and submit recommendations to the Program Director for action. The CGS Dean, via the Office of Admissions, then notifies applicants in writing of readmission decisions. No guarantee of readmission is implied, and questions related to advanced standing and similar issues will be addressed as they are for new applicants. Readmission will be granted only once.

## Advanced Placement/Exemption from Coursework

The CGS Program may allow for the transfer of credits from graduate-level coursework completed at other institutions prior to matriculation at Midwestern University. The Program decides upon all requests for advanced placement by newly admitted students on a course-by-course basis. To request such consideration, a student must submit a letter of request to the Program Director in which the student lists the course previously taken which might be similar in content to the Midwestern University course that the student is required to take. The student must also provide an official description and syllabus of the course previously taken. The Program Director will share the submitted course materials with the appropriate Course Director to determine if the course is an appropriate substitute. All requests must be submitted prior to matriculation. Typically, advanced placement will only be considered for coursework in which a minimum letter grade of "B" has been earned. A "C" letter grade is not acceptable for advanced placement consideration. If the Program denies the request for advanced placement, the student may appeal this decision to the CGS Dean.

If a course is accepted for credit, the equivalent Midwestern University course and the Advanced Placement (AP) notation will be recorded on the transcript along with the name of the institution at which the credit was earned. Any earned letter grade will not be included on the transcript or used in the GPA calculation. Further details may be found in the individual CGS program catalogs.

## Coursework Completed in Midwestern University Professional Programs

For CGS dual degree students enrolled in a Midwestern University healthcare professional degree program, coursework completed in the healthcare professional degree program may be applied towards the CGS degree. Further details may be found in the individual CGS program catalogs.

## Appeal Process

Following notification of a decision from the CGS Student Promotion and Graduation Committee, a student may appeal. The student has three working days to submit a formal written appeal of the Committee's decision to the Dean. The appeal must be submitted in writing to the Office of the Dean within this three-day period. A narrative explaining the basis for the appeal should accompany the request. An appeal must be based on one of the following documented premises:

1. Bias of one or more members of the CGS Student Promotion and Graduation Committee Note: The student must present specific evidence that the committee member(s) demonstrated bias against the student in conducting the academic review process
2. Material, documentable information not available to the committee at the time of its initial decision.

*Note: The student must provide a detailed explanation of why the new information is relevant and why it was not made available to the committee members during the academic review process. The student should be prepared to produce pertinent documentation at the appeal meeting.*

3. Procedural error.

*Note: The student must provide evidence that the committee did not correctly follow the procedures related to the conduct of the academic review process; for example, the student was not given notice of the meeting or committee decision in accordance with stated policies.*

Upon receipt of the student's appeal, the Dean will consider the appeal and may, at their discretion, form an ad hoc appeal committee. In all cases, the Dean must make a decision, typically within ten working days, and then notify the student, the Chair of the CGS Student Promotion and Graduation Committee, and all appropriate support offices via campus email. The decision of the Dean is final.

Students must attend all courses in which they are registered until the appeal process is complete. Students who fail a required or prerequisite course should consult with the Program Director regarding attendance in courses in the subsequent quarter.

## Auditing a Course for Remedial Purposes

The CGS Student Promotion and Graduation Committee may determine that a student should be enrolled to audit a previously taken course. Please refer to the Midwestern University Catalog Academic Policies section for a complete description of the Course Auditing Policy.

## Faculty Advisor Program

The CGS Program assigns a faculty advisor to students in each entering cohort. The responsibilities of the faculty advisor are as described below. In addition to these faculty advisors, the Program Director, the CGS Dean's Office and the Dean of Students are also available to assist students. It is the student's responsibility to initiate contact with the faculty advisor for assistance.

The responsibilities of CGS faculty advisors include:

1. Serving as the student's advisor and academic/professional counselor;
2. Overseeing and monitoring the academic progress and professional growth of the student;
3. Referring the student to academic and personal counseling services provided by the institution;
4. Serving as an advocate for the student;
5. Providing career counseling to the student.

## Grades

Students receive letter grades corresponding to the level of achievement in each course, based on the results of examinations, required course work, and, as applicable, other established criteria. The letter grades, percent ranges, and quality points per credit are as follows:

Grade	Percent (%)	Quality Points (per credit)	Comments
A	93-100	4.000	-
A-	90-92	3.670	-
B+	87-89	3.330	-
B	83-86	3.000	-
B-	80-82	2.670	-
C+	77-79	2.330	-
C	70-76	2.000	-
F	< 70	0.000	-

Grade	Percent (%)	Quality Points (per credit)	Comments
I	-	0.000	An Incomplete grade may be assigned by an instructor when a student's work is of passing quality but incomplete, or if a student qualifies for re-examination. It is the responsibility of the student to request an extension from the course instructor. By assigning an "I" grade, it is implied that an instructor agrees that the student has a valid reason and should be given additional time to complete required coursework. All incomplete grades will be resolved within 10 calendar days from the end of the final examinations for the quarter or they will automatically be converted to a grade of "F". In the case of courses ending prior to final exam week, it is the obligation of the course director to monitor the use and resolution of the incomplete grade with a notice to the Registrar.
IP	-	0.000	An In-Progress grade may be assigned when extenuating circumstances make it necessary to extend the grade completion period past 10 calendar days (e.g. illness, family death). Authorization by the Dean is required, and the completion period should not typically exceed one quarter.
P	-	0.000	Pass (for a pass/fail course); designation indicates that the student has made satisfactory progress or completed required coursework satisfactorily. Grade of "P" is counted toward credit hour accruals for graduation but does not affect GPA calculations.
F	-	0.000	Fail (for a pass/fail course); designation indicates that the student has not made satisfactory progress or completed required coursework satisfactorily. Grade of "F" is counted toward credit hour accruals as attempted but not completed. Grade of "F" is calculated into the GPA (quality points are lowered due to unsuccessful course completion).
W	-	0.000	Withdrawal is given if the work completed up to the time of withdrawal was satisfactory. This grade is not counted in any GPA calculation and is not counted in credit hour accruals for graduation.
WF	-	0.000	Withdrawal Failing is given if the work completed up to the time of withdrawal is below the passing grade level for the program. This grade is not counted in any GPA calculation and is not counted in credit hour accruals for graduation.
AU	-	0.000	This designation indicates an audited course in which a student is registered with the understanding that neither academic credit nor a grade is earned. The status of the course cannot be changed from audit to full credit after the start of the quarter.
AP			This designation indicates the decision of a college to award academic credit that precludes a student from taking required course work. The designation of Advanced Placement is applied toward credit hour accruals, but is not counted in the GPA calculation.

## Grade Point Average

The grade point average (GPA) is determined by calculating the total number of quality points earned and dividing them by the total number of credits carried. The total quality points earned for each course is determined by multiplying the quality points earned per credit (corresponding to the letter grade) by the number of credits assigned to the course. The student's cumulative grade point average is computed and recorded by the Office of the Registrar. It is calculated initially at the end of the first quarter of enrollment and does not include any grades or credits for courses audited or accepted for advanced placement or for courses with a grade of withdrawal (W), withdrawal failing (WF), or pass (P). Additionally, failing (F) grades for courses that are successfully repeated are not included in the GPA. Under exceptional circumstances and with the approval of the Program Director and Dean, students may retake a course in which they received a grade of "C". In such cases, the original grades remain on the transcript but only the new grades are used in the computation of the GPA.

## Criminal Background Checks

CGS performs criminal background checks as described in the Midwestern University policies.

## Graduation

The following degrees and certificate will be conferred upon candidates who have completed all academic requirements, satisfied all financial obligations, and completed all graduation requirements: Master of Biomedical Sciences (M.B.S.), Master of Arts in Biomedical Sciences (M.A.), Master of Public Health (M.P.H.), Master of Science in Precision Medicine (M.S.), and Post-Graduate Certificate in Precision Medicine (PGCert).

## Immunization Policy

Students enrolled in a program without a clinical component are required to follow the immunization policy, as outlined in the Student Handbook, but are not required to have titers.

## Leave of Absence

Please refer to the Midwestern University Catalog Academic Policies section for a complete description of the Leave of Absence Policy. Before voluntarily requesting a leave for personal reasons or after being placed on a mandatory leave for academic reasons, a student must make an appointment with the appropriate Program Director or designee and representative from the Dean's Office to discuss the implications of the leave of absence and a revised program of study, if applicable. Typically, a single leave of absence will not exceed 12 months, and consecutive or multiple interrupted leaves of absence will not exceed 18 months. Periods of non-enrollment do not count towards the allotted time for completion of academic programs.

## Professional Conduct

Students are expected to emulate the legal, moral, and ethical standards expected of professionals and display behavior that is consistent with these qualities. A Code of Responsibilities and Rights of the Students of Midwestern University is included in Appendix 1 of the MWU Student Handbook. This code clearly states the mode of behavior that is expected of students and covers both on-campus and off-campus activities. Students are expected to read and follow this code.

Unsatisfactory professional behavior, as defined in Appendices 2 and 4 of the MWU Student Handbook, is subject to disciplinary sanctions that may preclude a student's academic progress in their program of study. The Dean of Students investigates formal complaints concerning student misconduct and recommends disciplinary action to the CGS Dean. A student who is found to have engaged in improper conduct is subject to disciplinary action which includes, but is not limited to, disciplinary warning/probation, suspension, or dismissal. Disciplinary warning and probation are not noted on the transcript but are kept in the student's disciplinary file. Suspension and dismissal as a result of disciplinary action are noted on the student's transcript. Disciplinary information may be shared with sites that are affiliated with Midwestern University educational programs.

# CGS Faculty

## Administrative Faculty

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Assistant Professor

**Dhritiman Samanta, Ph.D.**

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**Richard Laddaga, Ph.D.**

McGill University, Canada  
Professor

**Balbina Plotkin, Ph.D.**

University of Tennessee  
Professor Emeritus

**Ira Sigar, Ph.D.**

Illinois Institute of Technology  
Associate Professor

**Michelle Swanson-Mungerson, Ph.D.**

Loyola University Chicago, Stritch School of  
Medicine  
Professor

**Julie Swartzendruber, Ph.D.**

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Associate Professor

**Martin Szul, Ph.D.**

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Lab Manager & Instructor

**Vaibhav Tiwari, Ph.D.**

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Department of Pathology  
Arizona

**Tony Tullo, M.D., Chair**

Medical College of Georgia  
Assistant Professor

**Parveen Ranjan, Ph.D.**

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Assistant Professor

**Joshua Routh, M.D.**

University of Arizona  
Assistant Professor

Illinois

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F.A.S.C.P., F.A.O.C.P., Chair**

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Professor

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The State University of New York at Buffalo  
Associate Professor



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Chicago College of Osteopathic Medicine  
Professor Emeritus

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University of Chieti-Pescara, Italy  
Associate Professor

Department of Pharmacology  
Arizona

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Dalhousie University  
Professor

**Gerald Call, Ph.D.**

University of Kansas Medical Center  
Professor

**Douglas Jones, Ph.D.**

University of Texas  
Associate Professor

**Shaleen Korch, Ph.D.**

University of North Dakota  
Professor

**Jeffrey Norris, D.V.M., Ph.D.**

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Associate Professor

**Edward Wickstead, Ph.D.**

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Assistant Professor

Illinois

**Phillip Kopf, Ph.D., Chair**

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Professor

**Joshua Edwards, Ph.D.**

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**Keith B. Glaser, Ph.D.**

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**Marsha Pierce, Ph.D.**

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Associate Professor

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Professor

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Arizona

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Professor

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Professor

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Assistant Professor

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IL)  
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Assistant Professor

**Sinju Sundaesan, Ph.D.**

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Assistant Professor

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Associate Professor

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Assistant Professor

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Integrated Graduate Program  
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Associate Professor

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**Ying He, Ph.D.**

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**Jose Hernandez, Ph.D.**

University of Zaragoza, Spain  
Professor and Chair

**Thu Huynh, Ph.D.**

New York University  
Assistant Professor

**Bucky Jones, Ph.D.**

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Professor

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**Rosa Ventrella, Ph.D.**

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**Michael V. Volin, Ph.D.**

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Director**

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Assistant Professor

**Karen Gruszynski, Ph.D., D.V.M., M.P.H.**

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University of Wisconsin-Madison  
Assistant Professor

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Medicine  
Assistant Professor

# Master of Biomedical Sciences Degree Program

## Mission

The Midwestern University Master of Biomedical Sciences Program educates students in the biomedical sciences and prepares them to be competitive applicants for careers in a wide range of professional programs, health-related fields, as well as for additional academic and professional training.

## Accreditation

Midwestern University is accredited by The Higher Learning Commission, 230 South LaSalle Street, Suite 7- 500, Chicago, IL 60604-1413.

## Degree Description

The Master of Biomedical Sciences (MBS) Program is designed as a full-time, 21-month, graduate-level program that provides the student with a broad background in the biomedical sciences, laboratory experiences, and research skills. The curriculum is designed to help improve student's academic foundation in the biomedical sciences and augment the student's credentials for admission into professional school (e.g., medical school, dental school, or other health professional program) and prepare and graduate students who have extensive knowledge, technical skills, and expertise to function in a variety of biomedical professions. These include careers as technicians and supervisors in the biotechnology, biosafety, and pharmaceutical industry; research personnel in biomedical science laboratories; employees in governmental and regulatory agencies; and faculty for undergraduate teaching programs.

The 72-quarter-hour (minimum) master's degree curriculum is usually completed in 21-24 months. All students must complete the program within three four years of matriculation, excepting approved leaves of absence. All students are required to complete a research project approved by the student's research committee. The required curriculum includes basic science courses in biochemistry; molecular cell biology; genetics; and physiology. Students must also complete at least six additional basic science credits in microbiology, immunology, pharmacology, or anatomy. In addition to the basic science courses, the student must take a series of research courses that prepares the student for a research project and thesis that is the culmination of the degree program. The research courses include Foundations of Research and Statistics courses, Journal Club, Laboratory Rotations, Philosophical Foundations of Research, Research Literature Review, Research Protocol, Graduate Seminar Series, and Thesis Research. Finally, a series of electives and independent study courses are available. The electives allow the student to further explore an area of interest.

## Admissions

### Admission Requirements

To be considered for admission to the Master of Biomedical Sciences degree program, applicants must submit the following documented evidence:

1. Completion of a bachelor's degree (B.A. or B.S.) or higher, preferably with a major in the sciences, from a regionally accredited college or university.
2. A minimum cumulative grade point average (GPA) of 2.75 on a scale of 4.00 in all coursework completed.
3. One letter of recommendation (individual or committee letter from applicant's college or university).

4. Copies of transcripts from each college or university attended. Official transcripts must be submitted prior to matriculation.
5. A test score from one of the following is recommended but not required: Graduate Record Examination (GRE), Medical College Admissions Test (MCAT), Pharmacy College Admissions Test (PCAT), Dental Admissions Test (DAT), Optometry Admissions Test (OAT), or other professional program admissions test.
6. Completion of the typical prerequisite coursework for admission into medical, dental, optometry or pharmacy schools, such as: biology, general chemistry, organic chemistry, physics and mathematics are strongly recommended. Prospective students are responsible for determining the prerequisites for the health professional program and institution of the student's choice.
7. Passage of the Midwestern University criminal background check.
8. Commitment to abide by the Midwestern University Drug-Free Workplace and Substance Abuse Policy.

## Application Process and Deadlines

To be considered for admission to the Master of Biomedical Sciences program, applicants must:

Apply through the Post Baccalaureate Centralized Application Service (PostbacCAS; <https://postbaccas.liaisoncas.org/students/>). PostbacCAS allows students to learn about, compare, and apply to several post baccalaureate programs through one centralized application.

Requirements for application include:

1. One letter of recommendation (individual or committee letter). The Biomedical Science Program will accept letters from pre-health advisors or committees, science professors, and health professionals.
2. Copies of transcripts from each college or university attended. Official transcripts must be submitted prior to matriculation from every undergraduate, graduate, or professional school the applicant attended or is currently attending. These transcripts must be signed and sealed by the registrar at each institution.

The Biomedical Sciences Program uses a rolling admission process in which completed applications are reviewed and decisions are made at regular intervals during the admissions cycle. The Master of Biomedical Sciences Program begins in the Fall Quarter. Admission to the Biomedical Sciences Program is considered on a competitive basis for applicants who have submitted a completed application. Multiple criteria are used to select the most qualified candidates, including selection of those students the Admissions Committee feels would benefit the most from the program. Selection decisions for the program are made by the Biomedical Sciences Program Admissions Committee with the approval of the Program Director and the Dean of the College of Graduate Studies until the class is filled. To maximize their competitiveness within our rolling admission process, candidates are advised to submit a completed application early in the admission cycle. Applications may not be accepted after August 1.

## Selection Process

After receiving completed application packets, the Office of Admissions verifies the information provided to determine whether all admissions requirements have been completed or will be completed prior to matriculation and to verify the cumulative GPAs for all completed courses. Completed applications are forwarded to the Biomedical Sciences Program Admissions Committee. Applicants will be notified either electronically (i.e., through the applicant's portal or by email) or by letter of admissions decisions.

*Please Note:* Applicants may track the receipt of application materials and the status of files on the University's website using instructions for accessing account information that will be sent by the Office of Admissions after receipt of the applicant's application. Applicants are responsible for notifying the Office of Admissions of any changes in the contact telephone number, mailing address or e-mail address. All requests for application withdrawals must be made in writing to the Office of Admissions:

Midwestern University Office of Admissions  
19555 N. 59th Avenue  
Glendale, AZ 85308  
888/247-9277 or 623/572-3215  
[admissaz@midwestern.edu](mailto:admissaz@midwestern.edu)

## Transfer Process

Transfer of a limited number of graduate level credits from other institutions may be allowed: 6 semester (9 quarter) hours for the Master of Biomedical Sciences. This does not remove the requirement to enroll in a minimum of 15 credit hours per quarter unless on extended study. The Program Director will review any request for transfer credit upon recommendation of the course director and MBS degree coordinator. The student should contact the MBS Coordinator for more information on the process.

# Technical Standards, MBS

## Technical Standards

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the college.

Candidates must be able to perform the following abilities and skills:

1. Observation: The candidate must be able to accurately make observations at a distance and close at hand, including those on a computer screen or electronic device. Observation necessitates the functional use of vision and sense of touch and is enhanced by the functional use of all other senses.
2. Communication: The candidate must be able to communicate in English, proficiently and sensitively, in verbal and written form, and be able to perceive nonverbal communication.
3. Motor: Candidates must be able to coordinate both gross and fine motor movements, maintain equilibrium and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control and eye-to-hand coordination to perform profession-specific skills and tasks.
4. Intellectual, Conceptual, Integrative and Quantitative Abilities: The candidate must be able to problem solve, measure, calculate, reason, analyze, record and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
5. Behavioral and Social Attributes: The candidate must possess the emotional health required for full utilization of the candidate's intellectual abilities, the exercise of good judgment, the consistent, prompt completion of all responsibilities, and the development of mature, sensitive and effective relationships. Candidate must be able to tolerate physically, mentally and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn are all personal qualities required during the educational process.

Candidates are required to verify that the candidate understands and is able to meet these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet Technical Standards with accommodation, must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

## Graduation Requirements

To qualify for the degree Master of Biomedical Sciences (MBS), students must:

1. Follow an approved course of study acceptable to the Biomedical Sciences Program Education Committee.
2. Satisfactorily complete all courses with a minimum cumulative grade point average of 2.75 for the Master in Biomedical Sciences degree.
3. Satisfactorily complete the required minimum of 72 quarter hour credits for the Master of Biomedical Sciences degree program.
4. Satisfactorily defend a Master's level research thesis project.
5. Receive a favorable recommendation for Master's degree conferral from the Student Promotion and Graduation Committee.
6. Receive a favorable recommendation for Master's degree conferral from the University Faculty Senate.
7. Settle all financial accounts with the University.
8. Complete all graduation clearance requirements as instructed by the Office of the Registrar.

## Master of Biomedical Sciences Curriculum

### Degree Type

Master of Biomedical Sciences

MWU/CGS Biomedical Sciences Program reserves the right to alter its curriculum however and whenever it deems appropriate. This catalog does not establish a contractual relationship between MWU and the student.

Total Quarter Credits for Completion of the Program: 72 minimum

### First Year Curriculum

Sample curriculum, course credits, and sequencing for the suggested seven (7) academic quarters are listed below. In addition to the listed core requirements, students must complete a minimum of 6 credits of required electives from the following list during their first year.

Winter Quarter Required Electives: three (3) credit minimum

- [ANATG 906](#) Human Anatomy with Laboratory 4 credits
- [BMMSG 970](#) Principles of Pharmacology 3 credits

Spring Quarter Required Electives: two (2) credit minimum

- [BMMSG 921](#) Microbiology 4 credits
- [BMMSG 924](#) Immunology 2 credits
- [BMMSG 971](#) Advanced Pharmacology & Chemotherapy 4 credits

All required electives are offered every year and first year required elective courses are also available to second year students. Required electives may be distinguished from elective courses by their course numbers: required electives have nine-hundred level course numbers and elective courses have eight-hundred level course numbers. Elective courses may not be offered every year.



In addition to completing all core and required elective courses, students must complete a minimum of 28 Thesis Research credit hours and additional electives to reach the minimum 72 credit hours required for graduation. After completion of the Laboratory Rotation course in the winter quarter of the first year, students are expected to identify a Thesis Research Advisor who agrees to supervise the student's thesis project. The Research Protocol, Research Literature review and Thesis Research courses are then completed under the supervision of the selected Thesis Research Advisor.

To facilitate the completion of research courses and the thesis project, students must form a Graduate Research Committee which is approved by their Thesis Research Advisor and the MBS Coordinator. This committee will approve the research project (typically in the spring quarter of the first year) and provide input to the Thesis Research Advisor on the student's research progress throughout the program. Students are required to have a minimum of five (5) quarterly committee meetings with their Graduate Research Committee where they will present their research and demonstrate they have made significant progress on their research. Students are required to submit a written thesis and present their thesis research in an oral thesis defense prior to graduation.

## Fall Quarter

### Core Requirements

Course Code	Title	Credits
BMMSG 501	Foundations of Research	1.0
BMMSG 508	Professional Development	1.0
BMMSG 516	Introduction to Medical Ethics	2.0
BMMSG 554	Molecular Cell Biology	3.0
BMMSG 555	Medical Biochemistry	4.0
PHYSG 1571	Human Physiology I	4.0
<b>Sub-Total Credits</b>		<b>15.00</b>

### Elective Course Options

Course Code	Title	Credits
BMMSG 845	Oncology	3.0
BMMSG 804	Clinical Skills I	0.5-1
ANATG 854	Neuroscience	2.5

## Winter Quarter

### Core Requirements

Students are expected to register for a minimum of 12 credits.

Course Code	Title	Credits
BMMSG 505	Graduate Seminar Series	1.0
BMMSG 520	Laboratory Rotation	2.0
BMMSG 541	Genetics	3.0
PHYSG 1583	Human Physiology II	4.0
<b>Sub-Total Credits</b>		<b>8.00</b>

### Required Elective Courses: Minimum 3-4 credits

Course Code	Title	Credits
ANATG 906	Human Anatomy with Laboratory	4.0
BMMSG 970	Principles of Pharmacology	3.0

## Other Elective Courses: Minimum 0-1 credits

Course Code	Title	Credits
BMMSG 806	Clinical Skills II	0.5-1
BMMSG 861	Evolution & Human Disease	2.0
BMMSG 874	Pre-Dental Simulation Course	1.0

## Spring Quarter

### Core Requirements

Students are expected to register for a minimum of 12 credits.

Course Code	Title	Credits
BMMSG 506	Graduate Seminar Series	1.0
BMMSG 518	Concepts of Research Statistics	1.0
BMMSG 582	Thesis Research	1.0-6
<b>Sub-Total Credits</b>		<b>5.00-10.00</b>

### Required Elective Courses: Minimum 2 credits

Course Code	Title	Credits
BMMSG 921	Microbiology	4.0
BMMSG 924	Immunology	2.0
BMMSG 971	Advanced Pharmacology & Chemotherapy	4.0

### Other Elective Courses

Course Code	Title	Credits
BMMSG 809	Clinical Rotations	0.5-1
BMMSG 810	Clinical Skills III	0.5-1
BMMSG 812	Pathophysiology	2.0
BMMSG 822	Molecular Virology	2.0
BMMSG 840	Exercise in Health and Research	2.0
BMMSG 841	Precision Medicine	2.0
BMMSG 863	Neuroscience	3.0

## Second Year Curriculum

### Summer Quarter

Students are expected to register for a minimum of 14 credits.

Course Code	Title	Credits
BMMSG 615	Research Literature Review	2.0
BMMSG 618	Philosophical Foundations of Research	3.0
BMMSG 670	Thesis Research	2.0-10
<b>Sub-Total Credits</b>		<b>14.00</b>

### Fall Quarter

Electives offered in the fall quarter of first year are available for second year students.

Course Code	Title	Credits
BMMSG 671	Thesis Research	2.0-10
<b>Sub-Total Credits</b>		<b>6.00-12.00</b>

## Winter Requirements

Required electives and electives offered in the fall quarter of first year are available for second year students.

Course Code	Title	Credits
BMMSG 609	Graduate Seminar Series	1.0
BMMSG 625	Statistical Analysis of Data	2.0
BMMSG 672	Thesis Research	2.0-10
<b>Sub-Total Credits</b>		<b>6.00-12.00</b>

## Spring Quarter

Required electives and electives offered in the fall quarter of first year are available for second year students.

Course Code	Title	Credits
BMMSG 610	Graduate Seminar Series	1.0
BMMSG 673	Thesis Research	2.0-10
<b>Sub-Total Credits</b>		<b>6.00-12.00</b>

## Elective Courses

All required elective and elective courses listed in the first year are available during the second year of the MBS curriculum. After consultation with the MBS Program Coordinator, students may register any required elective or elective courses they have not already completed during their second year of the program.

Total Credits

72

# Master of Biomedical Science Program Calendar

## Summer 2025

Event	Class	Date
<b>Memorial Day (Observed )</b>	<b>*No Classes*</b>	<b>May 26, 2025</b>
Classes Begin	MBS-II	June 2, 2025
Last Day to Add/Drop Classes	MBS-II	June 6, 2025
<b>Juneteenth (Observed)</b>	<b>*No Classes*</b>	<b>June 19, 2025</b>
<b>Independence Day (Observed)</b>	<b>*No Classes*</b>	<b>July 4, 2025</b>
Last Day of Classes	MBS-II	August 8, 2025
Quarterly Exams	MBS-II	August 17 – 15, 2025
Quarter Break	MBS-II	August 18 – 22, 2025
<b>Grades Due</b>	MBS-II	<b>August 19, 2025</b>

## Fall 2025

Event	Class	Date
Orientation	MBS-I	August 18 - 20, 2025
Classes Begin	MBS-I, MBS-II	August 25, 2025
Last Day to Add/Drop Classes	MBS-I, MBS-II	August 29, 2025
<b>Labor Day</b>	<b>*No Classes*</b>	<b>September 1, 2025</b>
<b>White Coat Ceremony</b>		<b>TBA</b>
Last Day of Classes	MBS-I, MBS-II	October 31, 2025

Event	Class	Date
Quarterly Exams	MBS-I, MBS-II	November 3 – 7, 2025
Quarter Break	MBS-I, MBS-II	November 10 – 28, 2025
<b>Grades Due</b>	MBS-I, MBS-II	<b>November 11, 2025</b>
<b>Thanksgiving Day</b>	<b>*No Classes*</b>	<b>November 27 – 28, 2025</b>

## Winter 2025

Event	Class	Date
Classes Resume	MBS-I, MBS-II	December 1, 2025
Last Day to Add/Drop Classes	MBS-I, MBS-II	December 5, 2025
Winter Break	MBS-I, MBS-II	December 22, 2025 – January 2, 2026
Classes Resume	MBS-I, MBS-II	January 5, 2026
<b>Martin Luther King, Jr. Day</b>	<b>*No Classes*</b>	<b>January 19, 2026</b>
Last Day of Classes	MBS-I, MBS-II	February 20, 2026
Quarterly Exams	MBS-I, MBS-II	February 23 - 27, 2026
Quarter Break	MBS-I, MBS-II	March 2 - 6, 2026
<b>Grades Due</b>	MBS-I, MBS-II	<b>March 3, 2026</b>

## Spring 2026

Event	Class	Date
Classes Resume	MBS-I, MBS-II	March 9, 2026
Last Day to Add/Drop Classes	MBS-I, MBS-II	March 13, 2026
Last Day of Classes	MBS-I, MBS-II	May 15, 2026
Quarterly Exams	MBS-I, MBS-II	May 18 – 22, 2026
Degree Completion Date	MBS-II, MABS	May 22, 2026
<b>Memorial Day (Observed)</b>	<b>*No Classes*</b>	<b>May 25, 2026</b>
Quarter Break	MBS-I	May 26 - June 5, 2026
<b>Grades Due</b>	MBS-I, MBS-II	<b>May 26, 2026</b>
<b>Commencement IL CGS</b>		<b>June 3, 2026 12:00 p.m.</b>

Last Revision 08/28/2024

## Faculty

**Elizabeth E. Hull, Ph.D.**

Rockefeller University  
Director and Professor

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College of Graduate Interdisciplinary Programs  
Professor

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University of Illinois  
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**Mitra Esfandiarei, Ph.D.**

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Faculty of Medicine  
Department of Pathology & Laboratory Medicine  
Professor

**Sudhindra Gadagkar, Ph.D.**

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Arizona State University  
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College of Pharmacy  
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**Scott D. Soby, Ph.D.**

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**Theresa Currier Thomas, Ph.D.**

University of Arizona  
Adjunct Associate Professor

**Brian P. Wellensiek, Ph.D.**

University of Arizona  
College of Medicine  
Associate Professor

## Master Of Biomedical Sciences Degree Program Courses

### ANATG 854: Neuroscience

This course is designed to develop the student's knowledge of neuroscience to a level required for clinical practice. This course presents information about principal structural components intertwined with the corresponding functions of the nervous system and the impact of neurological dysfunction on human occupation. The course also provides opportunities to apply neuroscience principles to motor and sensory learning for occupational performance. Curriculum delivery is through lectures, laboratory-based workshops, small group activities, independent activities, and online resources. Student progress is evaluated through written and practical examinations.

**Credits** 2.5

## **ANATG 906: Human Anatomy with Laboratory**

This course provides a lecture and lab-based survey of human anatomy. Students will develop three-dimensional anatomical knowledge that is required for biomedical and allied health training. Case studies will be used to foster familiarity with typical clinical presentations, and to learn how to approach diagnoses from a basic anatomical perspective. Lab sessions include the study of human cadaveric dissections, and a regional dissection of a portion of the human body. Student progress is evaluated through written and practical examinations.

**Credits** 4.0

### **Notes**

This course is a Required Elective option for Masters of Biomedical Sciences students.

## **BMSG 501: Foundations of Research**

This course is intended to provide students with a broad understanding of scientific research topics, pre-clinical and clinical literature, and annotating the literature with a view toward developing the topic for their MA Capstone or MBS research project. Successful completion of this course requires submission of pre-clinical and clinical annotated bibliographies, and completion of critical thinking assignments.

**Credits** 1.0

## **BMSG 505: Graduate Seminar Series**

The Graduate Seminar Series focuses on the development of effective scientific communication skills. Students learn the components of successful presentations, deliver an oral presentation to their peers, and offer and receive constructive peer review. Participation in the course provides exposure to a wide range of research areas and disciplines and promotes interprofessional collaborations.

**Credits** 1.0

### **Notes**

This course (I) is the first in the Graduate Seminar Series.

## **BMSG 506: Graduate Seminar Series**

The Graduate Seminar Series provides graduate students with the opportunity to learn and tune their skills in oral scientific presentation in front of an audience (faculty, research staff, and peers), provide exposure to other research areas and disciplines and promote interprofessional collaborations on Midwestern University campus. All non-presenting students will be required to provide a constructive, peer-review of the presenting student's presentation. This course will emphasize critical thinking and professionalism in the biomedical sciences. The topic for oral presentations will be chosen by the graduate student in consultation with the student's lab research supervisor(s).

**Credits** 1.0

### **Notes**

This course (II) is a part of a continuation of BMSG 505: Graduate Seminar Series

## **BMSG 507: Journal Club**

Journal Club is a graduate-level course designed to enhance students' critical analysis of scientific literature and strengthen their oral and written communication skills. Through a combination of lectures, seminars, and writing assignments, students will engage in in-depth discussions of current research articles, gaining experience in evaluating research design, methodology, and data interpretation. The course emphasizes the development of scientific presentation skills, fostering an environment where students critically review and present research findings in group settings. By the end of the course, students will be proficient in identifying research hypotheses, assessing study limitations, and effectively communicating scientific concepts, preparing them for academic and professional careers in biomedical and clinical sciences.

**Credits** 1.0

## **BMSG 508: Professional Development**

The purpose of this course is to provide students with skills that are necessary for success in the Biomedical Sciences program and in their future professional careers. The course will focus on the development of study, time management, and exam-taking skills in the context of the Biomedical Sciences program and help students successfully transition into professional programs or other career options.

**Credits** 1.0

## **BMSG 516: Introduction to Medical Ethics**

The objectives of this course are to improve critical thinking skills, introduce argumentation and argumentative writing, and to familiarize the student with some of the prominent ethical dilemmas in contemporary clinical medicine.

**Credits** 2.0

## **BMSG 518: Concepts of Research Statistics**

This course will introduce students to the basic concepts of Statistics including hypothesis testing, types of statistical tests, level of significance, statistical power, effect size, sample size calculation, and P value. After this course, it is expected that students will be able to meaningfully participate in the statistical design of their own experiments. Additionally, the concepts in this course should enable all students to understand their own research projects better and critically evaluate scientific literature from a statistical standpoint.

**Credits** 1.0

## **BMSG 520: Laboratory Rotation**

Rotations are designed to introduce students to laboratory research and assist the student in choosing a laboratory for their thesis work project. Students will complete a minimum of three rotations under the supervision of a faculty preceptor. Students are required to complete MWU-mandated CITI training and will learn laboratory safety, notebook keeping, and basic laboratory techniques. Successful completion of the course requires identification of a research advisor who agrees to supervise the completion of the student's research thesis project.

**Credits** 2.0

## **BMSG 521: Microbiology**

This course covers the basic biology of the major groups of microbiota, with clinical examples presented when appropriate for enhanced comprehension of the material. Course discussions will focus on the basic classification, structure, metabolism and genetics of bacteria, viruses, parasites and fungi. Specific pathogens with current and/or historical relevance will also be discussed throughout the course.

**Credits** 4.0

## **BMSG 524: Immunology**

This is a basic immunology course focusing on the concepts and components of the human immune system, with clinical examples presented when appropriate for enhancing comprehension of the material. The course will discuss established paradigms, experimental approaches, and biotechnological applications of immunology. Instruction and assessment will focus on acquisition and application of basic knowledge, as well as creative and critical thinking skills.

**Credits** 2.0

## **BMSG 528: Research Protocol**

This course is an independent study course designed to give first year MBS students the opportunity to develop a specific, comprehensive research protocol that will be implemented during completion of the Master of Biomedical Sciences degree. The research protocol will be completed under the supervision of the student's research advisor(s), presented in both written and oral formats, and approved by the student's research committee.

**Credits** 2.0

## **BMSG 541: Genetics**

This course will introduce the student to classical, population, quantitative, and molecular genetics. In general, the course will be taught from a medical perspective, while keeping in mind the evolutionary significance of pathological alleles. Topics included are: the human genome, core DNA technologies, genetic variation, mendelian transmission of traits, genetic basis of diseases, epigenetics, cancer genetics, genetic approaches to treating disease, risk assessment, genetic counseling, and ethical issues in clinical genetics.

**Credits** 3.0

## **BMSG 554: Molecular Cell Biology**

This course is designed to provide students with a comprehensive overview of the function of eukaryotic cells at the molecular level. Topics covered include cell structure, DNA replication, regulation of gene expression, protein trafficking and turnover, cell signaling, and regulation of cell survival and death. The course ends with a discussion of cell biology concepts in the context of human disease. Critical thinking and problem-solving skills are assessed as students are trained for professional level courses.

**Credits** 3.0

## **BMSG 555: Medical Biochemistry**

This course covers the structures, functions and metabolism of proteins, nucleic acids, carbohydrates and lipids within the context of medical biochemistry. The regulation and integration of metabolism as the cellular and tissue levels during the fed and fasting states will be emphasized. Correlations to disease processes and the biochemical basis of common clinical laboratory tests are used to illustrate clinical applications of biochemical concepts. Critical thinking and problem-solving skills are developed using weekly problem sessions.

**Credits** 4.0



## **BMSG 582: Thesis Research**

The program culminates in a completion of a research project. Students are required to take one or more credits of Thesis Research beginning spring of the first year. Credits taken each quarter will depend on the research project, elective courses, and credits needed to retain complete degree requirements. Thesis Research credits encompass conducting experiments, the analysis of data, and/or the writing of the thesis. Students may register for up to 10 credits per quarter and a minimum of 28 credit hours is required for the degree.

**Credits** 1.0

-6

### **Notes**

The Thesis Research course sequence replaces the previously required BMSG 680-689 Laboratory Research and BMSG 690-697 Research Thesis courses.

## **BMSG 609: Graduate Seminar Series**

The Graduate Seminar Series focuses on the development of effective scientific communication skills. Students learn the components of successful presentations, deliver an oral presentation to their peers, and offer and receive constructive peer review. Participation in the course provides exposure to a wide range of research areas and disciplines and promotes interprofessional collaborations.

**Credits** 1.0

## **BMSG 610: Graduate Seminar Series**

The Graduate Seminar Series focuses on the development of effective scientific communication skills. Students learn the components of successful presentations, deliver an oral presentation to their peers, and offer and receive constructive peer review. Participation in the course provides exposure to a wide range of research areas and disciplines and promotes interprofessional collaborations.

**Credits** 1.0

## **BMSG 615: Research Literature Review**

This course is an independent study course designed to give students the opportunity to perform the literature research necessary for completion of the Master of Biomedical Sciences degree.

**Credits** 2.0

## **BMSG 618: Philosophical Foundations of Research**

This course provides an introduction to the foundational philosophical concepts that underpin and justify research in the biomedical sciences, including epistemology (theories of knowledge), ontology (theories of being) and ethics (theories of responsible conduct). The course aims to develop critical thinking and writing skills and to familiarize students with factors that both legitimize and establish the limits of scientific inquiry as well as guide its everyday practice.

**Credits** 3.0

## **BMSG 625: Statistical Analysis of Data**

After gaining an understanding of the basic concepts of statistical analysis of research data in the BMSG 518 course, this course will enable students to comprehend the logic behind the basic statistical tests in this course. They will also learn to run them and critically interpret the results of the tests. These exercises will help students identify and run the most appropriate tests relevant to their own research project and then interpret their results in terms of the P value, statistical power, and effect size. By the end of the course, students should have a sound understanding of the statistical aspects of their own research and be able to critically evaluate the statistical adequacy/inadequacy of others' research as well.

**Credits** 2.0

## **BMSG 670: Thesis Research**

The program culminates in completion of a research project. Students are required to take one or more credits of Thesis Research beginning spring of the first year. The number of credits taken each quarter will depend on the research project, elective courses, and credits needed to complete degree requirements. Completion of Thesis Research credits may encompass conducting experiments, data analysis, and/or drafting the thesis document. Students may register for up to 10 credits per quarter and a minimum of 28 credit hours is required for the degree.

**Credits** 2.0

-10

### **Notes**

The Thesis Research course sequence replaces the previously required BMSG 680-689 Laboratory Research and BMSG 690-697 Research Thesis courses.

## **BMSG 671: Thesis Research**

The program culminates in completion of a research project. Students are required to take one or more credits of Thesis Research beginning spring of the first year. The number of credits taken each quarter will depend on the research project, elective courses, and credits needed to complete degree requirements. Completion of Thesis Research credits may encompass conducting experiments, data analysis, and/or drafting the thesis document. Students may register for up to 10 credits per quarter and a minimum of 28 credit hours is required for the degree.

**Credits** 2.0

-10

### **Notes**

The Thesis Research course sequence replaces the previously required BMSG 680-689 Laboratory Research and BMSG 690-697 Research Thesis courses.

## **BMSG 671: Thesis Research**

The program culminates in completion of a research project. Students are required to take one or more credits of Thesis Research beginning spring of the first year. The number of credits taken each quarter will depend on the research project, elective courses, and credits needed to complete degree requirements. Completion of Thesis Research credits may encompass conducting experiments, data analysis, and/or drafting the thesis document. Students may register for up to 10 credits per quarter and a minimum of 28 credit hours is required for the degree.

**Credits** 2.0

-10

### **Notes**

The Thesis Research courses replace BMSG 680-689, Laboratory Research

The Thesis Research courses replace BMSG 690-697, Research Thesis

## **BMSG 672: Thesis Research**

The program culminates in completion of a research project. Students are required to take one or more credits of Thesis Research beginning spring of the first year. The number of credits taken each quarter will depend on the research project, elective courses, and credits needed to complete degree requirements. Completion of Thesis Research credits may encompass conducting experiments, data analysis, and/or drafting the thesis document. Students may register for up to 10 credits per quarter and a minimum of 28 credit hours is required for the degree.

**Credits** 2.0

-10

### **Notes**

The Thesis Research course sequence replaces the previously required BMSG 680-689 Laboratory Research and BMSG 690-697 Research Thesis courses.

## **BMSG 673: Thesis Research**

The program culminates in completion of a research project. Students are required to take one or more credits of Thesis Research beginning spring of the first year. The number of credits taken each quarter will depend on the research project, elective courses, and credits needed to complete degree requirements. Completion of Thesis Research credits may encompass conducting experiments, data analysis, and/or drafting the thesis document. Students may register for up to 10 credits per quarter and a minimum of 28 credit hours is required for the degree.

**Credits** 2.0

-10

### **Notes**

The Thesis Research course sequence replaces the previously required BMSG 680-689 Laboratory Research and BMSG 690-697 Research Thesis courses.

## **BMSG 674: Thesis Research**

The program culminates in completion of a research project. Students are required to take one or more credits of Thesis Research beginning spring of the first year. The number of credits taken each quarter will depend on the research project, elective courses, and credits needed to complete degree requirements. Completion of Thesis Research credits may encompass conducting experiments, data analysis, and/or drafting the thesis document. Students may register for up to 10 credits per quarter and a minimum of 28 credit hours is required for the degree.

**Credits** 2.0

-10

### **Notes**

The Thesis Research course sequence replaces the previously required BMSG 680-689 Laboratory Research and BMSG 690-697 Research Thesis courses.

## **BMSG 675: Thesis Research**

The program culminates in completion of a research project. Students are required to take one or more credits of Thesis Research beginning spring of the first year. The number of credits taken each quarter will depend on the research project, elective courses, and credits needed to complete degree requirements. Completion of Thesis Research credits may encompass conducting experiments, data analysis, and/or drafting the thesis document. Students may register for up to 10 credits per quarter and a minimum of 28 credit hours is required for the degree.

**Credits** 2.0

-10

### **Notes**

The Thesis Research course sequence replaces the previously required BMSG 680-689 Laboratory Research and BMSG 690-697 Research Thesis courses.

## **BMSG 676: Thesis Research**

The program culminates in completion of a research project. Students are required to take one or more credits of Thesis Research beginning spring of the first year. The number of credits taken each quarter will depend on the research project, elective courses, and credits needed to complete degree requirements. Completion of Thesis Research credits may encompass conducting experiments, data analysis, and/or drafting the thesis document. Students may register for up to 10 credits per quarter and a minimum of 28 credit hours of Laboratory Research and Research Thesis is required for the degree.

**Credits** 2.0

-10

### **Notes**

The Thesis Research course sequence replaces the previously required BMSG 680-689 Laboratory Research and BMSG 690-697 Research Thesis courses.

## **BMSG 677: Thesis Research**

The program culminates in completion of a research project. Students are required to take one or more credits of Thesis Research beginning spring of the first year. The number of credits taken each quarter will depend on the research project, elective courses, and credits needed to complete degree requirements. Completion of Thesis Research credits may encompass conducting experiments, data analysis, and/or drafting the thesis document. Students may register for up to 10 credits per quarter and a minimum of 28 credit hours is required for the degree.

**Credits** 2.0

-10

### **Notes**

The Thesis Research course sequence replaces the previously required BMSG 680-689 Laboratory Research and BMSG 690-697 Research Thesis courses.

## **BMSG 700: Research Thesis Continuation**

The Research Thesis Continuation course provides students with the opportunity to complete their thesis project. Course registration allows students to conduct any remaining research and/or complete their public defense of the thesis project to complete degree requirements.

**Credits** 0.5

-6

## **BMSG 701: Research Thesis Continuation**

The Research Thesis Continuation course provides students with the opportunity to complete their thesis project. Course registration allows students to conduct any remaining research and/or complete their public defense of the thesis project to complete degree requirements.

**Credits** 0.5

-6

## **BMSG 702: Research Thesis Continuation**

The Research Thesis Continuation course provides students with the opportunity to complete their thesis project. Course registration allows students to conduct any remaining research and/or complete their public defense of the thesis project to complete degree requirements.

**Credits** 0.5

-6

## **BMSG 703: Research Thesis Continuation**

The Research Thesis Continuation course provides students with the opportunity to complete their thesis project. Course registration allows students to conduct any remaining research and/or complete their public defense of the thesis project to complete degree requirements.

**Credits** 0.5

-6

## **BMSG 704: Research Thesis Continuation**

The Research Thesis Continuation course provides students with the opportunity to complete their thesis project. Course registration allows students to conduct any remaining research and/or complete their public defense of the thesis project to complete degree requirements.

**Credits** 0.5

-6

## **BMSG 705: Research Thesis Continuation**

The Research Thesis Continuation course provides students with the opportunity to complete their thesis project. Course registration allows students to conduct any remaining research and/or complete their public defense of the thesis project to complete degree requirements.

**Credits** 0.5

-6

## **BMSG 802: Health Career Planning**

The purpose of this course is to help students understand the expectations and requirements of postbaccalaureate programs in medicine, dentistry, pharmacy, and other health professional programs. This is accomplished by discussing the variety of healthcare professions available and assisting the student in the skills necessary to be a successful candidate (interviewing skills, writing a personal statement, creating a resume, and selecting an appropriate professional school).

**Credits** 1.0

## **BMSG 803: Science Communication**

This course focuses on developing skills and techniques to effectively communicate scientific research findings to non-specialist populations. Emphasis will be placed on practicing translating scientific data and related implications from clinical, preclinical, and basic science studies to different audiences using written and oral formats. As effective communication to non-specialist audiences is an integral part of patient care and dissemination of research findings, this course is appropriate for all Biomedical Sciences students.

**Credits** 1.5

## **BMSG 804: Clinical Skills I**

This course is designed to prepare students for clinical training in their future health professions degree program. Sessions cover practical skills and clinical simulations.

**Credits** 0.5

-1

## **BMSG 806: Clinical Skills II**

This course is designed to prepare students for clinical training in their future health professions degree program. Sessions cover practical skills and clinical simulations.

**Credits** 0.5

-1

## **BMSG 809: Clinical Rotations**

This course serves as an introduction to a variety of health fields. Sessions are delivered by clinical programs and are designed to improve the ability of students to work as part of a healthcare team.

**Credits** 0.5

-1

## **BMSG 810: Clinical Skills III**

This course is designed to prepare students for clinical training in their future health professions degree program. Sessions cover practical skills and clinical simulations.

**Credits** 0.5

-1

## **BMSG 812: Pathophysiology**

Pathophysiology is a graduate-level elective course that explores the cellular and molecular mechanisms underlying human diseases. Through a systems-based approach, students will examine the physiological and pathological processes contributing to disease development and progression, with a focus on the cardiovascular, neurological, metabolic, and immune systems. The course integrates foundational scientific principles with clinical relevance, enhancing students' ability to analyze disease mechanisms and therapeutic strategies. Designed for biomedical sciences graduate students, this course strengthens critical thinking skills and prepares students for careers in research, healthcare, and translational medicine.

**Credits** 2.0

## **BMSG 814: Advanced Research Data Analysis**

This elective course is designed to give the student training in the use of statistics or other computational/analytical techniques specific for analysis of their research data that was not covered in previous statistics courses. The student will be encouraged to analyze the student's own data and to present the results and discussion as a paper.

**Credits** 3.0

## **BMSG 822: Molecular Virology**

This course focuses on the molecular and biological aspects of human viruses. Emphasis will be placed on the viral genetics, viral replication cycle, and diseases caused by members of the major virus families. Additionally, the historical significance of specific viruses will be highlighted along with current outbreaks around the globe.

**Credits** 2.0

## **BMSG 840: Exercise in Health and Research**

This course provides an introduction to the study of physical activity and its effects on human health. Emphasis will be on acute and chronic physiologic responses to various types of exercise. Human adaptations to physical activity and animal models of those human adaptations will be discussed based on reviews of current literature. For those seeking careers in the health professions or graduate school, it provides an evidence-based perspective of how physical activity impacts human health and performance.

**Credits** 2.0

## **BMSG 841: Precision Medicine**

This course (consisting of lectures and workshops) introduces the principles of precision medicine, the application of genomics research and technology in the clinic. The course is taught from an applied medical perspective, keeping in mind the role of genomics and evolution in health and disease. Topics include the genomic basis of disease, cancer genomics, genomic profiling technology and analysis platforms, bioinformatics, molecular sequence analysis, multiomics, genomic medicine, genetic counseling, and ethical issues in clinical genomics.

**Credits** 2.0

## **BMSG 845: Oncology**

This course provides an introduction to cancer and the biological aspects of tumor growth. Emphasis will be on the development and progression of cancer. Selected methods of cancer diagnosis and therapy will be discussed based on reviews of current literature. For those seeking careers in the health professions or graduate school, it provides perspective and foundation.

**Credits** 3.0

## **BMSG 861: Evolution & Human Disease**

This course will expose the student to the understanding that many human illnesses and ailments are the result of the discordance between our current lifestyle and the conditions under which humans evolved. It is intended that insights gained in the course will empower the students to practice healthcare with a perspective that goes beyond the symptoms, and indeed, into the evolutionary past, in seeking answers for ailments in the patient.

**Credits** 2.0

## **BMSG 863: Neuroscience**

This course is an introductory survey intended to provide basic understanding of the nervous system from anatomical to cellular levels. Topics of focus include nervous system development and organization, basic neuronal function, sensory perception, and pathology and treatment of prevalent neurologic/psychiatric disorders. This interdisciplinary course integrates basic concepts, in cellular biology, pharmacology, anatomy, and physiology, and provides context to the most recent advances in our understanding of neuropathology.

**Credits** 3.0

## **BMSG 874: Pre-Dental Simulation Course**

This course will include didactic lectures and hands-on clinical simulation experiences. It is designed to teach students the essentials of clinical dentistry before they enter dental school, easing the transition from theoretical learning to clinical application. Didactic lectures and clinical simulation modules take the student from dental morphology and occlusion through basic clinical dentistry including operative dentistry, preparations and restorations, and an introduction to digital dentistry.

**Credits** 1.0

## **BMSG 891: Advanced Topics I**

The Advanced Topics series is an opportunity for students to receive individualized or small group instruction on advanced topics in the biomedical sciences as well as topics related to broader aspects of biomedicine, such as public health, social aspects of clinical practice, and research in basic and applied sciences. Course formats may include lecture, discussion, laboratory, workshop or other forms.

**Credits** 1.0

-6

## **BMSG 892: Advanced Topics II**

The Advanced Topics series is an opportunity for students to receive individualized or small group instruction on advanced topics in the biomedical sciences as well as topics related to broader aspects of biomedicine, such as public health, social aspects of clinical practice, and research in basic and applied sciences. Course formats may include lecture, discussion, laboratory, workshop or other forms.

**Credits** 1.0

-6

## **BMSG 893: Special Topics**

This independent study-style course is intended to allow students to explore topics of interest not otherwise covered in the curriculum. Students must identify a faculty member to oversee and approve the independent study and meet with faculty to discuss the topic and formulate a plan of study. Students will present generalized findings at the end of the course. Usually, the course will involve an academic review of pertinent literature and the writing of a review paper.

**Credits** 1.0

-6

## **BMSG 921: Microbiology**

This course covers the basic biology of the major groups of microbiota, with clinical examples presented when appropriate for enhanced comprehension of the material. Course discussions will focus on the basic classification, structure, metabolism and genetics of bacteria, viruses, parasites and fungi. Specific pathogens with current and/or historical relevance will also be discussed throughout the course.

**Credits** 4.0

### **Notes**

This course is a Required Elective option for Masters of Biomedical Sciences students.

## **BMSG 924: Immunology**

This is a basic immunology course focusing on the concepts and components of the human immune system, with clinical examples presented when appropriate for enhancing comprehension of the material. The course will discuss established paradigms, experimental approaches, and biotechnological applications of immunology. Instruction and assessment will focus on acquisition and application of basic knowledge, as well as creative and critical thinking skills.

**Credits** 2.0

### **Notes**

This course is a Required Elective option for Masters of Biomedical Sciences students.

## **BMSG 970: Principles of Pharmacology**

This course begins with principles of pharmacodynamics and pharmacokinetics as related to humans. The underlying physiology and pathology of disease is discussed as students learn about common drugs affecting major organ systems of the body. In particular the autonomic nervous system, the cardiovascular system, and the renal system

**Credits** 3.0

### **Notes**

This course is a Required Elective option for Masters of Biomedical Sciences students.

## **BMSG 971: Advanced Pharmacology & Chemotherapy**

This course builds on material presented in the Principles of Pharmacology, with a greater emphasis on clinically important drugs. The course will complete pharmacology of the cardiovascular and the renal systems, then continue with pathophysiology and drugs of the central nervous system, the autocrine, the respiratory system, the gastrointestinal system, and the endocrine systems. The course will finish with antibiotic and antineoplastic chemotherapy.

**Credits** 4.0

### **Notes**

This course is a Required Elective option for Masters of Biomedical Sciences students.

## **MICRG 804: Vaccines**

MICRG 804 is a one-hour graduate level course that will cover the history, development and types of vaccines, public health implications of vaccination, and societal issues associated with vaccine use. The syllabus is posted on the CANVAS site for this course. Any updates to the syllabus will be uploaded to CANVAS and will take precedence. The Uniform Course Policies for the Basic Sciences document is also posted on the CANVAS site and takes precedence over this syllabus.

**Credits** 1.0



## **PHYSG 1572: Human Physiology I**

In this two-quarter series, students are introduced to the basic physiological principles that underlie normal function of various organs and organ systems. Emphasis is given to developing an understanding of health in physiological terms and appreciating the diverse regulatory processes that maintain the homeostasis of the human body. Topics presented include a general study of cell function; properties of excitable cells; and the function of the neuromuscular, cardiovascular, renal, respiratory, digestive, endocrine, and reproductive systems.

**Credits** 4.0

## **PHYSG 1583: Human Physiology II**

In this two-quarter series, students are introduced to the basic physiological principles that underlie normal function of various organs and organ systems. Emphasis is given to developing an understanding of health in physiological terms and appreciating the diverse regulatory processes that maintain the homeostasis of the human body. Topics presented include a general study of cell function; properties of excitable cells; and the function of the neuromuscular, cardiovascular, renal, respiratory, digestive, endocrine, and reproductive systems.

**Credits** 4.0

# Master of Arts in Biomedical Sciences Degree Program

## Mission

The Midwestern University Master of Arts in Biomedical Sciences Program educates students in the biomedical sciences and prepares them to be competitive applicants for professional programs and careers in healthcare.

## Accreditation

Midwestern University is accredited by The Higher Learning Commission, 230 South LaSalle Street, Suite 7- 500, Chicago, IL 60604-1413.

## Degree Description

The Master of Arts in Biomedical Sciences (MA) degree is a full-time, three-quarter, graduate-level, coursework only program. This program is designed to help students with a bachelor's degree, preferably with a major in the sciences, improve the student's academic foundation in the biomedical sciences and augment the student's credentials for admission into medical school, dental school, or other health professional programs. All students take a minimum of 45 quarter hour credits. Courses include biochemistry, molecular cell biology, genetics, human anatomy (with lab, histology and embryology components), human physiology, microbiology, immunology, pharmacology, medical ethics, and the capstone project.

The capstone project includes preparation of a scholarly, literature-based portfolio and a poster presentation. In addition, students are required to take elective credits if needed to bring the total quarter credits to 15 or more credits. Elective credits are offered in a variety of disciplines, including other biomedical sciences, ethics, research, or professional preparation courses.

## Admissions

### Admission Requirements

To be considered for admission to the Master of Arts in Biomedical Sciences degree program, applicants must submit the following documented evidence:

1. Completion of a bachelor's degree (B.A. or B.S.) or higher, preferably with a major in the sciences, from a regionally accredited college or university.
2. A minimum cumulative grade point average (GPA) of 2.75 on a scale of 4.00 in all coursework completed.
3. One letter of recommendation (individual or committee letter from the applicant's college or university).
4. Copies of transcripts from each college or university attended. Official transcripts must be submitted prior to matriculation.
5. Submission of test scores from one of the following exams is strongly recommended: Graduate Record Examination (GRE), Medical College Admissions Test (MCAT), Pharmacy College Admissions Test (PCAT), Dental Admissions Test (DAT), Optometry Admissions Test (OAT), or other professional program admissions test.
6. Completion of the typical prerequisite coursework for admission into medical, dental, optometry or pharmacy schools, including biology, general chemistry, organic chemistry, physics, and mathematics. Prospective students are responsible for determining the prerequisites for the health professional program and institution of the student's choice.
7. Completion of the prerequisite courses with grades of C or better (grades of C- are not acceptable).

8. Passage of the Midwestern University criminal background check.
9. Commitment to abide by the Midwestern University Drug-Free Workplace and Substance Abuse Policy.

## Prerequisite Courses

Course	Sem.	Qtr.
	Hrs.	Hrs.
Biology with laboratory	8	12
General Chemistry with laboratory	8	12
Organic Chemistry with laboratory	8	12
Physics	4	6
Mathematics	3	4

## Application Process and Deadlines

To be considered for admission to the Master of Arts in Biomedical Sciences program, applicants must:

Apply through the Post Baccalaureate Centralized Application Service

(PostbacCAS: <https://postbaccas.liaisoncas.org/students/>). PostbacCAS allows students to learn about, compare, and apply to several post baccalaureate programs through one centralized application.

Requirements for application include:

1. One letter of recommendation (individual or committee letter). The Biomedical Science Program will accept letters from pre-health advisors or committees, science professors, and health professionals.
2. Copies of transcripts from each college or university attended. Official transcripts must be submitted prior to matriculation from every undergraduate, graduate, or professional school the applicant attended or is currently attending. These transcripts must be signed and sealed by the registrar at each institution.

The Biomedical Sciences Program uses a rolling admission process in which completed applications are reviewed and decisions are made at regular intervals during the admissions cycle. The Master of Arts in Biomedical Sciences Program begins in the Fall Quarter. Admission to the Biomedical Sciences Program is considered on a competitive basis for applicants who have completed the required prerequisites. Multiple criteria are used to select the most qualified candidates, including selection of those students the Admissions Committee feels would benefit the most from the program. Selection decisions for the program are made by the Biomedical Sciences Program Admissions Committee with the approval of the Program Director and the Dean of the College of Graduate Studies until the class is filled. To maximize competitiveness within the rolling admission process, candidates are advised to submit a completed application early in the admission cycle. Applications may not be accepted after August 1.

## Selection Process

After receiving completed application packets, the Office of Admissions verifies the information provided to determine whether all admissions requirements have been completed or will be completed prior to matriculation. The admissions office also verifies the cumulative GPAs for all completed courses. Completed applications are forwarded to the Biomedical Sciences Program Admissions Committee. Applicants will be notified either electronically (i.e. through the applicant's portal or by email) or by letter of admissions decisions.

*Please note:* Applicants may track the receipt of application materials and the status of files on the University's website with the instructions for accessing their account information that will be sent by

the Office of Admissions after receipt of the applicant's applications. Applicants are responsible for notifying the Office of Admissions of any changes in contact telephone number, mailing address or e-mail address.

All requests for application withdrawal must be made in writing to the Office of Admissions:

Midwestern University Office of Admissions  
19555 N. 59th Avenue  
Glendale, AZ 85308  
888/247-9277 or 623/572-3215  
[admissaz@midwestern.edu](mailto:admissaz@midwestern.edu)

## Transfer Process

Transfer of a limited number of graduate level credits from other institutions may be allowed: 6 semester (9 quarter) hours for the Master of Arts in Biomedical Sciences. This does not remove the requirement to enroll in a minimum of 15 credit hours per quarter. The Program Director will review any request for transfer credit upon recommendation of course director and MA degree coordinator. The student should contact the MA Coordinator for more information on the process.

# Technical Standards

## Technical Standards

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the college.

Candidates must be able to perform the following abilities and skills:

1. Observation: The candidate must be able to accurately make observations at a distance and close at hand, including those on a computer screen or electronic device. Observation necessitates the functional use of vision and sense of touch and is enhanced by the functional use of all other senses.
2. Communication: The candidate must be able to communicate in English, proficiently and sensitively in verbal and written form, and be able to perceive nonverbal communication.
3. Motor: Candidates must be able to coordinate both gross and fine motor movements, maintain equilibrium and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control and eye-to-hand coordination to perform profession-specific skills and tasks.
4. Intellectual, Conceptual, Integrative and Quantitative Abilities: The candidate must be able to problem-solve, measure, calculate, reason, analyze, record, and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
5. Behavioral and Social Attributes: The candidate must possess the emotional health required for full utilization of the candidate's intellectual abilities, the exercise of good judgment, the consistent, prompt completion of all responsibilities, and the development of mature, sensitive and effective relationships. Candidate must be able to tolerate physically, mentally and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn are all personal qualities required during the educational process.

Candidates are required to verify that the candidate understands and is able to meet these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet Technical Standards with accommodation, must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation

with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

## Graduation Requirements

To qualify for the degree of Master of Arts in Biomedical Sciences (MA), students must:

1. Follow an approved course of study acceptable to the Biomedical Sciences Program Education Committee.
2. Satisfactorily complete all courses with a minimum cumulative grade point average of 2.75 for the Master of Arts in Biomedical Sciences degree.
3. Satisfactorily complete the required minimum of 45 quarter hour credits for the Master of Arts in Biomedical Sciences degree program.
4. Receive a favorable recommendation for Master's degree conferral from the Student Promotion and Graduation Committee.
5. Receive a favorable recommendation for Master's degree conferral from the University Faculty Senate.
6. Settle all financial accounts with the University.
7. Complete all graduation clearance requirements as instructed by the Office of the Registrar.

## Master of Arts in Biomedical Sciences Curriculum

### Degree Type

Master of Arts

Sample curriculum, course credits, and sequencing are listed below. Not all electives are offered every year. The MWU/CGS Biomedical Sciences Program reserves the right to alter its curriculum, however and whenever it deems appropriate. This catalog does not establish a contractual relationship between MWU and the student. Students are expected to complete a minimum of 15 credit hours per quarter as outlined below.

Total Quarter Credits for Completion of the Program: 45

### Fall Quarter Required Courses

Course Code	Title	Credits
BMMAG 501	Foundations of Research	1.0
BMMAG 508	Professional Development	1.0
BMMAG 516	Introduction to Medical Ethics	2.0
BMMAG 554	Molecular Cell Biology	3.0
BMMAG 555	Medical Biochemistry	4.0
PHYSG 1571	Human Physiology I	4.0
<b>Sub-Total Credits</b>		<b>15.00</b>

## Elective Course Options

Course Code	Title	Credits
BMMAG 804	Clinical Skills I	0.5-1
BMMAG 845	Oncology	3.0
ANATG 852	Neuroscience	2.5

## Winter Quarter Required Courses

Course Code	Title	Credits
BMMAG 502	Introduction to Capstone Course	1.0
ANATG 505	Human Anatomy with Laboratory	4.0
BMMAG 541	Genetics	3.0
BMMAG 570	Principles of Pharmacology	3.0
PHYSG 1582	Human Physiology II	4.0
<b>Sub-Total Credits</b>		<b>15.00</b>

## Elective Course Options

Course Code	Title	Credits
BMMAG 806	Clinical Skills II	0.5-1
BMMAG 861	Evolution & Human Disease	2.0
BMMAG 874	Pre-Dental Simulation Course	1.0

## Spring Quarter Required Courses

Course Code	Title	Credits
BMMAG 521	Microbiology	4.0
BMMAG 524	Immunology	2.0
BMMAG 571	Advanced Pharmacology and Chemotherapy	4.0
BMMAG 591	Capstone Course	1.0
<b>Sub-Total Credits</b>		<b>11.00</b>

## Elective Course Options: 4 Elective Credits Mandatory

Students must select at least 4 credits from the elective courses listed below.

Course Code	Title	Credits
BMMAG 809	Clinical Rotations	0.5-1
BMMAG 810	Clinical Skills III	0.5-1
BMMAG 812	Pathophysiology	2.0
BMMAG 817	Honors Capstone	1.0
BMMAG 818	Concepts of Research Statistics	1.0
BMMAG 822	Molecular Virology	2.0
BMMAG 840	Exercise in Health and Research	2.0
BMMAG 841	Precision Medicine	2.0
BMMAG 863	Neuroscience	3.0
MICRG 803	Vaccines	1.0
<b>Sub-Total Credits</b>		<b>4.00</b>
Total Credits		45

# Master of Arts in Biomedical Science Program Calendar

## Summer 2025

Event	Class	Date
Memorial Day (Observed )	<b>*No Classes*</b>	<b>May 26, 2025</b>
Juneteenth (Observed)	<b>*No Classes*</b>	<b>June 19, 2025</b>
Independence Day (Observed)	<b>*No Classes*</b>	<b>July 4, 2025</b>

## Fall 2025

Event	Class	Date
Orientation		August 18 - 20, 2025
Classes Begin		August 25, 2025
Last Day to Add/Drop Classes		August 29, 2025
Labor Day	<b>*No Classes*</b>	<b>September 1, 2025</b>
White Coat Ceremony		<b>TBA</b>
Last Day of Classes		October 31, 2025
Quarterly Exams		November 3 – 7, 2025
Quarter Break		November 10 – 28, 2025
Grades Due		<b>November 11, 2025</b>
Thanksgiving Day	<b>*No Classes*</b>	<b>November 27 – 28, 2025</b>

## Winter 2025

Event	Class	Date
Classes Resume		December 1, 2025
Last Day to Add/Drop Classes		December 5, 2025
Winter Break		December 22, 2025 – January 2, 2026
Classes Resume		January 5, 2026
Martin Luther King, Jr. Day	<b>*No Classes*</b>	<b>January 19, 2026</b>
Last Day of Classes		February 20, 2026
Quarterly Exams		February 23 - 27, 2026
Quarter Break		March 2 - 6, 2026
Grades Due		<b>March 3, 2026</b>

## Spring 2026

Event	Class	Date
Classes Resume		March 9, 2026
Last Day to Add/Drop Classes		March 13, 2026
Last Day of Classes		May 15, 2026
Quarterly Exams		May 18 – 22, 2026
Degree Completion Date		May 22, 2026
Memorial Day (Observed)	<b>*No Classes*</b>	<b>May 25, 2026</b>
Grades Due		<b>May 26, 2026</b>

Event	Class	Date
Commencement IL CGS		June 3, 2026 12:00 p.m.

Last Revision: 08/28/2024



# Faculty

**Elizabeth E. Hull, Ph.D.**

Rockefeller University  
Director and Professor

**Leonard B. Bell, Ph.D.**

Medical College of Wisconsin  
Professor Emeritus

**Lori M. Buhlman, Ph.D.**

University of Arizona  
College of Graduate Interdisciplinary Programs  
Professor

**Kimbal E. Cooper, Ph.D.**

University of Illinois  
College of Liberal Arts and Sciences  
Professor Emeritus

**Delrae M. Eckman, Ph.D.**

University of Nevada, Reno  
School of Medicine  
Associate Professor

**Mitra Esfandiarei, Ph.D.**

University of British Columbia  
Faculty of Medicine  
Department of Pathology & Laboratory Medicine  
Professor

**Sudhindra Gadagkar, Ph.D.**

Dalhousie University  
Professor

**Nathan W. Johnson, Ph.D.**

Arizona State University  
College of Liberal Arts & Sciences  
Associate Professor

**Carleton B. Jones, Ph.D.**

Washington State University  
College of Pharmacy  
Associate Professor

**John G. Phillips, Ph.D.**

University of Tulsa  
Assistant Professor

**Scott D. Soby, Ph.D.**

University of California, Davis  
College of Agricultural and Environmental Science  
Professor Emeritus

**Theresa Currier Thomas, Ph.D.**

University of Arizona  
Adjunct Associate Professor

**Brian P. Wellensiek, Ph.D.**

University of Arizona  
College of Medicine  
Associate Professor

## Master Of Arts In Biomedical Sciences Degree Program Courses

### ANATG 505: Human Anatomy with Laboratory

This course provides a lecture and lab-based survey of human anatomy. Students will develop three-dimensional anatomical knowledge that is required for biomedical and allied health training. Case studies will be used to foster familiarity with typical clinical presentations, and to learn how to approach diagnoses from a basic anatomical perspective. Lab sessions include the study of human cadaveric dissections, and a regional dissection of a portion of the human body. Student progress is evaluated through written and practical examinations.

**Credits** 4.0

### ANATG 852: Neuroscience

This course is designed to develop the student's knowledge of neuroscience to a level required for clinical practice. This course presents information about principal structural components intertwined with the corresponding functions of the nervous system and the impact of neurological dysfunction on human occupation. The course also provides opportunities to apply neuroscience principles to motor and sensory learning for occupational performance. Curriculum delivery is through lectures, laboratory-based workshops, small group activities, independent activities, and online resources. Student progress is evaluated through written and practical examinations.

**Credits** 2.5

## **BMMAG 501: Foundations of Research**

This course provides an introduction to the foundational philosophical concepts that underpin and justify research in the biomedical sciences, including epistemology (theories of knowledge), ontology (theories of being) and ethics (theories of responsible conduct). The course aims to develop critical thinking and writing skills and to familiarize students with factors that both legitimize and establish the limits of scientific inquiry as well as guide its everyday practice.

**Credits** 1.0

## **BMMAG 502: Introduction to Capstone Course**

This course helps the student begin the necessary preparation for the Capstone Project, an integrative summation of learning presented in a poster and manuscript format in the spring quarter. The course will focus on critical review of background literature in service of a faculty research mentor's project. Successful completion of the course requires completion of critical thinking assignments and professional collaboration with faculty.

**Credits** 1.0

## **BMMAG 508: Professional Development**

The purpose of this course is to provide students with skills that are necessary for success in the Biomedical Sciences program and in their future professional careers. The course will focus on the development of study, time management, and exam-taking skills in the context of the Biomedical Sciences program and help students successfully transition into professional programs or other career options.

**Credits** 1.0

## **BMMAG 516: Introduction to Medical Ethics**

The objectives of this course are to improve critical thinking skills, introduce argumentation and argumentative writing, and to familiarize the student with some of the prominent ethical dilemmas in contemporary clinical medicine.

**Credits** 2.0

## **BMMAG 521: Microbiology**

This course covers the basic biology of the major groups of microbiota, with clinical examples presented when appropriate for enhanced comprehension of the material. Course discussions will focus on the basic classification, structure, metabolism and genetics of bacteria, viruses, parasites and fungi. Specific pathogens with current and/or historical relevance will also be discussed throughout the course.

**Credits** 4.0

## **BMMAG 524: Immunology**

This is a basic immunology course focusing on the concepts and components of the human immune system, with clinical examples presented when appropriate for enhancing comprehension of the material. The course will discuss established paradigms, experimental approaches, and biotechnological applications of immunology. Instruction and assessment will focus on acquisition and application of basic knowledge, as well as creative and critical thinking skills.

**Credits** 2.0

## **BMMAG 541: Genetics**

This course will introduce the student to classical, population, quantitative, and molecular genetics. In general, the course will be taught from a medical perspective, while keeping in mind the evolutionary significance of pathological alleles. Topics included are: the human genome, core DNA technologies, genetic variation, mendelian transmission of traits, genetic basis of diseases, epigenetics, cancer genetics, genetic approaches to treating disease, risk assessment, genetic counseling, and ethical issues in clinical genetics.

**Credits** 3.0

## **BMMAG 554: Molecular Cell Biology**

This course is designed to provide students with a comprehensive overview of the function of eukaryotic cells at the molecular level. Topics covered include cell structure, DNA replication, regulation of gene expression, protein trafficking and turnover, cell signaling, and regulation of cell survival and death. The course ends with a discussion of cell biology concepts in the context of human disease. Critical thinking and problem-solving skills are assessed as students are trained for professional level courses.

**Credits** 3.0

## **BMMAG 555: Medical Biochemistry**

This course covers the structures, functions and metabolism of proteins, nucleic acids, carbohydrates and lipids within the context of medical biochemistry. The regulation and integration of metabolism as the cellular and tissue levels during the fed and fasting states will be emphasized. Correlations to disease processes and the biochemical basis of common clinical laboratory tests are used to illustrate clinical applications of biochemical concepts. Critical thinking and problem-solving skills are developed using weekly problem sessions.

**Credits** 4.0

## **BMMAG 570: Principles of Pharmacology**

This course begins with principles of pharmacodynamics and pharmacokinetics as related to humans. The underlying physiology and pathology of disease is discussed as students learn about common drugs affecting major organ systems of the body. In particular the autonomic nervous system, the cardiovascular system, and the renal system.

**Credits** 3.0

## **BMMAG 571: Advanced Pharmacology and Chemotherapy**

This course builds on material presented in the Principles of Pharmacology, with a greater emphasis on clinically important drugs. The course will complete pharmacology of the cardiovascular and the renal systems, then continue with pathophysiology and drugs of the central nervous system, the autocoids, the respiratory system, the gastrointestinal system, and the endocrine systems. The course will finish with antibiotic and antineoplastic chemotherapy.

**Credits** 4.0

## **BMMAG 591: Capstone Course**

This course represents the integrative summation of the required coursework in the Master's curriculum. Successful completion of the course requires the preparation of a scholarly literature review in service of a faculty research mentor's project and presentation of the topic in a research poster format. Throughout the course, students are required to show progression on the project through submission of outlines and drafts of the student's manuscript and poster.

**Credits** 1.0

### **Prerequisites**

[BMMAG 501: Foundations of Research](#)

## **BMMAG 802: Health Career Planning**

The purpose of this course is to help students understand the expectations and requirements of postbaccalaureate programs in medicine, dentistry, pharmacy, and other health professional programs. This is accomplished by discussing the variety of healthcare professions available and assisting the student in the skills necessary to be a successful candidate (interviewing skills, writing a personal statement, creating a resume, and selecting an appropriate professional school).

**Credits** 1.0

## **BMMAG 803: Science Communication**

This course focuses on developing skills and techniques to effectively communicate scientific research findings to non-specialist populations. Emphasis will be placed on practicing translating scientific data and related implications from clinical, preclinical, and basic science studies to different audiences using written and oral formats. As effective communication to non-specialist audiences is an integral part of patient care and dissemination of research findings, this course is appropriate for all Biomedical Sciences students.

**Credits** 1.5

## **BMMAG 804: Clinical Skills I**

This course is designed to prepare students for clinical training in their future health professions degree program. Sessions cover practical skills and clinical simulations.

**Credits** 0.5

-1

## **BMMAG 806: Clinical Skills II**

This course is designed to prepare students for clinical training in their future health professions degree program. Sessions cover practical skills and clinical simulations.

**Credits** 0.5

-1

## **BMMAG 807: Journal Club**

Journal Club is a graduate-level course designed to enhance students' critical analysis of scientific literature and strengthen their oral and written communication skills. Through a combination of lectures, seminars, and writing assignments, students will engage in in-depth discussions of current research articles, gaining experience in evaluating research design, methodology, and data interpretation. The course emphasizes the development of scientific presentation skills, fostering an environment where students critically review and present research findings in group settings. By the end of the course, students will be proficient in identifying research hypotheses, assessing study limitations, and effectively communicating scientific concepts, preparing them for academic and professional careers in biomedical and clinical sciences.

**Credits** 1.0

## **BMMAG 809: Clinical Rotations**

This course serves as an introduction to a variety of health fields. Sessions are delivered by clinical programs and are designed to improve the ability of students to work as part of a healthcare team.

**Credits** 0.5

-1

## **BMMAG 810: Clinical Skills III**

This course is designed to prepare students for clinical training in their future health professions degree program. Sessions cover practical skills and clinical simulations.

**Credits** 0.5

-1

## **BMMAG 812: Pathophysiology**

Pathophysiology is a graduate-level elective course that explores the cellular and molecular mechanisms underlying human diseases. Through a systems-based approach, students will examine the physiological and pathological processes contributing to disease development and progression, with a focus on the cardiovascular, neurological, metabolic, and immune systems. The course integrates foundational scientific principles with clinical relevance, enhancing students' ability to analyze disease mechanisms and therapeutic strategies. Designed for biomedical sciences graduate students, this course strengthens critical thinking skills and prepares students for careers in research, healthcare, and translational medicine.

**Credits** 2.0

## **BMMAG 816: Introduction to Medical Ethics**

The objectives of this course are to improve critical thinking skills, introduce argumentation and argumentative writing, and to familiarize the student with some of the prominent ethical dilemmas in contemporary clinical medicine.

**Credits** 2.0

## **BMMAG 817: Honors Capstone**

This course is an honors auxiliary course for the core Capstone course. In addition to the requirements of that Capstone course, students will target their work toward the completion of a review article or meta-analysis manuscript under the guidance of a research mentor. A draft of their manuscript will be submitted before completion of the course.

**Credits** 1.0

## **BMMAG 818: Concepts of Research Statistics**

This course will introduce students to the basic concepts of Statistics including hypothesis testing, types of statistical tests, level of significance, statistical power, effect size, sample size calculation, and P value. After this course, it is expected that students will be able to meaningfully participate in the statistical design of their own experiments. Additionally, the concepts in this course should enable all students to understand their own research projects better and critically evaluate scientific literature from a statistical standpoint.

**Credits** 1.0

## **BMMAG 819: Laboratory Research**

The purpose of this course is to give students hands-on experience in a basic science research laboratory. Students will participate in an ongoing project in the laboratory of a research mentor where they will learn various research techniques and methodologies. This course is available on a limited basis with approval.

**Credits** 1.0

-4

## **BMMAG 822: Molecular Virology**

This course focuses on the molecular and biological aspects of human viruses. Emphasis will be placed on the viral genetics, viral replication cycle, and diseases caused by members of the major virus families. Additionally, the historical significance of specific viruses will be highlighted along with current outbreaks around the globe.

**Credits** 2.0

## **BMMAG 840: Exercise in Health and Research**

This course provides an introduction to the study of physical activity and its effects on human health. Emphasis will be on acute and chronic physiologic responses to various types of exercise. Human adaptations to physical activity and animal models of those human adaptations will be discussed based on reviews of current literature. For those seeking careers in the health professions or graduate school, it provides an evidence-based perspective of how physical activity impacts human health and performance.

**Credits** 2.0

## **BMMAG 841: Precision Medicine**

This course (consisting of lecture and workshops) introduces the principles of precision medicine, the application of genomics research and technology in the clinic. The course is taught from an applied medical perspective, keeping in mind the role of genomics and evolution in health and disease. Topics include the genomic basis of disease, cancer genomics, genomic profiling technology and analysis platforms, bioinformatics, molecular sequence analysis, multiomics, genomic medicine, genetic counseling, and ethical issues in clinical genomics.

**Credits** 2.0

## **BMMAG 845: Oncology**

This course provides an introduction to cancer and the biological aspects of tumor growth. Emphasis will be on the development and progression of cancer. Selected methods of cancer diagnosis and therapy will be discussed based on reviews of current literature. For those seeking careers in the health professions or graduate school, it provides perspective and foundation.

**Credits** 3.0

## **BMMAG 861: Evolution & Human Disease**

This course will expose the student to the understanding that many human illnesses and ailments are the result of the discordance between our current lifestyle and the conditions under which humans evolved. It is intended that insights gained in the course will empower the students to practice healthcare with a perspective that goes beyond the symptoms, and indeed, into the evolutionary past, in seeking answers for ailments in the patient.

**Credits** 2.0

## **BMMAG 863: Neuroscience**

This course is an introductory survey intended to provide basic understanding of the nervous system from anatomical to cellular levels. Topics of focus include nervous system development and organization, basic neuronal function, sensory perception, and pathology and treatment of prevalent neurologic/psychiatric disorders. This interdisciplinary course integrates basic concepts, in cellular biology, pharmacology, anatomy, and physiology, and provides context to the most recent advances in our understanding of neuropathology.

**Credits** 3.0

## **BMMAG 874: Pre-Dental Simulation Course**

This course will include didactic lectures and hands-on clinical simulation experiences. It is designed to teach students the essentials of clinical dentistry before they enter dental school, easing the transition from theoretical learning to clinical application. Didactic lectures and clinical simulation modules take the student from dental morphology and occlusion through basic clinical dentistry including operative dentistry, preparations and restorations, and an introduction to digital dentistry.

**Credits** 1.0

## **BMMAG 881: Laboratory Research**

Laboratory research is available to students in the Master of Arts in Biomedical Sciences Program on a limited basis with approval. It is the student's responsibility to identify a research advisor/mentor and laboratory (or clinical setting) in which to conduct their research.

**Credits** 1.0

-3

## **BMMAG 891: Advanced Topics I**

The Advanced Topics series is an opportunity for students to receive individualized or small group instruction on advanced topics in the biomedical sciences as well as topics related to broader aspects of biomedicine, such as public health, social aspects of clinical practice, and research in basic and applied sciences. Course formats may include lecture, discussion, laboratory, workshop or other forms.

**Credits** 1.0

-6

## **BMMAG 892: Advanced Topics II**

The Advanced Topics series is an opportunity for students to receive individualized or small group instruction on advanced topics in the biomedical sciences as well as topics related to broader aspects of biomedicine, such as public health, social aspects of clinical practice, and research in basic and applied sciences. Course formats may include lecture, discussion, laboratory, workshop or other forms.

**Credits** 1.0

-6

## **BMMAG 893: Special Topics**

This independent study-style course is intended to allow students to explore topics of interest not otherwise covered in the curriculum. Students must identify a faculty member to oversee and approve the independent study and meet with faculty to discuss the topic and formulate a plan of study.

Students will present generalized findings at the end of the course. Usually, the course will involve an academic review of pertinent literature and the writing of a review paper.

**Credits** 1.0

-6

## **MICRG 803: Vaccines**

MICRG 803 is a one-hour graduate level course that will cover the history, development and types of vaccines, public health implications of vaccination, and societal issues associated with vaccine use. The syllabus is posted on the CANVAS site for this course. Any updates to the syllabus will be uploaded to CANVAS and will take precedence. The Uniform Course Policies for the Basic Sciences document is also posted on the CANVAS site and takes precedence over this syllabus.

**Credits** 1.0

## **PHYSG 1571: Human Physiology I**

In this two-quarter series, students are introduced to the basic physiological principles that underlie normal function of various organs and organ systems. Emphasis is given to developing an understanding of health in physiological terms and appreciating the diverse regulatory processes that maintain the homeostasis of the human body. Topics presented include a general study of cell function; properties of excitable cells; and the function of the neuromuscular, cardiovascular, renal, respiratory, digestive, endocrine, and reproductive systems.

**Credits** 4.0

## **PHYSG 1582: Human Physiology II**

In this two-quarter series, students are introduced to the basic physiological principles that underlie normal function of various organs and organ systems. Emphasis is given to developing an understanding of health in physiological terms and appreciating the diverse regulatory processes that maintain the homeostasis of the human body. Topics presented include a general study of cell function; properties of excitable cells; and the function of the neuromuscular, cardiovascular, renal, respiratory, digestive, endocrine, and reproductive systems.

**Credits** 4.0



# Master of Public Health

## Mission

The Master of Public Health program's mission is to provide public health education for healthcare professionals.

The Midwestern University Master of Public Health program is an interdisciplinary professional degree in public health. The One Health-focused curriculum emphasizes the interconnectedness of health among human, animal, and environmental systems and prepares students to address complex health challenges in a broad range of clinical and public health settings. The entirely online Midwestern University M.P.H. degree is oriented towards health professionals. M.P.H. students may enhance their medical knowledge, public health skills, and career options upon completion of this program.

## Accreditation

Midwestern University is accredited by The Higher Learning Commission, 230 South LaSalle Street, Suite 7- 500, Chicago, IL 60604-1413.

## Degree Description

The online, 56- quarter-credit Master's degree curriculum is designed to be taken as a stand-alone degree or dovetail with Midwestern's healthcare professional programs, allowing dual degree students to complete most requirements during the didactic years of their professional programs. The Master of Public Health (M.P.H.) program may be completed as a stand-alone track in 15 months, but it is designed to be completed in two years. The dual degree M.P.H. track is designed to be completed in four years. The dual degree option may be completed with health professional degrees such as Doctor of Osteopathic Medicine, Doctor of Veterinary Medicine, Doctor of Optometry, or Doctor of Dental Medicine over a four-year period. The maximum time allowed for completion of the stand-alone M.P.H. is three years; the maximum time allowed for completion of the dual degree M.P.H. degree is six years.

The program includes required and elective coursework; a planned, supervised, and evaluated public health practicum; and a culminating project. Core courses are based on the five foundational public health knowledge domains of epidemiology, biostatistics, environmental health science, social and behavioral science, and health policy and management.

The public health practicum, a required component of the M.P.H. degree program, involves participation in a minimum of 160 hours of work at a field practice site, such as a county or state health department or government agency. For dual degree students, the practicum may be scheduled to coincide with the applicable health professional degree program's rotation schedule, with the approval of the respective Dean.

The M.P.H. program also includes a capstone course. This requirement may be completed in conjunction with the student's practicum. Topics may include, but are not limited to: developing or evaluating a public health-related program, conducting a community needs assessment, or conducting traditional hypothesis-driven research of a public health nature. Students will produce a formal written report and deliver an oral presentation of their findings to an appropriate audience as defined by the program.

Graduates are prepared to directly enter the field as public health professionals or leverage their public health training to expand healthcare career options in clinical, research, community health, and regulatory medicine settings.

# Admissions

## Admission Requirements

To be considered for admission to the Master of Public Health (M.P.H.) standalone degree program offered by Midwestern University, applicants must submit the following documented evidence.

1. Completion of a baccalaureate or higher degree from an accredited institution with a minimum cumulative grade point average (GPA) of 2.75 on a 4.0 scale.
2. A completed application for the M.P.H. program should include.
  - a. official transcripts of course work from each college or university attended.
  - b. two letters of recommendation from individuals able to comment on the applicant's academic preparedness and professional experiences.
  - c. a personal statement.
  - d. resume/curriculum vitae.
3. International candidates must abide by the Midwestern University International Student Applicant Policy.
4. A minimum score of 90 on the Test of English as a Foreign Language (TOEFL) the internet-based test (iBT) is required for non-native speakers seeking to enroll in the M.P.H. program.
5. Commitment to abide by the Midwestern University Drug-Free Workplace and Substance Abuse Policy.
6. Passage of the Midwestern University criminal background check.

## Application Process and Deadlines

To be considered for admission to the M.P.H. degree program, applicants must submit their applications online through the Midwestern University direct application. Dual degrees are completed in conjunction with healthcare professional degrees such as Doctor of Osteopathic Medicine, Doctor of Veterinary Medicine, Doctor of Optometry, or Doctor of Dental Medicine. Students of professional degree programs may apply to the M.P.H. program as a dual degree student by submitting an abbreviated online application through the Student Portal and releasing their Midwestern University application package to the M.P.H. program for admissions consideration. No additional application fee is required.

The M.P.H. degree program uses a rolling admissions process in which completed applications are reviewed and decisions are made at regular intervals during the admissions cycle. The program begins in the Summer Quarter. After receiving completed application packets, the Midwestern University Office of Admissions verifies the information provided to determine whether all prerequisites have been completed satisfactorily, or they will be completed prior to potential matriculation and also to verify the cumulative GPAs for all completed courses. Admission to the M.P.H. degree program is considered on a competitive basis for applicants submitting completed applications. To maximize their competitiveness within this rolling admission process, candidates are advised to submit their completed applications early in the admission cycle. The deadline for applications is April 15 or the first business day thereafter.

To submit application: [https://apply.midwestern.edu/portal/mwu\\_app](https://apply.midwestern.edu/portal/mwu_app)

## Selection Process

Multiple criteria are used to select the most qualified candidates, including selection of those students the M.P.H. Admissions Committee determines who would benefit the most from the program. Selection decisions for the program are made by the M.P.H. Admissions Committee, with the approval of the Dean of the College of Graduate Studies. Applicants are notified either electronically (i.e., through their admissions portal or by e-mail) or by letter of admissions decision.

*Please Note:* Applicants may track the receipt of their application materials and the status of their files on the University's website using instructions for accessing account information that will be sent by the Office of Admissions after receipt of their applications.

Applicants are responsible for notifying the Office of Admissions of any changes in their telephone number, mailing address or e-mail address. All requests for application withdrawals must be made in writing to the Office of Admissions:

Midwestern University Office of Admissions  
19555 N. 59th Avenue  
Glendale, AZ 85308  
888/247-9277 or 623/572-3215  
[admissaz@midwestern.edu](mailto:admissaz@midwestern.edu)

Midwestern University Office of Admissions  
555 31st Street  
Downers Grove, IL 60515  
630/515-6171 or 800/458-6253  
[admissil@midwestern.edu](mailto:admissil@midwestern.edu)

## Transfer Credit from Other Institutions

The M.P.H. program allows for the transfer of up to 10 quarter-credits from equivalent graduate-level coursework or degrees completed within the past 10 years. Generally, transfer credit will only be given to students who satisfactorily completed coursework in a CEPH-accredited M.P.H. or an accredited professional healthcare degree program with a minimum letter grade of "B." Students must submit a letter of request to the M.P.H. Program Director, who will evaluate the submitted course materials with the appropriate course director to determine whether the course(s) is an appropriate substitute. If the M.P.H. Program Director denies the request for transfer credit, the student may appeal this decision to the CGS Dean. If a course is accepted for credit, the equivalent Midwestern University course and the Transfer Credit notation will be recorded on transcripts along with the name of the institution at which the credit was earned. Any earned letter grade will not be included on transcripts or used in GPA calculations.

## Primary Program Liaisons

The M.P.H. program assigns an advisor to students to assist with academic concerns. For dual degree students, primary program liaisons are available to assist students with the unique challenges of simultaneously managing two programs of study. In addition, the Program Director, CGS Dean, Associate Deans, and the Dean of Students are also available to assist students. It is the student's responsibility to initiate contact with these individuals for assistance.

## Satisfactory Academic Progress

A student enrolled as a dual degree student in the M.P.H. program and in a qualifying Midwestern health professional degree program is required to pass all required M.P.H. courses with a grade of "C" or higher and maintain a cumulative GPA of 2.50 or higher in the M.P.H. program. Regardless of satisfactory academic progress in the M.P.H. program, the CGS Student Promotion and Graduation Committee may determine that a dual degree student who experiences academic difficulty in the primary degree take a leave of absence from the M.P.H. program until satisfactory academic progress in the primary program is achieved. Separate criteria for achieving satisfactory academic progress in the primary degree program are listed in the catalog under the respective degree program.

# Technical Standards, Public Health

## Technical Standards

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the college.

Candidates must have abilities and skills in five areas: 1) observation; 2) communication; 3) motor; 4) intellectual, conceptual, integrative, and quantitative; and 5) behavioral and social. Technological compensation can be made for some limitations in certain of these areas, but candidates should be able to perform in a reasonably independent manner.

1. Observation: The candidate must be able to accurately make observations at a distance and close at hand. Observation necessitates the functional use of the sense of vision and sense of touch and is enhanced by the functional use of all of the other senses.
2. Communication: The candidate must be able to communicate effectively, efficiently, and sensitively in both oral and written form and be able to perceive nonverbal communication.
3. Motor: Candidates must be able to coordinate both gross and fine muscular movements, maintain equilibrium, and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control, and eye-to-hand coordination to perform profession-specific skills and tasks.
4. Intellectual, Conceptual, Integrative, and Quantitative Abilities: The candidate must be able to problem solve, measure, calculate, reason, analyze, record, and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships
5. Behavioral and Social Attributes: The candidate must possess the emotional health required for full utilization of their intellectual abilities, the exercise of good judgment and the consistent, prompt completion of all responsibilities, and the development of mature, sensitive, and effective relationships. Candidates must be able to tolerate physically, mentally, and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn are all personal qualities required during the educational process.

Candidates are required to verify that they understand and are able to meet these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet Technical Standards with accommodation, must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

## **Master of Public Health Stand-Alone Degree**

### **Degree Type**

Master of Public Health (M.P.H.)

The M.P.H. Program reserves the right to alter its curriculum however and whenever it deems appropriate. This Catalog does not establish a contractual relationship between Midwestern University and students. Total quarter credits required for program completion is 56.

### **STAND-ALONE TRACK**

Sample sequencing of courses and course credits. Students may elect to take fewer credit hours during the Summer Quarter. Not all electives are offered every quarter.

## Summer Quarter (Year 1)

Course Code	Title	Credits
PUBH 510	Introduction to Public Health	2.0
PUBH 515	Introduction to Environmental & Occupational Health	3.0
PUBH 517	Behavioral and Social Aspects of Public Health	2.0
PUBH 525	Principles of Epidemiology	3.0
PUBH 526	Program Assessment, Planning, and Evaluation	3.0
PUBH 535	Quantitative Research	2.0
<b>Sub-Total Credits</b>		<b>15.00</b>

## Fall, Winter, and Spring Quarters (Years 1 & 2)

Course Code	Title	Credits
PUBH 508	Design of the M.P.H. Practicum	1.0
PUBH 518	Health Systems	2.0
PUBH 630	Application of One Health Principles and Practice	2.0
PUBH 655	Impacts of Equity, Diversity, Inclusion, Climate Change, and Environmental Justice on Health	3.0
PUBH 660	Public Health Emergency Preparedness and Disaster Response	2.0
PUBH 715	Public Health Practicum	4.0
<b>Sub-Total Credits</b>		<b>14.00</b>

## Elective Courses for Fall, Winter, and Spring Quarters (Years 1 & 2)

Course Code	Title	Credits
PUBH 802	Field Practicum	2.0
PUBH 803	Field Practicum	3.0
PUBH 804	Field Practicum	4.0
PUBH 811	Food Protection: Safety, Security, and Defense	1.0
PUBH 813	Globalization and Impacts to Health	2.0
PUBH 814	Growing a Healthier Nation: Introduction to Public Health Nutrition	1.0
PUBH 816	Public Health Ethics	2.0
PUBH 818	Geography of Health	3.0
PUBH 819	Chronic Disease Epidemiology	2.0
PUBH 820	Epidemiology of Emerging Infectious Diseases	2.0
PUBH 821	Occupational Health and Evidence	3.0
<b>Sub-Total Credits</b>		<b>25.00</b>

## Summer Quarter (Year 2)

Course Code	Title	Credits
PUBH 514	Health Policy and Management	3.0
PUBH 536	Qualitative Research	2.0
PUBH 537	Biostatistics and Research	2.0
PUBH 635	U.S. and Global Food Systems	2.0
PUBH 665	Leadership and Management in Health	3.0
PUBH 721	Capstone Course	3.0
<b>Sub-Total Credits</b>		<b>15.00</b>

# Master of Public Health Dual Degree Curriculum

## Degree Type

Master of Public Health (M.P.H.)

The M.P.H. Program reserves the right to alter its curriculum however and whenever it deems appropriate. This Catalog does not establish a contractual relationship between Midwestern University and students. Total quarter credits required for program completion is 56.

## DUAL DEGREE OPTION

Sample sequencing of courses and course credits. Students may elect to take fewer credit hours during the Summer Quarter. Not all electives are offered every quarter.

## Summer Quarter (Year 1)

Course Code	Title	Credits
PUBH 510	Introduction to Public Health	2.0
PUBH 515	Introduction to Environmental & Occupational Health	3.0
PUBH 517	Behavioral and Social Aspects of Public Health	2.0
PUBH 525	Principles of Epidemiology	3.0
PUBH 526	Program Assessment, Planning, and Evaluation	3.0
PUBH 535	Quantitative Research	2.0
<b>Sub-Total Credits</b>		<b>15.00</b>

## Summer Quarter (Year 2)

Credits transferred from the primary health professional degree program 12 credits.

Course Code	Title	Credits
PUBH 514	Health Policy and Management	3.0
PUBH 536	Qualitative Research	2.0
PUBH 537	Biostatistics and Research	2.0
PUBH 635	U.S. and Global Food Systems	2.0
PUBH 665	Leadership and Management in Health	3.0
<b>Sub-Total Credits</b>		<b>12.00</b>

## Fall, Winter, and/or Spring Quarters

Course Code	Title	Credits
PUBH 508	Design of the M.P.H. Practicum	1.0
PUBH 518	Health Systems	2.0
PUBH 630	Application of One Health Principles and Practice	2.0
PUBH 655	Impacts of Equity, Diversity, Inclusion, Climate Change, and Environmental Justice on Health	3.0
PUBH 660	Public Health Emergency Preparedness and Disaster Response	2.0
PUBH 715	Public Health Practicum	4.0
PUBH 721	Capstone Course	3.0
<b>Sub-Total Credits</b>		<b>17.00</b>
Total Credits		56

# Graduation Requirements

To qualify for the M.P.H. degree, students must:

1. Complete satisfactorily all courses with a minimum cumulative grade point average of 2.50.
2. Complete satisfactorily the required minimum number of 56 quarter-credits in the curriculum.
3. Receive a favorable recommendation for Master's degree conferral from the CGS Student Promotion and Graduation Committee.
4. Receive a favorable recommendation for Master's degree conferral from the University Faculty Senate.
5. Settle all financial accounts with the University.
6. Complete all graduation clearance requirements as instructed by the Office of the Registrar.

M.P.H. degrees are awarded at the College of Graduate Studies commencement ceremonies. Dual degree students are also acknowledged for their M.P.H. in the commencement ceremonies of their Midwestern University primary health degree.

## Coursework Completed in other Midwestern University Professional Programs

Dual degree students enrolled in the M.P.H. program and a health professional degree program at Midwestern University may be awarded 12 credit hours towards the M.P.H. degree for approved courses taken in their professional programs. These courses are preapproved by the M.P.H. Education Committee with input from the respective health professional degree program Dean, and courses are identified in the course Catalog to indicate eligibility for elective credit in the M.P.H. program. Dual degree students enroll in the course designated for their primary professional degree program and are awarded credit for both programs upon successful completion of the course. Transcripts for the M.P.H. program reflect the transfer credit from the primary professional degree program. Dual credit in the M.P.H. program is only considered for coursework in which a satisfactory grade has been earned in the primary program.

Arizona College of Osteopathic Medicine Courses Eligible for M.P.H. Elective Credit		
Course Number	Course Name	Credit Hours
CLMDG 1516	Humanity in Medicine	1
CLMDG 1650A	Interprofessional Health Outreach through Medicine and Education I'm H.O.M.E.)	0.5
CLMDG 1650B	Interprofessional Health Outreach through Medicine and Education I'm H.O.M.E.)	0.5
CLMDG 1650C	Interprofessional Health Outreach through Medicine and Education I'm H.O.M.E.)	0.5
COREG 1560A	Interprofessional Healthcare	0.5
COREG 1570A	Interprofessional Healthcare	0.5
COREG 1580A	Interprofessional Healthcare	0.5
FMEDG 1531	Public Health, Jurisprudence, and Medical Ethics	2
IPECG 1401A	Improving Patient Safety I	0.5
IPECG 1402A	Improving Patient Safety II	1.5
IPECG 1404A	Leadership in Healthcare Teams (online)	1.5
MICRG 1531	Immunology	2.5
MICRG 1615	Microbiology I	4
MICRG 1625	Microbiology II	4
MPSYG 1511	Introduction to Human Behavior I	0.5
MPSYG 1522	Introduction to Human Behavior II	0.5
MPSYG 1533	Introduction to Human Behavior III	0.5

RURLG 1701	Rural Medicine Rotation	3
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Arizona College of Optometry Courses Eligible for M.P.H. Elective Credit		
Course Number	Course Name	Credit Hours
BASIG 1510	Integrated Basic Science Sequence I	2
BASIG 1511	Integrated Basic Science Sequence II	2
BASIG 1512	Integrated Basic Science Sequence III	2
BASIG 1513	Integrated Basic Science IV	2
BASIG 1514	Integrated Basic Science V	2
BASIG 1515	Integrated Basic Science VI	2
BASIG 1516	Integrated Basic Science VII	2
BASIG 1517	Integrated Basic Science VIII	2
BASIG 1518	Integrated Basic Science IX	2
CLMDG 1354O	Being a Leader and the Effective Exercise of Leadership	0.5
COREG 1560	Interprofessional Healthcare	0.5
COREG 1580	Interprofessional Healthcare	0.5
COREG 1570	Interprofessional Healthcare	0.5
OPTOG 1670	Capstone Project I: Research Design and Biostatistics	1
OPTOG 1672	Capstone Project II: Literature Search and Study Design	1
OPTOG 1745	Epidemiology, Public Health, and the Optometric Profession	2
OPTOG 1760	Capstone Project III: Data Collection and Analysis	1
OPTOG 1761	Capstone Project IV: Research Presentation	1
OPTOG 1790	Evidence-Based Medicine	1.5

Arizona College of Dental Medicine Courses Eligible for M.P.H. Elective Credit		
Course Number	Course Name	Credit Hours
BASIG 1501	Integrated Basic Science Sequence I	2
BASIG 1502	Integrated Basic Science Sequence II	2
BASIG 1503	Integrated Basic Science Sequence III	2
BASIG 1504	Integrated Basic Science IV	2
BASIG 1505	Integrated Basic Science VI	2
BASIG 1506	Integrated Basic Science VII	2
BASIG 1507	Integrated Basic Science VIII	2
BASIG 1508	Integrated Basic Science IX	2
COREG 1560I	Interprofessional Healthcare	0.5
COREG 1570I	Interprofessional Healthcare	0.5
COREG 1580I	Interprofessional Healthcare	0.5
DENTG 1510	Preventive Dental Medicine I	0.5
DENTG 1520	Preventive Dental Medicine II	0.5
DENTG 1535 or 1615	Human Behavior I	1
DENTG 1612	Dental Community Service I	0.5
DENTG 1618	Multicultural Healthcare	1
DENTG 1623	Dental Community Service II	0.5
DENTG 1634	Dental Community Service III	0.5



DENTG 1730	Human Behavior II	1
DENTG 1734	Dental Ethics III	0.5
DENTG 1852	Clinical Service Learning (2-week rotation)	2
IPECG 1401	Improving Patient Safety I	1
IPECG 1402	Improving Patient Safety II	1
IPECG 1404	Leadership in Healthcare Teams (online)	1.5
IPECG 1410	Safe Opioid Practices (online)	1
IPECG 1420	Antibiotic Stewardship (online)	1.5

<b>Arizona College of Veterinary Medicine Courses Eligible for M.P.H. Elective Credit</b>		
<b>Course Number</b>	<b>Course Name</b>	<b>Credit Hours Granted</b>
COREG 1560L	Interprofessional Healthcare/One Health Course	0.5
COREG 1570L	Interprofessional Healthcare/One Health Course	0.5
COREG 1580L	Interprofessional Healthcare/One Health Course	0.5
MICRG 1522	Veterinary Immunology	3
MICRG 1573	Veterinary Parasitology	3
MICRG 1671	Veterinary Microbiology I	4
MICRG 1672	Veterinary Microbiology II	3
VMEDG 1803	Shelter and Community Medicine	2
VMEDG 1322	Foreign Animal Diseases	2
VMEDG 1343	Infectious Diseases in Veterinary Pathology	2
VMEDG 1510	Principles of Veterinary Scholarship	2
VMEDG 1593	Public Health, Epidemiology, & Zoonotic Disease	4
VMEDG 1748	Clinical Toxicology	2
VMEDG 1766	Farm Animal Medicine I	1.5
VMEDG 1767	Farm Animal Medicine II	1

<b>Chicago College of Osteopathic Medicine Courses Eligible for M.P.H. Elective Credit</b>		
<b>Course Number</b>	<b>Course Name</b>	<b>Credit Hours</b>
BIOCD 1501	Biochemistry I	1.5
BIOCD 1502	Biochemistry II	2.5
CLIND 1430	Research Design, Methods, and Approaches	1
CLIND 1502	Foundations of Osteopathic Clinical Practice	1
CORED 1500	Healthcare Communications	1
CORED 1599	Interprofessional Education I	1
MICRD 1652	Infectious Disease, Etiologic Agents, and the Immune Response I	4
MICRD 1653	Infectious Disease, Etiologic Agents, and the Immune Response II	3
PATHD 1601	Pathology I	2.5
PATHD 1602	Pathology II	3
PATHD 1603	Pathology III	2
PHARD 1670	Pharmacology I	2
PHARD 1671	Pharmacology II	1.5
PHARD 1672	Pharmacology III	1
PHYSD 1502	Physiology I	2

PHYSD 1503	Physiology II	2
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Chicago College of Optometry Courses Eligible for M.P.H. Elective Credit		
Course Number	Course Name	Credit Hours
CORED 1111	Diversity, Equity, and Inclusion in Healthcare	1
CORED 1500K	Healthcare Communication	1
CORED 1599	Interprofessional Education I	1
CORED 1699K	Interprofessional Education II	1
IBSSD 1520	Molecular, Cellular and Tissue Structure and Function	5
IBSSD 1522	Blood, Lymphoid Tissue, and Immunology	4
MICRD 1582	Microbiology	1.5
MICRD 1590	Immunology	2
OPTOD 1401	Research	1.0-4.0
OPTOD 1411	Research	1.0-4.0
OPTOD 1511	Contemporary Issues in Healthcare and Ethics	0.5
OPTOD 1680	Capstone Project: Research Design, Biostatistics, and Literature Search	1
OPTOD 1681	Capstone Project: Study Design	1
OPTOD 1701	Behavioral Medicine	1
OPTOD 1745	Epidemiology, Public Health, and the Optometric Profession	2
OPTOD 1778	Capstone Project: Data Collection and Analysis	1
OPTOD 1779	Capstone Project: Dissemination of Results	1
OPTOD 1790	Clinical Case Analysis: Evidence-based Medicine	2

College of Dental Medicine - Illinois Courses Eligible for M.P.H. Elective Credit		
Course Number	Course Name	Credit Hours
CORED 1500J	Interprofessional Healthcare Communication	0.5
CORED 1599J	Interprofessional Education	1
IBSSD 1520	Molecular, Cellular and Tissue Structure and Function	5
IBSSD 1522	Blood, Lymphoid Tissue, and Immunology	4
IBSSD 1530	Infectious Diseases and Integument, Soft Tissue and Lymphoreticular Systems	3
IBSSD 1534	Cardiovascular and Respiratory Systems	3
IBSSD 1535	Gastrointestinal System	2.5
IBSDD 1540	Endocrinology/Urinary and Reproductive Systems, Growth and Aging	3
PHARD 1620	General Pharmacology I	1
PHARD 1631	General Pharmacology II	1.5

Occupational Therapy Program - Illinois Courses Eligible for M.P.H. Elective Credit		
Course Number	Course Name	Credit Hours
CORED 1599E (Class of 2025)	Interprofessional Education I	1
OTHED 1510	Critical Analysis of Evidence	3
OTHED 1512	Research Project Development	2-3
OTHED 1520	Occupation	2
OTHED 1580	Critical Analysis of Evidence	2

OTHED 1581	Research Project Development	2
OTHED 1582	Research Proposal Development	2
OTHED 1605	Research Proposal Development	1
OTHED 1610	Research Project Implementation	3
OTHED 1612	Research Project Synthesis	3
OTHED 1670	Disability and Policy	1
OTHED 1684	Research Project Synthesis	3
OTHED 1714	Data-based Decision Making	2
OTHED 1721	Health Promotion & Health Management	3
OTHED 1723	Occupational Justice	1
OTHED 1755	Administration and Management	3
OTHED 1770	Disability Studies	2

<b>Clinical Psychology Program- Illinois Courses Eligible for M.P.H. Elective Credit</b>		
<b>Course Number</b>	<b>Course Name</b>	<b>Credit Hours</b>
CORED 1599H	Interprofessional Education I	1
CORED 1699	Interprofessional Education II	1
PSCID 1379	LGBTQI Considerations in the Provision of Healthcare	1
PSYCD 1501	Professional Issues and Ethics	2
PSYCD 1502	Lifespan Development I	2
PSYCD 1503	Lifespan Development II	2
PSYCD 1504	Research Methods & Design I	3
PSYCD 1508	Research Methods & Design II	3
PSYCD 1510	Statistics I	3
PSYCD 1515	Test and Measurements I	3
PSYCD 1550	Biological Bases of Behavior	3
PSYCD 1610	Diversity in Clinical Psychology	3
PSYCD 1611	Statistics II	3
PSYCD 1654	Social and Cultural Bases of Behavior	3
PSYCD 1660	Cognitive-Affective Bases of Behavior	1
PSYCD 1680	Research Seminar: Integration of Science and Practice	2
PSYCD 1766	Advanced Integration of Scientific Knowledge	3

## Public Health Program Calendar

### Summer 2025

<b>Event</b>	<b>Date</b>
<b>Memorial Day Observed *No Classes*</b>	<b>May 26, 2025</b>
Classes Begin	May 27, 2025
<b>Juneteenth (Observed) *No Classes*</b>	<b>June 19, 2025</b>
<b>Independence Day Observed *No Classes*</b>	<b>July 4, 2025</b>
Last Day of Classes	August 3, 2025

## Fall 2025

Event	Date
Classes Begin	August 25, 2025
Last Day to Add/Drop Classes	August 29, 2025
<b>Labor Day *No Classes*</b>	<b>September 1, 2025</b>
Last Day of Classes	November 2, 2025
<b>Thanksgiving Day Observed *No Classes*</b>	<b>November 27 – 28, 2025</b>

## Winter 2025

Event	Date
Classes Resume	December 1, 2025
Last Day to Add/Drop Classes	December 5, 2025
Winter Break	December 22, 2025 – January 2, 2026
Classes Resume	January 5, 2026
<b>Martin Luther King, Jr. Day *No Classes*</b>	<b>January 19, 2026</b>
Last Day of Classes	February 22, 2026

## Spring 2026

Event	Date
Classes Resume	March 9, 2026
Last Day to Add/Drop Classes	March 13, 2026
Last Day of Classes	May 17, 2026
<b>Memorial Day Observed *No Classes*</b>	<b>May 25, 2026</b>
<b>Commencement IL CHS/CGS</b>	<b>May 27, 2026 9:00 a.m.</b>

Last Revision: 08/28/2024

## Faculty

**David Line, Ph.D., M.P.H., M.S.W., Program Director**

University of New Mexico  
Assistant Professor

**Karen Gruszynski, Ph.D., D.V.M., M.P.H.**

Louisiana State University - Ph.D., University of Wisconsin-Madison - DVM  
Assistant Professor

**Tiffany Hughes, Ph.D., M.P.H., M.B.A., FGSA**

University of South Florida  
Assistant Professor

**Chase Irwin, M.S.**

University of Arizona  
Manager of BioClinical Statistics

**Lawrence Sands, D.O., M.P.H.**

Midwestern University, Chicago College of Osteopathic Medicine  
Clinical Professor

**Felicia Trembath, Ph.D., M.P.H.**

Purdue University  
Assistant Professor

**Mariah Zeigler, D.V.M., M.P.H., DACVPM**

Virginia Maryland Regional College of Veterinary Medicine  
Assistant Professor

## Master Of Public Health Courses

### PUBH 508: Design of the M.P.H. Practicum

In this course, students are guided in developing a plan for their public health applied practice experience (practicum). Students will identify their practicum site, determine applied practice objectives, and submit all necessary University forms and supporting documents.

**Credits** 1.0

### PUBH 510: Introduction to Public Health

In this course, students examine the field of public health, including the history of public health, its relationship to healthcare systems, applications of public health, social determinants of health, and the legal and ethical issues associated with public health. The objective is to provide students with a foundation in these and other cross-cutting public health topics for the remainder of the program.

**Credits** 2.0

### PUBH 514: Health Policy and Management

This course introduces students to basic concepts in public health policy and public health program management. They will learn basics of healthcare organization and learn to distinguish between health policy and healthcare policy. Students will be presented a framework for health policy analysis. They will learn basic tools in program management.

**Credits** 3.0

### PUBH 515: Introduction to Environmental & Occupational Health

This introductory course provides students with a broad exposure to basic environmental and occupational health topics including: ecology; population dynamics; air pollution; toxicology; food safety and security; climate change; renewable energy; vector-borne disease; environmental policy; workplace health and safety; water treatment; waste disposal; and risk communication. Students engage in online discussions covering the specific, general, and global issues associated with these topics and their relationship to population health.

**Credits** 3.0

## **PUBH 517: Behavioral and Social Aspects of Public Health**

In this course, students examine how the behavioral and social sciences can be used to: (1) understand human health-related behavior and (2) guide the application of behavioral theory to modify behavior in order to prevent, reduce, or eliminate public health problems. Students are provided with an overview of behavior-oriented perspectives based on health promotion/education, psychology, and health communication. Important social determinants of health are discussed with the overall goal that students successfully completing the course are able to apply health behavior theory to primary and secondary disease prevention.

**Credits** 2.0

## **PUBH 518: Health Systems**

In this course, students analyze the delivery of health care and public health in the United States and in other nations. An emphasis is placed on organizations, financing, management, and evaluation of various health systems. Global and national agencies and policies central to the delivery of health care and public health will be identified and examined with an emphasis on health inequity and solutions which create health equity.

**Credits** 2.0

## **PUBH 525: Principles of Epidemiology**

In this introductory course, students learn basic epidemiological principles, methods, and tools to study the health of populations. Topics focus on the dynamics of disease transmission, descriptive epidemiological measures of disease, principles of study design, and causal inference. The main objective of this course is to provide students with a foundation that will prepare them to apply these concepts to both research and public health practice.

**Credits** 3.0

## **PUBH 526: Program Assessment, Planning, and Evaluation**

Course content will focus on the program/community assessment, program planning, and program evaluation. The central focus of the course will be the program framework to demonstrate and apply logic models for program assessment, planning, and evaluation. Students will use the framework of a logic model to assess population needs and capacities to understand what can be utilized to improve communities' health. A design plan for a population-based community health program and an evaluation plan to evaluate the public health program will be the main deliverables for the course. This is a required course for obtaining the M.P.H. degree.

**Credits** 3.0

## **PUBH 535: Quantitative Research**

Course content will focus on quantitative research methods to address public health issues. The main goal of the course is to introduce students to the research investigative cycle within the context of public health with planning, collecting data, summarizing the data, using statistical inference, and making appropriate conclusions from the study. The course will cover types of variables and processes for data collection from a quantitative perspective, study design concepts, and descriptive statistics. Students will be introduced to a statistical software package (SAS) and be able to analyze data using descriptive statistics. This is a required course for obtaining the M.P.H. degree.

**Credits** 2.0

## **PUBH 536: Qualitative Research**

In this course, students review and utilize qualitative techniques commonly seen in public health research and practice. Students are introduced to a variety of topics including, but not limited to, paradigms of qualitative research and inquiry, selected data collection and analysis methods for qualitative research in public health and strategies for reporting qualitative findings. The course emphasizes the development of practical skills in selecting a qualitative research methodology, engaging in qualitative data collection (e.g., interview or focus group facilitation), and analyzing and interpreting qualitative data.

**Credits** 2.0

## **PUBH 537: Biostatistics and Research**

This course introduces biostatistical methods and applications. We will cover inferential statistics (t-tests, Chi-square tests, correlation analysis, and linear regression), the role of biostatistics in the practice of public health, and how to align methods to answer statistical questions in public health. Students will be able to explain the role of quantitative methods in describing and assessing a population's health. Students will be able to select appropriate quantitative methods to answer research questions given certain data collection methods. Students will also learn a statistical software package (SAS) in depth and be able to analyze quantitative data. The main objective of this course is to provide students with a strong biostatistics foundation and understanding of the importance of statistical knowledge in public health. This is a required course for obtaining the M.P.H. degree.

**Credits** 2.0

## **PUBH 610: Globalization and Impacts to Health**

In this course students explore the effects of globalization and its social and scientific consequences in public health with the objective of developing systems thinking to address global health concerns. Topics include the interplay between global stressors such as population growth and migration, war, economic policy, urbanization, land use and environmental change, and the effects on the health of human and animal populations.

**Credits** 2.0

## **PUBH 630: Application of One Health Principles and Practice**

In this course, students learn strategies to engage stakeholders across multiple disciplines, geographic locations, and cultural perspectives to address public health challenges using One Health approaches. Students learn how the principles of One Health are applicable to current issues that threaten human, animal, and environmental health. Case studies are used to analyze practices and to propose One Health strategies for a range of public health problems.

**Credits** 2.0

## **PUBH 635: U.S. and Global Food Systems**

Students receive an overview of food governance, policy, and regulation in the United States and globally. The roles of public and private sectors at the local, state, national, and international levels are reviewed with the objective of giving students a perspective on the complexity of food policy through legislation, government regulations, and private sector agreements that ultimately impact global health. Students choose a relevant topic with the objective of critically analyzing the current food regulatory system in the U.S. based on these factors.

**Credits** 2.0

## **PUBH 655: Impacts of Equity, Diversity, Inclusion, Climate Change, and Environmental Justice on Health**

This course presents a public health perspective on climate change and ecosystem health. Students explore how climate change is defined and assessed; its environmental causes and effects; and its effects on populations. Public health initiatives, public education, and policy options to reduce climate change, minimize its effects, and heighten resilience are discussed. The background science and ethics of diversity and inclusion will be applied to the study of climate change, with a focus on climate and environmental justice and cultural humility. The overall objective of this course is for students to articulate how global policies related to energy and agriculture impact human, animal, and ecosystem health and how diversity, inclusion, and cultural humility are key elements to these relationships.

**Credits** 3.0

## **PUBH 660: Public Health Emergency Preparedness and Disaster Response**

Students learn about the National Response Framework and how the US government responds to domestic disasters. The phases of disaster response and the roles and responsibilities of local, state, and Federal agencies are discussed. The objective of the course is for students to understand the factors that enable them, as medical and public health leaders and responders to comprehensively assess these crises and effectively participate in their management and response.

**Credits** 2.0

## **PUBH 665: Leadership and Management in Health**

In this course, students will explore leadership, management, grants, and finance from a health perspective. Leadership attributes including ethics, courage, values, and supervision will be examined. Fayol's five functions of management will be reviewed. Fundamental accounting and finance documents and procedures will also be introduced with an emphasis on the contract and proposal process.

**Credits** 3.0

## **PUBH 715: Public Health Practicum**

Students participate in experiential training in public health within healthcare settings and government-sponsored organizations in the local geographic area and other more distant sites. Students enhance their didactic learning experiences by practical application, and they acquire a broad public health perspective to specific health-related problem solving. Students receive a total of 4 credits for the practicum experience, which may span one or more quarters.

**Credits** 4.0

### **Prerequisites**

All 500-level required core courses

## **PUBH 721: Capstone Course**

The M.P.H. degree requires that students develop competencies in public health through coursework, a practicum experience, and other projects or activities. The goal of this course is for students to integrate these didactic and practical experiences to address public health issues or problems. Students will apply competencies through public health case studies and a final culminating project. The culminating project will include written and oral components, which serve as evidence of synthesis of public health foundational and concentration competencies appropriate for the students' educational and professional goals and ideally useful to external stakeholders.

**Credits** 3.0

**Lab Hours** 0



## **PUBH 802: Field Practicum**

This course is designed to provide students with the opportunity to advance or expand the public health practicum experience. Students will continue a previous, or select a new, supervised public health applied practice experience in a community organization to support public health efforts that are meaningful to the organization. Students build upon their didactic learning experience by practical application, working with public health professionals, and they acquire a broad public health perspective to specific health-related problem solving. Students receive a total of 2 credits for the practicum experience, which may span one or more quarters.

**Credits** 2.0

## **PUBH 803: Field Practicum**

This course is designed to provide students with the opportunity to advance or expand the public health practicum experience. Students will continue a previous, or select a new, supervised public health applied practice experience in a community organization to support public health efforts that are meaningful to the organization. Students build upon their didactic learning experience by practical application, working with public health professionals, and they acquire a broad public health perspective to specific health-related problem solving. Students receive a total of 3 credits for the practicum experience, which may span one or more quarters.

**Credits** 3.0

## **PUBH 804: Field Practicum**

This course is designed to provide students with the opportunity to advance or expand the public health practicum experience. Students will continue a previous, or select a new, supervised public health applied practice experience in a community organization to support public health efforts that are meaningful to the organization. Students build upon their didactic learning experience by practical application, working with public health professionals, and they acquire a broad public health perspective to specific health-related problem solving.. Students receive a total of 4 credits for the practicum experience, which may span one or more quarters.

**Credits** 4.0

## **PUBH 811: Food Protection: Safety, Security, and Defense**

Despite advances in technology and social expectations, food safety remains a significant threat to human health and social stability. In the first part of this course, students explore food-borne pathogens of public health significance, the ecology of microorganisms in food, and their implications for food safety. Students examine current food-related issues through a one health lenses with a focus on food safety, food security, and food defense. Legislation and social issues related to biotechnology in food and food sustainability movements are explored. Consideration of these topics from the local, national, and global perspectives help students achieve appreciation for the role of public health in food protection.

**Credits** 1.0

## **PUBH 813: Globalization and Impacts to Health**

In this course students explore the effects of globalization and its social and scientific consequences in public health with the objective of developing systems thinking to address global health concerns. Topics include the interplay between global stressors such as population growth and migration, war, economic policy, urbanization, land use and environmental change, and the effects on the health of human and animal populations.

**Credits** 2.0

## **PUBH 814: Growing a Healthier Nation: Introduction to Public Health Nutrition**

In this course, we will examine the building block concepts of public health nutrition, including nutrient requirements, interpretation of food labels, food assistance programs, and dietary guidelines and resources. We will also explore various U.S. nutrition monitoring tools and how they inform U.S. nutrition policy and programs. This course also reviews basic principles of nutrition epidemiology and introduces dietary assessment methodologies used in nutrition research. Students will also learn how to critically appraise the nutrition science literature to apply evidence-based approaches to disease prevention and health promotion. The overall objective is for students to obtain a foundational understanding of nutrition science, the promotion of health through nutrition, and the prevention of nutrition-related related disease in populations.

**Credits** 1.0

## **PUBH 816: Public Health Ethics**

This course will introduce frameworks and concepts central to public health ethics and contrasts public health ethics with those found in other health professions. Students will learn strategies for making ethical decisions in situations that commonly arise in public health practice. Students will develop critical thinking around how public health campaigns and public health decisions may affect One Health principles. Students will become familiar with available tools and resources to address ethical challenges.

**Credits** 2.0

## **PUBH 818: Geography of Health**

In this course, students examine how geographic locations influence disease dynamics and health outcomes. Illuminates the importance of local knowledge for public health, connects issues in health and well-being across scales, and demonstrates the ways that geographic methods are relevant in health sciences, societal sciences, and policy arenas. Fundamental principles and concepts behind the use and application of Geographic Information System (GIS) mapping software as a tool for integrating, manipulating, and displaying public health related data will be presented. Students will gain hands-on experience working with GIS software.

**Credits** 3.0

## **PUBH 819: Chronic Disease Epidemiology**

Chronic conditions are among the most significant modern public health challenges having surpassed infectious diseases as the main contributors of mortality and morbidity in the developed world. This course will survey the epidemiology of common chronic diseases around the globe from interdisciplinary and life course perspectives. Students will examine methodological issues in studying chronic disease, consequences of chronic diseases for individuals and healthcare systems, and disparities in chronic disease. Non-medical and One Health drivers of chronic disease will be explored and serve as the foundation for approaches for prevention and control at the population level.

**Credits** 2.0

## **PUBH 820: Epidemiology of Emerging Infectious Diseases**

Students address recently emerging infectious diseases and explore emergence factors and impacts on public health from a One Health perspective. Epidemiologic concepts such as natural reservoirs, modes of transmission, in-apparent versus apparent infections, and herd immunity are discussed. The objective is for students to learn and apply strategies for prevention and control of zoonotic and other emerging infections. Case studies are used to illustrate and apply concepts.

**Credits** 2.0

## **PUBH 821: Occupational Health and Evidence**

Policies, technological advances, and a shift in the work we do have reduced acute occupational injuries over the last 100 years. Increased awareness over the last 50 years in chronic injuries has impacted occupations and economies globally. In the last 25 years there has been more awareness of the costs of social injuries including a loss of work-life balance, working from home, and diversity and inclusion issues. This course examines these evolutions, how to assess impacts, and opportunities for change associated with the dynamics of occupational health. Lectures, case studies, and exercises are integrated with the overall objective to teach various methodologic and analytic approaches to studying the relationship between occupational and environmental exposures and health outcomes in humans and animals.

**Credits** 3.0

# Master of Science in Precision Medicine

## Mission

The Midwestern University College of Graduate Studies M.S. in Precision Medicine is designed as an interdisciplinary professional dual degree in applied genomic sciences that aims to prepare healthcare professional students to utilize genomic information in the prediction, diagnosis, prognosis, prevention, and treatment of disease.

Upon program completion, students in the M.S. in Precision Medicine Program will have the foundational knowledge needed to:

1. Comprehend genomic and other 'omic data, describe how it is created and applied, and demonstrate basic analytical methods;
2. Determine what those data mean in practical terms for a patient's physical and mental health; and,
3. Utilize their knowledge to determine how that data can best be used to meet the medical needs of individual patients or populations.

The Program both complements and expands the mission of Midwestern University to meet the educational needs of the healthcare community by preparing students for the new era of genomic medicine. Students enrolled as dual degree candidates in Midwestern University's healthcare professional programs will expand their medical knowledge, understand genetic and genomic applications, and enhance their career options upon completion of this Program.

## Accreditation

Midwestern University is accredited by The Higher Learning Commission, 230 South LaSalle Street, Suite 7- 500, Chicago, IL 60604-1413.

## Degree Description

The Master of Science (M.S.) in Precision Medicine Program is completed as a dual degree in conjunction with a healthcare professional degree, such as Doctor of Osteopathic Medicine, Doctor of Dental Medicine, Doctor of Optometry, or Doctor of Veterinary Medicine.

Students completing other professional degrees at Midwestern University should contact the Precision Medicine Program Director prior to preparing an application. Osteopathic, Dental, and Optometry students may apply as incoming students or, with their Dean's approval, as first year students. Veterinary students may apply in the first or second year of their program. In some cases, the Post-Graduate Certificate in Precision Medicine may integrate more appropriately with the primary programs that are not listed above. The coursework for the M.S. can be completed in as little as two years and is optimally completed within the timeframe of the primary degree program. The maximum time allowed for completion of the degree is six years.

Graduates are prepared to directly enter their chosen healthcare profession with the background to understand and apply genetic or genomic information in the overall care of their patients. The online, 46- quarter-credit hour Master's degree curriculum is designed to dovetail with select Midwestern healthcare professional programs, which allows dual-degree students to complete most requirements during the didactic years of their programs.

The Master's degree program includes 28 quarter- credit hours of required and elective coursework in Precision Medicine, including an applied genomic Capstone Project. Students must also complete

relevant courses in their primary didactic programs, which upon satisfactory completion, will be applied as credit toward their secondary degree in Precision Medicine. Up to 18 hours of dual credit will be awarded from their primary degree programs for a total of 46 quarter- credit hours.

The M.S. in Precision Medicine Program requires a culminating experience that includes a Genomics Laboratory and Capstone Project whereby students are provided an introduction to the analytical methods needed for a genomic evaluation of an anonymized human genome provided by the course instructors. Veterinary Medicine students may have the option of analyzing a companion animal's genome for this course. The genome sequence will be used to complete the Capstone Project, which will culminate in a written report of the findings and a formal presentation. Upon successful completion of the Capstone Project and other aspects of the Program, students will be awarded the Master of Science in Precision Medicine degree.

# Admissions

## Eligibility

- The dual degree Master of Science in Precision Medicine is only directly available when admitted to or concurrently enrolled in the Midwestern primary degree programs listed below.
- All other students, including those not pursuing a concurrent degree at Midwestern, are eligible to apply to the Post-Graduate Certificate in Precision Medicine.
- Dually enrolled students in the Post-Graduate Certificate may transfer later to the Master of Science with the Program Director's approval.
- Eligibility to apply to the dual degree Master of Science is based on the primary program/year or the student. (Request for exceptions can be addressed with program director.)

MWU Primary Program	Eligible years
Doctor of Osteopathic Medicine (DO)	Newly admitted or current 1st year student
Dental Medicine	Newly admitted or current 1st year student
Optometry	Newly admitted or current 1st year student
Veterinary Medicine	Newly admitted or current 1st year or 2nd year student
All other programs	Must apply first to the Post-Graduate Certificate. Please use that program dropdown for more information.

To be considered for admission to the M.S. in Precision Medicine degree program, applicants must submit the following documented evidence:

1. Acceptance to a Midwestern University primary degree program.
2. A minimum cumulative GPA of 2.75.
3. Official transcripts of all undergraduate coursework as well as graduate coursework if any was completed.
4. A completed Midwestern University application for the Precision Medicine Program.
5. For current Midwestern University students whose primary degree program has already started, a letter of support must be provided from the Dean for their primary degree. This letter is automatically requested by the online application system.
6. Passage of the Midwestern University criminal background check.

## Application Process and Deadlines

To be considered for admission to the M.S. in Precision Medicine degree program, applicants must submit their applications online through the Midwestern University direct application process. The M.S. in Precision Medicine degree program uses a rolling admission process in which completed applications are reviewed and decisions are made at regular intervals during the admissions cycle. Admission to the Program is considered on a competitive basis for applicants

submitting completed applications. Multiple criteria are used to select the most qualified candidates, including selection of those students the Admissions Committee determines would benefit the most from the Program based on their planned programs of study and professional goals.

Due to the nature of the Precision Medicine curriculum, students with prior graduate or undergraduate courses in Biochemistry, Molecular Biology, Genetics/Genomics, or Computer Science may receive preference for admission to the Program.

Selection decisions for the Program are determined by the College of Graduate Studies Precision Medicine Admissions Committee, which is comprised of faculty members and the Precision Medicine Program Director, with the approval of the Dean of the College of Graduate Studies. To maximize their competitiveness within this rolling admission process, candidates are advised to submit their completed applications early in the admission cycle. The deadline for applications is April 15 or the first business day thereafter. The Program begins in the Summer Quarter.

To submit application: [https://apply.midwestern.edu/portal/mwu\\_app](https://apply.midwestern.edu/portal/mwu_app)

## Selection Process

After receiving completed application packets, the Northwestern University Office of Admissions verifies the information provided to determine whether all admissions requirements have been completed satisfactorily or will be completed prior to potential matriculation, and to verify the cumulative GPAs for all completed courses. Applicants are notified either electronically (i.e., through their admissions portal or by e-mail) or by letter of admissions decisions.

Please note that applicants may track the receipt of their application materials and the status of their files on the University's website using instructions for accessing account information sent by the Office of Admissions after receipt of their applications.

Applicants are responsible for notifying the Office of Admissions of any changes in their telephone number, mailing address, or e-mail address. All requests for application withdrawals must be made in writing to the Office of Admissions:

Northern University Office of Admissions  
19555 N. 59th Avenue  
Glendale, AZ 85308  
admissaz@midwestern.edu  
888/247-9277 or 623/572-3215.

Northern University Office of Admissions  
555 31st Street  
Downers Grove, IL 60515  
admissil@midwestern.edu  
630/515-6171 or 800/458- 6253.

## Satisfactory Academic Progress

Students must pass all required M.S. courses with a grade of "C" or higher and maintain a cumulative GPA of 2.50 or higher in the M.S. program. Regardless of satisfactory academic progress in the M.S. program, the CGS Student Promotion and Graduation Committee may determine that a dual degree student who experiences academic difficulty in the primary degree must take a leave from the M.S. program until satisfactory academic progress in the primary program is achieved. Separate criteria for achieving satisfactory academic progress in the primary degree program are listed in the catalog under the respective degree program.

## Advanced Placement

The M.S. in Precision Medicine Program allows the transfer of up to six quarter-credits (applicable only to core program courses) from recent (within the last five years) equivalent graduate-level coursework completed at other institutions prior to matriculation at Midwestern University. Generally, transfer credits would only be given to students who satisfactorily completed coursework with a minimum of a B grade from an accredited graduate degree program. Prior to matriculation, students must submit a letter of request and relevant course materials, including syllabi, to the Program Director. The Program Director will consult with the appropriate course director to evaluate the submitted course materials and determine whether the course is an appropriate substitute for one of the core Precision Medicine Program courses. If the request for transfer credits is denied, students may appeal this decision to the College of Graduate Studies Dean. If a course is accepted for credit, the equivalent Midwestern University course and the Advanced Placement notation will be recorded on the transcript along with the name of the institution at which the credit was earned. Any earned letter grade will not be included on the transcript or used in the GPA calculation.

## Transferring Between Program Tracks

Students wishing to transfer between the Master of Science and Post-Graduate Certificate, or vice versa, must request the approval of the Program Director. These requests are granted at the discretion of the Program Director based on the circumstances and needs of individual students.

Students in primary programs that do not allow their students to initially apply to the M.S. due to the primary program structure may be eligible to transfer from the Post-Graduate Certificate to the M.S. at a later time. Interested students should contact the Program Director to discuss this option.

# Technical Standards, Precision Medicine

## Technical Standards

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the College.

Candidates must be able to perform the following abilities and skills:

1. **Observation:** The candidate must be able to accurately make observations at a distance and close at hand, including those on a computer screen or electronic device. Observation necessitates the functional use of vision and sense of touch and is enhanced by the functional use of all of the other senses.
2. **Communication:** The candidate must be able to communicate in English, proficiently and sensitively, in verbal and written form, and be able to perceive nonverbal communication.
3. **Motor:** Candidates must be able to coordinate both gross and fine motor movements, maintain equilibrium and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control, and eye-to-hand coordination to perform profession-specific skills and tasks.
4. **Intellectual, Conceptual, Integrative and Quantitative Abilities:** The candidate must be able to problem solve, measure, calculate, reason, analyze, record, and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
5. **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of the candidate's intellectual abilities, the exercise of good judgment, the consistent, prompt completion of all responsibilities, and the development of mature, sensitive, and effective relationships. Candidate must be able to tolerate physically, mentally, and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of

uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn are all personal qualities required during the educational process.

Candidates are required to verify that the candidate understands and is able to meet these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet the Technical Standards with accommodation, must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

## Graduation Requirements

To qualify for the M.S. in Precision Medicine degree, students must:

1. Satisfactorily complete all courses with a minimum cumulative grade point average of 2.5.
2. Satisfactorily complete the required minimum number of 46 credit hours in the curriculum (including documented dual degree credits).
3. Receive a favorable recommendation for Master's degree conferral from the CGS Student Promotion and Graduation Committee.
4. Receive a favorable recommendation for Master's degree conferral from the University Faculty Senate.
5. Settle all financial accounts with the University.
6. Complete all graduation clearance requirements as instructed by the Office of the Registrar.

### Timeframe for Completion of Curriculum

The curriculum can be completed in as little as two years. It is expected that most students will complete their dual degree M.S. in Precision Medicine within the timeframe of their primary degree program, which is typically 3 to 4 years. Students may exceed this timeframe, if necessary, but must satisfactorily complete the full curriculum within six years of the starting date of their Precision Medicine Program in order to be awarded the degree.

### Graduation

M.S. degrees will be conferred upon candidates who have completed all academic requirements, satisfied all financial obligations, and completed all graduation requirements for the degree. Degrees will be awarded at the commencement for the College of Graduate Studies if all requirements have been met at that time.

## Master of Science in Precision Medicine Curriculum

### Degree Type

Master of Science (M.S.)

The Midwestern University College of Graduate Studies M.S. in Precision Medicine degree program reserves the right to alter its curriculum however and whenever it deems appropriate. This Catalog does not establish a contractual relationship between Midwestern University and students. Total quarter-credit hours required for Program completion is 46.



A typical curriculum, course credits, and course sequencing is shown below. Not all electives are offered every quarter. PMMS 501-503 are typically completed in the first summer quarter of the program and PMMS 601-605 are typically completed in the second Summer quarter. The remaining courses will primarily be completed in the fall through spring quarters.

## Year 1

### Summer Quarter

Course Code	Title	Credits
PMMS 501	Introduction to Genetics and Genomics	2.0
PMMS 502	Genomics of Rare and Complex Diseases	3.0
PMMS 503	Introduction to Bioinformatics, Statistics, and Data Interpretation	2.0
<b>Sub-Total Credits</b>		<b>7.00</b>

### Fall Quarter

Course Code	Title	Credits
	Precision Medicine Elective	1
<b>Sub-Total Credits</b>		<b>1.00</b>

### Winter Quarter

Course Code	Title	Credits
	Precision Medicine Elective	1
<b>Sub-Total Credits</b>		<b>1.00</b>

### Spring Quarter

Course Code	Title	Credits
PMMS 504	'Omics and Biomarkers	3.0
<b>Sub-Total Credits</b>		<b>3.00</b>

## Year 2

### Summer Quarter

Course Code	Title	Credits
PMMS 601	The Application of Precision Medicine to Cancer	3.0
PMMS 602	Pharmacogenomics	2.0
PMMS 603	Microbial Genetics, the Microbiome, and Infectious Diseases	3.0
PMMS 604	Ethical, Legal, and Social Issues of Precision Medicine	1.0
PMMS 605	Counseling and Communication Skills for Precision Medicine	1.0
	Precision Medicine Elective	1
<b>Sub-Total Credits</b>		<b>11.00</b>

### Fall Quarter

Course Code	Title	Credits
PMMS 606	Introduction to Personal Genomic Analysis, Genomics Laboratory, Part 1	2.0
<b>Sub-Total Credits</b>		<b>2.00</b>

### Winter and Spring Quarters

Course Code	Title	Credits
PMMS 607	Capstone Project, Genomics Laboratory Part 2	2.0
<b>Sub-Total Credits</b>		<b>2.00</b>

## Winter or Spring Quarter

Course Code	Title	Credits
	Precision Medicine Elective	1
Sub-Total Credits		1.00

**Electives - Students complete four elective courses. Not all electives may be offered in every academic quarter.**

Course Code	Title	Credits
PMMS 801	Application of Precision Medicine to Inflammatory and Autoimmune Disease	1.0
PMMS 802	The Application of Precision Medicine to Neurological Diseases	1.0
PMMS 803	Application of Precision Medicine to Cardiovascular Diseases	1.0
PMMS 804	Advanced Topics in Pharmacogenomics	1.0
PMMS 805	A One Health Approach to Genomics and Precision Medicine	1.0
PMMS 806	Connecting Nutrigenomics, Epigenomics, and Metabolism to Precision Medicine	1.0
PMMS 807	Genetic Technologies for the Treatment of Disease	1.0
PMMS 808	Precision Medicine Journal Club	1.0
PMMS 809	Understanding and Interpreting Direct-to-Consumer Genetic Testing	1.0
PMMS 810	Independent Study	0.5-6
Total Credits		46

## Dual Credit Courses from Professional Programs

**(up to 18 dual credits allowed)**

Students enrolled in a dual degree program at Midwestern University may be awarded up to 18 quarter-credit hours towards the M.S. degree for approved courses completed satisfactorily in their professional primary degree programs. These courses are preapproved by the Precision Medicine Program Director with input from respective professional program advisors, and courses are identified in the University Catalog as eligible for dual credit in the M.S. in Precision Medicine Program. The following are examples of courses from primary degree programs (e.g., Doctor of Osteopathic Medicine) that are eligible for full or partial dual credit for the purposes of the dual degree M.S. in Precision Medicine. A credit amount followed by \* indicates the amount of partial dual credit allowed for the course. The awarding of only partial credit is due to the presence of some content within the course that is not closely related to Precision Medicine topics, or which substantially duplicates Precision Medicine coursework.

### Chicago College of Osteopathic Medicine

BIOCD 1501 Biochemistry I  
5.0 credits

BIOCD 1502 Biochemistry II  
3.0 credits\*

PHYSD 1501 Physiology I  
4.0 credits

PHYSD 1502 Physiology II  
5.5 credits

MICRD 1652 Infectious Disease, Etiologic Agents, and the Immune Response I  
8.0 credits

MICRD 1653 Infectious Disease, Etiologic Agents, and the Immune Response II  
5.0 credits

PATHD 1601 Pathology I  
5.0 credits

PATHD 1602 Pathology II  
6.0 credits

PATHD 1603 Pathology III  
4.5 credits

PHARD 1670 Pharmacology I  
5.0 credits

PHARD 1671 Pharmacology II  
3.0 credits

PHARD 1672 Pharmacology III  
2.0 credits

## Arizona College of Osteopathic Medicine

BIOCG 1511 Biochemistry I  
5.0 credits\*

BIOCG 1522 Biochemistry II  
2.0 credits\*

PHYSG 1521 Physiology I  
5.0 credits

PHYSG 1532 Physiology II  
4.5 credits

MICRG 1531 Immunology  
2.5 credits

MICRG 1615 Microbiology I  
4.0 credits

MICRG 1625 Microbiology II  
4.0 credits

PATHG 1611 Pathology I  
5.0 credits

PATHG 1622 Pathology II  
5.0 credits

PATHG 1633 Pathology III  
5.0 credits

PHARG 1610 Pharmacology I  
3.5 credits

PHARG 1620 Pharmacology II  
3.5 credits

PHARG 1630 Pharmacology III  
3.0 credits

## College of Veterinary Medicine

MICRG 1522 Veterinary Immunology  
3.0 credits

MICRG 1671 Veterinary Microbiology I  
4.0 credits

MICRG 1672 Veterinary Microbiology II  
3.0 credits

MICRG 1673 Veterinary Parasitology  
3.0 credits

PHARG 1560 Veterinary Pharmacology I  
3.0 credits

PHARG 1662 Veterinary Pharmacology II  
3.0 credits\*

PHYSG 1512 Veterinary Physiology I  
3.0 credits

PHYSG 1522 Veterinary Physiology II  
2.0 credits

PHYSG 1533 Veterinary Physiology III  
4.0 credits

VMEDG 1641 Veterinary Pathology I  
5.0 credits

VMEDG 1642 Veterinary Pathology II  
5.0 credits

VMEDG 1645 Clinical Pathology  
4.0 credits

## Arizona College of Dental Medicine

BASIG 1501 Integrated Basic Science Sequence I  
4.0 credits

BASIG 1502 Integrated Basic Science Sequence II  
3.0 credit\*

BASIG 1503 Integrated Basic Science Sequence III  
4.5 credits

BASIG 1505 Integrated Basic Science Sequence V  
4.5 credits

BASIG 1506 Integrated Basic Science Sequence VI  
2.5 credits\*

PHARG 1601 General Pharmacology I  
2.0 credits

PHARG 1621 General Pharmacology II  
3.0 credits

## Illinois College of Dental Medicine

IBSSD 1520 Molecular, Cellular and Tissue Structure and Function  
5.0 credits

IBSSD 1522 Blood, Lymphoid Tissue and Immunology  
4.0 credits

IBSSD 1530 Essential of Infectious Disease, Integument and Lymphoreticular Systems  
3.0 credits

IBSSD 1534 Cardiovascular and Respiratory Systems  
3.0 credits\*

IBSSD 1535 Gastrointestinal System  
2.0 credits\*

PHARD 1620 General Pharmacology I  
2.0 credits

PHARD 1630 General Pharmacology II  
3.0 credits

## Arizona College of Optometry

BASIG 1510 Integrated Basic Science Sequence I  
4.0 credits

BASIG 1511 Integrated Basic Science Sequence II  
3.0 credits\*

BASIG 1512 Integrated Basic Science Sequence III  
4.5 credits

BASIG 1514 Integrated Basic Science Sequence V  
4.5 credits

BASIG 1515 Integrated Basic Science Sequence VI  
2.5 credits\*

PHARG 1602 General Pharmacology I  
2.0 credits

PHARC 1623 General Pharmacology II  
3.0 credits

## Illinois College of Optometry

PATHD 1501 Pathology/Histology I  
2.0 credits\*

PHYSD 1530 Human Physiology I  
3.0 credits

MICRD 1590 Immunology  
2.0 credits

PHYSD 1531 Human Physiology II  
3.0 credits

BIOCD 1590 Biochemistry for Optometry  
1.5 credits

MICRD 1582 Microbiology  
1.5 credits

PATHD 1502 Pathology/Histology II  
2.5 credits

PHARD 1641 Pharmacology I  
3.0 credits

PHARD 1642 Pharmacology II  
2.0 credits

## Illinois College of Pharmacy

BIOCD 1556 Biochemistry I  
2.5 credits

PHYSD 1524 Human Physiology I  
3.5 credits

BIOCD 1557 Biochemistry II  
3.5 credits

MICRD 1521 Introduction to Immunology and Biologics  
2.0 credits

MICRD 1620 Infectious Diseases and Their Etiological Agents  
3.0 credits

PHYSD 1525 Human Physiology II  
3.5 credits

PHIDD 1501 Integrated Sequence I  
4.5 credits

PHIDD 1502 Integrated Sequence II  
4.5 credits

PHIDD 1503 Integrated Sequence III  
4.5 credits

## Arizona College of Pharmacy

BIOCG 1551 Biochemistry  
3.0 credits

PHYSG 1501 Human Physiology I  
3.0 credits

MICRG 1553 Immunology  
3.0 credits

PHYSG 1502 Human Physiology II  
3.0 credits

BIOCG 1552 Molecular Biology and Human Genetics  
2.0 credits

MICRG 1513 Microbiology  
3.0 credits

PHIDG 1609 Integrated Sequence 9  
3.5 credits

PHIDG 1608 Integrated Sequence 8  
6.0 credits

PPRAG 1665 Ethical Decision Making  
2.0 credits

PPRAG 1672 Research Methods  
3.0 credits

## Illinois Clinical Psychology Program

PSYCD 1504 Research Methods and Design  
3.0 credits

PSYCD 1510 Statistics I  
3.0 credits

PSYCD 1608 Research Methods II  
3.0 credits

PSYCD 1550 Biological Bases of Behavior  
3.0 credits

PSYCD 1511 Statistics II  
3.0 credits

PSYCD 1640 Introduction to Neuropsychology  
3.0 credits

PSYCD 1670 Psychopathology II: Depressive, Bipolar and Schizophrenia Spectrum Disorders  
3.0 credits

## Arizona Clinical Psychology Program

PSYCG 1510 Statistics  
3.0 credits

PSYCG 1514 Research Methods and Design  
3.0 credits

PSYCG 1550 Biological Bases of Behavior  
3.0 credits

PSYCG 1570 Psychopathology: Child and Adolescent  
3.0 credits

PSYCG 1640 Introduction to Neuropsychology  
3.0 credits

PSYCG 1650 Psychopharmacology  
3.0 credits

PSYCG 1711 Advanced Statistics  
3.0 credits

## Illinois Physician Assistant Program

ANATD 0500 Human Gross Anatomy and Embryology  
5.0 credits

BIOCD 0551 Human Biochemistry  
3.0 credits

BIOCD 0552 Clinical Biochemistry and Nutrition  
3.0 credits

ANATD 0565 Human Neurosciences  
3.0 credits

PHARD 0584 Pharmacology I  
3.0 credits

PHYSD 0510 Human Physiology I  
3.5 credits

MICRD 0576 Immunology  
2.0 credits

PHARD 0585 Pharmacology II  
3.0 credits

PHYSD 0511 Human Physiology II  
3.5 credits

BIOCD 0581 Human Genetics  
1.0 credit

MICRD 0582 Infectious Diseases  
4.0 credits

PHARD 0586 Pharmacology III  
3.0 credits

## Arizona Physician Assistant Program

ANATG 1553 Human Anatomy and Embryology (with Gross Anatomy Lab)  
7.0 credits



BIOCG 551 Human Biochemistry  
4.0 credits

PASSG 568 Medical Ethics, Epidemiology & Evidence-Based Medicine  
2.0 credits

PHARG 566 Pharmacology and Pharmacotherapeutics I  
3.0 credits

PHYSG 1575 Human Physiology I  
4.0 credits

MICRG 570 Microbiology  
3.0 credits

PHARG 570 Pharmacology and Pharmacotherapeutics II  
3.0 credits

PHYSG 1586 Human Physiology II  
4.0 credits

PHARG 580 Pharmacology and Pharmacotherapeutics III  
3.0 credits

## Illinois Physical Therapy Program

PTHEd 1520 Human Physiology  
4.0 credits

PTHEd 1515 Research Design and Methodology  
3.0 credits

PTHEd 1532 Human Neuroscience  
3.5 credits

BIOCD 1553 Cell and Tissue Structure and Function  
2.0 credits

PHYSD 1637 Exercise Physiology  
3.0 credits

PTHEd 1602 Essentials of Pharmacology for Physical Therapists  
2.0 credits

PTHEd 1633 Applied Neuroscience  
3.0 credits

## Arizona Physical Therapy Program (Hybrid)

PTHEG 1507H Human Anatomy and Embryology  
5.0 credits

PTHEG 1508H Exercise Physiology  
3.0 credits

PTHEG 1519H Pathophysiology I  
3.0 credits

PTHEG 1512H Pharmacology  
2.0 credits

PTHEG 1520H Pathophysiology II  
3.0 credits

PTHEG 1605H Health Promotion and Exercise Prescription  
3.0 credits

PTHEG 1618H Clinical Conditions and Differential Screening  
2.0 credits

## Arizona Physical Therapy Program (Residential)

PTHEG 1507R Human Anatomy and Embryology  
5.0 credits

PTHEG 1508R Exercise Physiology  
3.0 credits

PTHEG 1519R Pathophysiology I  
3.0 credits

PTHEG 1512R Pharmacology  
2.0 credits

PTHEG 1520R Pathophysiology II  
3.0 credits

PTHEG 1605R Health Promotion and Exercise Prescription  
3.0 credits

PTHEG 1618R Clinical Conditions and Differential Screening  
2.0 credits

## Precision Medicine Program Calendar

### Summer 2025

Event	Class	Date
<b>Memorial Day Observed</b>	<b>*No Classes*</b>	<b>May 26, 2025</b>
Classes Begin	PR-II, PRC-II	May 27, 2025
Last Day to Add/Drop Classes	PR-II, PRC-II	May 30, 2025
Classes Begin	PR-I, PRC-I	June 2, 2025
Last Day to Add/Drop Classes	PR-I, PRC-I	June 6, 2025
<b>Juneteenth (Observed)</b>	<b>*No Classes*</b>	<b>June 19, 2025</b>
<b>Independence Day Observed</b>	<b>*No Classes*</b>	<b>July 4, 2025</b>
Last Day of Classes	PR-I, PR-II, PRC-1, PRC-II	August 3, 2025

### Fall 2025

Event	Class	Date
Classes Begin	PR-1, PR-II, PRC-1, PRC-II	August 11, 2025

Event	Class	Date
Last Day to Add/Drop Classes	PR-1, PR-II, PRC-1, PRC-II	August 15, 2025
<b>Labor Day</b>		<b>September 1, 2025</b>
Last Day of Classes	PR-1, PR-II, PRC-1, PRC-II	October 26, 2025
<b>Thanksgiving Day Observed</b>	<b>*No Classes*</b>	<b>November 27 – 28, 2025</b>

## Winter 2025

Event	Class	Date
Classes Begin	PR-1, PR-II, PRC-1, PRC-II	November 3, 2025
Last Day to Add/Drop Classes	PR-1, PR-II, PRC-1, PRC-II	November 7, 2025
<b>Martin Luther King, Jr. Day</b>	<b>*No Classes*</b>	<b>January 19, 2026</b>
Last Day of Classes	PR-1, PR-II, PRC-1, PRC-II	February 15, 2026

## Spring 2026

Event	Class	Date
Classes Begin	PR-1, PR-II, PRC-1, PRC-II	March 2, 2026
Last Day to Add/Drop Classes	PR-1, PR-II, PRC-1, PRC-II	March 6, 2026
Last Day of Classes	PR-1, PR-II, PRC-1, PRC-II	May 10, 2026
<b>Memorial Day Observed</b>	<b>*No Classes*</b>	<b>May 25, 2026</b>
<b>Commencement CGS</b>		<b>June 3, 2026 12:00 p.m.</b>

## LEGEND

PR-1 = MS 1<sup>st</sup> Year, PR-II = MS 2<sup>nd</sup> Year, PRC-1 = PG Cert 1<sup>st</sup> Year, PRC-II = PG Cert 2<sup>nd</sup> Year

Last Revision: 12/05/2024

# Faculty

**Garilyn Jentarra, Ph.D., Program Director**

Arizona State University  
Professor

**Kolla Kristjansdottir, Ph.D., Associate Program Director**

Duke University  
Duke University Medical Center  
Associate Professor

**Hilal Arnouk, M.D., Ph.D.**

The State University of New York at Buffalo  
Associate Professor

**Nancy Bae, Ph.D.**

University of Maryland at College Park/National  
Institutes of Health  
Associate Professor

**Bryan Bjork, Ph.D.**

University of Iowa  
Associate Professor

**Thomas Bodenstein, Ph.D.**

University of Alabama at Birmingham  
Associate Professor

**Kelly Bontempo, M.S., C.G.C.**

Northwestern University  
Adjunct Faculty

**Lori M. Buhlman, Ph.D.**

University of Arizona  
College of Graduate Interdisciplinary Programs  
Professor

**Kimberly Bussey, Ph.D.**

Oregon Health Sciences University  
Associate Professor

**Frederick Collison, O.D., FAAO**

Illinois College of Optometry  
Associate Professor

**Ying He, Ph.D.**

University of Illinois  
Assistant Professor

**Jose Hernandez, Ph.D.**

University of Zaragoza, Spain  
Professor and Chair

**Thu Huynh, Ph.D.**

New York University  
Assistant Professor

**Bucky Jones, Ph.D.**

The Ohio State University  
Professor

**Sam Katzif, Ph.D.**

Georgia State University  
Associate Professor

**Lisa Kronstad, Ph.D.**

University of California, Berkeley  
Associate Professor

**Kathryn Leyva, Ph.D.**

Northern Arizona University  
Professor and Chair

**Rafael Mejia-Alvarez, M.D., Ph.D.**

Universidad Nacional Autónoma de México School  
of Medicine, Mexico  
Baylor College of Medicine  
Professor

**Ann Revill, Ph.D.**

University of Arizona  
Associate Professor

**Megan Roy-Puckelwartz, Ph.D.**

University of Chicago  
Adjunct Faculty

**Mark Swanson, Ph.D.**

Stony Brook University  
Associate Professor

**Michelle Swanson-Mungerson, Ph.D.**

Loyola University Chicago, Stritch School of  
Medicine  
Professor

**Julie A. Swartzendruber, Ph.D.**

Northwestern University  
Associate Professor

**Martin Szul, Ph.D.**

University of Tennessee  
Lab Manager and Instructor

**Rosa Ventrella, Ph.D.**

Northwestern University  
Assistant Professor

**Michael V. Volin, Ph.D.**

The University of Chicago  
Professor and Chair

**Brian P. Wellensiek, Ph.D.**

University of Arizona College of Medicine  
Associate Professor

CGS General Faculty  
Administrative Faculty

**Yir Gloria Yueh, Ph.D.**

University of Connecticut  
Vice President and Chief Academic Officer  
Colleges of Osteopathic Medicine, Graduate  
Studies and Podiatric Medicine  
Professor

**Michael J. Fay, Ph.D.**

University of Mississippi  
Dean, College of Graduate Studies  
Professor

**Sandra Inouye, Ph.D.**

Northwestern University  
Associate Dean of Academic Affairs, College of  
Graduate Studies  
Director of Anatomical Laboratories  
Professor

## Master Of Science In Precision Medicine Courses

### PMMS 501: Introduction to Genetics and Genomics

This introductory course presents basic aspects of genetics, genomics, and molecular biology, including DNA variation and mutation. It also covers a range of common analytical techniques for nucleic acids and proteins. Important elements of chromosomal structure are explored as well as concepts related to genetic testing and gene therapy. Upon successful completion of this course, students will have the foundational knowledge necessary for understanding genomic and other 'omics concepts relevant to completing the remaining required core and elective courses.

**Credits** 2.0

### PMMS 502: Genomics of Rare and Complex Diseases

This course explores the genetic underpinnings of both monogenic and complex diseases. Dominant versus recessive autosomal diseases as well as X-linked, mitochondrial, and cytogenetic diseases are covered. Evolutionary and population genetics are discussed, and methods for studying complex diseases are introduced. Students completing this course will demonstrate a working knowledge of the genetics of monogenic and complex diseases, and an understanding of the relevant analytical methods.

**Credits** 3.0

**Prerequisites**

[PMMS 501: Introduction to Genetics and Genomics](#)

### PMMS 503: Introduction to Bioinformatics, Statistics, and Data Interpretation

Obtaining patient 'omics data is a first step in precision medicine. Subsequent computational and analytical methods are required to decipher these data. This course focuses on the analysis of 'omics data sets using bioinformatics and statistical tools. Students are introduced to the use of open access software to analyze provided data sets and learn to interpret the results. The objective of this course is to provide students with the basic skills needed to work with and derive valuable information from complex data sets produced by 'omics analyses.

**Credits** 2.0

**Prerequisites**

[PMMS 501: Introduction to Genetics and Genomics](#)

[PMMS 502: Genomics of Rare and Complex Diseases](#)

## **PMMS 504: 'Omics and Biomarkers**

This course builds on the use of genomics in medicine by extending knowledge into areas that complement genomics, such as transcriptomics, proteomics and metabolomics. Students explore how these 'omics fields can be used in biomarker discovery and health management. Upon successful completion of this course, students will be able to explain broadly what is meant by 'omics analyses, describe the technologies involved, and display a specific comprehension of the source and uses of the various biomarkers in medicine.

**Credits** 3.0

### **Prerequisites**

[PMMS 501: Introduction to Genetics and Genomics](#)

[PMMS 502: Genomics of Rare and Complex Diseases](#)

## **PMMS 601: The Application of Precision Medicine to Cancer**

This course explores genetic and other molecular mechanisms involved in cancer development and progression, including assessment of the genomes and transcriptomes of tumor cells as well as the patient's normal cells. Students examine how this knowledge translates into precision technologies for cancer screening, as well as diagnosing and treating cancer patients. Upon successful completion of this course, students will demonstrate an understanding of the genetic origins and development of cancer, the methods of assessing what is occurring in cancerous cells, and a basic understanding of how knowledge gained from analyses can be used to benefit patients.

**Credits** 3.0

### **Prerequisites**

[PMMS 501: Introduction to Genetics and Genomics](#)

[PMMS 502: Genomics of Rare and Complex Diseases](#)

## **PMMS 602: Pharmacogenomics**

This course presents the ways in which genomic information can be used to ensure that patients receive the greatest possible benefit from therapeutics while mitigating risk of adverse events. Students will explore how genetic variation may alter drug metabolism, disposition, and action, as well as discuss how doses may need to be tailored, or drugs altered to account for certain polymorphic differences. Students successfully completing this course will demonstrate a working knowledge of the interaction between a patient's genetic structure and the safety and efficacy of therapeutic drugs.

**Credits** 2.0

### **Prerequisites**

[PMMS 501: Introduction to Genetics and Genomics](#)

[PMMS 502: Genomics of Rare and Complex Diseases](#)

## **PMMS 603: Microbial Genetics, the Microbiome, and Infectious Diseases**

This course provides information on basic features of microbial genetics that are relevant to health. It covers what is known about the effects of an individual's microbiome on their health, the consequences of dysbiosis, and the effects of the microbiome on patient treatment, including metabolism of therapeutics. Methods for studying and assessing an individual's microbiome, or microbiome features of various subject groups are discussed. This course also explores the role of 'omics information from both patients and infecting microbes in the identification, targeted treatment, and control of infectious diseases in individuals and on a population basis. After successful completion of this course, students will be able to demonstrate a basic knowledge of health-relevant microbial genetics, will be able to describe the role of the microbiome in health, and will comprehend the usefulness of 'omics technologies in the management of infectious diseases.

**Credits** 3.0

### **Prerequisites**

[PMMS 501: Introduction to Genetics and Genomics](#)

[PMMS 502: Genomics of Rare and Complex Diseases](#)

## **PMMS 604: Ethical, Legal, and Social Issues of Precision Medicine**

This course examines the ethical and legal issues surrounding the use of precision medicine technology, and particularly the potential misuse of genomic information, privacy, ownership of genetic information, open versus informed consent, and accessibility. It also addresses social issues that have developed or may develop in the future as a result of these types of genomic knowledge. Upon successful completion of this course, students will be able to describe existing and potential future ethical, legal, and social issues surrounding the use of precision medicine technologies.

**Credits** 1.0

### **Prerequisites**

[PMMS 501: Introduction to Genetics and Genomics](#)

[PMMS 502: Genomics of Rare and Complex Diseases](#)

## **PMMS 605: Counseling and Communication Skills for Precision Medicine**

This course considers how to effectively communicate genomic or other 'omics information to patients. Students learn how to tailor complex genomic discussions to a lay audience, become aware of how the information provided may be viewed by patients or their families, and consider how to counsel them about this information to enable patient-centric, optimal health decisions. Upon successful completion of this course, students will demonstrate familiarity with both the sensitive issues that arise when using precision medicine technologies and with methods that can be used for effectively communicating that information to patients and their families.

**Credits** 1.0

### **Prerequisites**

[PMMS 501: Introduction to Genetics and Genomics](#)

[PMMS 502: Genomics of Rare and Complex Diseases](#)

## **PMMS 606: Introduction to Personal Genomic Analysis, Genomics Laboratory, Part 1**

This course introduces students to the analytical methods needed for a genetic evaluation of an anonymized human genome provided by the instructors. This genome analysis knowledge is ultimately used to complete a Capstone Project ([PMMS 607](#)). The objective of this course is for students to become familiar with the format in which a sequenced genome is provided and demonstrate the ability to use publicly available software to manipulate that genome sequence and search for the presence of health-related genetic variants.

**Credits** 2.0

### **Prerequisites**

[PMMS 501: Introduction to Genetics and Genomics](#)

[PMMS 502: Genomics of Rare and Complex Diseases](#)

[PMMS 503: Introduction to Bioinformatics, Statistics, and Data Interpretation](#)

## **PMMS 607: Capstone Project, Genomics Laboratory Part 2**

In this course, students use the knowledge and skills acquired in previous required courses, particularly in [PMMS 606](#), to make a health-focused assessment of an anonymized human genome provided to them by the instructors. Students concentrate on identifying gene variants associated directly with genetic diseases or with increased risk for diseases, and evaluating the consequences of those gene variants. This course culminates in a written report of the findings and a formal presentation. The objective of this course is for students to demonstrate competence in basic genome analysis and assessment of genetic risk alleles.

**Credits** 2.0

### **Prerequisites**

[PMMS 606: Introduction to Personal Genomic Analysis, Genomics Laboratory, Part 1](#)

## **PMMS 801: Application of Precision Medicine to Inflammatory and Autoimmune Disease**

This course explores genetic/genomic influences on the development of autoimmune diseases and other diseases with inflammatory components. Students discuss the use of biomarker studies for both increasing the accuracy of diagnosis and for identifying proteins and metabolites that may provide insight into the causes of these disorders. Students successfully completing this course will be able to demonstrate an understanding of the genetic underpinnings of inflammatory and autoimmune diseases and be able to explain how biomarker studies can be used to improve patient outcomes.

**Credits** 1.0

### **Prerequisites**

[PMMS 501: Introduction to Genetics and Genomics](#)

[PMMS 502: Genomics of Rare and Complex Diseases](#)

### **Notes**

Elective Courses: 4.0 quarter-credit hours required. Each elective course is 1.0 credit. Not all electives are offered every quarter.



## **PMMS 802: The Application of Precision Medicine to Neurological Diseases**

This course examines the genetic underpinnings of common neurological disorders, neurogenetic disorders, and neurodegenerative diseases. Students study how genomics can be used to identify genes that are directly involved in neurological disorders or that confer significant risk of developing a disorder. Students discuss how that information is used for diagnosis, prognosis, and development of novel therapeutics. Upon successful completion of the course, students will be able to explain the role that gene variants and mutations play in the development of neurological diseases and describe how that information can be used to support effective patient treatment and care.

**Credits** 1.0

### **Prerequisites**

[PMMS 501: Introduction to Genetics and Genomics](#)

[PMMS 502: Genomics of Rare and Complex Diseases](#)

### **Notes**

Elective Courses: 4.0 quarter-credit hours required. Each elective course is 1.0 credit. Not all electives are offered every quarter.

## **PMMS 803: Application of Precision Medicine to Cardiovascular Diseases**

This course covers polymorphisms related to cardiovascular disease, including genes that contribute to the development of heart disease, atherosclerosis, and stroke. Students review how these genetic risk factors were identified and linked to cardiovascular disease. They also learn about the interplay of lifestyle factors with genetic risk factors in the development of cardiovascular disease. Students completing this course will demonstrate an understanding of gene variants involved in increasing the risk of cardiovascular disease and be able to describe the role that lifestyle choices play in development of cardiovascular disease.

**Credits** 1.0

### **Prerequisites**

[PMMS 501: Introduction to Genetics and Genomics](#)

[PMMS 502: Genomics of Rare and Complex Diseases](#)

### **Notes**

Elective Courses: 4.0 quarter-credit hours required. Each elective course is 1.0 credit. Not all electives are offered every quarter.

## **PMMS 804: Advanced Topics in Pharmacogenomics**

This advanced topics course provides an in-depth knowledge of the clinical applications of pharmacogenomics. Students deepen their understanding of how genetic differences impact drug therapy. Students view recorded lectures presented by experts on disease-specific topics and also read assigned papers relevant to those topics. Assessment is based on completion of worksheets. Upon successful completion of this course, students will demonstrate a broad understanding of the current and potential clinical applications of pharmacogenomics.

**Credits** 1.0

### **Prerequisites**

[PMMS 501: Introduction to Genetics and Genomics](#)

[PMMS 502: Genomics of Rare and Complex Diseases](#)

[PMMS 602: Pharmacogenomics](#)

### **Notes**

Elective Courses: 4.0 quarter-credit hours required. Each elective course is 1.0 credit. Not all electives are offered every quarter.

## **PMMS 805: A One Health Approach to Genomics and Precision Medicine**

This course focuses on how knowledge of the genomics, health, and environment of one species can be used to effectively develop targeted treatments for other species. It addresses the global interrelatedness of the health of all species and how One Health-based studies can help to develop solutions for human and animal health issues and inform public policy. Students successfully completing this course will be able to describe the uses and practicality of the One Health approach to supporting animal and human health, as well as the health of the environment.

**Credits** 1.0

### **Prerequisites**

[PMMS 501: Introduction to Genetics and Genomics](#)

[PMMS 502: Genomics of Rare and Complex Diseases](#)

### **Notes**

Elective Courses: 4.0 quarter-credit hours required. Each elective course is 1.0 credit. Not all electives are offered every quarter.

## **PMMS 806: Connecting Nutrigenomics, Epigenomics, and Metabolism to Precision Medicine**

This course examines the field of nutrigenomics as well as its relationship to both metabolism and the epigenome. It covers what is known about the effects of an individual's genetic variants on their use of nutrients and how that affects their overall health. Because nutrition is linked closely to metabolism, this course also explores how genetic, dietary, and other environmental factors interact to influence the metabolic processes that occur in the body. This course will also explore how dietary and environmental influences are capable of altering or introducing epigenetic modifications, which can affect gene expression patterns. After successful completion of this course, students will be able to demonstrate a basic knowledge of nutrigenomics and its relationship to metabolic processes and epigenetic modifications.

**Credits** 1.0

### **Prerequisites**

[PMMS 501: Introduction to Genetics and Genomics](#)

[PMMS 502: Genomics of Rare and Complex Diseases](#)

### **Notes**

Elective Courses: 4.0 quarter-credit hours required. Each elective course is 1.0 credit. Not all electives are offered every quarter.

## **PMMS 807: Genetic Technologies for the Treatment of Disease**

This course dives into the mechanisms of several genetic manipulation technologies with specific emphasis on their applicability to treat several classes of human genetic disorders. Students will also be exposed to the potential health risks and ethical issues associated with these technologies. Upon successful completion of this course, students will demonstrate knowledge of these current technologies, as well as several new methods and how they can be applied to specific types of human genetic disease as well as describe the potential pitfalls and ethical quagmires surrounding their use.

**Credits** 1.0

### **Prerequisites**

[PMMS 501: Introduction to Genetics and Genomics](#)

[PMMS 502: Genomics of Rare and Complex Diseases](#)

### **Notes**

Elective Courses: 4.0 quarter-credit hours required. Each elective course is 1.0 credit. Not all electives are offered every quarter.

## **PMMS 808: Precision Medicine Journal Club**

This course engages students in surveys and in-depth evaluations of the precision medicine scientific literature. Seminal papers in the development of 'omic and precision medicine technologies, as well as recent publications, are critically reviewed. The objective of this course is to provide students with an understanding of how the various 'omics fields developed and to assist them with learning to evaluate and properly understand scientific literature.

**Credits** 1.0

### **Prerequisites**

[PMMS 501: Introduction to Genetics and Genomics](#)

[PMMS 502: Genomics of Rare and Complex Diseases](#)

### **Notes**

Elective Courses: 4.0 quarter-credit hours required. Each elective course is 1.0 credit. Not all electives are offered every quarter.

## **PMMS 809: Understanding and Interpreting Direct-to-Consumer Genetic Testing**

Direct-to-consumer genetic testing is in widespread use for both tracing ancestry and for identification of disease risk alleles. The purpose of this course is to help students understand the various types of tests available and recognize what types of information they provide. Students will learn how to assist their patients in interpreting and applying the results of risk allele testing to achieve better health outcomes. Upon successful completion of this course, students will understand the various formats in which direct-to-consumer genetic testing results are provided, will be able to describe how to appropriately evaluate the information provided, and will be able to help the patient make decisions or find resources that will help them make the best use of the genetic information they receive.

**Credits** 1.0

### **Prerequisites**

[PMMS 501: Introduction to Genetics and Genomics](#)

[PMMS 502: Genomics of Rare and Complex Diseases](#)

### **Notes**

Elective Courses: 4.0 quarter-credit hours required. Each elective course is 1.0 credit. Not all electives are offered every quarter.

## **PMMS 810: Independent Study**

This independent study course is designed to provide students the opportunity to explore topics of didactic and/or clinical interest as needed to enhance the student's learning.

**Credits** 0.5

-6

### **Prerequisites**

Permission of the instructor.

# Post-Graduate Certificate in Precision Medicine

## Mission

The Midwestern University College of Graduate Studies Post-Graduate Certificate (PGCert) in Precision Medicine Program is designed as an interdisciplinary professional certificate in applied genomic sciences that aims to prepare healthcare professional students and practicing healthcare professionals to utilize genomic information in the prediction, diagnosis, prognosis, prevention, and treatment of disease.

Upon completion, students in the PGCert in Precision Medicine Program will have the foundational knowledge needed to:

1. Comprehend genomic and other 'omic data, describe how it is created and applied, and demonstrate basic analytical methods;
2. Determine what those data mean in practical terms for a patient's physical and mental health, and;
3. Utilize their knowledge to determine how that data can best be used to meet the medical needs of individual patients or populations.

The Program both complements and expands the mission of Midwestern University to meet the educational needs of the healthcare community by preparing students for the new era of applied genomics in medicine. Stand-alone PG Cert candidates will complete their certificate independently. Dual track PGCert candidates will complete their certificate in conjunction with another Midwestern University healthcare professional program.

Students enrolled in the PGCert in Precision Medicine Program will enhance their medical knowledge, understand genetic and genomic applications, and expand their career options upon completion of the Program.

## Accreditation

Midwestern University is accredited by The Higher Learning Commission, 230 South LaSalle Street, Suite 7- 500, Chicago, IL 60604-1413.

## Degree Description

### Dual Track Post-Graduate Certificate in Precision Medicine

The PGCert in Precision Medicine can be completed as a dual track program in conjunction with another Midwestern University healthcare professional degree such as Doctor of Osteopathic Medicine, Doctor of Veterinary Medicine, Doctor of Dental Medicine, Doctor of Optometry, or Doctor of Pharmacy. Students enrolled in Podiatric Medicine, Physician Assistant, or other Midwestern University degree programs not listed above may apply for this dual track program with the approval of their Dean.

Pharmacy, Podiatry, and Veterinary students cannot apply as incoming students but are eligible to apply during the first or subsequent years of their primary program.

### Stand-Alone Post-Graduate Certificate in Precision Medicine

The stand-alone PGCert in Precision Medicine is available for individuals NOT currently admitted to, or enrolled in, another Midwestern University healthcare program. Applicants to the stand-alone PGCert must already have been awarded or will be awarded a graduate level healthcare or biomedical/biological sciences degree or a bachelor's degree (B.A. or B.S.) from an accredited college or university with completion of genetics, molecular and cellular biology, biochemistry, or similar coursework. If degree not already awarded, must be completed prior to matriculation.

# Preparation of Graduates

Graduates are prepared to directly enter their chosen healthcare profession with the background to understand and apply genetic or genomic information in the overall care of their patients. This online, 22 quarter-credit hour curriculum is taught at a graduate level and designed to complement healthcare professional programs and careers.

The coursework can be completed in as little as two years, and if dual track, is optimally completed within the timeframe of the primary program. The maximum time allowed for completion of the dual track or stand-alone certificate is six years.

The 22 quarter-credit hour PGCert in Precision Medicine Program includes required and elective coursework. Some dual track students may desire to transfer from this track to the Master of Science in Precision Medicine degree track. Interested students should contact the Precision Medicine Program Director. Additional coursework and completion of the Genomics Laboratory and Capstone Project will be required (see Master of Science in Precision Medicine Program).

# Admissions

## Eligibility

- The Post-Graduate Certificate is available as either a dual track program (when admitted to or concurrently enrolled in another Midwestern primary degree program) or as a stand-alone program.
- For dual track student eligibility, see the table below. Eligibility is based on the primary program/ year of the student, the meeting of admissions requirements, and their progress in that program.
- Eligibility to apply to the stand-alone Post Graduate Certificate is based on meeting the program admissions requirements, which can be found on the program website and in the course catalog.
- Dual track Post-Graduate Certificate students may transfer later to the Master of Science with the Program Director's approval.

Primary Program	
Doctor of Osteopathic Medicine (DO)	Newly admitted or any year of DO program
Dental Medicine	Newly admitted or any year of Dental program
Optometry	Newly admitted or any year of Optometry program
Veterinary Medicine	Newly admitted or any year of Veterinary program
Podiatry	Current 1st year or later student in Podiatry program
Pharmacy	Current 1st year or later student in Pharmacy program
Physician Assistant	Newly admitted or any year of PA program
All other programs	Recently admitted or any year of primary program

## Admissions Requirements for Dual Track Applicants

To be considered for admission to the PGCert in Precision Medicine Program, applicants must submit the following documented evidence:

1. A minimum cumulative GPA of 2.75, and acceptance to a Midwestern University primary degree program.
2. A completed Midwestern University application for the Precision Medicine Program.
3. For current Midwestern University students whose primary degree program has already started, a letter of support must be provided from the Dean for their primary degree. This letter is automatically requested by the online application system.
4. Passage of the Midwestern University criminal background check.

## Admission Requirements for Stand Alone Applicants

To be considered for admission to the PGCert in Precision Medicine Program, applicants must submit the following documented evidence:

1. A minimum cumulative GPA of 2.75.
2. A graduate level healthcare or biomedical/biological sciences degree or a bachelor's degree (B.A. or B.S.) from an accredited college or university with completion of genetics, molecular and cellular biology, biochemistry, or similar coursework. If degree not already awarded, must be completed prior to matriculation.
3. A completed Midwestern University application for the Precision Medicine Program.
4. Passage of the Midwestern University criminal background check.

## Application Process and Deadlines

To be considered for admission to the PGCert in Precision Medicine Program, applicants must submit their applications online through the Midwestern University direct application process.

The PGCert in Precision Medicine program uses a rolling admission process in which completed applications are reviewed and decisions are made at regular intervals during the admissions cycle. Admission to the Program is considered on a competitive basis for applicants submitting completed applications. Multiple criteria are used to select the most qualified candidates, including selection of those students the Admissions Committee determines would benefit the most from the Program based on their planned programs of study and/or professional goals.

Due to the nature of the Precision Medicine curriculum, students with prior graduate or undergraduate courses in Biochemistry, Molecular Biology, Computer Science, Genetics, and Genomics will receive preference for admission to the Program.

Selection decisions for the Program are determined by the College of Graduate Studies Precision Medicine Admissions Committee, which is comprised of faculty members and the Precision Medicine Program Director, with the approval of the Dean of the CGS. To maximize their competitiveness within this rolling admission process, candidates are advised to submit their completed applications early in the admission cycle. The deadline for dual track applications is April 15 or the first business day thereafter. The deadline for stand-alone applicants is May 1 or the first business day thereafter. The Program begins in the summer quarter.

To submit application: [https://apply.midwestern.edu/portal/mwu\\_app](https://apply.midwestern.edu/portal/mwu_app)

## Selection Process

After receiving completed application packets, the Midwestern University Office of Admissions verifies the information provided to determine whether all admissions requirements have been completed satisfactorily or will be completed prior to potential matriculation and to verify the cumulative GPAs for all completed courses. Applicants are notified either electronically (i.e., through their admissions portal or by e-mail) or by letter of admissions decisions. Please note that applicants may track the receipt of their application materials and the status of their files on the University's website using instructions for accessing account information sent by the Office of Admissions after receipt of their applications. Applicants are responsible for notifying the Office of Admissions of any changes in their telephone number, mailing address, or e-mail address. All requests for application withdrawals must be made in writing to the Office of Admissions:

Midwestern University Office of Admissions, 19555 N. 59th Avenue Glendale, AZ 85308;  
admissaz@midwestern.edu; 888/247-9277 or 623/572-3215.

Midwestern University Office of Admissions, 555 31st Street Downers Grove, IL 60515;  
admissil@midwestern.edu; 630/515-6171 or 800/458- 6253.

## Satisfactory Academic Progress

Students must pass all required Certificate courses with a grade of "C" or higher and maintain a cumulative GPA of 2.50 or higher in the Certificate program. For dual track students, regardless of satisfactory academic progress in the Certificate program, the CGS Student Promotion and Graduation Committee may determine that a dual track student who experiences academic difficulty in the primary degree must take a leave from the Certificate program until satisfactory academic progress in the primary program is achieved. Separate criteria for achieving satisfactory academic progress in the primary degree program are listed in the catalog under the respective degree program.

## Advanced Placement

The PGCert in Precision Medicine Program allows the transfer of up to six quarter-credits (applicable only to core program courses) from recent (within the last five years) equivalent graduate-level coursework completed at other institutions prior to matriculation at Midwestern University. Generally, transfer credits would only be given to students who satisfactorily completed course-work with a minimum of a B grade from an accredited graduate degree program. Prior to matriculation, students must submit a letter of request and relevant course materials, including syllabi, to the Program Director. The Program Director will consult with the appropriate course director to evaluate the submitted course materials and determine whether the course is an appropriate substitute for one of the core Precision Medicine Program courses. If the request for transfer credits is denied, students may appeal this decision to the CGS Dean. If a course is accepted for credit, the equivalent Midwestern University course and the Advanced Placement notation will be recorded on the transcript along with the name of the institution at which the credit was earned. Any earned letter grade will not be included on the transcript or used in the GPA calculation.

## Transferring Between Program Tracks

Dual track students wishing to transfer between the Master of Science and Post-Graduate Certificate, or vice versa, must request the approval of the Program Director. These requests are granted at the discretion of the Program Director based on the circumstances and needs of individual students.

Stand-alone PGCert students are not eligible to transfer to the M.S. program.

Students in primary programs that do not allow their students to initially apply to the M.S. due to the primary program structure may be eligible to transfer from the PGCert to the M.S. at a later time. Interested students should contact the Program Director to discuss this option.

# Technical Standards, Post-Graduate Certificate in Precision Medicine

## Technical Standards

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the College.

Candidates must be able to perform the following abilities and skills:

1. Observation: The candidate must be able to accurately make observations at a distance and close at hand, including those on a computer screen or electronic device. Observation necessitates the functional use of vision and sense of touch and is enhanced by the functional use of all of the other senses.
2. Communication: The candidate must be able to communicate in English, proficiently and sensitively, in verbal and written form, and be able to perceive nonverbal communication.

3. **Motor:** Candidates must be able to coordinate both gross and fine motor movements, maintain equilibrium and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control, and eye-to-hand coordination to perform profession-specific skills and tasks.
4. **Intellectual, Conceptual, Integrative and Quantitative Abilities:** The candidate must be able to problem solve, measure, calculate, reason, analyze, record, and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
5. **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of the candidate's intellectual abilities, the exercise of good judgment, the consistent, prompt completion of all responsibilities, and the development of mature, sensitive, and effective relationships. Candidates must be able to tolerate physically, mentally, and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn are all personal qualities required during the educational process.

Candidates are required to verify that the candidate understands and is able to meet these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet Technical Standards with accommodation, must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation

with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

## Post-Graduate Certificate in Precision Medicine Curriculum

### Degree Type

Post-Graduate Certificate

### Year 1

#### Summer Quarter

Course Code	Title	Credits
PMGC 501	Introduction to Genetics and Genomics	2.0
<b>Sub-Total Credits</b>		<b>2.00</b>

#### Fall Quarter

Course Code	Title	Credits
PMGC 502	Genomics of Rare and Complex Diseases	3.0
<b>Sub-Total Credits</b>		<b>3.00</b>



## Winter Quarter

Course Code	Title	Credits
PMGC 503	Introduction to Bioinformatics, Statistics, and Data Interpretation	2.0
<b>Sub-Total Credits</b>		<b>2.00</b>

## Spring Quarter

Course Code	Title	Credits
PMGC 504	'Omics and Biomarkers	3.0
<b>Sub-Total Credits</b>		<b>3.00</b>

## Year 2

### Summer Quarter

Course Code	Title	Credits
PMGC 601	The Application of Precision Medicine to Cancer	3.0
<b>Sub-Total Credits</b>		<b>3.00</b>

### Fall Quarter

Course Code	Title	Credits
PMGC 602	Pharmacogenomics	2.0
	Precision Medicine Elective	1
<b>Sub-Total Credits</b>		<b>3.00</b>

### Winter Quarter

Course Code	Title	Credits
PMGC 603	Microbial Genetics, the Microbiome, and Infectious Diseases	3.0
<b>Sub-Total Credits</b>		<b>3.00</b>

### Spring Quarter

Course Code	Title	Credits
PMGC 604	Ethical Legal and Social Issues of Precision Medicine	1.0
PMGC 605	Counseling and Communication skills for Precision Medicine	1.0
	Precision Medicine Elective	1
<b>Sub-Total Credits</b>		<b>3.00</b>

## Electives - Students complete two elective courses. Not all electives may be offered in every academic quarter.

Course Code	Title	Credits
PMGC 801	Application of Precision Medicine to Inflammatory and Autoimmune Disease	1.0
PMGC 802	The Application of Precision Medicine to Neurological Diseases	1.0
PMGC 803	Application of Precision Medicine to Cardiovascular Diseases	1.0
PMGC 804	Advanced Topics in Pharmacogenomics	1.0
PMGC 805	A One Health Approach to Genomics and Precision Medicine	1.0
PMGC 806	Connecting Nutrigenomics, Epigenomics, and Metabolism to Precision Medicine	1.0
PMGC 807	Genetic Technologies for the Treatment of Disease	1.0
PMGC 808	Precision Medicine Journal Club	1.0
PMGC 809	Understanding and Interpreting Direct-to-Consumer Genetic Testing	1.0
PMGC 810	Independent Study	0.5-6
	Total Credits	22

## Completion Requirements

To be awarded the PGCert in Precision Medicine, students must:

1. Satisfactorily complete all courses with a minimum cumulative grade point average of 2.5.
2. Satisfactorily complete the required minimum number of 22 credit hours in the curriculum.
3. Receive a favorable recommendation for Post-Graduate Certificate conferral from the CGS Student Promotion and Graduation Committee.
4. Receive a favorable recommendation for Post-Graduate Certificate conferral from the University Faculty Senate.
5. Settle all financial accounts with the University.
6. Complete all graduation clearance requirements as instructed by the Office of the Registrar.

PGCert earned through the dual track or stand-alone programs will be awarded at the commencement for the College of Graduate Studies if all requirements have been met at that time.

## Timeframe for Completion of Curriculum

The curriculum can be completed in as little as two years. Dual track or stand-alone students in the PGCert Program must satisfactorily complete the full curriculum within six years of the starting date of their Precision Medicine Program in order to be awarded the Certificate.

## Precision Medicine Program Calendar

### Summer 2025

Event	Class	Date
<b>Memorial Day Observed</b>	<b>*No Classes*</b>	<b>May 26, 2025</b>
Classes Begin	PR-II, PRC-II	May 27, 2025
Last Day to Add/Drop Classes	PR-II, PRC-II	May 30, 2025
Classes Begin	PR-I, PRC-I	June 2, 2025

Event	Class	Date
Last Day to Add/Drop Classes	PR-I, PRC-I	June 6, 2025
<b>Juneteenth (Observed)</b>	<b>*No Classes*</b>	<b>June 19, 2025</b>
<b>Independence Day Observed</b>	<b>*No Classes*</b>	<b>July 4, 2025</b>
Last Day of Classes	PR-1, PR-II, PRC-1, PRC-II	August 3, 2025

## Fall 2025

Event	Class	Date
Classes Begin	PR-1, PR-II, PRC-1, PRC-II	August 11, 2025
Last Day to Add/Drop Classes	PR-1, PR-II, PRC-1, PRC-II	August 15, 2025
<b>Labor Day</b>		<b>September 1, 2025</b>
Last Day of Classes	PR-1, PR-II, PRC-1, PRC-II	October 26, 2025
<b>Thanksgiving Day Observed</b>	<b>*No Classes*</b>	<b>November 27 – 28, 2025</b>

## Winter 2025

Event	Class	Date
Classes Begin	PR-1, PR-II, PRC-1, PRC-II	November 3, 2025
Last Day to Add/Drop Classes	PR-1, PR-II, PRC-1, PRC-II	November 7, 2025
<b>Martin Luther King, Jr. Day</b>	<b>*No Classes*</b>	<b>January 19, 2026</b>
Last Day of Classes	PR-1, PR-II, PRC-1, PRC-II	February 15, 2026

## Spring 2026

Event	Class	Date
Classes Begin	PR-1, PR-II, PRC-1, PRC-II	March 2, 2026
Last Day to Add/Drop Classes	PR-1, PR-II, PRC-1, PRC-II	March 6, 2026
Last Day of Classes	PR-1, PR-II, PRC-1, PRC-II	May 10, 2026
<b>Memorial Day Observed</b>	<b>*No Classes*</b>	<b>May 25, 2026</b>
<b>Commencement CGS</b>		<b>June 3, 2026 12:00 p.m.</b>

## LEGEND

PR-1 = MS 1<sup>st</sup> Year, PR-II = MS 2<sup>nd</sup> Year, PRC-1 = PG Cert 1<sup>st</sup> Year, PRC-II = PG Cert 2<sup>nd</sup> Year

Last Revision: 12/05/2024

# Faculty

**Garilyn Jentarra, Ph.D., Program Director**

Arizona State University  
Professor

**Kolla Kristjansdottir, Ph.D., Associate Program Director**

Duke University  
Duke University Medical Center  
Associate Professor

**Hilal Arnouk, M.D., Ph.D.**

The State University of New York at Buffalo  
Associate Professor

**Nancy Bae, Ph.D.**

University of Maryland at College Park/National  
Institutes of Health  
Associate Professor

**Bryan Bjork, Ph.D.**

University of Iowa  
Associate Professor

**Thomas Bodenstein, Ph.D.**

University of Alabama at Birmingham  
Associate Professor

**Kelly Bontempo, M.S., C.G.C.**

Northwestern University  
Adjunct Faculty

**Lori M. Buhlman, Ph.D.**

University of Arizona  
College of Graduate Interdisciplinary Programs  
Professor

**Kimberly Bussey, Ph.D.**

Oregon Health Sciences University  
Associate Professor

**Frederick Collison, O.D., FAAO**

Illinois College of Optometry  
Associate Professor

**Ying He, Ph.D.**

University of Illinois  
Assistant Professor

**Jose Hernandez, Ph.D.**

University of Zaragoza, Spain  
Professor and Chair

**Thu Huynh, Ph.D.**

New York University  
Assistant Professor

**Bucky Jones, Ph.D.**

The Ohio State University  
Professor

**Sam Katzif, Ph.D.**

Georgia State University  
Associate Professor

**Lisa Kronstad, Ph.D.**

University of California, Berkeley  
Associate Professor

**Kathryn Leyva, Ph.D.**

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**Rafael Mejia-Alvarez, M.D., Ph.D.**

Universidad Nacional Autónoma de México School  
of Medicine, Mexico  
Baylor College of Medicine  
Professor

**Ann Revill, Ph.D.**

University of Arizona  
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**Megan Roy-Puckelwartz, Ph.D.**

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Adjunct Faculty

**Mark Swanson, Ph.D.**

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Associate Professor

**Michelle Swanson-Mungerson, Ph.D.**

Loyola University Chicago, Stritch School of  
Medicine  
Professor

**Julie A. Swartzendruber, Ph.D.**

Northwestern University  
Associate Professor

**Martin Szul, Ph.D.**

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Lab Manager and Instructor

**Rosa Ventrella, Ph.D.**

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Assistant Professor

**Michael V. Volin, Ph.D.**

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Professor and Chair

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**Yir Gloria Yueh, Ph.D.**

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Vice President and Chief Academic Officer  
Colleges of Osteopathic Medicine, Graduate  
Studies and Podiatric Medicine  
Professor

**Michael J. Fay, Ph.D.**

University of Mississippi  
Dean, College of Graduate Studies  
Professor

**Sandra Inouye, Ph.D.**

Northwestern University  
Associate Dean of Academic Affairs, College of  
Graduate Studies  
Director of Anatomical Laboratories  
Professor

## Post Graduate Certificate In Precision Medicine Courses

### PMGC 501: Introduction to Genetics and Genomics

This introductory course presents basic aspects of genetics, genomics, and molecular biology, including DNA variation and mutation. It also covers a range of common analytical techniques for nucleic acids and proteins. Important elements of chromosomal structure are explored as well as concepts related to genetic testing and gene therapy. Upon successful completion of this course, students will have the foundational knowledge necessary for understanding genomic and other 'omics concepts relevant to completing the remaining required core and elective courses.

**Credits** 2.0

### PMGC 502: Genomics of Rare and Complex Diseases

This course explores the genetic underpinnings of both monogenic and complex diseases. Dominant versus recessive autosomal diseases as well as X-linked, mitochondrial and cytogenetic diseases are covered. Evolutionary and population genetics are discussed, and methods for studying complex diseases are introduced. Students completing this course will demonstrate a working knowledge of the genetics of monogenic and complex diseases, and an understanding of the relevant analytical methods.

**Credits** 3.0

**Prerequisites**

[PMGC 501: Introduction to Genetics and Genomics](#)

### PMGC 503: Introduction to Bioinformatics, Statistics, and Data Interpretation

Obtaining patient 'omics data is a first step in precision medicine. Subsequent computational and analytical methods are required to decipher these data. This course focuses on the analysis of 'omics data sets using bioinformatics and statistical tools. Students are introduced to the use of open access software to analyze provided data sets and learn to interpret the results. The objective of this course is to provide students with the basic skills needed to work with and derive valuable information from complex data sets produced by 'omics analyses.

**Credits** 2.0

**Prerequisites**

[PMGC 501: Introduction to Genetics and Genomics](#)

[PMGC 502: Genomics of Rare and Complex Diseases](#)

## **PMGC 504: 'Omics and Biomarkers**

This course builds on the use of genomics in medicine by extending knowledge into areas that complement genomics, such as transcriptomics, proteomics and metabolomics. Students explore how these 'omics fields can be used in biomarker discovery and health management. Upon successful completion of this course, students will be able to explain broadly what is meant by 'omics analyses, describe the technologies involved, and display a specific comprehension of the source and uses of the various biomarkers in medicine.

**Credits** 3.0

### **Prerequisites**

[PMGC 501: Introduction to Genetics and Genomics](#)

[PMGC 502: Genomics of Rare and Complex Diseases](#)

## **PMGC 601: The Application of Precision Medicine to Cancer**

This course explores genetic and other molecular mechanisms involved in cancer development and progression, including assessment of the genomes and transcriptomes of tumor cells as well as the patient's normal cells. Students examine how this knowledge translates into precision technologies for cancer screening, as well as diagnosing and treating cancer patients. Upon successful completion of this course, students will demonstrate an understanding of the genetic origins and development of cancer, the methods of assessing what is occurring in cancerous cells, and a basic understanding of how knowledge gained from analyses can be used to benefit patients.

**Credits** 3.0

### **Prerequisites**

[PMGC 501: Introduction to Genetics and Genomics](#)

[PMGC 502: Genomics of Rare and Complex Diseases](#)

## **PMGC 602: Pharmacogenomics**

This course presents the ways in which genomic information can be used to ensure that patients receive the greatest possible benefit from therapeutics while mitigating risk of adverse events. Students explore how genetic variation may alter drug metabolism, disposition, and action, and they discuss how doses may need to be tailored, or drugs altered to account for certain polymorphic differences. Students successfully completing this course will demonstrate a working knowledge of the interaction between a patient's genetic structure and the safety and efficacy of therapeutic drugs.

**Credits** 2.0

### **Prerequisites**

[PMGC 501: Introduction to Genetics and Genomics](#)

[PMGC 502: Genomics of Rare and Complex Diseases](#)

## **PMGC 603: Microbial Genetics, the Microbiome, and Infectious Diseases**

This course provides information on basic features of microbial genetics that are relevant to health. It covers what is known about the effects of an individual's microbiome on their health, the consequences of dysbiosis, and the effects of the microbiome on patient treatment, including metabolism of therapeutics. Methods for studying and assessing an individual's microbiome, or microbiome features of various subject groups are discussed. This course also explores the role of 'omics information from both patients and infecting microbes in the identification, targeted treatment, and control of infectious diseases in individuals and on a population basis. After successful completion of this course, students will be able to demonstrate a basic knowledge of health-relevant microbial genetics, will be able to describe the role of the microbiome in health, and will comprehend the usefulness of 'omics technologies in the management of infectious diseases.

**Credits** 3.0

### **Prerequisites**

[PMGC 501: Introduction to Genetics and Genomics](#)

[PMGC 502: Genomics of Rare and Complex Diseases](#)

## **PMGC 604: Ethical Legal and Social Issues of Precision Medicine**

This course examines the ethical and legal issues surrounding the use of precision medicine technology, and particularly the potential misuse of genomic information, privacy, ownership of genetic information, open versus informed consent, and accessibility. It also addresses social issues that have developed or may develop in the future as a result of these types of genomic knowledge. Upon successful completion of this course, students will be able to describe existing and potential future ethical, legal, and social issues surrounding the use of precision medicine technologies.

**Credits** 1.0

### **Prerequisites**

[PMGC 501: Introduction to Genetics and Genomics](#)

[PMGC 502: Genomics of Rare and Complex Diseases](#)

## **PMGC 605: Counseling and Communication skills for Precision Medicine**

This course considers how to effectively communicate genomic or other 'omics information to patients. Students learn how to tailor complex genomic discussions to a lay audience, become aware of how the information provided may be viewed by patients or their families, and consider how to counsel them about this information to enable patient-centric, optimal health decisions. Upon successful completion of this course, students will demonstrate familiarity with both the sensitive issues that arise when using precision medicine technologies and with methods that can be used for effectively communicating that information to patients and their families.

**Credits** 1.0

### **Prerequisites**

[PMGC 501: Introduction to Genetics and Genomics](#)

[PMGC 502: Genomics of Rare and Complex Diseases](#)

## **PMGC 801: Application of Precision Medicine to Inflammatory and Autoimmune Disease**

This course explores genetic/genomic influences on the development of autoimmune diseases and other diseases with inflammatory components. Students discuss the use of biomarker studies for both increasing the accuracy of diagnosis and for identifying proteins and metabolites that may provide insight into the causes of these disorders. Students successfully completing this course will be able to demonstrate an understanding of the genetic underpinnings of inflammatory and autoimmune diseases and be able to explain how biomarker studies can be used to improve patient outcomes.

**Credits** 1.0

### **Prerequisites**

[PMGC 501: Introduction to Genetics and Genomics](#)

[PMGC 502: Genomics of Rare and Complex Diseases](#)

### **Notes**

Elective Courses: 2.0 quarter-credit hours required. Each elective course is 1.0 credit. Not all electives are offered every quarter.

## **PMGC 802: The Application of Precision Medicine to Neurological Diseases**

This course examines the genetic underpinnings of common neurological disorders, neurogenetic disorders, and neurodegenerative diseases. Students study how genomics can be used to identify genes that are directly involved in neurological disorders or that confer significant risk of developing a disorder. Students discuss how that information is used for diagnosis, prognosis, and development of novel therapeutics. Upon successful completion of the course, students will be able to explain the role that gene variants and mutations play in the development of neurological diseases and describe how that information can be used to support effective patient treatment and care.

**Credits** 1.0

### **Prerequisites**

[PMGC 501: Introduction to Genetics and Genomics](#)

[PMGC 502: Genomics of Rare and Complex Diseases](#)

### **Notes**

Elective Courses: 2.0 quarter-credit hours required. Each elective course is 1.0 credit. Not all electives are offered every quarter.

## **PMGC 803: Application of Precision Medicine to Cardiovascular Diseases**

This course covers polymorphisms related to cardiovascular disease, including genes that contribute to the development of heart disease, atherosclerosis, and stroke. Students review how these genetic risk factors were identified and linked to cardiovascular disease. They also learn about the interplay of lifestyle factors with genetic risk factors in the development of cardiovascular disease. Students completing this course will demonstrate an understanding of gene variants involved in increasing the risk of cardiovascular disease and be able to describe the role that lifestyle choices play in development of cardiovascular disease.

**Credits** 1.0

### **Prerequisites**

[PMGC 501: Introduction to Genetics and Genomics](#)

[PMGC 502: Genomics of Rare and Complex Diseases](#)

### **Notes**

Elective Courses: 2.0 quarter-credit hours required. Each elective course is 1.0 credit. Not all electives are offered every quarter.



## PMGC 804: Advanced Topics in Pharmacogenomics

This advanced topics course provides an in-depth knowledge of the clinical applications of pharmacogenomics. Students deepen their understanding of how genetic differences impact drug therapy. Students view recorded lectures presented by experts on disease-specific topics and also read assigned papers relevant to those topics. Assessment is based on completion of worksheets. Upon successful completion of this course, students will demonstrate a broad understanding of the current and potential clinical applications of pharmacogenomics.

**Credits** 1.0

### **Prerequisites**

[PMGC 501: Introduction to Genetics and Genomics](#)

[PMGC 502: Genomics of Rare and Complex Diseases](#)

[PMGC 602: Pharmacogenomics](#)

### **Notes**

Elective Courses: 2.0 quarter-credit hours required. Each elective course is 1.0 credit. Not all electives are offered every quarter.

## PMGC 805: A One Health Approach to Genomics and Precision Medicine

This course focuses on how knowledge of the genomics, health, and environment of one species can be used to effectively develop targeted treatments for other species. It addresses the global interrelatedness of the health of all species and how One Health-based studies can help to develop solutions for human and animal health issues and inform public policy. Students successfully completing this course will be able to describe the uses and practicality of the One Health approach to supporting animal and human health, as well as the health of the environment.

**Credits** 1.0

### **Prerequisites**

[PMGC 501: Introduction to Genetics and Genomics](#)

[PMGC 502: Genomics of Rare and Complex Diseases](#)

### **Notes**

Elective Courses: 2.0 quarter-credit hours required. Each elective course is 1.0 credit. Not all electives are offered every quarter.

## PMGC 806: Connecting Nutrigenomics, Epigenomics, and Metabolism to Precision Medicine

This course examines the field of nutrigenomics as well as its relationship to both metabolism and the epigenome. It covers what is known about the effects of an individual's genetic variants on their use of nutrients and how that affects their overall health. Because nutrition is linked closely to metabolism, this course also explores how genetic, dietary, and other environmental factors interact to influence the metabolic processes that occur in the body. This course will also explore how dietary and environmental influences are capable of altering or introducing epigenetic modifications, which can affect gene expression patterns. After successful completion of this course, students will be able to demonstrate a basic knowledge of nutrigenomics and its relationship to metabolic processes and epigenetic modifications.

**Credits** 1.0

### **Prerequisites**

[PMGC 501: Introduction to Genetics and Genomics](#)

[PMGC 502: Genomics of Rare and Complex Diseases](#)

### **Notes**

Elective Courses: 2.0 quarter-credit hours required. Each elective course is 1.0 credit. Not all electives are offered every quarter.

## PMGC 807: Genetic Technologies for the Treatment of Disease

This course dives into the mechanisms of several genetic manipulation technologies with specific emphasis on their applicability to treat several classes of human genetic disorders. Students will also be exposed to the potential health risks and ethical issues associated with these technologies. Upon successful completion of this course, students will demonstrate knowledge of these current technologies, as well as several new methods and how they can be applied to specific types of human genetic disease as well as describe the potential pitfalls and ethical quagmires surrounding their use.

**Credits** 1.0

### **Prerequisites**

[PMGC 501: Introduction to Genetics and Genomics](#)

[PMGC 502: Genomics of Rare and Complex Diseases](#)

### **Notes**

Elective Courses: 2.0 quarter-credit hours required. Each elective course is 1.0 credit. Not all electives are offered every quarter.

## PMGC 808: Precision Medicine Journal Club

This course engages students in surveys and in-depth evaluations of the precision medicine scientific literature. Seminal papers in the development of 'omic and precision medicine technologies, as well as recent publications, are critically reviewed. The objective of this course is to provide students with an understanding of how the various 'omics fields developed and to assist them with learning to evaluate and properly understand scientific literature.

**Credits** 1.0

### **Prerequisites**

[PMGC 501: Introduction to Genetics and Genomics](#)

[PMGC 502: Genomics of Rare and Complex Diseases](#)

### **Notes**

Elective Courses: 2.0 quarter-credit hours required. Each elective course is 1.0 credit. Not all electives are offered every quarter.

## PMGC 809: Understanding and Interpreting Direct-to-Consumer Genetic Testing

Direct-to-consumer genetic testing is in widespread use for both tracing ancestry and for identification of disease risk alleles. The purpose of this course is to help students understand the various types of tests available and recognize what types of information they provide. Students will learn how to assist their patients in interpreting and applying the results of risk allele testing to achieve better health outcomes. Upon successful completion of this course, students will understand the various formats in which direct-to-consumer genetic testing results are provided, will be able to describe how to appropriately evaluate the information provided, and will be able to help the patient make decisions or find resources that will help them make the best use of the genetic information they receive.

**Credits** 1.0

### **Prerequisites**

[PMGC 501: Introduction to Genetics and Genomics](#)

[PMGC 502: Genomics of Rare and Complex Diseases](#)

### **Notes**

Elective Courses: 2.0 quarter-credit hours required. Each elective course is 1.0 credit. Not all electives are offered every quarter.

## **PMGC 810: Independent Study**

This independent study course is designed to provide students the opportunity to explore topics of didactic and/or clinical interest as needed to enhance the student's learning.

**Credits** 0.5

-6

### **Prerequisites**

Permission of the instructor.

## **PMGC 810: Independent Study**

This independent study course is designed to provide students the opportunity to explore topics of didactic and/or clinical interest as needed to enhance the student's learning.

**Credits** 0.5

-6

### **Prerequisites**

Permission of the Instructor

# College of Dental Medicine-Arizona

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## Mission

The mission of the Midwestern University College of Dental Medicine-Arizona is to graduate well-qualified general dentists and to improve oral health through research, scholarly activity, and service to the public.

## Vision

The Vision of ONE: Everyone involved with CDMA, working as ONE team, should have that ONE singular purpose of developing competent and confident clinicians in mind as they approach each day.

The following themes guide the CDMA in pursuit of the Vision of ONE.

- Remembering ONE purpose of developing *competent* and *confident* clinicians
- Inspiring the desire for growth and development in everyone
- Modeling the concept of ONE team from Admissions to Graduation
- Teaching the teachers and leading the leaders
- Standardizing the CDMA faculty to uniform instruction
- Empowering students to be partners in their education
- Empowering staff to be partners in the education of the students
- Developing leadership skills that bring out the best in the students
- Utilizing patient centered care to foster empathy by precept, example, and service
- Leading others to act for the betterment of the larger whole - group, class, school, profession, and community
- Empowering students to believe in themselves
- Teaching students the importance of lifelong learning
- Instilling in students the importance of balance and humility in life
- Helping students to develop good habits that will last a lifetime
- Developing a culture of opportunity
- Developing a culture of optimism
- Developing a culture of exceptionalism with humility
- Promoting Diversity, Inclusion and Equity

## Accreditation

The Midwestern University College of Dental Medicine- Arizona is accredited by the Commission on Dental Accreditation. The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation will review complaints that relate to a program's compliance with the accreditation standards. The Commission is interested in the sustained quality and continued improvement of dental and dental-related education programs but does not intervene on behalf of individuals or act as a court of appeal for treatment received by patients or individuals in matters of admission, appointment, promotion or dismissal of faculty, staff, or students.

The Commission can be contacted at 312/440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611. The Commission's web address is: <http://www.ada.org/en/coda>.

Midwestern University is accredited by The Higher Learning Commission (HLC), 230 South LaSalle Street, Suite 7-500, Chicago, IL 60604-1413.

# Degree Description

Upon graduation from the College of Dental Medicine- Arizona, the Doctor of Dental Medicine (D.M.D.) degree is granted. The usual length of the course of study is four academic years. The curriculum consists of two years of primarily didactic and preclinical instruction with clinical introductory experiences followed by two years of primarily clinical experiences and rotations including applicable didactic material. Upon graduation with the D.M.D. degree, the graduate is eligible to take licensure examinations to enter dental practice in the United States or Canada or participate in residency training in advanced fields of dentistry.

## Admissions

The Midwestern University College of Dental Medicine- Arizona considers for admission those students who possess the academic, professional, and personal qualities necessary for development as exemplary dental professionals. To select these students, the College uses a rolling admissions process within a competitive admissions framework.

### Admission Requirements

To be competitive, an applicant should have earned a bachelor's degree from an accredited college or university and possess both a science (biology, chemistry, and physics) and total GPA of 3.00 or more on a 4.00 scale.

#### Prerequisite courses:

Course:	Semester/Hour Requirements
Biology with lab	8 Semester/12 Quarter hours
General Chemistry with lab	8 Semester/12 Quarter hours
Organic Chemistry with lab	4 Semester/6 Quarter hours
Anatomy	3 Semester/4 Quarter hours
Microbiology	3 Semester/4 Quarter hours
Physics	8 Semester/12 Quarter hours
Physiology	3 Semester/4 Quarter hours
Biochemistry	3 Semester/4 Quarter hours
English Composition/Technical Writing	6 Semester/9 Quarter hours
Bachelors Degree Preferred	

In order to be considered for admissions, an applicant must:

1. Complete the above prerequisite courses.
2. Submit competitive Dental Admission Test (DAT) scores.
  - A total DAT score (summative scores of the Survey of Natural Sciences and Academic Average) should be 410 or above to be competitive.
  - A score of 410 or higher will be expected for the Academic Average (410), Reading Comprehension (370), Perceptual Ability (410) and Survey of Natural Sciences (410) sections.
  - The DAT test must have been taken no more than 3 years prior to the anticipated matriculation date.
  - *Note: The Canadian DAT can be substituted for the U.S. DAT.*
3. Submit two letters of recommendation.
  - One must be from either a predental advisory committee or a science professor.
  - The other preferentially should be from either someone with a D.O./M.D. or D.D.S./D.M.D. degree and/or someone who can testify to the integrity and ethical standards of the applicant.
  - Letters written by immediate family members will not be accepted.

- All letters of evaluation must be submitted directly from the evaluators. The Office of Admissions will not accept letters submitted by students.
- 4. Demonstrate a sincere understanding of, and interest in, the humanitarian ethos of health care and particularly dental medicine.
- 5. Reflect a service orientation through community service or extracurricular activities.
- 6. Reflect proper motivation for and commitment to health care as demonstrated by previous salaried work, volunteer work, or other life experiences.
- 7. Possess the oral and written communication skills necessary to interact with patients and colleagues.
- 8. Agree to abide by the Midwestern University Drug-Free Workplace and Substance Abuse Policy.
- 9. Pass the Midwestern University finger printing and criminal background check.

## Competitive Admissions

Within the competitive admissions framework, the College uses multiple criteria to select the most qualified, diverse group of candidates from an applicant pool that greatly exceeds the number of seats available. Applicants are evaluated on academic coursework, performance on the Dental Admission Test (DAT), their application (AADSAS) essays, letters of evaluation, and interviews. Demonstrated community service through volunteerism or service-oriented employment is preferred.

## Rolling Admissions

Midwestern University College of Dental Medicine- Arizona uses a rolling admissions process. Applications are reviewed and decisions to interview individual candidates are made at regular intervals during the admissions cycle. Interviews are conducted and the selection process of each candidate for College admission is made until the class is filled. Applicants are notified of their selection status as soon as possible after their interview date, but not prior to December 15 of the year preceding matriculation which is the earliest date the U.S. and Canadian dental schools have agreed to extend a position in the class.

## Application Process

To initiate the application process, prospective students must apply directly to AADSAS electronically:  
1400 K Street NW Suite 1100  
Washington, DC 20005; Phone: 202/289-7201; Fax: 202/289-7204

1. Students may apply online. Students may access an AADSAS application in mid- May of the academic year preceding the year in which they plan to matriculate.
2. After receiving an applicant's processed information from AADSAS, the Office of Admissions creates the applicant file. The applicant must complete and return two letters of evaluation. All letters of evaluation must be submitted by the evaluators directly to AADSAS or to MWU - the Office of Admissions will not accept evaluations submitted by students.

*Please note:* Status of the application can be tracked on the MWU website. Instructions for accessing accounts are available from the Office of Admissions. Please send notification of any changes in your mailing address and e-mail address. All requests for withdrawal an application must be done in writing; contact the Office of Admissions via e-mail at [admissaz@midwestern.edu](mailto:admissaz@midwestern.edu).

## Application Deadline

The official Associated American Dental Schools Application Service (AADSAS) application deadline is January 1st; however, to be competitive within the rolling admissions process, prospective students should submit their AADSAS applications as early as possible after June 1 of the year prior to their desired matriculation. Even though the AADSAS deadline is January 1 of the matriculation year, typically 75 percent of all admissions offers will be made by the end of December of the year prior to matriculation. The Midwestern University College of Dental Medicine- Arizona completion deadline (meaning all necessary parts of the application including DAT test scores) is March 1 of the expected matriculation year.

## Interview and Selection Process

To be considered for interviews, applicants must meet the admissions requirements listed previously. They must also submit all the materials necessary to complete their files, e.g., AADSAS applications, DAT scores, and two letters of recommendation written by a predental advisory committee, a faculty member, a dentist or physician, and by someone who knows the applicant very well.

After the Office of Admissions receives these materials, applicant files are reviewed to determine whether applicants merit interviews based on established criteria of the Admissions Committee. Applicants who receive invitations to interview must respond within four weeks. The Chair of the Admissions Committee, with the approval of the Dean, may also place a large number of students on an interview "wait list" pending possible interview openings toward the end of the interview cycle.

When applicants accept interviews, they join several other interviewees to meet with members of an interview panel, which is selected from a volunteer group of dental faculty. Team members and students question applicants about their academic and healthcare preparedness for dental school, and they rate the applicants on a standardized evaluation form relative to each of these variables. At the conclusion of the interviews, team members forward their evaluations for each applicant to the Admissions Committee. The Committee may recommend to accept, to deny, or place applicants on the alternate list.

Recommendations are then forwarded to the Dean for final approval. The Dean, via the Office of Admissions, notifies applicants of their status after the interviews, but not before December 15 of the year preceding matriculation, which is the date that all dental schools have agreed would be the first notification date.

The interview process typically begins in the summer prior to matriculation and ends in April or May of the matriculation year.

## Reapplication Process

After receiving either denial or end-of-cycle letters, or letters of dismissal from the College, applicants/students may reapply for the next enrollment cycle. Before reapplying, however, applicants should seek the advice of an admissions counselor.

To initiate the reapplication process, applicants must submit their applications to AADSAS. Applications are then processed according to standard application procedures.

## Transfer Admission

Midwestern University College of Dental Medicine- Arizona may elect to accept transfer students from other dental schools as long as these students remain in good academic standing and have (an) acceptable reason(s) for seeking transfer.

To be considered for transfer, students must meet the College's general requirements for admission. Students must also observe the following procedures:

1. All inquiries for transfer to Midwestern University College of Dental Medicine- Arizona must be submitted to the Office of Admissions.
2. Completed applications are returned to the Office of Admissions and must include transcripts from the previous dental school, class rank, a statement of the reason for transfer, a Dean's letter of Good Academic Standing.
3. The Admissions Committee reviews all completed applications and interviews selected applicants.
4. Applications also are reviewed by the Dean, who will conduct interviews with the selected transfer applicants.
5. Applicants are notified by the Dean of final transfer admission decisions.

# Technical Standards, Dental Medicine

## Technical Standards

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the CDMA. Candidates must be able to perform the following abilities and skills.

1. Observation: The candidate must be able to accurately make observations at a distance and close at hand, including those on a computer screen or electronic device. Observation necessitates the functional use of vision and sense of touch and is enhanced by the functional use of all of the other senses.
2. Communication: The candidate must be able to communicate in English, proficiently and sensitively, in verbal and written form, and be able to perceive nonverbal communications.
3. Motor: Candidates must be able to coordinate both gross and fine motor movements, maintain equilibrium and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control and eye-to-hand coordination to perform profession-specific skills and tasks. Candidates must be able to lift 20 lbs.
4. Intellectual, Conceptual, Integrative and Quantitative Abilities: The candidate must be able to problem solve, measure, calculate, reason, analyze, record and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
5. Behavioral and Social Attributes: The candidate must possess the emotional health required for full utilization of their intellectual abilities, the exercise of good judgment, the consistent, prompt completion of all responsibilities, and the development of mature, sensitive and effective communication. The candidate must be able to tolerate physically, mentally and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn are all personal qualities required during the educational process. The candidate must agree to participate in touching/palpating on the skin and being touched/palpated on the skin by individuals regardless of gender in all academic settings, including dental head/neck exams, including intra- and extra-oral examinations and other dental treatments. These activities will take place in large and small group settings as directed in the College's curricular requirements.

Candidates are required to verify that they understand and are able to meet these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet Technical Standards with accommodation, must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

## Dental Medicine Curriculum

The Midwestern University College of Dental Medicine-Arizona reserves the right to alter its curriculum whenever it deems appropriate for the essential professional preparation of its students.

Total Quarter Credits in the Dental Program: 250.5 (Beginning with the Class of 2026)



## First Year

### Fall Quarter

Course Code	Title	Credits
BASIG 1501	Integrated Basic Sciences I	4.0
BASIG 1502	Integrated Basic Sciences II	4.0
BASIG 1503	Integrated Basic Sciences III	4.5
COREG 1560I	Interprofessional Healthcare/One Health	0.5
DENTG 1510	Preventive Dental Medicine I	1.0
DENTG 1511	Preclinical Professionalism I	0.5
DENTG 1512	Oral Health Sciences I	3.0
DENTG 1512L	Oral Health Sciences I Lab	1.5
DENTG 1515	Personal Finance	0.5
<b>Sub-Total Credits</b>		<b>19.50</b>

### Winter Quarter

Course Code	Title	Credits
BASIG 1504	Integrated Basic Sciences IV	2.5
BASIG 1505	Integrated Basic Sciences V	4.5
BASIG 1506	Integrated Basic Sciences VI	4.5
COREG 1570I	Interprofessional Healthcare/One Health	0.5
DENTG 1520	Preventive Dental Medicine II	1.0
DENTG 1521	Preclinical Professionalism II	0.5
DENTG 1522	Oral Health Sciences II	2.5
DENTG 1522L	Oral Health Sciences II Lab	1.5
DENTG 1523	Dental Ethics I	0.5
<b>Sub-Total Credits</b>		<b>18.00</b>

### Spring Quarter

Course Code	Title	Credits
BASIG 1507	Integrated Basic Sciences VII	3.5
BASIG 1508	Integrated Basic Sciences VIII	2.5
BASIG 1509	Integrated Basic Sciences IX	4.0
COREG 1580I	Interprofessional Healthcare/One Health	0.5
DENTG 1531	Preclinical Professionalism III	0.5
DENTG 1533	Oral Health Sciences III	2.5
DENTG 1533L	Oral Health Sciences III Lab	1.5
DENTG 1538	Multicultural Healthcare	1.0
<b>Sub-Total Credits</b>		<b>16.00</b>

## Second Year

### Preclinical Block

Course Code	Title	Credits
DENTG 1640L	Preclinical Dental Rotations	1.5
<b>Sub-Total Credits</b>		<b>1.50</b>

## Fall Quarter

Course Code	Title	Credits
PHARG 1601	General Pharmacology I	2.0
DENTG 1611	Preclinical Professionalism IV	0.5
DENTG 1612	Dental Community Service I	0.5
DENTG 1614	Oral Health Sciences IV	9.0
DENTG 1615	Human Behavior I	1.0
DENTG 1617	Clinical Case Studies I	1.0
DENTG 1614L	Oral Health Sciences IV Lab	7.0
<b>Sub-Total Credits</b>		<b>21.00</b>

## Winter Quarter

Course Code	Title	Credits
PHARG 1621	General Pharmacology II	3.0
DENTG 1621	Preclinical Professionalism V	0.5
DENTG 1623	Dental Community Service II	0.5
DENTG 1625	Oral Health Sciences V	9.5
DENTG 1625L	Oral Health Sciences V Lab	7.0
DENTG 1627	Clinical Case Studies II	1.0
<b>Sub-Total Credits</b>		<b>21.50</b>

## Spring Quarter

Course Code	Title	Credits
DENTG 1630	Comprehensive Preclinical Assessment	1.0
DENTG 1631	Preclinical Professionalism VI	0.5
DENTG 1633	Dental Ethics II	0.5
DENTG 1634	Dental Community Service III	0.5
DENTG 1636	Oral Health Sciences VI	9.0
DENTG 1636L	Oral Health Sciences VI Lab	7.0
DENTG 1637	Anesthesia I	1.0
DENTG 1638	Medical Emergencies	1.0
DENTG 1639	Clinical Case Studies III	1.0
<b>Sub-Total Credits</b>		<b>21.50</b>

## Third Year

### Summer Quarter

Course Code	Title	Credits
DENTG 1721	Anesthesia II	1.0
DENTG 1724	Surgical Periodontics General Practice	1.0
DENTG 1728	Advanced Imaging	1.0
DENTG 2000	Patient Care Introduction	12.0
DENTG 2010	Clinical Professionalism, Introduction	1.5
DENTG 2020	Clinical Conference I	1.0
<b>Sub-Total Credits</b>		<b>17.50</b>

## Fall Quarter

Course Code	Title	Credits
DENTG 1730	Human Behavior II	1.0
DENTG 1733	Clinical Reviews	1.5
DENTG 1734	Dental Ethics III	1.0
DENTG 2001	Patient Care I	12.0
DENTG 2011	Clinical Professionalism I	1.5
DENTG 2021	Clinical Conference II	0.5
<b>Sub-Total Credits</b>		<b>17.50</b>

## Winter Quarter

Course Code	Title	Credits
DENTG 1740	Implantology	1.0
DENTG 1742	Clinical Pharmacology I	1.0
DENTG 1745	Practice Management I	1.0
DENTG 1749	Clinical Topics	1.0
DENTG 2002	Patient Care II	12.0
DENTG 2012	Clinical Professionalism II	1.5
<b>Sub-Total Credits</b>		<b>17.50</b>

## Spring Quarter

Course Code	Title	Credits
DENTG 1750	Practice Management II	1.0
DENTG 1751	Occlusion	1.0
DENTG 1754	Clinical Oral Pathology I	1.0
DENTG 1756	Special Needs	1.0
DENTG 2003	Patient Care III	12.0
DENTG 2013	Clinical Professionalism III	1.5
<b>Sub-Total Credits</b>		<b>17.50</b>

## Fourth Year

### Clinical Block

Course Code	Title	Credits
DENTG 1852	Clinical Service Learning	2.0
<b>Sub-Total Credits</b>		<b>2.00</b>

### Summer Quarter

Course Code	Title	Credits
DENTG 1823	Practice Management III	1.0
DENTG 1825	Clinical Oral Pathology II	1.0
DENTG 2004	Patient Care IV	11.0
DENTG 2014	Clinical Professionalism IV	1.5
<b>Sub-Total Credits</b>		<b>14.50</b>

## Fall Quarter

Course Code	Title	Credits
DENTG 1830	Dental Sleep Medicine	1.0
DENTG 1831	Oral Conscious Sedation	1.0
DENTG 1837	Practice Management Selectives	0.5
DENTG 1838	Clinical Pharmacology II	1.0
DENTG 2005	Patient Care V	11.0
DENTG 2015	Clinical Professionalism V	1.5
DENTG 2023	Clinical Conference III	0.5
<b>Sub-Total Credits</b>		<b>16.50</b>

## Winter Quarter

Course Code	Title	Credits
DENTG 1844	Advanced Practice Management	1.0
DENTG 1845	Advanced Topics	1.0
DENTG 2006	Patient Care VI	11.0
DENTG 2016	Clinical Professionalism VI	1.5
<b>Sub-Total Credits</b>		<b>14.50</b>

## Spring Quarter

Course Code	Title	Credits
DENTG 2007	Patient Care VII	11.0
DENTG 2017	Clinical Professionalism VII	1.5
<b>Sub-Total Credits</b>		<b>12.50</b>

## Professional Electives

There are five interprofessional (IPE) elective course offerings for D3 and D4 students and one elective course offering for D4 students. Students must complete a minimum of one IPE elective for graduation.

Course Code	Title	Credits
IPECG 1401C	Improving Patient Safety 1	1.5
IPECG 1402C	Improving Patient Safety 2	1.5
IPECG 1404C	Leadership in Healthcare Teams	1.5
IPECG 1410C	Safe Opioid Practices	1.5
IPECG 1420C	Antibiotic Stewardship	1.5
<b>Sub-Total Credits</b>		<b>1.50-7.50</b>

## Dental Elective

Course Code	Title	Credits
DENTG 1445	Botox In Dentistry	1.0
<b>Sub-Total Credits</b>		<b>1.00-1.00</b>
Total Credits		250.5-257.5

## Graduation Requirements

Students usually complete the Doctor of Dental Medicine (D.M.D.) degree in fourteen consecutive quarters (45 months). To qualify for the D.M.D. degree, students must:

1. Follow an approved course of study leading to the completion of all D.M.D. requirements;
2. Satisfactorily complete all professional courses with a minimum cumulative grade point average of 2.000 and have no course grade below a "C" or "P" (Pass);

3. Successfully complete all CDMA competencies;
4. Successfully complete a minimum of 1.5 hours of an Interprofessional elective course during the third or fourth year of the DMD program (for students beginning their third year during and after Summer quarter 2024);
5. Challenge the Integrated National Board Dental Examination (INBDE) or equivalent depending on the country where the candidate plans to practice;
6. Receive a favorable recommendation for conferral of the D.M.D. degree from the Student Academic Promotions Committee, Associate Dean for Clinical Education and the Dean of CDMA;
7. Be recommended for conferral of the D.M.D. degree by the University Faculty Senate;
8. Settle all financial accounts with the University; and
9. Complete all graduation clearance requirements as instructed by the CDMA and University.

## Licensure Requirements

Graduates of accredited U.S. Dental Schools are eligible to challenge certain licensure examinations and thereby obtain the right to practice dentistry ("licensure") in all 50 states of the United States, as well as many foreign countries. To obtain licensure, qualified candidates must meet the requirements established by individual states. Typically, states grant licensure in one of two ways:

1. The state accepts a certificate issued by the National Board of Dental Examiners (NBDE) and a certificate issued by a regional board of dental examiners (e.g. CRDTS, CDCA).
2. Certain states honor formal or informal reciprocity agreements with other state(s) and, in some cases, issue a license by credentialing the certificate from another state.

It is the ultimate responsibility of the individual dental graduate/candidate to become fully aware of the many rules, regulations and restrictions related to licensure across the United States. Midwestern University and the College of Dental Medicine-Arizona cannot and will not be responsible for the many regulations and frequent changes that occur in the licensure environment.

For further information concerning licensure, please contact the American Dental Association or the specific state's licensing board.

Midwestern University's College of Dental Medicine-Arizona is designed to meet the educational requirements to become licensed to practice medicine in the following states and US districts and territories: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, District of Columbia, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, U.S. Virgin Islands, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

Each student should check the additional licensure requirements for the state, district, or territory in which they intend to pursue employment. *Special note:* licensure in New York and Delaware also requires completion of a PGY1 residency.

## Student Academic Policies

The following academic policies apply to all students who matriculate during the academic year of this catalog publication. These policies will apply throughout the entire time a student is enrolled in the college. In the event that these policies need to be revised as the result of new accreditation requirements, mandates by the United States Department of Education, or other unforeseen circumstances, students will be notified in writing prior to the effective date of the new policy.

Faculty and students should also refer to the University Academic Policy section for additional policies that apply to all students at Midwestern University.

Preclinical and Clinical Promotions Committee Two faculty committees of CDMA will review the academic performance of students: the Preclinical

Student Promotion Committee for the first two years and the Clinical Student Promotion Committee for the third and fourth years.

Both promotion committees meet at the end of each academic quarter to assess the academic status of students with a F, a WF, an I or an IP grade and assess the progress of each student. Students who attain satisfactory academic and professional progress are promoted to the next academic quarter, provided all tuition and fees have been paid.

Students with one or more course failure or WF are given the opportunity to meet with the appropriate Student Promotion Committee. Notification of the date, time, and place of the committee meeting is sent to the student at least 48 hours in advance by priority email and/or telephone. Students are invited to the meeting to give a statement, to teleconference into the meeting by telephone, or provide a statement by e-mail or in writing, should they so desire. Decisions of the committee are forwarded to the Dean and emailed to the student. The right of appeal exists and is described in the Appeals Process section. Appeals must be filed with the Dean within three working days following official notification of the committee decision.

Students who have successfully completed their clinical education, passed all of the competency evaluations, and paid all tuition and fees will be recommended for graduation to the Faculty Senate.

## Academic Failure

Students who accumulate three failures over a single academic year, or two failures in a single quarter, may be recommended for dismissal or an academic leave of absence. Students returning from an academic leave of absence are required to retake failed courses. The grade for a course repeated at an outside institution or at Midwestern University and passed is recorded as a grade of "C". The previous "F" course grade remains on the official transcript but does not calculate into the overall Grade Point Average.

Students may be dismissed from the academic program for the following reasons:

1. Accumulate 4 or more failures within the four-year curriculum
2. Accumulate 3 or more failures in a single academic year
3. Accumulate 2 or more failures in a single academic quarter
4. Fail the repeat of a course previously failed

Any failures must be repeated within one year, unless an extension is granted by the Associate Dean for Academic Affairs and the Dean.

*Please Note:* Students will be assessed tuition and related fees for any additional years.

## Readmission After Dismissal for Poor Academic Performance

It is at the discretion of the CDMA academic program to readmit a student who has been dismissed for poor academic performance. To initiate the reapplication process, candidates must complete and submit a new application and proceed through the standard application process established by the program. Before reapplying, however, individuals should seek the advice of an admissions counselor. It is expected that the individual would have addressed documented deficiencies before reapplication and be able to demonstrate that the individual meets all admission requirements and technical standards of the program.

The College's Admissions Committee will review completed applications of candidates and submit recommendations to the Dean for action. The CDMA Dean, via the Office of Admissions, then notifies applicants in writing of admission decisions.

No guarantee of readmission is implied, and questions related to advanced standing and similar issues will be addressed as they are for new applicants.

Reapplications are allowed only within the first two years following dismissal. Readmission will be granted only once.

## Academic Warning

An academic warning is a formal notification of substandard, quarterly academic performance, which cautions the student that continued performance at this level may result in the student being placed on academic probation. To return to good academic standing, a student must correct deficiencies and incur no further failures. An academic warning is issued by a Promotions Committee when a student has failed (grade of less than 70) one class in a quarter or upon the unsuccessful completion of a probationary quarter. When a student is placed on academic warning, it is noted in the student's academic file. Subsequently, when a student is returned to good academic standing, this is also noted in the student's file. Academic warning is not noted on transcripts. Students on academic warning are ineligible to hold student organizational offices unless appealed to, and approved by, the Dean.

## Academic Probation

Academic Probation represents notice that continued inadequate academic performance might result in dismissal. If a student on academic probation successfully completes a probationary quarter, the student's academic status reverts to academic warning. To return to good academic standing, a student must correct deficiencies and incur no further failures. When a student is placed on academic probation, it is noted in the student's academic file. Subsequently, when a student is returned to good academic standing, this is also noted in the student's file. Academic probation is not noted on transcripts.

## Advanced Standing

All requests for advanced standing by admitted, transfer, or enrolled students are processed on a course-by-course basis by the Dean. Courses must be at the graduate level to be considered for advanced standing. To request advanced standing, a student must submit a letter to the Dean in which the student includes a list of the course(s), an official course description(s), a transcript, and a syllabus of the course(s) previously taken. It is expected that a minimum grade of a "B" would have been achieved in the class being petitioned. The decision to grant or deny advanced standing will be made by the divisions providing the dental course in consultation with the CDMA Dean's Office.

## Appeal Process

Following notification of a decision of the Student Promotion Committee, a student may appeal the decision in writing within three working days from notification of the decision to the Dean of the College of Dental Medicine-Arizona. The Dean makes the final decision. The Dean may grant an appeal only if a student can demonstrate one of the following:

1. bias of one or more committee members
2. material information not available to the committee at the time of its initial decision
3. procedural error

During the appeal process, the student must continue to attend classes.

## Course Failure Policy

The faculty provides didactic programs and measures students' performance in subject areas deemed necessary to become dental practitioners. Students who do not demonstrate minimum competencies assume the obligation and responsibility to make up academic failures. D-1 and D-2 students must

successfully pass all failed courses before they can be promoted to the following year. D-3 and D-4 students must remediate/repeat any failed courses. Usually this occurs within the first month of the subsequent quarter.

## Grade for Retaken Course

If a student receives a failing grade, that grade is recorded on the transcript as a letter grade (an "F" entry). Upon repetition of a failed course, the original grade of "F" remains on the transcript. The repeated course and the new grade is entered on the transcript. The grade for a failed course repeated and passed at Midwestern University or at an outside institution is recorded on the transcript as a grade of "C." For all failed clinical courses at Midwestern University that are repeated and passed, a grade of "C" will be recorded on the transcript. For both preclinical coursework and clinical courses that are repeated, the original failing grade will remain on the transcript but will not be included in the GPA calculations. If a repeated preclinical or clinical course is failed, a grade of "F" is again recorded on the transcript. Students who fail a course a second time will be recommended for dismissal.

## Disciplinary Warning/Probation

Disciplinary warning/probation occurs for student acts of professional misconduct as defined in Appendices 2 and 4 of the Student Handbook. Disciplinary probation is not noted on the transcript but is kept in the student's disciplinary file. Disciplinary probation information may be shared with clinical sites that are affiliated with Midwestern University educational programs.

## Dismissal

Matriculation and participation in dental school is a privilege, not a right. Therefore, a student can be dismissed for the following reasons:

1. failure to achieve minimum academic standards (preclinical or clinical promotions committees)
2. failure to exhibit the personal qualifications and ethical standards necessary to the practice of dentistry (student judicial process)
3. violation of Midwestern University College of Dental Medicine-Arizona rules and regulations that are grounds for dismissal (student and administrative judicial process).

*Please Note:* Students will be assessed full tuition for any additional years.

## Faculty Advisor Program

The advisor program plays an important role at Midwestern University College of Dental Medicine-Arizona. Students and faculty work closely together in the academic arena. This kind of educational interaction permits students to get to know their faculty and vice versa. Students are encouraged to use the advice, expertise, and help of the faculty. Students should feel free to contact a faculty member of their choice for advice, encouragement, and support.

## Grade Point Average

The grade point average is a weighted average computed using the number of credits assigned to each course and the quality points corresponding to the letter grade earned in each course. It is determined by calculating the total number of quality points earned and dividing them by the total number of credits carried. The total quality points earned for each course is determined by multiplying the quality points earned per credit (corresponding to the letter grade) by the number of credits assigned to the course. The student's cumulative grade point average is computed and recorded by the Office of the Registrar. It is calculated beginning at the end of the first quarter of enrollment, and does not include any grades or credits for courses audited or courses with a grade of withdrawal (W), withdrawal failing (WF), pass (P) or failed (F) that were later repeated.



## Grading System

Students receive letter grades corresponding to the level of achievement in each course, based on the results of examinations, required course work, and, as applicable, other established criteria. The letter grades, percent ranges, and quality points per credit are as follows:

Grade	Percent (%)	Quality Points (per credit)	Comments
A	93–100	4.00	—
A–	90–92	3.67	—
B+	87–89	3.33	—
B	83–86	3.00	—
B–	80–82	2.67	—
C+	77–79	2.33	—
C	70–76	2.00	—
F	< 70	0	For professional programs
I	—	0.00	An Incomplete (I) grade may be assigned by a course director when a student's work is of passing quality but incomplete, or if a student qualifies for re-examination. It is the responsibility of the student to request an extension from the course instructor. By assigning an "I" grade, it is implied that an instructor agrees that the student has a valid reason and should be given additional time to complete required coursework. All incomplete grades must be resolved within 10 calendar days from the end of final exams for the quarter. In the case of courses ending prior to final exam week, it is the obligation of the course director to monitor the use and resolution of the incomplete grade, with notice to the Registrar. If an incomplete grade remains beyond 10 days, it may be converted to a grade of "F," which signifies failure of the course.
IP	—	0.00	An In Progress (IP) grade may be assigned by a course director when a student qualifies for re-examination. It is the responsibility of the student to request an extension from the course instructor. By assigning an "IP" grade, it is implied that an instructor agrees that the student has a valid reason and should be given additional time, up to one month to complete required coursework. The "IP" in progress is used when extenuating circumstances make it necessary to extend the grade completion period past 10 days (illness, family death, etc). The completion period should not exceed one quarter with notification to the Registrar.
P	—	0.00	Pass; designation indicates that the student has made satisfactory progress or completed required coursework satisfactorily. Grade of 'P' is counted toward credit hour accruals for graduation but is not counted in any GPA calculations.
W	—	0.00	Withdrawal can be given during the third to the eighth weeks of the quarter. There is no penalty and no credit.
W/F	—	0.00	Withdrawal/Failing is given after 50% of the course is complete and the average grade indicates that the work completed up to the time of withdrawal was unsatisfactory. This grade is not counted in any GPA calculations and is not counted in credit hour accruals for graduation.
AU	—	0.00	This designation indicates an audited course, that is, a student registered for a course with the understanding that neither academic credit nor a grade is earned. The possibility does not exist to change the course status from audit to full credit after the start of the quarter. The designation AU is not counted in the GPA calculation.
AP			This designation indicates the decision of a college to award academic credit that precludes a student from taking required course work. The designation of Advanced Placement (AP) is applied toward credit hour accruals, but is not counted in the GPA calculation.

*These grading scales apply to all courses unless otherwise noted in the course syllabus.*

## Immunization Policy for CDMA

Full-time students are required to have all immunizations as outlined in the general policy section of the student handbook. Immunization requirements for CDMA students are subject to current Center for Disease Control and Prevention guidelines, applicable state health department protocols and affiliated rotation sites requirements. Students who do not adhere to the immunization policy by the stated deadline may jeopardize their standing in the College.

## Leave of Absence (LOA)

Academic. A student may be placed on LOA for academic reasons upon a determination of the Student Promotions Committee. A student on LOA for academic reasons is automatically placed on academic probation. Students will be assessed tuition for any additional instruction required as a result of the LOA. An academic LOA will result in a delay in the expected graduation date.

Voluntary. Students who wish to voluntarily initiate a leave of absence for personal or medical reasons should contact the Associate Dean for Academic Affairs.

Additional coursework, for which students will be assessed tuition, may be required of students returning from a personal or medical LOA. A voluntary LOA may result in a delay in the expected graduation date.

## Integrated National Board Dental Examination (INBDE) Policy

Students must challenge the INBDE or equivalent (depending on the country where the candidate plans to practice) during the fall or winter quarter of the DMD-4 year. If a student encounters a catastrophic event that prevents them from taking the examination during that timeframe, the Dean may allow challenging of the examination at a later date.

Students who fail to pass the INBDE or equivalent:

1. Should retake the exam within six months from the date of the first attempt.
2. Should meet with the Dean (or designee) and selected Course Coordinators/Directors to develop an individualized course of study focused toward retaking and passing the INBDE. This will include recommendations to the student to uncover potential test-taking challenges and develop a structured study schedule.

Passing any portion of a licensing examination is not a substitute for passing a Midwestern University course.

## Satisfactory Academic Progress

As required by federal law, reasonable standards of satisfactory academic progress have been established by Midwestern University College of Dental Medicine- Arizona for the Doctor of Dental Medicine program. These standards apply to all students applying for, or currently receiving, financial assistance. The policy and procedure for assessing financial aid status are noted in the Student Financial Services section of this catalog. CDMA students must maintain a minimum GPA of 3.0 to be eligible to engage in student organization leadership roles or attend professional association meetings or other elective events that may interfere with curriculum time or academic progress.

# Dental Medicine Program Calendar

## Summer 2025

Event	Class	Date
<b>Memorial Day</b>	<b>*No Classes*</b>	<b>May 26, 2025</b>
Classes Resume	DM-III, DM-IV	June 2, 2025
Last Day to Add/Drop Classes	DM-III, DM-IV	June 6, 2025
<b>Juneteenth (Observed)</b>	<b>*No Classes*</b>	<b>June 19, 2025</b>
<b>Independence Day (Observed)</b>	<b>*No Classes*</b>	<b>July 4, 2025</b>
Last Day of Class	DM-III, DM-IV	August 8, 2025
Quarterly Exams	DM-III, DM-IV	August 11 - 15, 2025
Quarter Break	DM-III, DM-IV	August 18 - 22, 2025

## Fall 2025

Event	Class	Date
Orientation	DM-I	August 18 - 20, 2025
Classes Begin	DM-I, DM-II, DM-III, DM-IV	August 25, 2025
Last Day to Add/Drop Classes	DM-I, DM-II, DM-III, DM-IV	August 29, 2025
<b>Labor Day</b>	<b>*No Classes*</b>	<b>September 1, 2025</b>
<b>White Coat Ceremony</b>		<b>September 27, 2025</b>
Last Day of Classes	DM-I, DM-II, DM-III, DM-IV	October 31, 2025
Quarterly Exams	DM-I, DM-II, DM-III, DM-IV	November 3 - 7, 2025
Thanksgiving Break	DM-I, DM-II, DM-III, DM-IV	November 10 - 28, 2025

## Winter 2025

Event	Class	Date
Classes Begin	DM-I, DM-II, DM-III, DM-IV	December 1, 2025
Last Day to Add/Drop Classes	DM-I, DM-II, DM-III, DM-IV	December 5, 2025
Winter Break	DM-I, DM-II, DM-III, DM-IV	December 22, 2025 - January 2, 2026
Classes Resume	DM-I, DM-II, DM-III, DM-IV	January 5, 2026
<b>Martin Luther King/ Jr. Day</b>	<b>*No Classes*</b>	<b>January 19, 2026</b>
Last Day of Classes	DM-I, DM-II, DM-III, DM-IV	February 20, 2026
Quarterly Exams	DM-I, DM-II, DM-III, DM-IV	February 23 - 27, 2026
Spring Break	DM-I, DM-II, DM-III, DM-IV	March 2 - 6, 2026

## Spring 2026

Event	Class	Date
Classes Begin	DM-I, DM-II, DM-III, DM-IV	March 9, 2026
Last Day to Add/Drop Classes	DM-I, DM-II, DM-III, DM-IV	March 13, 2026
Last Day of Classes	DM-I, DM-II, DM-III, DM-IV	May 15, 2026
Quarterly Exams	DM-I, DM-II, DM-III, DM-IV	May 18 - 22, 2026
<b>Memorial Day</b>	<b>*No Classes*</b>	<b>May 25, 2026</b>
Quarter Break	DM-III, DM-IV	May 26 - 29, 2026
Quarter Break	DM-I, DM-II	May 26 - August 21, 2026
<b>Commencement (CDMA)</b>		<b>June 1, 2026 12:00 p.m.</b>

Last Revision: 05/9/2025

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# College Of Dental Medicine Arizona Courses

## **BASIG 1501: Integrated Basic Sciences I**

BASIG 1501 provides an overview of cell structure and function, including topics on molecular cell biology, metabolism, epithelium, general connective tissues, and blood. Module 1: Cell and Molecular Biology outlines the basic histological structure and biochemical function of the cell with emphasis on transcription, translation, and control of gene expression. Module 2: Metabolism focuses on normal cell metabolism and includes application of the basic concepts of metabolism to cases. Module 3: Epithelium, General Connective Tissues, and Blood defines the basic structure, function, and biochemical characteristics of two basic histological tissues: epithelium and connective tissue. This module also includes an introduction to cellular adaptations, injury, and death and to peripheral blood cells and hemopoiesis. The biochemical basis of hemostasis is described. Disorders of hemostasis and their consequences are discussed.

**Credits** 4.0

## **BASIG 1502: Integrated Basic Sciences II**

BASIG 1502 provides an overview of cancer, genetics, lymphatic system, and immunology. In Module 4: Cancer and Genetics emphasis is placed on DNA mutations, polymorphisms, patterns of inheritance in human diseases, cytogenetics, and molecular basis of cancer. Module 5: Lymphatic System and Immunology includes the gross anatomy and histology of the lymphatic system and the structure/function of the immune system. Basic precepts of the lymphatic system and immunology will be applied to inflammation, tissue repair and healing. Understanding of immunology will be applied to immune responses to infectious agents. Also included are: development and pathology of immunologically-mediated diseases, immune responses to transplants, cancer, HIV infection, and therapeutic use of drugs affecting the immune system.

**Credits** 4.0

## **BASIG 1503: Integrated Basic Sciences III**

BASIG 1503 provides an overview of infectious diseases, integument, and blood disorders. Module 6: Introduction to Infectious Diseases provides fundamental understanding of basic concepts in microbiology to accurately identify and manage infectious diseases. The information will aid in the management of the patient's health and general well-being. In Module 7: Integument and Blood Disorders, students combine their knowledge of epithelium and connective tissue to learn the basic structure and function of the integument. This module further describes common infections and pathologies of the integument as well as blood-borne infections and blood disorders.

**Credits** 4.5

## **BASIG 1504: Integrated Basic Sciences IV**

BASIG 1504 provides an overview of the Musculoskeletal System (Module 8). Module 8 includes: the basic concepts of embryology, an introduction to gross anatomy, the structure and function of skeletal and smooth muscle and the development of bone and cartilage. Muscle membrane excitability and the molecular basis of muscle contraction are discussed. Diseases of bone and soft tissues are included. This module contains lectures and two laboratory sessions that describe upper extremity anatomy and function.

**Credits** 2.5



## **BASIG 1505: Integrated Basic Sciences V**

BASIG 1505 provides an overview of the structure and function of the nervous system and is composed of one module titled Nervous System (Module 9). This module begins by discussing the nervous system in terms of its organization, support systems, and structure including the histology of nervous tissue, brain biochemistry, and mechanisms of neurotransmission including development of action potentials and synaptic transmission. This is followed by nervous system development, and then descriptions of the structure and function of the somatosensory pathways, descending motor systems, auditory, vestibular, and visual systems, and finally finishing with the cerebral cortex. Common clinical concerns are also discussed including relevant microbiology and pathology.

**Credits** 4.5

## **BASIG 1506: Integrated Basic Sciences VI**

BASIG 1506 provides an overview of the structure and function of the Cardiovascular (Module 11) and Respiratory Systems (Module 12). Module 11: Cardiovascular System begins with a discussion of the anatomy, histology, and embryological development of the heart and circulatory system. Other topics included are cardiac muscle function, electrophysiology of cardiac muscle, cardiac cycle, and cardiac performance. Control of cardiovascular function integrates discussions of hemodynamics, regional circulation, and arterial blood pressure. Module 12: Respiratory System discusses the anatomy and histology of the respiratory system, mechanics of breathing, gas transport, and regulation of respiration. Relevant topics in microbiology, pathophysiology, and pathology are described in both modules.

**Credits** 4.5

## **BASIG 1507: Integrated Basic Sciences VII**

BASIG 1507 provides an overview of the Endocrine System (Module 13) and the Gastrointestinal (GI) System (Module 14). In Module 13 the disciplines of histology and physiology describe the basic structure and normal function of the Endocrine System. Topics discussed include the hypothalamic control of endocrine secretion and regulation of individual endocrine organs. Common disorders of the Endocrine System are discussed by the pathology faculty. Module 14 Gastrointestinal System includes topics such as: chewing, swallowing and digestion. The gross anatomical, histological, physiological, microbiological, and pathological aspects of the GI system are discussed.

**Credits** 3.5

## **BASIG 1508: Integrated Basic Sciences VIII**

BASIG 1508 provides an overview of the Urogenital System (Module 15). Topics included in the first part of the module are: the anatomy of the urogenital system, histology of the urinary system, renal tubular transport mechanisms, the production of urine, the control of extracellular fluid volume, and acid/base balance. The second part of the module provides an overview of the structure and function of the Male and Female Reproductive Systems. Diseases of the urogenital system are discussed.

**Credits** 2.5

## **BASIG 1509: Integrated Basic Sciences IX**

BASIG 1509 provides an overview of the Gross Anatomy of the Head and Neck (Module 16). This module provides instruction in the fundamental head and neck gross anatomy information required for clinical training. Three-dimensional relationships among anatomical structures are reinforced by in-depth dissections of the head and neck. Students are expected to use this anatomical information to elucidate and solve case-based problems commonly seen in clinical practice. Student dissection of the head and neck is performed under faculty supervision during three 3-hour laboratories per week.

**Credits** 4.0

## **COREG 1560I: Interprofessional Healthcare/One Health**

The Interprofessional Healthcare/One Health course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

## **COREG 1570I: Interprofessional Healthcare/One Health**

The Interprofessional Healthcare/One Health course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

## **COREG 1580I: Interprofessional Healthcare/One Health**

The Interprofessional Healthcare/One Health course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

## **DENTG 1445: Botox In Dentistry**

This course will introduce the topic of Botox in Dentistry. Course objectives include therapeutic uses in the dental practice, ways to incorporate in a dental office, proper photography and documentation, and a thorough review of facial muscle anatomy with a hands-on clinical portion to practice facial markings and injection techniques.

**Credits** 1.0

## **DENTG 1510: Preventive Dental Medicine I**

These two courses cover important concepts in preventive dental medicine. Through lectures and hands-on exercises in the Simulation Clinic, students learn how to establish their own oral health. They also learn the science and practice of oral health assessment and preventive dental treatment modalities. Course instruction focuses on ways to promote one's own oral health, the health of one's patients, and the health of one's community at large. Methods learned and forms used in the courses are incorporated into subsequent patient care in the Dental Institute.

**Credits** 1.0

## **DENTG 1511: Preclinical Professionalism I**

These courses span the D1 and D2 years and serve as a transition to Clinical Professionalism in the D3 and D4 years. These quarterly courses contain no formal class sessions or written examinations. The courses monitor and evaluate student dentists' relationships with their peers, faculty, and staff and their professional conduct. The course grading philosophy assumes a professional behavioral norm in which all encounters and personal interactions are handled appropriately and professionally. Each student dentist begins the course with 100 points. Points are deducted if there are departures from the norm of excellent interactions with peers, faculty, and staff, and professional conduct.

**Credits** 0.5

## **DENTG 1512: Oral Health Sciences I**

These continuously running didactic courses take the student from dental morphology and occlusion through basic to advanced clinical dentistry including operative dentistry, fixed and removable prosthodontics (including principles and applications of CAD/CAM and implant dentistry), rotary endodontics, pediatric dentistry, oral surgery, oral medicine, periodontics, orthodontics, and temporomandibular function and dysfunction. The courses are organized into tooth systems. Each system integrates such topics as growth and development, cariology, radiology, oral pathology, and dental material science into its core while continuously utilizing a case-based, evidenced-based approach from a patient perspective.

**Credits** 3.0

## **DENTG 1512L: Oral Health Sciences I Lab**

These continuously running laboratory courses, which are simulation clinic modules, take the student from dental morphology and occlusion and through basic to advanced clinical dentistry in operative dentistry, fixed and removable prosthodontics (including design and fabrication of CAD/CAM restorations and implant placement and restoration), rotary endodontics, pediatric dentistry, oral surgery, oral medicine, periodontics, orthodontics and temporomandibular function and dysfunction introducing therapeutic appliance diagnosis and fabrication. The courses are organized into tooth systems. Each system integrates such topics as growth and development, cariology, radiology, and dental material science into the core of restorative procedures from pediatric to geriatric patients. Simulated clinical competencies integrate radiographic diagnosis, basic science, and treatment planning in conjunction with typical psychomotor skills to enhance the comprehensive preclinical learning experience.

**Credits** 1.5

## **DENTG 1515: Personal Finance**

This course introduces the new dental student to effective personal financial management. Topics include the economy's effect on credit and debt, personal money management, managing credit, and debt and personal needs.

**Credits** 0.5

## **DENTG 1520: Preventive Dental Medicine II**

These two courses cover important concepts in preventive dental medicine. Through lectures and hands-on exercises in the Simulation Clinic, students learn how to establish their own oral health. They also learn the science and practice of oral health assessment and preventive dental treatment modalities. Course instruction focuses on ways to promote one's own oral health, the health of one's patients, and the health of one's community at large. Methods learned and forms used in the courses are incorporated into subsequent patient care in the Dental Institute.

**Credits** 1.0

## **DENTG 1521: Preclinical Professionalism II**

These courses span the D1 and D2 years and serve as a transition to Clinical Professionalism in the D3 and D4 years. These quarterly courses contain no formal class sessions or written examinations. The courses monitor and evaluate student dentists' relationships with their peers, faculty, and staff and their professional conduct. The course grading philosophy assumes a professional behavioral norm in which all encounters and personal interactions are handled appropriately and professionally. Each student dentist begins the course with 100 points. Points are deducted if there are departures from the norm of excellent interactions with peers, faculty, and staff, and professional conduct.

**Credits** 0.5

## **DENTG 1522: Oral Health Sciences II**

These continuously running didactic courses take the student from dental morphology and occlusion through basic to advanced clinical dentistry including operative dentistry, fixed and removable prosthodontics (including principles and applications of CAD/CAM and implant dentistry), rotary endodontics, pediatric dentistry, oral surgery, oral medicine, periodontics, orthodontics, and temporomandibular function and dysfunction. The courses are organized into tooth systems. Each system integrates such topics as growth and development, cariology, radiology, oral pathology, and dental material science into its core while continuously utilizing a case-based, evidenced-based approach from a patient perspective.

**Credits** 2.5

## **DENTG 1522L: Oral Health Sciences II Lab**

These continuously running laboratory courses, which are simulation clinic modules, take the student from dental morphology and occlusion and through basic to advanced clinical dentistry in operative dentistry, fixed and removable prosthodontics (including design and fabrication of CAD/CAM restorations and implant placement and restoration), rotary endodontics, pediatric dentistry, oral surgery, oral medicine, periodontics, orthodontics and temporomandibular function and dysfunction introducing therapeutic appliance diagnosis and fabrication. The courses are organized into tooth systems. Each system integrates such topics as growth and development, cariology, radiology, and dental material science into the core of restorative procedures from pediatric to geriatric patients. Simulated clinical competencies integrate radiographic diagnosis, basic science, and treatment planning in conjunction with typical psychomotor skills to enhance the comprehensive preclinical learning experience.

**Credits** 1.5

## **DENTG 1523: Dental Ethics I**

The Dental Ethics course series introduces dental students to the broad concepts of ethical guidelines, reasoning, and decision-making affecting the delivery of healthcare. The courses use a case-based approach to clinical ethical reasoning and examination of ethical issues and dilemmas in the dental care setting and addresses expectations for professional behavior among dental practitioners.

**Credits** 0.5

## **DENTG 1531: Preclinical Professionalism III**

These courses span the D1 and D2 years and serve as a transition to Clinical Professionalism in the D3 and D4 years. These quarterly courses contain no formal class sessions or written examinations. The courses monitor and evaluate student dentists' relationships with their peers, faculty, and staff and their professional conduct. The course grading philosophy assumes a professional behavioral norm in which all encounters and personal interactions are handled appropriately and professionally. Each student dentist begins the course with 100 points. Points are deducted if there are departures from the norm of excellent interactions with peers, faculty, and staff, and professional conduct.

**Credits** 0.5

## **DENTG 1533: Oral Health Sciences III**

These continuously running didactic courses take the student from dental morphology and occlusion through basic to advanced clinical dentistry including operative dentistry, fixed and removable prosthodontics (including principles and applications of CAD/CAM and implant dentistry), rotary endodontics, pediatric dentistry, oral surgery, oral medicine, periodontics, orthodontics, and temporomandibular function and dysfunction. The courses are organized into tooth systems. Each system integrates such topics as growth and development, cariology, radiology, oral pathology, and dental material science into its core while continuously utilizing a case-based, evidenced-based approach from a patient perspective.

**Credits** 2.5

## **DENTG 1533L: Oral Health Sciences III Lab**

These continuously running laboratory courses, which are simulation clinic modules, take the student from dental morphology and occlusion and through basic to advanced clinical dentistry in operative dentistry, fixed and removable prosthodontics (including design and fabrication of CAD/CAM restorations and implant placement and restoration), rotary endodontics, pediatric dentistry, oral surgery, oral medicine, periodontics, orthodontics and temporomandibular function and dysfunction introducing therapeutic appliance diagnosis and fabrication. The courses are organized into tooth systems. Each system integrates such topics as growth and development, cariology, radiology, and dental material science into the core of restorative procedures from pediatric to geriatric patients. Simulated clinical competencies integrate radiographic diagnosis, basic science, and treatment planning in conjunction with typical psychomotor skills to enhance the comprehensive preclinical learning experience.

**Credits** 1.5

## **DENTG 1538: Multicultural Healthcare**

Students learn how multiculturalism influences oral health care delivery. Topics include diversity, race, ethnicity, gender and sexual orientation, age, health disparities, social determinants of health, health care concerns faced by different populations, and culturally appropriate communication skills. Instruction occurs in didactic lecture, online discussion posts and classroom activities.

**Credits** 1.0

## **DENTG 1611: Preclinical Professionalism IV**

These courses span the D1 and D2 years and serve as a transition to Clinical Professionalism in the D3 and D4 years. These quarterly courses contain no formal class sessions or written examinations. The courses monitor and evaluate student dentists' relationships with their peers, faculty, and staff and their professional conduct. The course grading philosophy assumes a professional behavioral norm in which all encounters and personal interactions are handled appropriately and professionally. Each student dentist begins the course with 100 points. Points are deducted if there are departures from the norm of excellent interactions with peers, faculty, and staff, and professional conduct.

**Credits** 0.5

## **DENTG 1612: Dental Community Service I**

In these Dental Community Service courses, second year dental students participate in visits to elementary, junior high and high schools to provide health promotion education to students in oral disease prevention, tobacco cessation, and drug avoidance. Each student participates one half-day per quarter.

**Credits** 0.5

## **DENTG 1614: Oral Health Sciences IV**

These continuously running didactic courses take the student from dental morphology and occlusion through basic to advanced clinical dentistry including operative dentistry, fixed and removable prosthodontics (including principles and applications of CAD/CAM and implant dentistry), rotary endodontics, pediatric dentistry, oral surgery, oral medicine, periodontics, orthodontics, and temporomandibular function and dysfunction. The courses are organized into tooth systems. Each system integrates such topics as growth and development, cariology, radiology, oral pathology, and dental material science into its core while continuously utilizing a case-based, evidenced-based approach from a patient perspective.

**Credits** 9.0

## **DENTG 1614L: Oral Health Sciences IV Lab**

These continuously running laboratory courses, which are simulation clinic modules, take the student from dental morphology and occlusion and through basic to advanced clinical dentistry in operative dentistry, fixed and removable prosthodontics (including design and fabrication of CAD/CAM restorations and implant placement and restoration), rotary endodontics, pediatric dentistry, oral surgery, oral medicine, periodontics, orthodontics and temporomandibular function and dysfunction introducing therapeutic appliance diagnosis and fabrication. The courses are organized into tooth systems. Each system integrates such topics as growth and development, cariology, radiology, and dental material science into the core of restorative procedures from pediatric to geriatric patients. Simulated clinical competencies integrate radiographic diagnosis, basic science, and treatment planning in conjunction with typical psychomotor skills to enhance the comprehensive preclinical learning experience.

**Credits** 7.0

## **DENTG 1615: Human Behavior I**

This course introduces the fundamentals of effective communication and relationship-building skills. Topics covered include rapport-building skills with patients and colleagues, emotional intelligence, personality types, conflict resolution, and team-building strategies.

**Credits** 1.0

## **DENTG 1617: Clinical Case Studies I**

This seminar series allows the dental students to participate in treatment planning options for complex dental cases and requires them to work up primary and alternative treatment plans for complex patients likely to be seen in a general practice, and present the plans to their faculty mentors in a case presentation format. This course runs for three quarters during the second-year curriculum where cases will become increasingly more challenging.

**Credits** 1.0

## **DENTG 1621: Preclinical Professionalism V**

These courses span the D1 and D2 years and serve as a transition to Clinical Professionalism in the D3 and D4 years. These quarterly courses contain no formal class sessions or written examinations. The courses monitor and evaluate student dentists' relationships with their peers, faculty, and staff and their professional conduct. The course grading philosophy assumes a professional behavioral norm in which all encounters and personal interactions are handled appropriately and professionally. Each student dentist begins the course with 100 points. Points are deducted if there are departures from the norm of excellent interactions with peers, faculty, and staff, and professional conduct.

**Credits** 0.5

## **DENTG 1623: Dental Community Service II**

In these Dental Community Service courses, second year dental students participate in visits to schools and geriatric communities to provide health promotion education in oral disease prevention, tobacco cessation, and drug avoidance to individuals in different stages of life. Each student participates one half-day per quarter.

**Credits** 0.5

## **DENTG 1625: Oral Health Sciences V**

These continuously running didactic courses take the student from dental morphology and occlusion through basic to advanced clinical dentistry including operative dentistry, fixed and removable prosthodontics (including principles and applications of CAD/CAM and implant dentistry), rotary endodontics, pediatric dentistry, oral surgery, oral medicine, periodontics, orthodontics, and temporomandibular function and dysfunction. The courses are organized into tooth systems. Each system integrates such topics as growth and development, cariology, radiology, oral pathology, and dental material science into its core while continuously utilizing a case-based, evidenced-based approach from a patient perspective.

**Credits** 9.5

## **DENTG 1625L: Oral Health Sciences V Lab**

These continuously running laboratory courses, which are simulation clinic modules, take the student from dental morphology and occlusion and through basic to advanced clinical dentistry in operative dentistry, fixed and removable prosthodontics (including design and fabrication of CAD/CAM restorations and implant placement and restoration), rotary endodontics, pediatric dentistry, oral surgery, oral medicine, periodontics, orthodontics and temporomandibular function and dysfunction introducing therapeutic appliance diagnosis and fabrication. The courses are organized into tooth systems. Each system integrates such topics as growth and development, cariology, radiology, and dental material science into the core of restorative procedures from pediatric to geriatric patients. Simulated clinical competencies integrate radiographic diagnosis, basic science, and treatment planning in conjunction with typical psychomotor skills to enhance the comprehensive preclinical learning experience.

**Credits** 7.0

## **DENTG 1627: Clinical Case Studies II**

This seminar series allows the dental students to participate in treatment planning options for complex dental cases and requires them to work up primary and alternative treatment plans for complex patients likely to be seen in a general practice, and present the plans to their faculty mentors in a case presentation format. This course runs for three quarters during the second-year curriculum where cases will become increasingly more challenging.

**Credits** 1.0

## **DENTG 1630: Comprehensive Preclinical Assessment**

This course is a comprehensive assessment to evaluate readiness for patient care. This Comprehensive Examination is a measure of the student's ability to master the preclinical assignments given during the year. This four-part, pass/fail, week-long examination contains psychomotor skills including restorative and periodontal therapies, a comprehensive station-based Objective Structured Clinical Examination (OSCE), radiology technique, and a comprehensive oral examination of standardized case-based questions. Leading up to the examination are two preparatory lectures and two weeks of hands-on practice in the Simulation Clinic.

**Credits** 1.0

**Lab Hours** 26

**Lecture Hours** 2

## **DENTG 1631: Preclinical Professionalism VI**

These courses span the D1 and D2 years and serve as a transition to Clinical Professionalism in the D3 and D4 years. These quarterly courses contain no formal class sessions or written examinations. The courses monitor and evaluate student dentists' relationships with their peers, faculty, and staff and their professional conduct. The course grading philosophy assumes a professional behavioral norm in which all encounters and personal interactions are handled appropriately and professionally. Each student dentist begins the course with 100 points. Points are deducted if there are departures from the norm of excellent interactions with peers, faculty, and staff, and professional conduct.

**Credits** 0.5

## **DENTG 1633: Dental Ethics II**

The Dental Ethics course series introduces dental students to the broad concepts of ethical guidelines, reasoning, and decision-making affecting the delivery of healthcare. The courses use a case-based approach to clinical ethical reasoning and examination of ethical issues and dilemmas in the dental care setting and addresses expectations for professional behavior among dental practitioners.

**Credits** 0.5

## **DENTG 1634: Dental Community Service III**

In these Dental Community Service courses, second year dental students participate in visits to schools and geriatric communities to provide health promotion education in oral disease prevention, tobacco cessation, and drug avoidance to individuals in different stages of life. Each student participates one half-day per quarter.

**Credits** 0.5

## **DENTG 1636: Oral Health Sciences VI**

These continuously running didactic courses take the student from dental morphology and occlusion through basic to advanced clinical dentistry including operative dentistry, fixed and removable prosthodontics (including principles and applications of CAD/CAM and implant dentistry), rotary endodontics, pediatric dentistry, oral surgery, oral medicine, periodontics, orthodontics, and temporomandibular function and dysfunction. The courses are organized into tooth systems. Each system integrates such topics as growth and development, cariology, radiology, oral pathology, and dental material science into its core while continuously utilizing a case-based, evidenced-based approach from a patient perspective.

**Credits** 9.0

## **DENTG 1636L: Oral Health Sciences VI Lab**

These continuously running laboratory courses, which are simulation clinic modules, take the student from dental morphology and occlusion and through basic to advanced clinical dentistry in operative dentistry, fixed and removable prosthodontics (including design and fabrication of CAD/CAM restorations and implant placement and restoration), rotary endodontics, pediatric dentistry, oral surgery, oral medicine, periodontics, orthodontics and temporomandibular function and dysfunction introducing therapeutic appliance diagnosis and fabrication. The courses are organized into tooth systems. Each system integrates such topics as growth and development, cariology, radiology, and dental material science into the core of restorative procedures from pediatric to geriatric patients. Simulated clinical competencies integrate radiographic diagnosis, basic science, and treatment planning in conjunction with typical psychomotor skills to enhance the comprehensive preclinical learning experience.

**Credits** 7.0



## **DENTG 1637: Anesthesia I**

Anesthesia I covers the anatomy, medical considerations, pharmacology, techniques, and complications of local anesthesia in dental practice. Anesthesia II covers nitrous oxide administration; oral, IM, IV, and conscious sedation; general anesthesia; and emergency management. Clinical experiences occur in subsequent clinical courses.

**Credits** 1.0

## **DENTG 1638: Medical Emergencies**

This lecture course provides concepts and techniques for the identification, prevention, and management of medical emergencies in the dental office.

**Credits** 1.0

## **DENTG 1639: Clinical Case Studies III**

This seminar series allows the dental students to participate in treatment planning options for complex dental cases and requires them to work up primary and alternative treatment plans for complex patients likely to be seen in a general practice, and present the plans to their faculty mentors in a case presentation format. This course runs for three quarters during the second-year curriculum where cases will become increasingly more challenging.

**Credits** 1.0

## **DENTG 1640L: Preclinical Dental Rotations**

This continuously running course is organized in multiple small group rotations that focus on various disciplines of dentistry, such as implants, CAD/CAM, lasers, and 3D printing. The course builds on and expands the knowledge obtained in the Oral Health Sciences didactic and laboratory courses.

**Credits** 1.5

## **DENTG 1721: Anesthesia II**

Anesthesia I covers the anatomy, medical considerations, pharmacology, techniques, and complications of local anesthesia in dental practice. Anesthesia II covers nitrous oxide administration; oral, IM, IV, and conscious sedation; general anesthesia; and emergency management. Clinical experiences occur in subsequent clinical courses.

**Credits** 1.0

## **DENTG 1724: Surgical Periodontics General Practice**

This course covers periodontal surgeries commonly performed by general practitioners and periodontists. Topics include evidence-based clinical decision-making; resective, regenerative, and plastic surgical techniques; complications of periodontal surgery; and management and maintenance of the surgical patient.

**Credits** 1.0

## **DENTG 1728: Advanced Imaging**

Through lectures students learn coronal, sagittal, and axial planes and how to arrange the data in cross-sections for evaluation of the TMJ, implant treatment planning, orthodontics, etc. This course introduces the dental students to acquisition and interpretation of cone beam CT scans for the practice of dentistry.

**Credits** 1.0

## **DENTG 1730: Human Behavior II**

This course covers advanced communication and human interaction skills. Topics include leadership skills, advanced NLP learning styles, case presentation skills, interviewing skills, and practice management topics related to the 'people' side of dentistry.

**Credits** 1.0

## **DENTG 1733: Clinical Reviews**

This course provides a comprehensive review of the major clinical disciplines in dentistry to reinforce previous preclinical instruction and learning and further prepare students to deliver comprehensive patient care.

**Credits** 1.5

## **DENTG 1734: Dental Ethics III**

The Dental Ethics course series introduces dental students to the broad concepts of ethical guidelines, reasoning, and decision-making affecting the delivery of healthcare. The courses use a case-based approach to clinical ethical reasoning and examination of ethical issues and dilemmas in the dental care setting and addresses expectations for professional behavior among dental practitioners.

**Credits** 1.0

## **DENTG 1740: Implantology**

This course focuses on the clinical applications of dental implant treatment. Topics include various case selection and restorative and surgical techniques in dental implantology for the general dentist.

**Credits** 1.0

## **DENTG 1742: Clinical Pharmacology I**

Clinical Pharmacology focuses on the application of safe and effective pharmacology for dental patients. Through case-based instruction, topics include identifying the effects of medications taken by patients on the delivery of dental care and the implications and contraindications of medications used or prescribed by the dentist.

**Credits** 1.0

## **DENTG 1745: Practice Management I**

The Practice Management courses introduce the dental student to the business, financial, and personnel aspects of dental practice. Course themes include practice building, office finances, and business systems, and practice acquisition.

**Credits** 1.0

## **DENTG 1749: Clinical Topics**

This course provides students with the information necessary to communicate and work in an interprofessional healthcare team. The oral systemic connection is addressed through lectures on systems, antibiotic stewardship, and managing medical emergencies.

**Credits** 1.0

## **DENTG 1750: Practice Management II**

The Practice Management courses introduce the dental student to the business, financial, and personnel aspects of dental practice. Course themes include practice building, office finances, and business systems, and practice acquisition.

**Credits** 1.0

## **DENTG 1751: Occlusion**

The Occlusion course teaches the fundamentals of how the movable mandibular arch works in coordinated occlusion with the fixed maxillary arch, the role of appropriate occlusion in creating dental restorations, and the diagnosis and management of occlusal disorders.

**Credits** 1.0

## **DENTG 1754: Clinical Oral Pathology I**

Oral Pathology focuses on identification and differential diagnosis of the oral pathology lesions most commonly encountered in general dental practices. Through Case-based instruction and clinical imaging, topics include hard tissue, soft tissue, and radiographic pathology.

**Credits** 1.0

## **DENTG 1756: Special Needs**

Recognizing the unique dental and medical needs of patients who are medically compromised or have mental or physical limitations, this course helps students develop the knowledge and skills needed to render comprehensive oral health care to this population. Students gain an understanding of the complexities of compromises and limitations, learn about adaptive devices and management techniques, and study the role of dentistry in total patient care while learning to manage patients with medical and physical disabilities. Topics include pediatric, adult, and geriatric special needs; sedation and/or indications for sedation; and occupational therapy and pharmacology uses.

**Credits** 1.0

## **DENTG 1758: INBDE Preparation Assessment**

Through practice quizzes and a final examination, this online course assesses the students' preparation and readiness to sit for the Integrated National Board Dental Examination (INBDE). Successful completion of this course is required for permission to sit for the INBDE examination.

**Credits** 0.5

## **DENTG 1823: Practice Management III**

The Practice Management courses introduce the dental student to the business, financial, and personnel aspects of dental practice. Course themes include practice building, office finances, and business systems, and practice acquisition.

**Credits** 1.0

## **DENTG 1825: Clinical Oral Pathology II**

Oral Pathology focuses on identification and differential diagnosis of the oral pathology lesions most commonly encountered in general dental practices. Through Case-based instruction and clinical imaging, topics include hard tissue, soft tissue, and radiographic pathology.

**Credits** 1.0

## **DENTG 1830: Dental Sleep Medicine**

This course focuses on identification of sleep disordered breathing and describing the adverse effects of Obstructive Sleep Apnea (OSA) on systemic, neurocognitive, and craniofacial development of adult and pediatric patients. The course also applies 3D CBCT imaging to differentiate normal anatomical appearance from pathology, outlines treatment options for sleep apnea, and compares appliances for its treatment.

**Credits** 1.0

## **DENTG 1831: Oral Conscious Sedation**

This course focuses on patient selection, pharmacological agent selection, equipment selection, dosing protocols, and techniques for conscious sedation of dental patients. The course also covers airway management, medical emergency management, and training requirements.

**Credits** 1.0

## **DENTG 1837: Practice Management Selectives**

In Practice Management Selectives, each student chooses one selective track, based on the student's plans for practice after graduation. Tracks include Residency or Graduate Program, Private Practice Associate, Private Practice Owner, Corporate Dentistry, Military Forces, Public Health and Prison Systems and Academics.

**Credits** 0.5

## **DENTG 1838: Clinical Pharmacology II**

Clinical Pharmacology focuses on the application of safe and effective pharmacology for dental patients. Through case-based instruction, topics include identifying the effects of medications taken by patients on the delivery of dental care and the implications and contraindications of medications used or prescribed by the dentist.

**Credits** 1.0

## **DENTG 1844: Advanced Practice Management**

The Advanced Practice Management course builds on the previous practice management courses and continues preparation of the graduate for management of the dental practice and leadership of the oral healthcare team.

**Credits** 1.0

## **DENTG 1845: Advanced Topics**

This course consists of presentation and discussion of complex clinical dental cases, incorporating content from the dental specialties, and other dental disciplines.

**Credits** 1.0

## **DENTG 1852: Clinical Service Learning**

In the Clinical Service Learning course, fourth-year dental students participate in rotations to community-based dental clinics providing dental care services to pediatric and under served populations. Each student participates for two weeks.

**Credits** 2.0

## **DENTG 2000: Patient Care Introduction**

In the Patient Care courses, students learn patient-centered oral health care and develop the clinical competencies required for entry to the general practice of dentistry. By providing patient care under the supervision, guidance, and support of the faculty, students enhance their diagnostic, technical, and interpersonal skills. The course emphasizes the importance of these skills in effective, efficient, and compassionate patient care and guides the students toward independent practice by evaluating competence in the delivering specific services, providing high-quality comprehensive care to all patients, maintaining professionalism in the delivery of care, evaluating accurately one's clinical performance, and practicing efficiently and profitably.

**Credits** 12.0

## **DENTG 2001: Patient Care I**

In the Patient Care courses, students learn patient-centered oral health care and develop the clinical competencies required for entry to the general practice of dentistry. By providing patient care under the supervision, guidance, and support of the faculty, students enhance their diagnostic, technical, and interpersonal skills. The course emphasizes the importance of these skills in effective, efficient, and compassionate patient care and guides the students toward independent practice by evaluating competence in the delivering specific services, providing high-quality comprehensive care to all patients, maintaining professionalism in the delivery of care, evaluating accurately one's clinical performance, and practicing efficiently and profitably.

**Credits** 12.0

## **DENTG 2002: Patient Care II**

In the Patient Care courses, students learn patient-centered oral health care and develop the clinical competencies required for entry to the general practice of dentistry. By providing patient care under the supervision, guidance, and support of the faculty, students enhance their diagnostic, technical, and interpersonal skills. The course emphasizes the importance of these skills in effective, efficient, and compassionate patient care and guides the students toward independent practice by evaluating competence in the delivering specific services, providing high-quality comprehensive care to all patients, maintaining professionalism in the delivery of care, evaluating accurately one's clinical performance, and practicing efficiently and profitably.

**Credits** 12.0

## **DENTG 2003: Patient Care III**

In the Patient Care courses, students learn patient-centered oral health care and develop the clinical competencies required for entry to the general practice of dentistry. By providing patient care under the supervision, guidance, and support of the faculty, students enhance their diagnostic, technical, and interpersonal skills. The course emphasizes the importance of these skills in effective, efficient, and compassionate patient care and guides the students toward independent practice by evaluating competence in the delivering specific services, providing high-quality comprehensive care to all patients, maintaining professionalism in the delivery of care, evaluating accurately one's clinical performance, and practicing efficiently and profitably.

**Credits** 12.0

## **DENTG 2004: Patient Care IV**

In the Patient Care courses, students learn patient-centered oral health care and develop the clinical competencies required for entry to the general practice of dentistry. By providing patient care under the supervision, guidance, and support of the faculty, students enhance their diagnostic, technical, and interpersonal skills. The course emphasizes the importance of these skills in effective, efficient, and compassionate patient care and guides the students toward independent practice by evaluating competence in the delivering specific services, providing high-quality comprehensive care to all patients, maintaining professionalism in the delivery of care, evaluating accurately one's clinical performance, and practicing efficiently and profitably.

**Credits** 11.0

## **DENTG 2005: Patient Care V**

In the Patient Care courses, students learn patient-centered oral health care and develop the clinical competencies required for entry to the general practice of dentistry. By providing patient care under the supervision, guidance, and support of the faculty, students enhance their diagnostic, technical, and interpersonal skills. The course emphasizes the importance of these skills in effective, efficient, and compassionate patient care and guides the students toward independent practice by evaluating competence in the delivering specific services, providing high-quality comprehensive care to all patients, maintaining professionalism in the delivery of care, evaluating accurately one's clinical performance, and practicing efficiently and profitably.

**Credits** 11.0

## **DENTG 2006: Patient Care VI**

In the Patient Care courses, students learn patient-centered oral health care and develop the clinical competencies required for entry to the general practice of dentistry. By providing patient care under the supervision, guidance, and support of the faculty, students enhance their diagnostic, technical, and interpersonal skills. The course emphasizes the importance of these skills in effective, efficient, and compassionate patient care and guides the students toward independent practice by evaluating competence in the delivering specific services, providing high-quality comprehensive care to all patients, maintaining professionalism in the delivery of care, evaluating accurately one's clinical performance, and practicing efficiently and profitably.

**Credits** 11.0

## **DENTG 2007: Patient Care VII**

In the Patient Care courses, students learn patient-centered oral health care and develop the clinical competencies required for entry to the general practice of dentistry. By providing patient care under the supervision, guidance, and support of the faculty, students enhance their diagnostic, technical, and interpersonal skills. The course emphasizes the importance of these skills in effective, efficient, and compassionate patient care and guides the students toward independent practice by evaluating competence in the delivering specific services, providing high-quality comprehensive care to all patients, maintaining professionalism in the delivery of care, evaluating accurately one's clinical performance, and practicing efficiently and profitably.

**Credits** 11.0

## **DENTG 2010: Clinical Professionalism, Introduction**

The Clinical Professionalism courses contain no formal class sessions or written examinations. The courses monitor and evaluate students' relationships with their patients and their professional conduct in clinic attendance, patient relations, timeliness and continuity of care, patient record management, administrative matters, and professional conduct. The grading philosophy assumes a professional behavioral norm in which all patient encounters and personal interactions are handled appropriately and professionally. Points are deducted for departures from the norm of excellent patient relations, patient management, or professional conduct.

**Credits** 1.5

## **DENTG 2011: Clinical Professionalism I**

The Clinical Professionalism courses contain no formal class sessions or written examinations. The courses monitor and evaluate students' relationships with their patients and their professional conduct in clinic attendance, patient relations, timeliness and continuity of care, patient record management, administrative matters, and professional conduct. The grading philosophy assumes a professional behavioral norm in which all patient encounters and personal interactions are handled appropriately and professionally. Points are deducted for departures from the norm of excellent patient relations, patient management, or professional conduct.

**Credits** 1.5

## **DENTG 2012: Clinical Professionalism II**

The Clinical Professionalism courses contain no formal class sessions or written examinations. The courses monitor and evaluate students' relationships with their patients and their professional conduct in clinic attendance, patient relations, timeliness and continuity of care, patient record management, administrative matters, and professional conduct. The grading philosophy assumes a professional behavioral norm in which all patient encounters and personal interactions are handled appropriately and professionally. Points are deducted for departures from the norm of excellent patient relations, patient management, or professional conduct.

**Credits** 1.5

## **DENTG 2013: Clinical Professionalism III**

The Clinical Professionalism courses contain no formal class sessions or written examinations. The courses monitor and evaluate students' relationships with their patients and their professional conduct in clinic attendance, patient relations, timeliness and continuity of care, patient record management, administrative matters, and professional conduct. The grading philosophy assumes a professional behavioral norm in which all patient encounters and personal interactions are handled appropriately and professionally. Points are deducted for departures from the norm of excellent patient relations, patient management, or professional conduct.

**Credits** 1.5

## **DENTG 2014: Clinical Professionalism IV**

The Clinical Professionalism courses contain no formal class sessions or written examinations. The courses monitor and evaluate students' relationships with their patients and their professional conduct in clinic attendance, patient relations, timeliness and continuity of care, patient record management, administrative matters, and professional conduct. The grading philosophy assumes a professional behavioral norm in which all patient encounters and personal interactions are handled appropriately and professionally. Points are deducted for departures from the norm of excellent patient relations, patient management, or professional conduct.

**Credits** 1.5

## **DENTG 2015: Clinical Professionalism V**

The Clinical Professionalism courses contain no formal class sessions or written examinations. The courses monitor and evaluate students' relationships with their patients and their professional conduct in clinic attendance, patient relations, timeliness and continuity of care, patient record management, administrative matters, and professional conduct. The grading philosophy assumes a professional behavioral norm in which all patient encounters and personal interactions are handled appropriately and professionally. Points are deducted for departures from the norm of excellent patient relations, patient management, or professional conduct.

**Credits** 1.5

## **DENTG 2016: Clinical Professionalism VI**

The Clinical Professionalism courses contain no formal class sessions or written examinations. The courses monitor and evaluate students' relationships with their patients and their professional conduct in clinic attendance, patient relations, timeliness and continuity of care, patient record management, administrative matters, and professional conduct. The grading philosophy assumes a professional behavioral norm in which all patient encounters and personal interactions are handled appropriately and professionally. Points are deducted for departures from the norm of excellent patient relations, patient management, or professional conduct.

**Credits** 1.5

## **DENTG 2017: Clinical Professionalism VII**

The Clinical Professionalism courses contain no formal class sessions or written examinations. The courses monitor and evaluate students' relationships with their patients and their professional conduct in clinic attendance, patient relations, timeliness and continuity of care, patient record management, administrative matters, and professional conduct. The grading philosophy assumes a professional behavioral norm in which all patient encounters and personal interactions are handled appropriately and professionally. Points are deducted for departures from the norm of excellent patient relations, patient management, or professional conduct.

**Credits** 1.5

## **DENTG 2020: Clinical Conference I**

This course sequence consists of informational sessions about clinical operations, clinical policies, competency assessments, mock boards, real boards, and other matters or issues arising in the delivery of patient care in a learning environment.

**Credits** 1.0

## **DENTG 2021: Clinical Conference II**

This course provides instruction in the areas of nutrition and tobacco use and their effects on oral health. Through presentations and discussions, students learn the science and practice of diet and tobacco use assessments and preventative treatment modalities. This course focuses on techniques to promote oral health through diet and tobacco cessation counseling.

**Credits** 0.5

## **DENTG 2023: Clinical Conference III**

This course sequence consists of informational sessions about clinical operations, clinical policies, competency assessments, mock boards, real boards, and other matters or issues arising in the delivery of patient care in a learning environment.

**Credits** 0.5

## **PHARG 1601: General Pharmacology I**

This course places an emphasis on the physical and chemical properties of the drugs, dosages, and therapeutic effects, methods of administration and indications/contraindications for the use of the drug.

**Credits** 2.0

## **PHARG 1621: General Pharmacology II**

This course places an emphasis on the physical and chemical properties of the drugs, dosages, and therapeutic effects, methods of administration and indications/contradictions for the use of the drug.

**Credits** 3.0



# Arizona College of Optometry

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## Mission

The mission of Midwestern University Arizona College of Optometry is to educate future optometrists and residents in an interprofessional healthcare environment. The College fosters professional attitudes and behaviors that encourage lifelong learning, scholarship to serve the needs of the public, and a commitment to improve the health and well-being of society.

## Vision and Goals

The Arizona College of Optometry's vision is to:

- Deliver the premier optometric educational experience utilizing our unique interprofessional setting and cutting edge technology.
- Provide our students with the knowledge and skills to deliver the highest level of professional, ethical and compassionate eye and vision care.
- Promote lifelong learning, community outreach and innovative research.

The 9 goals of the Arizona College of Optometry (AZCOPT) are listed below:

- Ensure that students have a strong foundation in basic visual and clinical sciences by providing broad and innovative educational opportunities
- Plan and develop a diversity of clinical experiences to enable students to enter the practice of optometry
- Support and nurture an environment of intellectual inquiry and research activity by students, residents and faculty
- Promote interprofessional educational programming to develop students' appreciation of other health care professions
- Promote student involvement in community service
- Maintain and advance high quality residency programs
- Perpetuate an Eye Institute that serves the eye/vision care needs of the community
- Provide lifelong learning activities and support services to the alumni, the optometric profession, and the public
- Maintain the financial viability of the College

## Accreditation

The Midwestern University Arizona College of Optometry is accredited by the Accreditation Council on Optometric Education (ACOE), of the American Optometric Association (AOA), 243 N. Lindbergh Blvd., St. Louis, MO 63141; phone 800/365-2219, [accredit@theacoe.org](mailto:accredit@theacoe.org). "Accredited" is the classification granted to a professional degree program that meets the standards for accreditation. This classification indicates that the program has no deficiencies or weaknesses that compromise the educational effectiveness of the total program.

## Degree Description

AZCOPT awards the degree Doctor of Optometry (O.D.) upon successful completion of the four-year professional curriculum in optometry. The first and second years of the curriculum emphasize basic health sciences, optics and visual science. Students are introduced to clinical practice in simulation laboratories, introductory courses, and clinical experiences. Visual consequences of disease are introduced in the second year. The third year, divided between a didactic and clinical setting, emphasizes the diagnosis and treatment of ocular dysfunction, disease and specialty care. The fourth

year consists of intensive clinical training that includes both on campus and off campus externship rotations. Clinical settings for external rotations may include military facilities, Veteran Administration hospitals, public health service hospitals, and specialty and/or private practices or clinics. The maximum time for degree completion is five years.

## Admissions

AZCOPT considers for admission those students who possess the academic, professional, and personal qualities necessary for development as exemplary optometrists. AZCOPT uses multiple criteria to select the most qualified candidates including cumulative and science grade point averages (GPAs), standardized test scores, personal experiences and character, ability to communicate, familiarity with the profession, volunteer/community involvement, research experience, and other considerations. AZCOPT uses a competitive, rolling admissions process.

### Admission Requirements

Students seeking admission to AZCOPT must submit the following documented evidence:

1. A minimum cumulative GPA and science coursework GPA of 2.75 on a 4.00 scale.
2. A baccalaureate degree from a regionally accredited institution. A B.A. degree is acceptable but a B.S. degree is preferred.
3. Submit the results of one of the following standardized examinations: Optometry Admissions Test (OAT), Medical College Admissions Test (MCAT), Dental Aptitude Test (DAT), or the Graduate Record Exam (GRE). A competitive test score (at least at or above the mean score for each exam) is recommended of all applicants. In order to be considered for admittance to the class in the Fall of each academic year, the standardized examination must be taken and results submitted by April 30th of the year of matriculation. Entrance exam scores must be earned no more than five years prior to the planned enrollment year.
4. Complete the necessary course prerequisites. All prerequisite courses must be completed with grades of C (not C-) or better prior to matriculation. Only courses designed for science majors or pre-professional students are acceptable for the science prerequisites.
5. Provide two letters of recommendation. One letter must be from a practicing optometrist. The other letter must be from a prehealth advisor, a science professor, an employer, or an extracurricular activity advisor.
6. Have a good understanding of optometric medicine. Candidates are strongly encouraged to shadow and observe a number of practicing optometrists in the clinical setting.
7. Participate in extracurricular and/or community activities that indicate a well- rounded background and demonstrate a commitment to service.
8. Embody interpersonal and communication skills necessary to relate effectively with others.
9. Pass criminal background check.
10. A commitment to abide by the Midwestern University Drug-Free Workplace and Substance Abuse Policy.

### Prerequisite Courses

Course	Semester Hours	Quarter Hours
Biology with lab	8	12
General/inorganic chemistry with lab	8	12
Organic chemistry with lab	4	6
Physics	6	9
Calculus	3	4
Microbiology	3	4
Statistics	3	4

Course	Semester Hours	Quarter Hours
Psychology	3	4
English	6	9

*\*Note: AZCOPT strongly recommends Anatomy, Physiology, and Biochemistry courses.*

The Doctor of Optometry degree program is rigorous and challenging. The Admissions Committee will therefore assess the quality and rigor of the pre-optometry academic records presented by applicants. When assessing an application, the Admissions Committee will view with concern applicants with:

1. Cumulative and science grade point averages below 3.00 on a 4.00 scale.
2. Admission test scores below the mean for each exam.
3. Prerequisite science coursework completed more than 10 years ago. More recent (within five years) math and science coursework is preferred.

## Application Process and Deadlines

Applicants are strongly encouraged to apply early in the cycle. Applications are considered on a first come first served basis only until all seats are filled.

### 1. OptomCAS Application

Applicants are required to submit online applications and application fees to OptomCAS by April 1st of the year of matriculation. In addition to the online application and application fees, an applicant must forward to OptomCAS official transcripts from all colleges and universities attended by the April 1st date. An application will be considered complete after all official transcripts have been received by OptomCAS. The verification process by OptomCAS will begin once the application is complete.

Students must apply for admission via OptomCAS at [www.opted.org](http://www.opted.org) or [www.optomcas.org](http://www.optomcas.org). Please refer to the OptomCAS application instructions for specific details about completing the OptomCAS application, required documents, and processing times.

OptomCAS applications are available starting in June or July for applicants seeking admission in Fall of the following year. Due to the large number of applicants and the limited number of seats available, students are strongly encouraged to complete their OptomCAS application early in the cycle. AZCOPT will consider completed applications on a first-come, first-served basis until all seats are filled.

### 2. Standardized Exam

AZCOPT prefers the OAT but will accept the MCAT, DAT, or GRE test scores as an alternative. Applicants must arrange for scores from the standardized exam to be sent directly to Midwestern University. Only test scores received directly from the testing agency will be accepted. Any of these standardized exam scores must be earned no more than 5 years prior to the planned enrollment year.

Additional information on the OAT may be found at [www.opted.org](http://www.opted.org) or in writing to:

Optometry Admission Testing Program  
211 East Chicago Avenue  
Chicago, Illinois 60611 800/232-1694  
email: [optexam@ada.org](mailto:optexam@ada.org)

3. Letters of Recommendation Applicants must submit two letters of recommendation from professionals to OptomCAS ([www.optomcas.org](http://www.optomcas.org)). One letter must be from a practicing optometrist. The second letter must be from a prehealth advisor, a science professor, an employer, or extracurricular activity advisor. Letters of recommendation from relatives, personal and/or family friends are not acceptable.

#### 4. Completed Application

All application materials, including the OptomCAS application, admission test scores (as reported to Midwestern University), and two letters of recommendation (as submitted to OptomCAS) must be received by the Office of Admissions on or before April 30th of the year of matriculation. Only completed applications received by the Office of Admissions on or before the deadline date will be reviewed for potential entrance into the program.

*Please note:* Applicants are responsible for tracking the receipt of application materials and verifying the status of applications on the University website.

The Office of Admissions will send qualified applicant's instructions for checking the status of application materials online.

Applicants are responsible for notifying the Office of Admissions of any changes in mailing address or e-mail address.

Midwestern University Office of Admissions  
19555 North 59th Avenue  
Glendale, AZ 85308  
623/572-3215 or 888/247-9277  
[admissaz@midwestern.edu](mailto:admissaz@midwestern.edu)

## Rolling Admissions

AZCOPT uses a rolling admissions process in which applications are processed and reviewed during regular intervals in the admissions cycle until the class is filled.

## Interview Process

Before an invitation is issued to attend an interview, applicants must meet the admission requirements previously listed. After the Office of Admissions receives all required application materials, applicant files are reviewed to determine whether an applicant merits an invitation for an interview. Applicants may also be placed on a waiting list pending possible openings in a later part of the admissions cycle.

Interviews are typically held between August and May. Invited applicants must attend an interview to receive further consideration in the admissions process.

The interview day is approximately six hours. Each interviewee will meet with at least two interviewers. Applicants will be evaluated on verbal communication skills, understanding of the optometry profession, commitment to patient care, and other elements as determined by the College. Applicants will also learn more about Midwestern University, AZCOPT, financial aid programs, student services, and the Glendale Campus.

Following the interview, an applicant's file will be forwarded to the Admissions Committee for review. The committee may recommend to accept, deny, or place the applicant on an alternate list.

Recommendations are then forwarded to the Dean for final approval. The Dean, via the Office of Admissions, notifies applicants of their status within two weeks of their interview date, provided that the file is complete.

Requests for the withdrawal of an application must be made in writing.

## Dual Acceptance Program

The Dual Acceptance Program (DAP) is an early acceptance program for selected students who successfully complete the specified pre-optometry coursework. The Dual Acceptance Programs are currently in effect with *Arizona State University* and *Arizona Christian University*.

Benefits of the DAP:

- Provides for an excellent foundation in pre-optometry education.
- Sets out a clear road map for which courses to take and when.
- Exempts the student from the Optometry Admissions Test (OAT) and associated fees.
- Exempts the student from the OptomCAS application process and associated fees.
- Guarantees entry to MWU AZCOPT well in advance with successful completion of all program requirements.

To receive consideration for the Dual Acceptance Program, high school senior students must meet the following eligibility requirements:

1. Earn admission to Arizona State University or Arizona Christian University.
2. Apply online to the AZCOPT Dual Acceptance Program as a high school senior.
3. Obtain a minimum score of 28 on the ACT or 1250 on the SAT.
4. Demonstrate a people or service orientation through community service or extracurricular activities.
5. Demonstrate motivation for and commitment to the optometry profession as demonstrated by previous work, volunteer, or other life experiences.
6. Possess the oral and written communication skills necessary to interact with patients and colleagues.

After the Midwestern University Office of Admissions receives all completed application materials, applicant files are reviewed to determine whether applicants merit invitations for an interview. Invited applicants must participate in an on campus interview for further consideration in the admissions process.

Following the interview, their completed applications are forwarded to the AZCOPT Admissions Committee for review. The committee may recommend to accept or to deny applicants for admission. These recommendations are then forwarded to the Dean for final approval. The Dean, via the Office of Admissions, notifies applicants of their status. Accepted applicants will be ensured a seat at AZCOPT upon successful completion of the program requirements:

1. All prerequisite pre-optometry courses must be completed at Arizona State University or Arizona Christian University prior to matriculation to AZCOPT. Official AP and dual- enrollment credits completed during high school, and that are listed on the affiliated university's transcript as equivalent courses, are acceptable for meeting the prerequisites.
2. Completion of a baccalaureate degree at Arizona State University or Arizona Christian University within 4 years. Any extension beyond the 4 years should be discussed with the Dean of the Arizona College of Optometry.
3. A minimum overall GPA of 3.40 on a 4.00 scale must be attained.
4. A minimum science GPA of 3.40 on a 4.00 scale must be attained.
5. Students must earn a grade of "C" or higher in all required courses. A grade of "C-" or lower is not acceptable.
6. Students are not permitted to repeat courses for a higher grade once credit has been received.
7. Accepted students are required to sign a letter of understanding upon acceptance. Accepted students will submit a deposit fee within 1 year prior to matriculation. All fees are applied toward the student's first quarter tuition.

Students who are not accepted to or fail to complete the Dual Acceptance Program may apply to AZCOPT using the standard procedures.

## Reapplication Process

After receiving either denial or end-of-cycle letters, or after dismissal from the College, applicants may reapply for the next enrollment cycle. Before reapplying, however, applicants should seek the advice of a MWU admissions counselor.

## Transfer Admission Policy

AZCOPT may elect to accept transfer students from other U.S. accredited schools of optometry who are currently enrolled, are in good academic standing, have no ethics or professionalism violations, and provide acceptable reason(s) for seeking transfer. Typically, students will transfer at the beginning of the second year of the curriculum. Students requesting transfers must meet the College's general requirements for admission and submit the following documentation:

1. A letter to the Director of Admissions outlining the reasons for requesting transfer and explaining any difficulties encountered at the previous institutions.
2. Course syllabi for all optometry coursework for which advanced standing credit is requested.
3. Official scores from the OAT, MCAT, DAT, or GRE.
4. Official transcripts from all schools attended - undergraduate, graduate, and professional.
5. A letter from the Dean of the college in which the student is enrolled that describes current academic status and terms of withdrawal or dismissal.
6. Additional documents or letters of recommendation as determined necessary by the Director of Admissions or Dean.

Following receipt of these materials, a decision by the Dean is made regarding whether or not the student merits an on-campus interview. If the student receives an invitation, the individual interviews with an appropriate interview team. The interview team then makes an admissions recommendation to the Dean, who is responsible for approving both the student's admissions status and class standing.

The transfer application must be received sufficiently early to allow for processing of the application, interview, and relocation of the student prior to the start of the next academic term.

## Readmission after Dismissal for Poor Academic Performance

It is at the discretion of AZCOPT to readmit a student who has been dismissed for poor academic performance. To initiate the reapplication process, candidates must complete and submit an application and proceed through the standard application process established by the program. Before reapplying, however, individuals should seek the advice of an admissions counselor, Associate Dean, or Dean. It is expected that the individual would have addressed documented deficiencies before reapplication and be able to demonstrate that the student meets all admission requirements and technical standards of the College.

The College's Admissions Committee will review completed applications of candidates and submit recommendations to the Dean for action. The Dean, via the Office of Admissions, then notifies applicants in writing of admissions decisions.

No guarantee of readmission is implied, and questions related to advanced standing and similar issues will be addressed as they are for new applicants.

Reapplications are allowed only within the first two years following dismissal and readmission will be granted only once.

## Technical Standards

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the College.

Candidates must be able to perform the following abilities and skills:

1. Observation: The candidate must be able to accurately make observations at a distance and close at hand, including those on a computer screen or electronic device. Observation necessitates the functional use of the sense of vision and sense of touch and is enhanced by the functional use of all of the other senses.

2. Communication: The candidate must be able to communicate in English, proficiently and sensitively in verbal and written form and be able to perceive nonverbal communication.
3. Motor: Candidates must be able to coordinate both gross and fine motor movements, maintain equilibrium and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control and eye-to-hand coordination to perform profession-specific skills and tasks.
4. Intellectual, Conceptual, Integrative and Quantitative Abilities: The candidate must be able to problem solve, measure, calculate, reason, analyze, record and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
5. Behavioral and Social Attributes: The candidate must possess the emotional health required for full utilization of the candidate's intellectual abilities, the exercise of good judgment, the consistent, prompt completion of all responsibilities, and the development of mature, sensitive and effective relationships. Candidates must be able to tolerate physically, mentally and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, and interest and motivation to learn are all personal qualities required during the educational process. The candidate must agree to participate in touching/palpating on the skin and being touched/palpated on the skin by individuals regardless of gender in all academic settings. These activities will take place in large and small group settings as directed in the College's curricular requirements.

Candidates are required to verify an understanding of these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet Technical Standards with accommodation must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

## Graduation Requirements

To be eligible for graduation and to receive the degree Doctor of Optometry (O.D.), the student must meet the following requirements:

- Follow an approved course of study acceptable to the College's Student Promotion and Graduation Committee and leading to the completion of all academic requirements for the degree;
- Complete all academic requirements with passing grades and earn a cumulative GPA of at least 2.00;
- Be recommended for conferral of the degree Doctor of Optometry by the University Faculty Senate;
- Settle all financial accounts with the University;
- Complete all College reporting requirements as instructed by the Office of the Dean;
- Complete all graduation clearance requirements as instructed by the Office of the Registrar.

# Licensure Requirements

To obtain licensure, graduates must have completed the requirements established by each state or national licensing board. Licenses require successful passage of a country's national board examinations and may require the passage of additional state licensing exams. Postdoctoral requirements may vary among US states. The National Board of Examiners in Optometry (NBEO) administers complete integrated examinations in three parts that reflect the different stages of a candidate's optometric education and training. Eligibility to sit for the exam is contingent upon the student reaching the third or fourth year in the curriculum and the successful completion of all requisite coursework.

Students intending to practice in Canada must seek a Certificate of Competence in Optometry. This requires that the student take and pass the Optometry Examining Board of Optometry (OEBC) examination which has Written and Practical (clinical skills) Assessments. Eligibility to sit for the exam is contingent upon the student reaching the spring of the third or final year of the program and the successful completion of all requisite coursework.

It is the responsibility of the individual student to pass national board examinations. For additional information regarding licensure, contact the following agencies:

National Board of Examiners in Optometry  
200 S. College Street, #2010  
Charlotte, NC 28202  
Phone: 800-969-EXAM (3926) or 704-332-9565  
Fax: 704-332-9568  
E-mail: [nbeo@optometry.org](mailto:nbeo@optometry.org) Website: [www.optometry.org](http://www.optometry.org)

or:

Optometry Examining Board of Canada  
37 Sandiford Drive, Suite 403  
Stouffville Ontario  
L4A 3Z2  
Phone: 905-642-1373  
Fax: 905-642-3786  
E-mail: [exams@oebc.ca](mailto:exams@oebc.ca)  
Website: <http://www.oebc.ca>

Midwestern University's Doctor of Optometry meets the educational requirements for licensure to practice as an optometrist in the following jurisdictions: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, District of Columbia, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, U.S. Virgin Islands, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Wyoming.

Each student should check the additional licensure requirements for the state, district or territory in which employment is pursued.

*Special Note:* Licensure in Oklahoma requires that you must have passed the Laser Therapy for the Anterior Segment Course offered by the Northeastern State University.

## Curriculum

Total quarter credit hours required to complete program: 254

The College reserves the right to alter the curriculum as it deems appropriate.



## First Year

### Fall Quarter

Course Code	Title	Credits
BASIG 1510	Integrated Basic Sciences I	4.0
BASIG 1511	Integrated Basic Sciences II	4.0
BASIG 1512	Integrated Basic Sciences III	4.5
COREG 1560J	Interprofessional Healthcare	0.5
OPTOG 1510	Clinical Services, Theory & Methods I	3.0
OPTOG 1511	Contemporary Issues in Health Care and Ethics	0.5
OPTOG 1540	Geometric, Physical and Visual Optics I	4.0
OPTOG 1560	Ocular Anatomy and Physiology I	2.0
<b>Sub-Total Credits</b>		<b>22.50</b>

### Winter Quarter

Course Code	Title	Credits
BASIG 1513	Integrated Basic Sciences IV	2.5
BASIG 1514	Integrated Basic Sciences V	4.5
BASIG 1515	Integrated Basic Sciences VI	4.5
COREG 1570J	Interprofessional Healthcare	0.5
OPTOG 1520	Clinical Services, Theory & Methods II	3.0
OPTOG 1550	Geometric, Physical and Visual Optics II	4.0
OPTOG 1580	Ocular Anatomy and Physiology II	2.0
<b>Sub-Total Credits</b>		<b>21.00</b>

### Spring Quarter

Course Code	Title	Credits
BASIG 1516	Integrated Basic Sciences VII	3.5
BASIG 1517	Integrated Basic Sciences VIII	2.5
BASIG 1518	Integrated Basic Sciences IX	4.0
COREG 1580J	Interprofessional Healthcare	0.5
OPTOG 1514	Optometry Business and Career Management I	1.0
OPTOG 1525	Geometric, Physical and Visual Optics III	2.0
OPTOG 1530	Clinical Services, Theory & Methods III	3.0
OPTOG 1590	Ocular Anatomy and Physiology III	2.0
<b>Sub-Total Credits</b>		<b>18.50</b>

## Second Year

### Fall Quarter

Course Code	Title	Credits
OPTOG 1620	Visual Science: Monocular Sensory Processing	2.0
OPTOG 1630	Ophthalmic Optics I	4.0
OPTOG 1640	Ocular Disease I	3.0
OPTOG 1650	Clinical Services, Theory & Methods IV	3.0
OPTOG 1670	Capstone Project I: Research Design and Biostatistics	1.0
OPTOG 1675	Visual Neurophysiology	2.0
OPTOG 1691	Ocular Pharmacology I	1.0
PHARG 1602	General Pharmacology I	2.0
<b>Sub-Total Credits</b>		<b>18.00</b>

## Winter Quarter

Course Code	Title	Credits
OPTOG 1622	Visual Science: Ocular Motility	2.0
OPTOG 1632	Ophthalmic Optics II	4.0
OPTOG 1642	Ocular Disease II	3.0
OPTOG 1645	Contact Lens I	3.0
OPTOG 1652	Clinical Services, Theory & Methods V	3.0
OPTOG 1672	Capstone Project II: Literature Search and Study Design	1.0
OPTOG 1692	Ocular Pharmacology II	1.0
PHARG 1623	General Pharmacology II	3.0
<b>Sub-Total Credits</b>		<b>20.00</b>

## Spring Quarter

Course Code	Title	Credits
OPTOG 1624	Visual Science: Binocular Vision	4.0
OPTOG 1644	Ocular Disease III	3.0
OPTOG 1646	Contact Lens II	3.0
OPTOG 1654	Clinical Services, Theory & Methods VI	3.0
OPTOG 1655	Introduction to Clinical Services	1.5
OPTOG 1693	Ocular Pharmacology III	2.5
OPTOG 1694	Pediatric Optometry	1.0
<b>Sub-Total Credits</b>		<b>18.00</b>

## Third Year

### Summer Quarter

Course Code	Title	Credits
OPTOG 1714	Optometry Business and Career Management II	1.0
OPTOG 1720	Diagnosis and Management of Non-Strabismic Binocular Vision Disorders	4.0
OPTOG 1740	Contact Lens III	3.0
OPTOG 1746	Ocular Disease IV	2.0
OPTOG 1760	Capstone Project III: Data Collection and Analysis	1.0
OPTOG 1770	Clinical Services VII	6.0
<b>Sub-Total Credits</b>		<b>17.00</b>

### Fall Quarter

Course Code	Title	Credits
OPTOG 1722	Diagnosis of Strabismus and Amblyopia	4.0
OPTOG 1771	Clinical Services VIII	6.0
OPTOG 1785	Visual Rehabilitation	3.0
OPTOG 1787	Neuro-ophthalmic Disease	2.5
OPTOG 1790	Evidence Based Medicine	1.5
<b>Sub-Total Credits</b>		<b>17.00</b>

## Winter Quarter

Course Code	Title	Credits
OPTOG 1723	Treatment and Management of Strabismus and Amblyopia	3.0
OPTOG 1729	Advanced Ophthalmic Procedures	3.0
OPTOG 1730	Integrative Assessment and Management of Ocular and Systemic Conditions	2.0
OPTOG 1772	Clinical Services IX	6.0
<b>Sub-Total Credits</b>		<b>14.00</b>

## Spring Quarter

Course Code	Title	Credits
OPTOG 1724	Optometry Business and Career Management III	2.0
OPTOG 1726	Advanced Competency in Binocular Vision and Pediatrics	3.0
OPTOG 1745	Epidemiology, Public Health and the Optometric Profession	2.0
OPTOG 1761	Capstone Project IV: Research Presentation	3.0
OPTOG 1773	Clinical Services X	6.0
<b>Sub-Total Credits</b>		<b>16.00</b>

## Fourth Year

### Summer Quarter

Course Code	Title	Credits
OPTOG 1800	Clinical Services XI	18.0
<b>Sub-Total Credits</b>		<b>18.00</b>

### Fall Quarter

Course Code	Title	Credits
OPTOG 1810	Clinical Services XII	18.0
<b>Sub-Total Credits</b>		<b>18.00</b>

### Winter Quarter

Course Code	Title	Credits
OPTOG 1820	Clinical Services XIII	18.0
<b>Sub-Total Credits</b>		<b>18.00</b>

### Spring Quarter

Course Code	Title	Credits
OPTOG 1830	Clinical Services XIV	18.0
<b>Sub-Total Credits</b>		<b>18.00</b>

## Electives

While enrolled at AZCOPT, students may choose to take elective courses for enrichment. Elective options may include, but are not limited to, the following:

Course Code	Title	Credits
CLMDG 1354O	A Foundation for Leadership	2.0
ONEHG 1301J	One Health Grand Rounds	2.0
OPTOG 1351	Study Skills Enhancement	2.0
OPTOG 1382A	Selected Studies	1.0-3
OPTOG 1397	Sports Vision Workshop	1.5
OPTOG 1494A	Third Year Clinical Skills Enhancement	1.0-7
OPTOG 1494B	Third Year Clinical Skills Enhancement	1.0-7
OPTOG 1494C	Third Year Clinical Skills Enhancement	1.0-7
OPTOG 1494D	Third Year Clinical Skills Enhancement	1.0-7
OPTOG 1495A	Fourth Year Clinical Skills Enhancement	1.0-18
OPTOG 1495B	Fourth Year Clinical Skills Enhancement	1.0-18
OPTOG 1495C	Fourth Year Clinical Skills Enhancement	1.0-18
OPTOG 1495D	Fourth Year Clinical Skills Enhancement	1.0-18
OPTOG 1498	Spanish for Optometric Eye Exams	1.5
<b>Sub-Total Credits</b>		<b>18.00-112</b>
Total Credits		254

# Student Academic Policies

The following academic policies apply to all students who matriculate during the academic year of this catalog publication. These policies will apply throughout the entire time a student is enrolled in the college. In the event that these policies need to be revised as the result of new accreditation requirements, mandates by the United States Department of Education, or other unforeseen circumstances, students will be notified in writing prior to the effective date of the new policy.

Faculty and students should also refer to the University Academic Policy section for additional policies that apply to all students at Midwestern University.

## Student Promotion and Graduation Committee

The Student and Promotion and Graduation Committee (SPGC) is responsible for enforcing the published academic and professional standards established by the faculty and for assuring that they are met by all students enrolled in each program. As such, this Committee establishes the criteria, policies, and procedures for student advancement and graduation, as well as academic probation, dismissal, and readmission. The Committee meets routinely and the meetings are most often scheduled at the conclusion of each academic quarter to review the academic progress and performance of students enrolled in the program in relation to institutional academic policies. At the end of the academic year, the Committee assesses the academic and professional progress and performance of each student. If the student's progress is satisfactory, the student is promoted to the next academic year, provided all tuition and fees have been paid. Finally, the Committee also identifies and recommends to the MWU Faculty Senate candidates for graduation.

If a student fails to make satisfactory progress in completing the prescribed course of study, the Committee shall take appropriate action to correct the deficiency (ies). In instances involving repeated failures of a student to maintain satisfactory academic/professional progress, the Committee may recommend dismissal.

If a student's academic performance is scheduled for discussion during a Student Promotion and Graduation Committee meeting and the result could change the student's status in the College (extended program or dismissal), then the student will be invited to either appear personally before the Committee or submit a letter or other documentation to be presented at the meeting on the student's behalf. The invited student must indicate, in writing, an intention to appear or provide materials 24 hours prior to the scheduled meeting to the Associate Dean of Academic Affairs. If the student chooses to appear before the Committee, this prerogative extends to the involved student only and not to any other individuals. The documentation will be provided to the Chair and Committee members of the SPGC.

Among the options available to the Committee in regard to unsatisfactory student performance are:

1. That a written caution be provided to the student.
2. That the student:
  - a. be placed on academic probation for a specified period of time;
  - b. take an alternative approved course offered at another college or university;
  - c. repeat the course(s) in which there is a failure when the course is offered again in the curriculum;
  - d. be placed in an extended program;
  - e. require that the student take additional coursework (e.g., OPTOG 1597 A-C, OPTOG 1697 A-C, or OPTOG 1797 A-D); or
  - f. be dismissed from the College.

Within two working days following the Committee meeting, the Associate Dean is responsible for providing notification in writing with a delivery confirmation (i.e., next-day express mail, e-mail, or hand-delivery) to the involved student, informing the individual of the recommendation of the Committee. The Associate Dean is responsible for reviewing all recommendations for consistency with stated

College academic policies and practices. The Dean or Associate Dean is responsible for providing written notification to all appropriate academic support offices (i.e., Registrar, Student Financial Services, etc.).

## Academic Standards

An annual grade point average will be used as the central measure of academic performance. It is calculated from all graded courses from a particular professional year. Grades earned in courses taken prior to matriculation in the professional program and grades earned for courses taken at the College in a more advanced professional year than that in which the student is enrolled, are not included in the calculation of this annual grade point average. Grades earned for courses taken at another institution while enrolled in the professional program are included in the calculation of this annual grade point average if the transfer coursework was approved by the Student Promotion and Graduation Committee. "W" and "WF" grade notations are not calculated in the students GPA and are not counted in credit hour accrual for graduation.

Students must maintain an annual grade point average of at least 2.00 in the professional program to remain in good academic standing. If a student's annual grade point average drops below 2.00 at the end of any quarter during the academic year, or the student earns a grade of "F/WF" in one or more courses, the student is notified, in writing that the student is being placed on academic probation for the next academic quarter.

Probation represents notice that continued inadequate academic performance may result in dismissal from the program and the College.

If the student has an annual grade point average less than 2.00 at the end of an academic year, or has earned one or two "F/WF" grades in a quarter the student will be either dismissed or will be placed in an extended program (academic deceleration). The extended program year must take place in the year immediately following and the student will be required to successfully repeat all the courses in which the grades of "W/F/WF" were received and successfully complete any and all additional courses as assigned by the Student Promotion and Graduation Committee. A student is allowed to go through an extended program only once. To be returned to good academic standing, the student must raise the annual grade point average to 2.00 or above at the end of the repeat year. Such a student reenters the next professional year curriculum and resumes a full load. A reentering student must achieve a cumulative grade point average of at least 2.00 at the end of each quarter to continue at AZCOPT.

If the student does not meet the criteria for satisfactory academic performance at the end of the extended program, the student will be dismissed.

If the student earns an "F/WF" in three or more courses overall, and/ or fails a repeated course, the student will be dismissed from the College. The dismissal is based on the determination by the Committee that the student has not satisfactorily demonstrated that the student possesses the aptitude to successfully achieve the standards and requirements set forth in the academic policies and professional expectations for the program.

Academic recommendations are made by the Student Promotion and Graduation Committee to the Associate Dean. Students will be notified, in writing, within two working days following the committee meeting regarding the recommendations of the Committee.

The following policies also guide decisions made by the Student Promotion and Graduation Committee:

1. A student must pass all required courses before entering the next year of the professional program.
2. Students placed on an extended program must pass any and all additional required courses assigned by the Student Promotion and Graduation Committee.
3. Students must successfully resolve all "I" (Incomplete) and "IP" (In-Progress) grades before beginning externship.

4. To proceed with externship, a student must earn an annual didactic grade point average (GPA) of at least 2.00 for the third professional year.

Clinical Rotation Failure (refers to OPTOG 1770, 1771, 1772, 1773, 1800, 1810, 1820, and 1830 Clinical Services I-VIII) Clinical service courses are completed sequentially.

## Appeal Process

Following notification of a decision for dismissal or academic deceleration, a student may appeal, in writing, the decision to the Dean. Such appeals must be received by the Dean within three working days after the student is officially notified of the dismissal or deceleration decision. A narrative explaining the basis of the appeal should accompany the request. An appeal must be based on one of the following premises:

1. Bias of one or more Committee members.
2. Material information not available to the Committee at the time of its initial decision.
3. Procedural error.

The Dean will review the appeal request and narrative and decide if it is necessary to reconvene a meeting of the Student Promotion and Graduation Committee, which would be asked to provide a recommendation to the Dean on the appeal request. Once a decision is made to convene a Committee meeting, the student requesting an appeal shall be notified in writing with a delivery confirmation (i.e., e-mail or hand delivery) by the Associate Dean at least two working days in advance of the scheduled Committee meeting in which the student's appeal will be heard. The student will be invited to either appear personally before the committee or submit a letter or other documentation to be presented at the meeting on the student's behalf. The invited students must indicate, in writing, an intention to appear or provide materials 24 hours prior to the scheduled meeting to the Associate Dean of Academic Affairs. The information will be provided to the Chair and committee members of the SPGC. If the student chooses to appear before the Committee, this prerogative extends to the involved student only and not to any other individuals. The Committee submits its recommendation to the Dean. Upon receipt of the Committee's recommendation, the Dean will make a final decision, typically within ten working days and then notify the student.

During the appeal process, the students must continue to attend classes. Students registered in a clinical course (rotation) may be placed on a mandatory academic leave of absence until the appeal process is finalized. Students are urged to seek information about the impact of appeals and academic deceleration with the office of financial aid.

## Dismissal

A student may be dismissed from the College for academic reasons upon the recommendation of the Student Promotion and Graduation Committee. The dismissal is based on the determination by the Committee that the student has not satisfactorily demonstrated that the student possesses the aptitude to successfully achieve the standards and requirements set forth in the academic policies and professional expectations for the program.

## Extended Program

Problems may arise that may necessitate the extension of a student's academic course load. Only enrolled students may enter an extended program. To enter an extended program, either one or both of the following conditions must be met:

1. Personal hardship. If a student is experiencing unusual stresses in life and an extended academic load could alleviate added stress, the student may petition the College for an extended program. This petition is to be submitted to the Dean or Associate Dean of Academic Affairs and may not be automatically granted, but may be approved in exceptional circumstances. The Dean and

Associate Dean are responsible for reviewing and assessing the petition and may forward it to the Student Promotion and Graduation Committee if appropriate. The student will be informed of the decision, in writing, by the Associate Dean of Academic Affairs or Dean.

2. Academic. As described above, a student ending an academic year with an annual GPA of less than 2.00 may be given the option to repeat courses from that year in which "F" grades were received. A student may be placed on an extended program for academic reasons at the discretion of the Student Promotion and Graduation Committee. A student placed on an extended program for academic reasons is automatically placed on academic probation and may not be returned to good academic standing until the extended program is successfully completed. In addition, the Student Promotion and Graduation Committee may require the student to take additional coursework to strengthen and /or maintain mastery of optometric skills, techniques and concepts during the extended program. In this case, the additional coursework will be considered as required courses for graduation. If a student earns a failing grade in this additional course work, the student will be referred to the Student Promotion and Graduation Committee.

If a student is placed on an extended program, such action does not modify or limit the committee's actions for dismissal. Thus, the student may be dismissed for academic reasons while on an extended program.

A student placed on an extended program for academic reasons will be returned to good academic standing when the student reenters the prescribed academic program and completes all courses that were unsatisfactory and are required for graduation and successfully completes any and all additional courses as assigned by the Student Promotion and Graduation Committee.

A reentering student must achieve a cumulative grade point average of at least 2.00 at the end of each quarter to continue at the college. A student is allowed to go through an extended program only once.

## Grade Appeals

A student whose academic progress will be subject to review by the Student Promotion and Graduation Committee and who wishes to appeal a grade must do so in an expedited manner prior to the scheduled meeting of the committee. In this case, an appeal of a didactic course grade must be submitted within one business day following posting of the grade and must be based on one of the following premises:

1. Factual errors in course assessment tools
2. Mathematical error in calculating the final grade
3. Bias

The course director must act on this appeal within one business day. If the appeal is denied, the student has the right to appeal the decision to the Associate Dean of Academic Affairs. The Associate Dean of Academic Affairs should notify the student of the Associate Dean's decision within one business day following receipt of the student's re-appeal. The decision of the Associate Dean of Academic Affairs is final.

An appeal of a failing clinical externship grade must be submitted within two business days after a grade for rotation is posted. The course director must act on this appeal within two business days. If the appeal is denied, the student has the right to appeal the decision to the Associate Dean of Clinical Affairs within two business days. The Associate Dean of Clinical Affairs should notify the student of the Associate Dean's decision within two business days following receipt of the student's re-appeal. The decision of the Associate Dean of Clinical Affairs is final.

Students are allowed only one failed or withdrawn failed externship, and only one retake of the failed or withdrawn failed externship while enrolled at the College.

Any extension of the time for student appeal or course director's decision must be approved by the College Dean. All appeals and decisions must be communicated in written form.

# Student Administrative Policies

## Advanced Standing

All requests for advanced standing by newly admitted, transfer, or enrolled students are processed on a course-by-course basis by the Student Promotion and Graduation Committee. The Office of the Dean provides staff support for such evaluations. To request such consideration, a student should submit a letter of request to the Dean in which the student lists a course(s) previously taken at an accredited college or university which might be similar in content to a professional course(s) that the individual is scheduled to take. The student is advised to provide an official course description(s) and a syllabus (syllabi) of the course(s) previously taken. For some courses, a student may be required to take a comprehensive challenge exam. All requests must be submitted at least three weeks prior to the start of the course being considered. The decision of the committee is forwarded to the Dean as a recommendation to either grant or deny advanced standing. Advanced standing will be considered for coursework taken in which a letter grade of "B" or better has been earned. A "B-" letter grade is not acceptable for advanced standing consideration.

No advanced standing will be awarded for professional coursework completed at a foreign college or coursework required by the Student Promotion and Graduation Committee.

## Attendance

Upon acceptance to AZCOPT, students are expected to devote their entire efforts to the academic curriculum. The College actively discourages employment that will conflict with a student's ability to perform while didactic courses and externships are in session. The College will not take outside employment or activities into consideration when scheduling classes, examinations, reviews, field trips, or individual didactic or experiential course functions. Class attendance is mandatory for all students during externship.

## Class Standing

To achieve the status of a second-year student in the professional program, students must have successfully completed all requisite first-year courses and earned an annual GPA of at least 2.00. To achieve the status of a third-year student in the professional program, students must have successfully completed all requisite second-year courses and earned an annual GPA of at least 2.00. To achieve the status of a fourth-year student in the professional program, students must have successfully completed all requisite third-year courses, and earned an annual GPA of at least 2.00.

## Disciplinary Probation

Disciplinary probation occurs for student acts of professional misconduct as defined in Appendices 2 and 4 of the Midwestern University Student Handbook or as defined in the Clinic Manuals. Disciplinary probation is not noted on the transcript but is kept in the student's file. Disciplinary probation information may be shared with clinical sites that are affiliated with Midwestern University educational programs.

## Grades

Letter grades corresponding to the level of achievement in each course are assigned based on the results of examinations, required coursework, and other criteria established for each course. Individual faculty have the prerogative to use a plus/minus letter grading system or a whole letter grading system.

Courses are recorded in terms of quarter hour(s) of credit. Multiplication of the credits for a course by the numeric value for the grade awarded gives the number of quality points earned for a course. Dividing the total number of quality points earned in courses by the total number of credits in those courses gives the grade point average.



Grades reported as "W", "W/F", and "P" are recorded on a student's permanent record but are not used in the calculation of a student's grade point average. Similarly, a grade of "I" or "IP" may be assigned and is used only when special/extenuating circumstances exist (e.g., prolonged illness, family crisis, etc), which prevent a student from completing the necessary course requirements on time in order to receive a grade.

If a student receives an "F" grade in a course, that grade will be recorded on the student's transcript. This deficiency may be corrected as recommended by the Student Promotion and Graduation Committee by repeating the failed course. When a course is repeated, the student may earn a maximum grade of "C". Following successful repetition of the course, the permanent record of the student will be updated to indicate that the failing grade has been successfully corrected. The grade earned each time is recorded, but only the most recent grade is used in the computation of the student's cumulative grade point average.

If a student is required or recommended, by the Student Promotion Graduation Committee, to retake a course that was previously passed, the grade earned each time is recorded, but only the most recent grade is used in the computation of the student's cumulative grade point average.

Grade and Quality Point Scale		
Grade	Quality Points (per credit)	Comments
A	4.000	-
A-	3.670	-
B+	3.330	-
B	3.000	-
B-	2.670	-
C+	2.330	-
C	2.000	-
F	0.000	-
I	0.000	An Incomplete (I) grade may be assigned by an instructor when a student's work is of passing quality but incomplete, or if a student qualifies for re-examination. It is the responsibility of the student to request an extension from the course instructor. By assigning an "I" grade, it is implied that an instructor agrees that the student has a valid reason and should be given additional time to complete required coursework. All incomplete grades must be resolved within 10 calendar days from the end of final exams for the quarter. In the case of courses ending prior to final exam week, it is the obligation of the course director to monitor the use and resolution of the incomplete grade, with notice to the Registrar.
IP	0.000	An In-Progress (IP) grade may be assigned when extenuating circumstances make it necessary to extend the grade completion period past 10 calendar days (e.g. illness, family death). Authorization by the Dean is required, and the completion period should not typically exceed one quarter.
P	0.000	Pass (for a pass/fail course); designation indicates that the student has made satisfactory progress or completed required coursework satisfactorily. Grade of "P" is counted toward credit hour accruals for graduation but does not affect GPA calculations.
F	0.000	Fail (for a pass/fail course); designation indicates that the student has not made satisfactory progress or completed required coursework satisfactorily. Grade of "F" is counted toward credit hour accruals as attempted but not completed. Grade of "F" is calculated into the GPA (quality points are lowered due to unsuccessful course completion).
W	0.000	Withdrawal is given if the work completed up to the time of withdrawal was satisfactory. This grade is not counted in any GPA calculation and is not counted in credit hour accruals for graduation.
W/F	0.000	Withdrawal/Failing is given if the work completed up to the time of withdrawal is below the passing grade level for the Program/School. This grade is not counted in any GPA calculation and is not counted in credit hour accruals for graduation. Multiple "F's" and "W/F's" can be grounds for dismissal.
AU	0.000	This designation indicates an audited course in which a student is registered with the understanding that neither academic credit nor a grade is earned. The status of the course cannot be changed from audit to full credit after the start of the quarter. The designation AU is not counted in the GPA calculation.
AP		This designation indicates the decision of a college to award academic credit that precludes a student from taking required course work. The designation of Advanced Placement (AP) is applied toward credit hour accruals, but is not counted in the GPA calculation.

# Immunizations

Students enrolled in a program with a clinical component are required to follow the immunization policy as outlined in the immunization section of the University's Student Handbook. Immunization requirements for Arizona College of Optometry students are subject to applicable current state health department protocol and affiliated rotation requirements. Students who do not follow the immunization policy by the stated deadline may jeopardize continued enrollment in the college. If, at any time, immunizations expire or are not up to date, the student may be suspended until such time that they are in full compliance with this requirement.

## Optometry Program Calendar

### Summer 2025

Event	Class	Date
<b>Memorial Day</b>	<b>*No Classes*</b>	<b>May 26, 2025</b>
Clinical Services XI	OP-IV	June 2 - August 22, 2025
Classes Resume	OP-III	June 2, 2025
Last Day to Add/Drop Classes	OP-III	June 6, 2025
<b>Juneteenth (Observed)</b>	<b>*No Classes*</b>	<b>June 19, 2025</b>
<b>Independence Day (Observed)</b>	<b>*No Classes*</b>	<b>July 4, 2025</b>
Quarterly Exams	OP-III	August 11 - 15, 2025
Quarter Break	OP-III	August 18 - 22, 2025

### Fall 2025

Event	Class	Date
Orientation	OP-I	August 18 - 20, 2025
Classes Begin	O-I, OP-II, OP-III	August 25, 2025
Last Day to Add/Drop Classes	O-I, OP-II, OP-III	August 29, 2025
<b>Labor Day</b>	<b>*No Classes*</b>	<b>September 1, 2025</b>
Clinical Services XII	OP-IV	September 1 - November 21, 2025
<b>White Coat Ceremony</b>		<b>September 27, 2025</b>
Last Day of Classes	O-I, OP-II, OP-III	October 31, 2025
Quarterly Exams	O-I, OP-II, OP-III	November 3 - 7, 2025
Thanksgiving Break	O-I, OP-II, OP-III	November 10 - 28, 2025

### Winter 2025

Event	Class	Date
Clinical Services XIII	OP-IV	December 1, 2025 - February 20, 2026
Classes Begin	O-I, OP-II, OP-III	December 1, 2025
Last Day to Add/Drop Classes	O-I, OP-II, OP-III	December 5, 2025
Winter Break	O-I, OP-II, OP-III	December 22, 2025 - January 2, 2026
Classes Resume	O-I, OP-II, OP-III	January 5, 2026
<b>Martin Luther King/ Jr. Day</b>	<b>*No Classes*</b>	<b>January 19, 2026</b>
Last Day of Classes	O-I, OP-II, OP-III	February 20, 2026
Quarterly Exams	O-I, OP-II, OP-III	February 23 - 27, 2026
Spring Break	O-I, OP-II, OP-III	March 2 - 6, 2026

## Spring 2026

Event	Class	Date
Clinical Services XIV	OP-IV	March 2 - May 22, 2026
Classes Begin	O-I, OP-II, OP-III	March 9, 2026
Last Day to Add/Drop Classes	O-I, OP-II, OP-III	March 13, 2026
Last Day of Classes	O-I, OP-II, OP-III	May 15, 2026
Quarterly Exams	O-I, OP-II, OP-III	May 18 - 22, 2026
<b>Memorial Day</b>	<b>*No Classes*</b>	<b>May 25, 2026</b>
Senior Week	OP-IV	June 1 - 2, 2026
Commencement		June 3, 2026 3:00 p.m.

Last Revision: 05/05/2025

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Midwestern University Arizona College of Optometry  
Associate Professor

**Michael R. Kozlowski, O.D., Ph.D., FAAO**

New England College of Optometry  
Professor

**Grace Liao, O.D., FAAO, FSLS**

Southern California College of Optometry  
Associate Professor

**Christopher Lowe, O.D., FAAO**

Pacific University College of Optometry  
Associate Professor

**Caitlin C. Miller, O.D., FAAO**

Illinois College of Optometry  
Associate Dean of Clinical Affairs and Associate Professor

**Ashley Olson, O.D.**

Midwestern University Arizona College of Optometry  
Assistant Professor

**Krupa Patel, O.D.**

Southern California College of Optometry  
Assistant Professor

**Matthew Roe, O.D., FAAO, FOVDR**

State University of New York College of Optometry  
Associate Professor

**Rachel Stephan, O.D., FAAO**

Illinois College of Optometry  
Assistant Professor

**Sarah Y. Thomas, O.D.**

Midwestern University Arizona College of Optometry  
Associate Professor

**Balamurali Vasudevan, Ph.D., M.B.A., B.S.Optom., FAAO**

State University of New York  
Director of Optometric Research and Professor

**Eric A. Woo, O.D., FAAO**

Illinois College of Optometry  
Associate Dean of Academic Affairs and Associate Professor

**Florencia J. Yeh, O.D., FAAO, FSLS**

New England College of Optometry  
Associate Professor

**Vladimir V. Yevseyenkov, O.D, Ph.D., FAAO**

Kansas State University  
Professor

# Graduate Studies Faculty with Joint Appointments

**Layla Al-Nakkash, Ph.D.**

University of Newcastle upon Tyne  
Professor

**Karen Baab, Ph.D., M.A.**

City University of New York  
Associate Professor

**Nancy S. Bae, Ph.D.**

University of Maryland at College Park/NIH  
Associate Professor

**Thomas L. Broderick, Ph.D.**

University of Alberta  
Professor

**Gerald Call, Ph.D.**

University of Kansas Medical Center  
Professor

**David Carroll, Ph.D.**

University of Connecticut  
Assistant Professor

**Fernando Gonzalez, Ph.D.**

University of Texas Southwestern - Medical Center  
of Dallas  
Associate Professor

**Aryeh Grossman, Ph.D.**

Stony Brook University  
Professor

**Wade A. Grow, Ph.D.**

University of Idaho  
Professor

**Nicholas Haley, Ph.D.**

Colorado State University  
Associate Professor

**Margaret Hall, Ph.D.**

Stony Brook University  
Professor

**Jose Hernandez, Ph.D.**

University of Zaragoza  
Professor

**John Hnida, Ph.D.**

University of New Mexico  
Professor

**Thu Huynh, Ph.D.**

New York University  
Assistant Professor

**Garilyn Jentarra, Ph.D.**

Arizona State University  
Associate Professor

**Douglas Jones, Ph.D.**

University of Texas  
Associate Professor

**T. Bucky Jones, Ph.D.**

The Ohio State University  
Professor

**Shaleen Korch, Ph.D.**

University of North Dakota  
Professor

**Lisa Kronstad, Ph.D.**

University of California, Berkeley  
Associate Professor

**Kathryn Lawson, Ph.D.**

University of Arizona  
Associate Professor

**Andrew Lee, Ph.D.**

University of California at Berkeley  
Professor

**Matthew O'Neill, Ph.D.**

Johns Hopkins University  
Associate Professor

**Pamela E. Potter, Ph.D.**

Dalhousie University  
Professor

**Michael Quinlan, Ph.D.**

Arizona State University  
Associate Professor

**Parveen Ranjan, M.D., MPH**

University of Delhi Medical School, New Delhi  
Assistant Professor

**Ann Revill, Ph.D.**

University of Arizona  
Associate Professor

**Minsub Shim, Ph.D.**

North Carolina State University  
Associate Professor

**Erin Simons, Ph.D.**

Ohio University  
Professor

**Mark Swanson, Ph. D.**

Stony Brook University  
Assistant Professor

**Kathryn Townsend, Ph.D.**

Washington University, St. Louis  
Professor

**Tony Tullo, M.D.**

Medical College of Georgia  
Assistant Professor

**Johana Vallejo-Elias, Ph.D.**

University of Missouri  
Professor

**Carrie Veilleux, Ph.D.**

University of Texas at Austin  
Assistant Professor

## Arizona College Of Optometry Courses

### BASIG 1510: Integrated Basic Sciences I

BASIG 1510 provides an overview of cell structure and function, including topics on molecular cell biology, metabolism, epithelium, general connective tissues, and blood. Module 1: Cell Biology outlines the basic histological structure and biochemical function of the cell. Module 2: Molecular Cell Biology and Metabolism focuses on transcription, translation, control of gene expression, and normal cell metabolism. Module 3: Epithelium, General Connective Tissues, and Blood defines the basic structure, function and biochemical characteristics of two basic histological tissues: epithelium and connective tissue. This module also includes an introduction to peripheral blood cells and hematopoiesis. The biochemical basis of hemostasis is described. Disorders of hemostasis and their consequences are discussed.

**Credits** 4.0

### BASIG 1511: Integrated Basic Sciences II

BASIG 1511 provides an overview of cancer, genetics, lymphatic system and immunology. In Module 4: Cancer and Genetics, emphasis is placed on DNA mutations, polymorphisms, patterns of inheritance in human diseases, cytogenetics, and molecular basis of cancer. Module 5: Lymphatic System and Immunology, includes gross anatomy and histology of the lymphatic system and structure/function of the immune system. Basic precepts of the lymphatic system and immunology will be applied to inflammation, tissue repair and healing. Understanding of immunology will be applied to immune responses to infectious agents. Also included are: development and pathology of immunologically-mediated diseases, immune responses to transplants, cancer, HIV infection, and therapeutic use of drugs affecting the immune system.

**Credits** 4.0

### BASIG 1512: Integrated Basic Sciences III

BASIG 1512 provides an overview of infectious diseases, integument and blood disorders. Module 6: Introduction to Infectious Diseases provides fundamental understanding of basic concepts in microbiology to accurately identify and manage infectious diseases. The information will aid in the management of the patient's health and general well-being. In Module 7: Integument and Blood Disorders, students combine knowledge of epithelium, connective tissue, and peripheral blood to learn the basic structure and function of the integument. This module further describes common infections and pathologies of the integument as well as blood-borne infections and blood disorders.

**Credits** 4.5

## **BASIG 1513: Integrated Basic Sciences IV**

BASIG 1513 provides an overview of the Musculoskeletal System. Module 8 includes: the basic concepts of embryology, an introduction to gross anatomy, the structure and function of skeletal and smooth muscle and the development of bone and cartilage. Muscle membrane excitability and the molecular basis of muscle contraction are discussed. Diseases of bone and soft tissues are included. This module contains lectures and two laboratory sessions that describe upper extremity anatomy and function.

**Credits** 2.5

## **BASIG 1514: Integrated Basic Sciences V**

BASIG 1514 provides an overview of the structure and function of the nervous system and is composed of one module titled Nervous System. Module 9 begins by discussing the nervous system in terms of its organization, support systems, and structure including the histology of nervous tissue, brain biochemistry, and mechanisms of neurotransmission including development of action potentials and synaptic transmission. This is followed by nervous system development, and then descriptions of the structure and function of the somatosensory pathways, descending motor systems, auditory, vestibular, and visual systems, and finally finishing with the cerebral cortex. Common clinical concerns are also discussed including relevant microbiology and pathology.

**Credits** 4.5

## **BASIG 1515: Integrated Basic Sciences VI**

BASIG 1515 provides an overview of the structure and function of the Cardiovascular and Respiratory Systems. Module 11: Cardiovascular System begins with a discussion of the anatomy, histology, and embryological development of the heart and circulatory system. Other topics included are cardiac muscle function, electrophysiology of cardiac muscle, cardiac cycle, and cardiac performance. Control of cardiovascular function integrates discussions of hemodynamics, regional circulation, and arterial blood pressure. Module 12: Respiratory System discusses the anatomy and histology of the respiratory system, mechanics of breathing, gas transport, and regulation of respiration. Relevant topics in microbiology, pathophysiology, and pathology are described in both modules.

**Credits** 4.5

## **BASIG 1516: Integrated Basic Sciences VII**

BASIG 1516 provides an overview of the Endocrine System and the Gastrointestinal (GI) System. In Module 13 the disciplines of histology and physiology describe the basic structure and normal function of the Endocrine System. Topics discussed include the hypothalamic control of endocrine secretion and regulation of individual endocrine organs. Common disorders of the Endocrine System are discussed by the pathology faculty. Module 14 Gastrointestinal System includes topics such as: chewing, swallowing and digestion. The gross anatomical, histological, physiological, microbiological, and pathological aspects of the GI system are discussed.

**Credits** 3.5

## **BASIG 1517: Integrated Basic Sciences VIII**

BASIG 1517 provides an overview of the Urogenital System. Topics included in the first part of module 15 are: the anatomy of the urogenital system, histology of the urinary system, renal tubular transport mechanisms, the production of urine, the control of extracellular fluid volume, and acid/base balance. The second part of the module provides an overview of the structure and function of the Male and Female Reproductive Systems. Diseases of the urogenital system are discussed.

**Credits** 2.5

## **BASIG 1518: Integrated Basic Sciences IX**

BASIG 1518 provides an overview of the Gross Anatomy of the Head and Neck. Module 16 provides instruction in the fundamental head and neck gross anatomy information required for clinical training. Three-dimensional relationships among anatomical structures are reinforced by in-depth dissections of the head and neck. Students are expected to use this anatomical information to elucidate and solve case-based problems commonly seen in clinical practice. Student dissection of the head and neck is performed under faculty supervision during three 3-hour laboratories per week.

**Credits** 4.0

## **CLMDG 1354O: A Foundation for Leadership**

This course is filled with opportunities for you to discover for yourself a new context for leadership in your life. The course is designed to increase workability in your relationships with others as well as increase performance in your work. The focus of this course is discovery through inquiry. Rather than engaging in typical case studies or using a model of learning that focuses on you “knowing the right answers to questions”, we will engage in an Inquiry model. This inquiry will focus on you “discovering for yourself what leadership in your life actually looks like”. This new model requires your participation in class discussions and completing the class assignments. If you have not participated in this type of course before, it may be unfamiliar at first, yet easy to adapt to as the course unfolds. By the end of this course, you will be standing on a powerful foundation for exercising leadership in your life.

**Credits** 2.0

## **COREG 1560J: Interprofessional Healthcare**

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, the interaction of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists of online lectures with associated quizzes, online interprofessional group discussions and in-person interprofessional group case discussions.

**Credits** 0.5

## **COREG 1570J: Interprofessional Healthcare**

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists of online lectures with associated quizzes, online interprofessional group discussions and in-person interprofessional group case discussions.

**Credits** 0.5

## **COREG 1580J: Interprofessional Healthcare**

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists of online lectures with associated quizzes, online interprofessional group discussions and in-person interprofessional group case discussions.

**Credits** 0.5



## **ONEHG 1301J: One Health Grand Rounds**

This elective course is designed to foster interest and discussion on major public health issues, and promote interprofessional study and research related to One Health. Each topic will focus on key challenges related to a specific health topic and explore cutting-edge scientific evidence and the potential impact of different interventions. The outcome will be to highlight how these challenges are being addressed at the national, state, and/or local levels and propose recommendations for future research and practice.

**Credits** 2.0

## **OPTOG 1351: Study Skills Enhancement**

This course allows students to understand and apply test taking strategies in order to increase the student's success in professional studies.

**Credits** 2.0

### **Prerequisites**

Permission from the course director

## **OPTOG 1382A: Selected Studies**

This course allows students to pursue special interests. This may include writing of abstracts or a review of current vision science literature. This course may be repeated for credit.

**Credits** 1.0

-3

### **Prerequisites**

Permission from the course director

## **OPTOG 1382B: Selected Studies**

This course allows students to pursue their special interests. This may include writing of abstracts or a review of current vision science literature. This course may be repeated for credit.

**Credits** 1.0

-3

### **Prerequisites**

Permission from the course director

## **OPTOG 1382C: Selected Studies**

This course allows students to pursue their special interests. This may include writing of abstracts or a review of current vision science literature. This course may be repeated for credit.

**Credits** 1.0

-3

### **Prerequisites**

Permission from the course director

## **OPTOG 1382D: Selected Studies**

This course allows students to pursue their special interests. This may include writing of abstracts or a review of current vision science literature. This course may be repeated for credit.

**Credits** 1.0

-3

### **Prerequisites**

Permission from the course director

## **OPTOG 1397: Sports Vision Workshop**

This course is designed to review the athlete's visual system in multiple sports including baseball, softball, football, basketball, and hockey. Students will learn how to perform a comprehensive and systematic evaluation of an athlete's visual system, and make appropriate sport specific recommendations based on refractive error, visual processing, and visual motor integration. A range of options involving training techniques and lenses will be discussed to improve an athlete's visual system specifically for the athlete's sport. This course includes hands on exposure to techniques available to training an athlete.

**Credits** 1.5

**Prerequisites**

Permission from the course director

## **OPTOG 1494A: Third Year Clinical Skills Enhancement**

Individualized supervised clinical experiences to enhance the examination skills of students are the focus of this course. This course may be repeated for credit.

**Credits** 1.0

-7

**Prerequisites**

Permission from the course director

## **OPTOG 1494B: Third Year Clinical Skills Enhancement**

Individualized supervised clinical experiences to enhance the examination skills of students are the focus of this course. This course may be repeated for credit.

**Credits** 1.0

-7

**Prerequisites**

Permission from the course director

## **OPTOG 1494C: Third Year Clinical Skills Enhancement**

Individualized supervised clinical experiences to enhance the examination skills of students are the focus of this course. This course may be repeated for credit.

**Credits** 1.0

-7

**Prerequisites**

Permission from the course director

## **OPTOG 1494D: Third Year Clinical Skills Enhancement**

Individualized supervised clinical experiences to enhance the examination skills of students are the focus of this course. This course may be repeated for credit.

**Credits** 1.0

-7

**Prerequisites**

Permission from the course director

## **OPTOG 1495A: Fourth Year Clinical Skills Enhancement**

Individualized supervised clinical experiences to enhance the examination skills of students are the focus of this course. This course may be repeated for credit.

**Credits** 1.0

-18

## **OPTOG 1495B: Fourth Year Clinical Skills Enhancement**

Individualized supervised clinical experiences to enhance the examination skills of students are the focus of this course. This course may be repeated for credit.

**Credits** 1.0

-18

## **OPTOG 1495C: Fourth Year Clinical Skills Enhancement**

Individualized supervised clinical experiences to enhance the examination skills of students are the focus of this course. This course may be repeated for credit.

**Credits** 1.0

-18

## **OPTOG 1495D: Fourth Year Clinical Skills Enhancement**

Individualized supervised clinical experiences to enhance the examination skills of students are the focus of this course. This course may be repeated for credit.

**Credits** 1.0

-18

## **OPTOG 1498: Spanish for Optometric Eye Exams**

Students develop basic communication skills in Spanish. This course emphasizes the vocabulary associated with the optometric examination. This course is for students with minimal knowledge of the Spanish language.

**Credits** 1.5

**Prerequisites**

Permission from the course director

## **OPTOG 1510: Clinical Services, Theory & Methods I**

This course sequence is an introduction to the theory and procedures that structure the examination of the eye. This includes instrumentation, examination methods, psychophysical techniques, appropriate patient instructions, protocols and recording of findings. Instruction is provided to foster progressive development of basic examination techniques including, but not limited to, medical and ocular history, visual acuity, color vision, cover test, depth perception, pupillary and visual pathways, external ocular examination, retinoscopy and refraction, and ophthalmoscopy. Students must successfully complete a proficiency examination at the end of each course before progressing into the next course in the sequence.

**Credits** 3.0

**Prerequisites**

none

## **OPTOG 151I: Contemporary Issues in Health Care and Ethics**

This course introduces students to the current issues faced by providers of primary eye care as well as ethical precepts that serve as foundations to providing healthcare to the public. Included is the history of optometry, professional and student ethics, as well as the interaction and influence of industry on the profession of optometry.

**Credits** 0.5

## **OPTOG 1514: Optometry Business and Career Management I**

This course sequence introduces the student to the business, financial, and personal aspects of practice. Course themes include planning for personal, professional, and financial goals, credit and debt management, optometric career choices, modes and scope of practice, considerations in private practice, professionalism as part of patient care and fundamentals of effective communication and interpersonal skills. The desired outcome of the course is that the student will be able to select and take the steps needed to enter the best practice for the student's individual needs and future goals.

**Credits** 1.0

**Prerequisites**

None

## **OPTOG 1520: Clinical Services, Theory & Methods II**

This course sequence is an introduction to the theory and procedures that structure the examination of the eye. This includes instrumentation, examination methods, psychophysical techniques, appropriate patient instructions, protocols and recording of findings. Instruction is provided to foster progressive development of basic examination techniques including, but not limited to, medical and ocular history, visual acuity, color vision, cover test, depth perception, pupillary and visual pathways, external ocular examination, retinoscopy and refraction, and ophthalmoscopy. Students must successfully complete a proficiency examination at the end of each course before progressing into the next course in the sequence.

**Credits** 3.0

**Prerequisites**

[OPTOG 1510](#) Clinical Services, Theory & Methods I

## **OPTOG 1525: Geometric, Physical and Visual Optics III**

The course sequence provides an introduction to the qualitative and quantitative characterization of the behavior of light and optical systems as related to optometry. In Geometrical Optics, the basics of refraction at plane and spherical surfaces, image formation and magnification, spherical and spherocylindrical thin lenses, thin lens eye models, thick lenses, prisms, reflection and mirrors will be presented. Physical Optics presents conceptual and quantitative understanding of aberrations, characteristics of electromagnetic waves, diffraction, interference, fluorescence, polarization, scattering, photometry, lasers, and other applications. Visual Optics considers the eye as an optical system, including schematic eye models, refractive error, optical characteristics of the eye, stimulus to accommodation, retinal image size and quality, Purkinje images, entoptic phenomena, presbyopia, aphakia, intraocular implants and effects of radiation.

**Credits** 2.0

**Prerequisites**

[OPTOG 1550](#) Geometric, Physical and Visual Optics II

## **OPTOG 1530: Clinical Services, Theory & Methods III**

This course sequence is an introduction to the theory and procedures that structure the examination of the eye. This includes instrumentation, examination methods, psychophysical techniques, appropriate patient instructions, protocols and recording of findings. Instruction is provided to foster progressive development of basic examination techniques including, but not limited to, medical and ocular history, visual acuity, color vision, cover test, depth perception, pupillary and visual pathways, external ocular examination, retinoscopy and refraction, and ophthalmoscopy. Students must successfully complete a proficiency examination at the end of each course before progressing into the next course in the sequence.

**Credits** 3.0

**Prerequisites**

[OPTOG 1520](#) Clinical Services, Theory & Methods II

## **OPTOG 1540: Geometric, Physical and Visual Optics I**

The course sequence provides an introduction to the qualitative and quantitative characterization of the behavior of light and optical systems as related to optometry. In Geometrical Optics, the basics of refraction at plane and spherical surfaces, image formation and magnification, spherical and spherocylindrical thin lenses, thin lens eye models, thick lenses, prisms, reflection and mirrors will be presented. Physical Optics presents conceptual and quantitative understanding of aberrations, characteristics of electromagnetic waves, diffraction, interference, fluorescence, polarization, scattering, photometry, lasers, and other applications. Visual Optics considers the eye as an optical system, including schematic eye models, refractive error, optical characteristics of the eye, stimulus to accommodation, retinal image size and quality, Purkinje images, entoptic phenomena, presbyopia, aphakia, intraocular implants and effects of radiation.

**Credits** 4.0

**Prerequisites**

none

## **OPTOG 1550: Geometric, Physical and Visual Optics II**

The course sequence provides an introduction to the qualitative and quantitative characterization of the behavior of light and optical systems as related to optometry. In Geometrical Optics, the basics of refraction at plane and spherical surfaces, image formation and magnification, spherical and spherocylindrical thin lenses, thin lens eye models, thick lenses, prisms, reflection and mirrors will be presented. Physical Optics presents conceptual and quantitative understanding of aberrations, characteristics of electromagnetic waves, diffraction, interference, fluorescence, polarization, scattering, photometry, lasers, and other applications. Visual Optics considers the eye as an optical system, including schematic eye models, refractive error, optical characteristics of the eye, stimulus to accommodation, retinal image size and quality, Purkinje images, entoptic phenomena, presbyopia, aphakia, intraocular implants and effects of radiation.

**Credits** 4.0

**Prerequisites**

[OPTOG 1540](#) Geometric, Physical and Visual Optics I

## **OPTOG 1560: Ocular Anatomy and Physiology I**

This course sequence allows the student to understand and appreciate the anatomy, physiology and pathophysiology of the tissues and structures of the eye. Students will gain an understanding of the relationship of ocular anatomy and physiology to ocular pharmacology, biochemistry, and ocular pathophysiology. This course series comprises lectures and workshops.

**Credits** 2.0

**Prerequisites**

None

## **OPTOG 1580: Ocular Anatomy and Physiology II**

This course sequence allows the student to understand and appreciate the anatomy, physiology and pathophysiology of the tissues and structures of the eye. Students will gain an understanding of the relationship of ocular anatomy and physiology to ocular pharmacology, biochemistry, and ocular pathophysiology. This course series comprises lectures and workshops.

**Credits** 2.0

**Prerequisites**

[OPTOG 1560](#) Ocular Anatomy and Physiology I

## **OPTOG 1590: Ocular Anatomy and Physiology III**

This course sequence allows the student to understand and appreciate the anatomy, physiology and pathophysiology of the tissues and structures of the eye. Students will gain an understanding of the relationship of ocular anatomy and physiology to ocular pharmacology, biochemistry, and ocular pathophysiology. This course series comprises lectures and workshops.

**Credits** 2.0

### **Prerequisites**

[OPTOG 1580](#) Ocular Anatomy and Physiology II

## **OPTOG 1597A: Optometric Competency Course**

This series of courses serves to enhance the mastery of optometry skills, techniques and concepts. A course in the sequence is assigned by the Student Promotion and Graduation Committee to a student who has been academically decelerated after receiving a non-passing grade in a required course within the Doctor of Optometry curriculum. The course is assigned for 1-12 credit hours during the quarter in which a student repeats the failed course. The assigned course will include content previously completed, that is deemed critical for success in the Doctor of Optometry curriculum. This is a pass/fail course; letter grades are not assigned. A student who fails to successfully complete the assigned Optometric Competency Course will be referred to the Student Promotion and Graduation Committee and may be dismissed from the college.

**Credits** 1.0

-12

### **Prerequisites**

Approval of the Student Promotion and Graduation Committee, Associate Dean of Academic Affairs, or Dean

## **OPTOG 1597B: Optometric Competency Course**

This series of courses serves to enhance the mastery of optometry skills, techniques and concepts. A course in the sequence is assigned by the Student Promotion and Graduation Committee to a student who has been academically decelerated after receiving a non-passing grade in a required course within the Doctor of Optometry curriculum. The course is assigned for 1-12 credit hours during the quarter in which a student repeats the failed course. The assigned course will include content previously completed, that is deemed critical for success in the Doctor of Optometry curriculum. This is a pass/fail course; letter grades are not assigned. A student who fails to successfully complete the assigned Optometric Competency Course will be referred to the Student Promotion and Graduation Committee and may be dismissed from the college.

**Credits** 1.0

-12

### **Prerequisites**

Approval of the Student Promotion and Graduation Committee, Associate Dean of Academic Affairs, or Dean

## **OPTOG 1597C: Optometric Competency Course**

This series of courses serves to enhance the mastery of optometry skills, techniques and concepts. A course in the sequence is assigned by the Student Promotion and Graduation Committee to a student who has been academically decelerated after receiving a non-passing grade in a required course within the Doctor of Optometry curriculum. The course is assigned for 1-12 credit hours during the quarter in which a student repeats the failed course. The assigned course will include content previously completed, that is deemed critical for success in the Doctor of Optometry curriculum. This is a pass/fail course; letter grades are not assigned. A student who fails to successfully complete the assigned Optometric Competency Course will be referred to the Student Promotion and Graduation Committee and may be dismissed from the college.

**Credits** 1.0

-12

### **Prerequisites**

Approval of the Student Promotion and Graduation Committee, Associate Dean of Academic Affairs, or Dean

## **OPTOG 1620: Visual Science: Monocular Sensory Processing**

This course introduces concepts on anatomy and physiology related to the visual perception and image processing. The functionality of visual performance using dark adaption, color vision, spatial and temporal vision is explained in normal and abnormal conditions. This information is relevant to understanding how the visual system functions with various perception aspects. Students are introduced to the development of vision and abnormal cortical development.

**Credits** 2.0

## **OPTOG 1622: Visual Science: Ocular Motility**

This course focuses on characteristics, control, and deficits of the eye movement systems, the autonomic systems subserving accommodation, and pupillary mechanisms and understanding the interactions between these eye movement systems and the visual perception process. Theories and mechanisms of presbyopia and treatment options are also discussed.

**Credits** 2.0

## **OPTOG 1624: Visual Science: Binocular Vision**

Students will learn about fundamental binocular vision concepts as observed under normal and abnormal conditions. This course will include a discussion of binocular sensory mechanisms of vision such as stereovision, along with the underlying neuroanatomy and physiology. Mechanisms of cortical suppression and possible treatment options are also discussed.

**Credits** 4.0

### **Prerequisites**

[OPTOG 1525](#) Geometric, Physical and Visual Optics III

## **OPTOG 1630: Ophthalmic Optics I**

This course sequence covers the study of the physical and optical characteristics of ophthalmic lenses and prisms; the design and application of single vision, multifocal, occupational and progressive lenses; the benefits and applications of ophthalmic lens materials, absorptive lenses, and lens treatments; and the proper measurement and fitting of ophthalmic lenses and frames.

**Credits** 4.0

## **OPTOG 1632: Ophthalmic Optics II**

This course sequence covers the study of the physical and optical characteristics of ophthalmic lenses and prisms; the design and application of single vision, multifocal, occupational and progressive lenses; the benefits and applications of ophthalmic lens materials, absorptive lenses, and lens treatments; and the proper measurement and fitting of ophthalmic lenses and frames.

**Credits** 4.0

**Prerequisites**

[OPTOG 1630](#) Ophthalmic Optics I

## **OPTOG 1640: Ocular Disease I**

This course sequence covers signs and symptoms, pathophysiology, clinical course, differential diagnosis, treatment and management of ocular diseases of the anterior and posterior segment of the eye and ocular adnexa.

**Credits** 3.0

**Prerequisites**

None

## **OPTOG 1642: Ocular Disease II**

This course sequence covers signs and symptoms, pathophysiology, clinical course, differential diagnosis, treatment and management of ocular diseases of the anterior and posterior segment of the eye and ocular adnexa.

**Credits** 3.0

**Prerequisites**

[OPTOG 1640](#) Ocular Disease I

## **OPTOG 1644: Ocular Disease III**

This course sequence covers signs and symptoms, pathophysiology, clinical course, differential diagnosis, treatment and management of ocular diseases of the anterior and posterior segment of the eye and ocular adnexa.

**Credits** 3.0

**Prerequisites**

[OPTOG 1642](#) Ocular Disease II

## **OPTOG 1645: Contact Lens I**

This course sequence includes a discussion of the theory and practice of contact lens design and contact lens fitting methodologies. Areas of discussion include corneal topography, design of materials, fabrication and modification of contact lenses, fitting and evaluation methodologies and procedures. This course sequence will also explore advanced contact lens applications for high and irregular astigmatism, keratoconus, presbyopia, post-surgical and irregular corneas, corneal reshaping, and ocular prosthetics.

**Credits** 3.0

**Prerequisites**

None



## **OPTOG 1646: Contact Lens II**

This course sequence includes a discussion of the theory and practice of contact lens design and contact lens fitting methodologies. Areas of discussion include corneal topography, design of materials, fabrication and modification of contact lenses, fitting and evaluation methodologies and procedures. This course sequence will also explore advanced contact lens applications for high and irregular astigmatism, keratoconus, presbyopia, post-surgical and irregular corneas, corneal reshaping, and ocular prosthetics.

**Credits** 3.0

**Prerequisites**

[OPTOG 1645](#) Contact Lens I

## **OPTOG 1650: Clinical Services, Theory & Methods IV**

This course sequence covers instrumentation, examination methods, psychophysical techniques, appropriate patient instructions and communication skills, protocols, and recording of findings. Instruction is provided to foster progressive development of basic examination techniques and assessment of binocular skills and ocular health. Students must successfully complete a proficiency examination at the end of each course before progressing into the next course in the sequence.

**Credits** 3.0

**Prerequisites**

[OPTOG 1530](#) Clinical Services, Theory & Methods III

## **OPTOG 1652: Clinical Services, Theory & Methods V**

This course sequence covers instrumentation, examination methods, psychophysical techniques, appropriate patient instructions and communication skills, protocols, and recording of findings. Instruction is provided to foster progressive development of basic examination techniques and assessment of binocular skills and ocular health. Students must successfully complete a proficiency examination at the end of each course before progressing into the next course in the sequence.

**Credits** 3.0

**Prerequisites**

[OPTOG 1650](#) Clinical Services, Theory & Methods IV

## **OPTOG 1654: Clinical Services, Theory & Methods VI**

This course sequence covers instrumentation, examination methods, psychophysical techniques, appropriate patient instructions and communication skills, protocols, and recording of findings. Instruction is provided to foster progressive development of basic examination techniques and assessment of binocular skills and ocular health. Students must successfully complete a proficiency examination at the end of each course before progressing into the next course in the sequence.

**Credits** 3.0

**Prerequisites**

[OPTOG 1652](#) Clinical Services, Theory & Methods V

## **OPTOG 1655: Introduction to Clinical Services**

The objective of this course is to introduce the student to clinical care services in the Eye Institute. In addition, this course will assess and verify the optometry student's level of competency in primary care optometry patient care skills. The course is designed to refine clinical procedures and students will be required to complete a comprehensive clinical skills proficiency examination. Successful completion of this course qualifies the student to enter the Clinical Services VII - X course sequence.

**Credits** 1.5

**Prerequisites**

[OPTOG 1652](#) Clinical Services, Theory and Methods V

## **OPTOG 1670: Capstone Project I: Research Design and Biostatistics**

Principles of research design and the application of bio statistical methods will be discussed. The course will include an overview of potential studies that the student may choose for a capstone project.

**Credits** 1.0

## **OPTOG 1672: Capstone Project II: Literature Search and Study Design**

The student will decide on a project hypothesis, conduct a literature search, design the study and submit an IRB application if needed. The project requires data collection of basic or clinical research under the mentorship of a faculty member.

**Credits** 1.0

### **Prerequisites**

[OPTOG 1670](#) Capstone Project I: Research Design and Biostatistics

## **OPTOG 1675: Visual Neurophysiology**

This course discusses the neurophysiological basis of vision, from detection of light by the retina to the processing of complex visual scenes by the visual association cortex. Specific topics include basic neuronal physiology, signal transduction, receptive field construction, subcortical and cortical visual pathways, high-order visual processing, neurophysiological techniques for studying the visual system, and visual disorders with a neurophysiological basis.

**Credits** 2.0

## **OPTOG 1691: Ocular Pharmacology I**

This course sequence discusses the pharmaceutical treatment of ocular diseases. It will cover, in detail, the selection of drugs appropriate for the treatment of important ocular disorders and their methods of use. In-class practice of the use of pharmaceutical agents in disease treatment will be an important part of the learning experience. Specific topics include major classes of drugs used to treat ocular disorders and how they are employed, side effects of the use of both ocular and systemic drugs, common formulations used for ocular drugs, new pharmaceutical agents, and general pharmacology and toxicology.

**Credits** 1.0

### **Prerequisites**

None

## **OPTOG 1692: Ocular Pharmacology II**

This course sequence discusses the pharmaceutical treatment of ocular diseases. It will cover, in detail, the selection of drugs appropriate for the treatment of important ocular disorders and their methods of use. In-class practice of the use of pharmaceutical agents in disease treatment will be an important part of the learning experience. Specific topics include major classes of drugs used to treat ocular disorders and how they are employed, side effects of the use of both ocular and systemic drugs, common formulations used for ocular drugs, new pharmaceutical agents, and general pharmacology and toxicology.

**Credits** 1.0

### **Prerequisites**

[OPTOG 1691](#) Ocular Pharmacology I

## **OPTOG 1693: Ocular Pharmacology III**

This course sequence discusses the pharmaceutical treatment of ocular diseases. It will cover, in detail, the selection of drugs appropriate for the treatment of important ocular disorders and their methods of use. In-class practice of the use of pharmaceutical agents in disease treatment will be an important part of the learning experience. Specific topics include major classes of drugs used to treat ocular disorders and how they are employed, side effects of the use of both ocular and systemic drugs, common formulations used for ocular drugs, new pharmaceutical agents, and general pharmacology and toxicology.

**Credits** 2.5

### **Prerequisites**

[OPTOG 1692](#) Ocular Pharmacology II

## **OPTOG 1694: Pediatric Optometry**

This course presents vision development and diagnostic strategies for examining children from infancy through adolescence. Discussions on how vision development guides treatment and management options in the pediatric population will include common anterior segment pathologies, refractive errors, and contact lenses.

**Credits** 1.0

## **OPTOG 1697A: Optometric Competency Course**

This series of courses serves to enhance the mastery of optometry skills, techniques and concepts. A course in the sequence is assigned by the Student Promotion and Graduation Committee to a student who has been academically decelerated after receiving a non-passing grade in a required course within the Doctor of Optometry curriculum. The course is assigned for 1-12 credit hours during the quarter in which a student repeats the failed course. The assigned course will include content previously completed, that is deemed critical for success in the Doctor of Optometry curriculum. This is a pass/fail course; letter grades are not assigned. A student who fails to successfully complete the assigned Optometric Competency Course will be referred to the Student Promotion and Graduation Committee and may be dismissed from the college.

**Credits** 1.0

-12

### **Prerequisites**

Approval of the Student Promotion and Graduation Committee, Associate Dean of Academic Affairs, or Dean

## **OPTOG 1697B: Optometric Competency Course**

This series of courses serves to enhance the mastery of optometry skills, techniques and concepts. A course in the sequence is assigned by the Student Promotion and Graduation Committee to a student who has been academically decelerated after receiving a non-passing grade in a required course within the Doctor of Optometry curriculum. The course is assigned for 1-12 credit hours during the quarter in which a student repeats the failed course. The assigned course will include content previously completed, that is deemed critical for success in the Doctor of Optometry curriculum. This is a pass/fail course; letter grades are not assigned. A student who fails to successfully complete the assigned Optometric Competency Course will be referred to the Student Promotion and Graduation Committee and may be dismissed from the college.

**Credits** 1.0

-12

### **Prerequisites**

Approval of the Student Promotion and Graduation Committee, Associate Dean of Academic Affairs, or Dean

## **OPTOG 1697C: Optometric Competency Course**

This series of courses serves to enhance the mastery of optometry skills, techniques and concepts. A course in the sequence is assigned by the Student Promotion and Graduation Committee to a student who has been academically decelerated after receiving a non-passing grade in a required course within the Doctor of Optometry curriculum. The course is assigned for 1-12 credit hours during the quarter in which a student repeats the failed course. The assigned course will include content previously completed, that is deemed critical for success in the Doctor of Optometry curriculum. This is a pass/fail course; letter grades are not assigned. A student who fails to successfully complete the assigned Optometric Competency Course will be referred to the Student Promotion and Graduation Committee and may be dismissed from the college.

**Credits** 1.0

-12

### **Prerequisites**

Approval of the Student Promotion and Graduation Committee, Associate Dean of Academic Affairs, or Dean

## **OPTOG 1714: Optometry Business and Career Management II**

This course sequence introduces the student to the business, financial, and personal aspects of practice. Course themes include planning for personal, professional, and financial goals, credit and debt management, optometric career choices, modes and scope of practice, considerations in private practice, professionalism as part of patient care and fundamentals of effective communication and interpersonal skills. The desired outcome of the course is that the student will be able to select and take the steps needed to enter the best practice for the student's individual needs and future goals.

**Credits** 1.0

### **Prerequisites**

None

## **OPTOG 1720: Diagnosis and Management of Non-Strabismic Binocular Vision Disorders**

This course reviews the common non-strabismus diagnoses of accommodation, binocular vision, and oculomotor systems. Specialized testing techniques will be presented as they relate to these diagnoses including tests of accommodative function, heterophoria, fixation disparity, associated phoria, graphical analysis, and various measures of eye movement skills. Appropriate therapies for these diagnoses with a heavy emphasis on vision therapy techniques will be outlined. Applying these skills further to patients who have suffered an acquired/traumatic brain injury (ABI/TBI) will be discussed.

**Credits** 4.0

### **Prerequisites**

[OPTOG 1624](#) Visual Science: Binocular Vision and [OPTOG 1694](#) Pediatric Optometry

## **OPTOG 1722: Diagnosis of Strabismus and Amblyopia**

This course will emphasize the principles and techniques of evaluating patients presenting with strabismus and amblyopia. An organized approach to a comprehensive evaluation is presented with an emphasis on the administration and interpretation of diagnostic testing procedures including the assessment of associated anomalies such as eccentric fixation, comitancy and anomalous correspondence.

**Credits** 4.0

### **Prerequisites**

[OPTOG 1720](#) Diagnosis and Management of Non-Strabismic Binocular Vision Disorders

## **OPTOG 1723: Treatment and Management of Strabismus and Amblyopia**

This course presents theoretical and clinical considerations in the management of strabismus and amblyopia including the rationale and methods for using lenses, prisms, occlusion, vision therapy, medication, and surgical referrals. Associated anomalies are discussed in terms of their significance and management.

**Credits** 3.0

**Prerequisites**

[OPTOG 1722](#) Diagnosis of Strabismus and Amblyopia

## **OPTOG 1724: Optometry Business and Career Management III**

This course sequence introduces the student to the business, financial, and personal aspects of practice. Course themes include planning for personal, professional, and financial goals, credit and debt management, optometric career choices, modes and scope of practice, considerations in private practice, professionalism as part of patient care and fundamentals of effective communication and interpersonal skills. The desired outcome of the course is that the student will be able to select and take the steps needed to enter the best practice for the student's individual needs and future goals.

**Credits** 2.0

**Prerequisites**

None

## **OPTOG 1726: Advanced Competency in Binocular Vision and Pediatrics**

This course focuses on testing visual information processing (VIP) and gives students an organized approach to identify visual deficits that may have an impact on reading and learning. Students will also learn how to create sequential management plans for treating patients with visual processing disorders. In addition to VIP testing, an overview of acquired and traumatic brain injuries will be presented and students will be introduced to the multidisciplinary approach in management of these patients.

**Credits** 3.0

## **OPTOG 1729: Advanced Ophthalmic Procedures**

This course will provide an introduction to therapeutic ophthalmic lasers; intraocular, subcutaneous, intramuscular, and intravenous injections; and other advanced procedures. The course will also include pre- and post-operative care of ophthalmic procedures as well as suturing and wound maintenance.

**Credits** 3.0

**Prerequisites**

[OPTOG 1746](#) Ocular Disease IV

## **OPTOG 1730: Integrative Assessment and Management of Ocular and Systemic Conditions**

This course is a multidisciplinary course that is team-taught by faculty from various Midwestern University colleges and demonstrates the importance of the interdisciplinary approach as related to eye and vision care. This course will provide students with an introduction to, and hands-on experiences with, select physical assessment techniques. Topics will focus on a review of high-yield conditions pertinent to optometrists and build on clinical application and critical thinking skills.

**Credits** 2.0

**Prerequisites**

[OPTOG 1746: Ocular Disease IV](#)

## **OPTOG 1740: Contact Lens III**

This course sequence includes a discussion of the theory and practice of contact lens design and contact lens fitting methodologies. Areas of discussion include corneal topography, design of materials, fabrication and modification of contact lenses, fitting and evaluation methodologies and procedures. This course sequence will also explore advanced contact lens applications for high and irregular astigmatism, keratoconus, presbyopia, post-surgical and irregular corneas, corneal reshaping, and ocular prosthetics.

**Credits** 3.0

**Prerequisites**

[OPTOG 1646](#) Contact Lens II

## **OPTOG 1745: Epidemiology, Public Health and the Optometric Profession**

This course is an introduction to the epidemiology of ocular anomalies, overview of public and community health planning and care, and the role of the optometrist in community health promotion.

**Credits** 2.0

## **OPTOG 1746: Ocular Disease IV**

This course sequence covers signs and symptoms, pathophysiology, clinical course, differential diagnosis, treatment and management of ocular diseases of the anterior and posterior segment of the eye and ocular adnexa.

**Credits** 2.0

**Prerequisites**

[OPTOG 1644](#) Ocular Disease III

## **OPTOG 1760: Capstone Project III: Data Collection and Analysis**

This course is a continuation of [OPTOG 1672](#) Capstone Project II: Literature Search and Study Design. The student will further develop the capstone project, begin data collection and statistical analysis.

**Credits** 1.0

**Prerequisites**

[OPTOG 1672](#) Capstone Project II: Literature Search and Study Design

## **OPTOG 1761: Capstone Project IV: Research Presentation**

This course is a continuation of [OPTOG 1760](#) Capstone Project III: Data Collection and Analysis. Students prepare an abstract and poster describing the research results. The students will deliver a public presentation of the work during the spring of the third professional year.

**Credits** 3.0

**Prerequisites**

[OPTOG 1760](#) Capstone Project III: Data Collection and Analysis

## **OPTOG 1770: Clinical Services VII**

The student will provide eye care services in the Primary Care Clinic at the Midwestern University Eye Institute. The student will also participate in patient care in the optical and diagnostic testing services. Students may also rotate or examine patients in specialized clinics such as contact lenses, pediatrics, vision therapy, and ocular disease/low vision. This course series focuses on progressive competence in the diagnosis treatment and management of visual dysfunction and ocular conditions. Students will additionally participate in lectures and case based clinical seminars.

**Credits** 6.0

**Prerequisites**

[OPTOG 1654](#) Clinical Services, Theory & Methods VI, and [OPTOG 1655](#) Clinical Services Proficiency

## **OPTOG 1771: Clinical Services VIII**

The student will provide eye care services in the Primary Care Clinic at the Midwestern University Eye Institute. The student will also participate in patient care in the optical and diagnostic testing services. Students may also rotate or examine patients in specialized clinics such as contact lenses, pediatrics, vision therapy, and ocular disease/low vision. This course series focuses on progressive competence in the diagnosis treatment and management of visual dysfunction and ocular conditions. Students will additionally participate in lectures and case based clinical seminars.

**Credits** 6.0

**Prerequisites**

[OPTOG 1770](#) Clinical Services VII

## **OPTOG 1772: Clinical Services IX**

The student will provide eye care services in the Primary Care Clinic at the Midwestern University Eye Institute. The student will also participate in patient care in the optical and diagnostic testing services. Students may also rotate or examine patients in specialized clinics such as contact lenses, pediatrics, vision therapy, and ocular disease/low vision. This course series focuses on progressive competence in the diagnosis treatment and management of visual dysfunction and ocular conditions. Students will additionally participate in lectures and case based clinical seminars.

**Credits** 6.0

**Prerequisites**

[OPTOG 1771](#) Clinical Services VIII

## **OPTOG 1773: Clinical Services X**

The student will provide eye care services in the Primary Care Clinic at the Midwestern University Eye Institute. The student will also participate in patient care in the optical and diagnostic testing services. Students may also rotate or examine patients in specialized clinics such as contact lenses, pediatrics, vision therapy, and ocular disease/low vision. This course series focuses on progressive competence in the diagnosis treatment and management of visual dysfunction and ocular conditions. Students will additionally participate in lectures and case based clinical seminars.

**Credits** 6.0

**Prerequisites**

[OPTOG 1772](#) Clinical Services IX

## **OPTOG 1785: Visual Rehabilitation**

Visual Rehabilitation is an entry level course, which presents the fundamental knowledge of clinical low vision care and rehabilitation necessary to perform basic low vision examinations during the fourth year clinical rotation, and in a practice setting after graduation. This course is an overview of the strategies for visual rehabilitation examination of patients with visual impairments, neurological issues following traumatic brain injury, and the geriatric population in general.

**Credits** 3.0

## **OPTOG 1787: Neuro-ophthalmic Disease**

This course discusses the diagnosis, treatment, and management of neuro-ophthalmic diseases and ocular manifestations of neurological systemic diseases. Components of the neuro-ophthalmic examination, neuroimaging of the visual system, and specialty testing are presented. The student is introduced to case management strategies related to neuro-ophthalmic disorders.

**Credits** 2.5

## **OPTOG 1790: Evidence Based Medicine**

This course will focus on various aspects of evidence based medicine. Students will learn how to analyze medical literature and apply evidence-based information to patient scenarios through case presentations and group discussions.

**Credits** 1.5

## **OPTOG 1797A: Optometric Competency Course**

This series of courses serves to enhance the mastery of optometry skills, techniques and concepts. A course in the sequence is assigned by the Student Promotion and Graduation Committee to a student who has been academically decelerated after receiving a non-passing grade in a required course within the Doctor of Optometry curriculum. The course is assigned for 1-12 credit hours during the quarter in which a student repeats the failed course. The assigned course will include content previously completed, that is deemed critical for success in the Doctor of Optometry curriculum. This is a pass/fail course; letter grades are not assigned. A student who fails to successfully complete the assigned Optometric Competency Course will be referred to the Student Promotion and Graduation Committee and may be dismissed from the college.

**Credits** 1.0

-12

### **Prerequisites**

Approval of the Student Promotion and Graduation Committee, Associate Dean of Academic Affairs, or Dean

## **OPTOG 1797B: Optometric Competency Course**

This series of courses serves to enhance the mastery of optometry skills, techniques and concepts. A course in the sequence is assigned by the Student Promotion and Graduation Committee to a student who has been academically decelerated after receiving a non-passing grade in a required course within the Doctor of Optometry curriculum. The course is assigned for 1-12 credit hours during the quarter in which a student repeats the failed course. The assigned course will include content previously completed, that is deemed critical for success in the Doctor of Optometry curriculum. This is a pass/fail course; letter grades are not assigned. A student who fails to successfully complete the assigned Optometric Competency Course will be referred to the Student Promotion and Graduation Committee and may be dismissed from the college.

**Credits** 1.0

-12

### **Prerequisites**

Approval of the Student Promotion and Graduation Committee, Associate Dean of Academic Affairs, or Dean

## **OPTOG 1797C: Optometric Competency Course**

This series of courses serves to enhance the mastery of optometry skills, techniques and concepts. A course in the sequence is assigned by the Student Promotion and Graduation Committee to a student who has been academically decelerated after receiving a non-passing grade in a required course within the Doctor of Optometry curriculum. The course is assigned for 1-12 credit hours during the quarter in which a student repeats the failed course. The assigned course will include content previously completed, that is deemed critical for success in the Doctor of Optometry curriculum. This is a pass/fail course; letter grades are not assigned. A student who fails to successfully complete the assigned Optometric Competency Course will be referred to the Student Promotion and Graduation Committee and may be dismissed from the college.

**Credits** 1.0

-12

### **Prerequisites**

Approval of the Student Promotion and Graduation Committee, Associate Dean of Academic Affairs, or Dean



## **OPTOG 1797D: Optometric Competency Course**

This series of courses serves to enhance the mastery of optometry skills, techniques and concepts. A course in the sequence is assigned by the Student Promotion and Graduation Committee to a student who has been academically decelerated after receiving a non-passing grade in a required course within the Doctor of Optometry curriculum. The course is assigned for 1-12 credit hours during the quarter in which a student repeats the failed course. The assigned course will include content previously completed, that is deemed critical for success in the Doctor of Optometry curriculum. This is a pass/fail course; letter grades are not assigned. A student who fails to successfully complete the assigned Optometric Competency Course will be referred to the Student Promotion and Graduation Committee and may be dismissed from the college.

**Credits** 1.0

-12

### **Prerequisites**

Approval of the Student Promotion and Graduation Committee, Associate Dean of Academic Affairs, or Dean

## **OPTOG 1800: Clinical Services XI**

The fourth professional year is designed to promote continued development of the student's emerging clinical problem-solving abilities. This is a series of full-time clinical rotations or externships comprised of patient care experiences. Students will rotate at the Midwestern University Eye Institute and at approved external rotation sites with an emphasis on direct patient care in individualized supervised clinical experiences focusing on primary care, ocular disease and optometric specialties. Clinical decision making will be enhanced through challenging patient care problems that highlight or emphasize differential diagnosis, management decisions, referral decisions and follow-up, as well as address newer techniques and procedures for diagnosis and management.

**Credits** 18.0

### **Prerequisites**

[OPTOG 1773](#) Clinical Services X

## **OPTOG 1810: Clinical Services XII**

The fourth professional year is designed to promote continued development of the student's emerging clinical problem-solving abilities. This is a series of full-time clinical rotations or externships comprised of patient care experiences. Students will rotate at the Midwestern University Eye Institute and at approved external rotation sites with an emphasis on direct patient care in individualized supervised clinical experiences focusing on primary care, ocular disease and optometric specialties. Clinical decision making will be enhanced through challenging patient care problems that highlight or emphasize differential diagnosis, management decisions, referral decisions and follow-up, as well as address newer techniques and procedures for diagnosis and management.

**Credits** 18.0

### **Prerequisites**

[OPTOG 1800](#) Clinical Services XI

## **OPTOG 1820: Clinical Services XIII**

The fourth professional year is designed to promote continued development of the student's emerging clinical problem-solving abilities. This is a series of full-time clinical rotations or externships comprised of patient care experiences. Students will rotate at the Midwestern University Eye Institute and at approved external rotation sites with an emphasis on direct patient care in individualized supervised clinical experiences focusing on primary care, ocular disease and optometric specialties. Clinical decision making will be enhanced through challenging patient care problems that highlight or emphasize differential diagnosis, management decisions, referral decisions and follow-up, as well as address newer techniques and procedures for diagnosis and management.

**Credits** 18.0

**Prerequisites**

[OPTOG 1810](#) Clinical Services XII

## **OPTOG 1830: Clinical Services XIV**

The fourth professional year is designed to promote continued development of the student's emerging clinical problem-solving abilities. This is a series of full-time clinical rotations or externships comprised of patient care experiences. Students will rotate at the Midwestern University Eye Institute and at approved external rotation sites with an emphasis on direct patient care in individualized supervised clinical experiences focusing on primary care, ocular disease and optometric specialties. Clinical decision making will be enhanced through challenging patient care problems that highlight or emphasize differential diagnosis, management decisions, referral decisions and follow-up, as well as address newer techniques and procedures for diagnosis and management.

**Credits** 18.0

**Prerequisites**

[OPTOG 1820](#) Clinical Services XIII

## **PHARG 1602: General Pharmacology I**

These courses place an emphasis on general principles of drug action, the physical and chemical properties of the drugs, and their therapeutic effects, methods of administration, mechanism(s) of action, adverse effects and drug interactions, and indications/contraindications for the use of the drug.

**Credits** 2.0

**Prerequisites**

none

## **PHARG 1623: General Pharmacology II**

These courses place an emphasis on general principles of drug action, the physical and chemical properties of the drugs, and their therapeutic effects, methods of administration, mechanism(s) of action, adverse effects and drug interactions, and indications/contraindications for the use of the drug.

**Credits** 3.0

**Prerequisites**

[PHARG 1602](#) General Pharmacology I

# College of Veterinary Medicine

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## Mission

The mission of the College of Veterinary Medicine is to improve animal and human life through innovative veterinary education, state-of-the-art health care services, and scholarly work relevant to the principles of One Health.

## Vision

Be a leader in veterinary medical education and be recognized for creating, developing, and implementing an innovative D.V.M. curriculum that focuses on producing graduates who are competent and confident in "Day-One" skills.

## Core Values

In pursuit of its mission, the College is guided by this set of core values:

- Adaptability
- Diversity/Inclusion
- Personal integrity
- Professionalism
- Respect
- Teamwork
- Trust

## Accreditation

Midwestern University CVM is fully accredited through the American Veterinary Medical Association's Council on Education (AVMA-COE).

Contact Information for the AVMA-COE:

1931 North Meacham Road, Suite 100

Schaumburg, IL 60173-4360

Phone: 800.248.2862

Fax: 847.925.1329

<https://www.avma.org/education/center-for-veterinary-accreditation/accreditation-veterinary-colleges>

## Degree Description

Upon graduation from the College of Veterinary Medicine, the Doctor of Veterinary Medicine (D.V.M.) degree is granted. The usual course of study for the program is four academic years (13 quarters). The curriculum consists of 8 quarters of basic and clinical science instruction with laboratories. The final five quarters consist of clinical rotations. Except for a student receiving a degree in another program, in addition to the DVM degree (dual degree), the educational program leading up to a DVM degree may not exceed 6 years from the date of matriculation.

Completion of requirements for a DVM degree does not guarantee future employment or licensure.

# Admissions

The College of Veterinary Medicine considers for admission those students who possess the academic, professional, and personal qualities necessary for becoming exemplary veterinary professionals. Students seeking admission to the College must:

1. Demonstrate an understanding of the veterinary medical profession.
2. Demonstrate service orientation through community service or extracurricular activities.
3. Have proper motivation for and commitment to the veterinary profession as demonstrated by previous compensated work, volunteer work, or other life experiences.
4. Possess the communication skills necessary to interact with patients, clients, and colleagues.
5. Pass the Midwestern University criminal background check.
6. Abide by Midwestern University's Drug- Free Workplace and Substance Abuse Policy.
7. Meet the technical standards for the college (see below).

## Competitive Admissions

Within its competitive admissions framework, the College uses multiple criteria to select the most qualified, diverse group of candidates from the applicant pool. Applicants are evaluated and selected based on their academic achievements including coursework, relevant non-veterinary experience, veterinary experience, letters of recommendation, and if required by the CVM Admission Committee, an interview. It is advisable that applicants have significant veterinary, animal, research, or biomedical experience to strengthen their applications, but major accomplishments in any field are considered assets.

## Rolling Admissions

CVM uses a rolling admissions process in which qualified applicants are reviewed, interviews are conducted, and selections are made at regular intervals during the admissions cycle.

## Application Process

CVM uses the Veterinary Medical College Application Service (VMCAS). The VMCAS application is available online at [www.aavmc.org](http://www.aavmc.org). The VMCAS application cycle opens in January of each year. The VMCAS application deadline is generally mid-September.

In accordance with the Association of American Veterinary Medical Colleges acceptance deadline policy, students have until mid-April to finalize all admission decisions. Students may accept or reject an offer prior to this deadline. If a signed letter accepting admission and the required deposit are not received by the deadline, the offer of admission will be automatically withdrawn. Refer to the VCMAS website for specifics about the application process.

## Admission Requirements

Students seeking admission to the CVM must submit documentation of the following:

1. Completion of prerequisite coursework or plans to complete the coursework prior to matriculation (confirmed by official transcripts).
  - Minimum science and minimum total cumulative GPA of 3.00 on a 4.00 scale.
  - No grade lower than a C in any course will be accepted for credit.
  - Pass/fail and satisfactory/unsatisfactory grading is not acceptable in prerequisite science courses.
2. Completion of a combined minimum of 240 hours (6 weeks) in any of the following fields: veterinary medicine/veterinary practice, health science, biomedical research, or non-veterinary animal experience. Personal pet experiences are generally not included in the 240 hour (6 week) minimum. Students with additional hours of experience and a diversity of experiences will present stronger cases for admission.
3. Three letters of recommendation.

- At least one of the letters must be from a veterinarian.
  - The other letters can be from other veterinarians or undergraduate science professors.
  - Letters written by family members are unacceptable.
  - Letters must be submitted by evaluators. Letters submitted by students are not accepted by the Office of Admissions.
4. Although not required, a bachelor's degree will make a candidate more competitive.
  5. A minimum of 64 total semester hours/96 quarter hours.

## Admission Prerequisites

Prerequisite Courses	Semester Hours	Quarter Hours
Biochemistry	3	4
Biology	8	12
General Chemistry with Lab	8	12
Organic Chemistry with Lab	8	12
Mathematics*	6	9
Physics with Lab	4	6
English Composition	6	9
Science Electives**	8	12

\*Mathematics courses must be college algebra or higher; advanced placement math courses may be substituted for college courses.

\*\*Science electives include cell biology, physiology, microbiology, genetics, animal nutrition, etc.

## Interview and Selection Process

Applicants are responsible for tracking the receipt of their application materials and verifying the status of their application on the University website. Instructions for accessing application information on the University website will be sent to each applicant via email by the Office of Admissions. Applicants must keep the Office of Admissions informed of any changes in contact information.

The Midwestern University Office of Admissions will verify completed applications and determine which applicants merit further consideration based on criteria established by the CVM Admissions Committee. Qualified applicants with a science GPA of 3.4 or greater will receive priority review by the CVM Admissions Committee. Qualified applicants who meet certain criteria may be granted admission without an interview.

For applicants in which an interview is required to gain admission, interviews are conducted on a rolling basis. Interviews are offered on-campus (in-person) or virtually. The interview day will include an interview by a two-member panel, tour of the facilities (if attending an on-campus interview day), and an overview of the D.V.M. program. For interviewed applicants, the CVM Admissions Committee may recommend to accept the applicant, place the applicant on an alternate list, or deny the applicant admission to the College. Students will be notified of their status by the Office of Admissions.

## Dual Admission Program

Selected students who have demonstrated the capacity to successfully manage course work for their primary academic degree may request to enroll in a second degree program. This can be developed in three different settings:

1. Students who are enrolled in one of the Midwestern University (MWU) master's degree programs and are accepted into a MWU doctoral degree program on the same campus may elect to complete the master's degree.

2. Students who wish to pursue a master's degree which is not offered at MWU (may include, but not be limited to MBA, MEd) should investigate information about their desired program and set up an appointment to discuss with a Dean's Office representative. Students have a number of options for institutions offering such degrees in the metropolitan area.
3. Students who wish to apply for a PhD program anywhere in the United States should investigate information about their desired program and set up an appointment to discuss with a Dean's Office representative. Typically, those entering a leave of absence to participate in a PhD program will do so between years three and four of the DVM program.

## Reapplication Process

After receiving either a denial or an end-of-cycle notification from the Office of Admissions, applicants may reapply for the next enrollment cycle. Alternates who are not granted admission during the enrollment cycle may also reapply. Select alternates may be eligible for admission without an interview, if they reapply the following enrollment cycle. Before reapplying, applicants should seek the advice of an admissions counselor. To initiate the reapplication process, applicants must submit their applications and all required documentation (transcripts, letters of recommendation, etc.) to the Office of Admissions through VMCAS. Applications are then processed according to standard application procedures.

## Transfer Admission

CVM may accept transfer students from other accredited veterinary schools on a case-by-case basis. Students requesting a transfer must meet all the standard admissions requirements. The final decision will be determined by the Associate Dean for Academic Affairs and the Dean.

# Technical Standards, Veterinary Medicine

## Technical Standards

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the college.

Candidates must be able to perform the following abilities and skills:

1. Observation: The candidate must be able to accurately make observations at a distance and close at hand, including those on a computer screen or electronic device. Observation necessitates the functional use of vision, hearing, and sense of touch and is enhanced by the functional use of all the other senses. The candidate must be able to accurately auscultate lung/breath, heart, and bowel sounds to complete the curricular requirement to individually complete the physical examination of a patient. The candidate must use vision, hearing, and smell to assess herds and flocks in which animals cannot be examined individually.
2. Communication: The candidate must be able to communicate in English, proficiently and sensitively, in verbal and written form, and be able to perceive nonverbal communication.
3. Motor: Candidates must be able to coordinate both gross and fine motor movements, maintain equilibrium, and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control, and eye-to-hand coordination to perform profession-specific skills and tasks. Candidates must be able to move at least 50 lbs. vertically and horizontally.
4. Intellectual, Conceptual, Integrative, and Quantitative Abilities: The candidate must be able to problem-solve, measure, calculate, reason, analyze, record, and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
5. Behavioral and Social Attributes: The candidates must possess the emotional health required for full utilization of the candidate's intellectual abilities, the exercise of good judgment, the consistent, prompt completion of all responsibilities, and the development of mature, sensitive, and effective relationships. Candidates must be able to tolerate physically, mentally, and

emotionally taxing workloads and to function effectively under stress. The candidates must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn are all personal qualities required during the educational process. The candidates must agree to participation in touching/palpating/handling of all species as directed in the College's curricular requirements.

6. Animal Handling: Candidates must be able to participate in touching, palpating, and/or handling of all animal species as directed in, or required by, the College's curricular requirements. Because various species can be unpredictable in behavior, may have dangerous diseases, and could otherwise inflict personal injury during the course of touching, palpating, and/or handling, the candidate must have a rabies vaccination series or proof of an adequate antibody titer ("Rabies Vaccine"). The Rabies Vaccine is a requirement to ensure the candidate's safety and allow for the candidate's participation in, and successful completion of, the College's curriculum.

Candidates are required to verify that they understand and are able to meet these Technical Standards, at least four weeks prior to matriculation (or if admitted later, within one week). Candidates who only meet the Technical Standards with accommodation must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/Program Director, will determine what reasonable accommodation can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

## Veterinary Medicine Curriculum

*Please note:* The Midwestern University College of Veterinary Medicine reserves the right to alter its curriculum to address evolving college goals and resources.

Total credits first year - 51.5

Total credits second year - 55

Didactic credits third year - 34

Clinical credits third/fourth year - 84

Total for program completion - 224.5

### First Year

#### Fall Quarter

Course Code	Title	Credits
ANATG 1555	Veterinary Anatomy I	6.0
COREG 1560L	Interprofessional Healthcare	0.5
PHYSG 1512	Veterinary Physiology I	3.0
VMEDG 1501	Practice of Veterinary Medicine I	4.0
VMEDG 1510	Principles of Veterinary Scholarship	2.0
<b>Sub-Total Credits</b>		<b>15.50</b>

## Winter Quarter

Course Code	Title	Credits
ANATG 1556	Veterinary Anatomy II	6.0
COREG 1570L	Interprofessional Healthcare	0.5
MICRG 1522	Veterinary Immunology	3.0
PHYSG 1522	Veterinary Physiology II	2.0
VMEDG 1502	Practice of Veterinary Medicine II	3.0
VMEDG 1593	Preventative Medicine and Veterinary Public Health	4.0
<b>Sub-Total Credits</b>		<b>18.50</b>

## Spring Quarter

Course Code	Title	Credits
COREG 1580L	Interprofessional Healthcare	0.5
MICRG 1573	Veterinary Parasitology	3.0
PHARG 1560	Veterinary Pharmacology I	3.0
PHYSG 1533	Veterinary Physiology III	4.0
VMEDG 1503	Practice of Veterinary Medicine III	3.0
VMEDG 1520	Clinical Anatomy	4.0
VMEDG 1301/1302	Research Elective (optional)	2.0
<b>Sub-Total Credits</b>		<b>17.50-18.50</b>

## Second Year

### Fall Quarter

Course Code	Title	Credits
MICRG 1671	Veterinary Microbiology I	4.0
PHARG 1662	Veterinary Pharmacology II and Clinical Anesthesiology	5.0
VMEDG 1604	Practice of Veterinary Medicine IV	3.0
VMEDG 1641	Veterinary Pathology I	5.0
VMEDG 1661	Equine Medicine and Surgery I	4.0
<b>Sub-Total Credits</b>		<b>21.00</b>

### Winter Quarter

Course Code	Title	Credits
MICRG 1672	Veterinary Microbiology II	3.0
VMEDG 1605	Practice of Veterinary Medicine V	3.0
VMEDG 1635	Diagnostic Imaging	3.0
VMEDG 1642	Veterinary Pathology II	5.0
VMEDG 1662	Equine Medicine and Surgery II	4.0
<b>Sub-Total Credits</b>		<b>18.00</b>

### Spring Quarter

Course Code	Title	Credits
VMEDG 1606	Practice of Veterinary Medicine VI	3.0
VMEDG 1645	Clinical Pathology	4.0
VMEDG 1651	Principles of Surgery with Lab I	4.0
VMEDG 1655	Small Animal Medicine and Surgery I	5.0
VMEDG 1301/1302	Research Elective (optional)	2.0
<b>Sub-Total Credits</b>		<b>16.00-17.00</b>



## Third Year

### Fall Quarter

Course Code	Title	Credits
	Elective (3 Credits)	3
VMEDG 1709	Practice of Veterinary Medicine IX	3.0
VMEDG 1724	Personal Finance for Veterinary Professionals	2.0
VMEDG 1748	Clinical Toxicology	2.0
VMEDG 1754	Principles of Surgery with Lab II	2.0
VMEDG 1756	Small Animal Medicine and Surgery II	5.0
VMEDG 1766	Farm Animal Medicine I	4.0
<b>Sub-Total Credits</b>		<b>17.00-20.00</b>

### Winter Quarter

Course Code	Title	Credits
	Elective (3 Credits)	3
VMEDG 1709	Practice of Veterinary Medicine IX	3.0
VMEDG 1754	Principles of Surgery with Lab II	2.0
VMEDG 1757	Small Animal Medicine and Surgery III	5.0
VMEDG 1767	Farm Animal Medicine II	3.0
VMEDG 1776	Exotic Animal Medicine	2.0
<b>Sub-Total Credits</b>		<b>14.00-17.00</b>

Upon entering the clinical program, students must choose a clinical track, either small animal, small animal internship, or mixed animal. Scheduling of all rotations is overseen by the Director of Clinical Education.

### Breaks/Vacation

The clinical phase of the curriculum consists of five quarters that run continuously beginning in the spring quarter of the third year. During the clinical program, students must complete a total of 84 credits. This will include 57 credits of required/core rotations and 27 credits of elective rotations, regardless of clinical track. In general, blocks are two weeks in length. However, during certain times when clinic hours are limited, three-week blocks may be used. Students are awarded three credits for each block, regardless of length.

Students have two blocks available for vacation during the clinical program. One occurs over the winter quarter, and the other will vary, but can only be taken during a 2-week block. Vacation time cannot be scheduled during required rotations. Time-off requests must follow the policies set forth in the current Clinical Year Information Guidebook.

## Elective Clinical Courses (Rotations)

To be eligible for academic credit, an externship rotation must be planned with and approved by the Director of Clinical Education and the Clinical Education Team.

## Small Animal/Small Animal Internship Track

Course Code	Title	Credits
VMEDG 1800	On-Campus Clinical Electives	
VMEDG 1801	Small Animal Primary Care	24.0
VMEDG 1802	Emergency/ICU	6.0
VMEDG 1803	Shelter and Community Medicine	3.0
VMEDG 1804	Veterinary Diagnostics	6.0
VMEDG 1808	Small Animal Internal Medicine	6.0
VMEDG 1809	Small Animal General Surgery	6.0
VMEDG 1810	Clinical Anesthesiology	6.0
VMEDG 1811	Off-Campus Clinical Electives	
<b>Sub-Total Credits</b>		<b>84.00</b>

## Mixed Animal Track

Course Code	Title	Credits
VMEDG 1800	On-Campus Clinical Electives	
VMEDG 1802	Emergency/ICU	6.0
VMEDG 1803	Shelter and Community Medicine	3.0
VMEDG 1804	Veterinary Diagnostics	6.0
VMEDG 1805	Equine Primary Care	12.0
VMEDG 1806	Farm Animal Primary Care	12.0
VMEDG 1807	Mixed Track Small Animal Primary Care	12.0
VMEDG 1810	Clinical Anesthesiology	6.0
VMEDG 1811	Off-Campus Clinical Electives	
<b>Sub-Total Credits</b>		<b>84.00</b>
Total Credits		224.5

## Graduation Requirements

The degree Doctor of Veterinary Medicine (D.V.M.) is conferred upon candidates who have completed all required courses in the 4-year program.

1. Students must pass all didactic course work, clinical rotation courses, and electives with an overall GPA of 2.0 or higher to graduate.
2. Students must also satisfy all financial obligations to Midwestern University.
3. Students must complete all graduation clearance requirements as instructed by the Office of the Registrar and the Clinical Education Team.
4. All graduating students are required to attend the ceremony.

## Licensure Requirements

Midwestern University's College of Veterinary Medicine program is designed to meet requirements established by individual state boards in the following states and territories: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming, and the District of Columbia, Puerto Rico, and the U.S. Virgin Islands.

Each student should check the additional licensure requirements for the state, district, or territory in which they intend to pursue employment.

More information can be obtained by visiting the American Association of Veterinary State Boards website at <https://www.aavsb.org>.

Licensure requirements vary among states but all licensing jurisdictions in the United States of America and Canada require a passing score on the North American Veterinary Licensing Examination (NAVLE) administered by the International Council for Veterinary Assessment (ICVA). The NAVLE is offered throughout the United States of America and Canada and at certain overseas sites at computer testing centers operated by Prometric.

Those eligible to apply for the NAVLE include:

1. Graduates of schools accredited by the AVMA-COE
2. Senior students at AVMA-COE-accredited schools who have an expected graduation date no later than eight months from the last date of the applicable testing window.

Additional information regarding the NAVLE can be found on the ICVA website at [www.icva.net](http://www.icva.net).

## Student Academic Policies

The following academic policies apply to all students who matriculate during the academic year of this catalog publication. These policies will apply throughout the entire time a student is enrolled in the college. In the event that these policies need to be revised as the result of new accreditation requirements, mandates by the United States Department of Education, or other unforeseen circumstances, students will be notified in writing prior to the effective date of the new policy.

Faculty and students should also refer to the University Academic Policy section of this catalog for additional policies that apply to all students at Midwestern University.

### Academic Probation

Academic probation represents notice that continued inadequate academic performance will result in a recommendation of dismissal. If a student on academic probation successfully completes a probationary quarter with repeated courses and earns grades of "C" or higher in all courses, the student's academic status reverts to academic warning. To return to good academic standing, a student must complete one full quarter at full academic credit load in the CVM curriculum sequence with no grade lower than a "C". A student cannot return to good academic standing until all course failures are corrected. Academic probation is not noted on the transcript. Students may be required to seek assistance from the Office of Student Services and/or course faculty for tutoring. Students on academic probation are ineligible to hold student organization offices or to progress to quarter nine and clinical rotations.

### Academic Warning

Academic warning is a formal notification of marginal or substandard academic performance. Student progress is assessed mid-quarter and a student is placed on academic warning status, if indicated by academic performance. Academic warning cautions the student that continued performance at this level may compromise the student's ability to pass one or more courses. Students may be required to seek assistance from the Office of Student Services and/or course faculty for tutoring. Students with an academic warning are ineligible to hold student organization offices.

## Appeals Process

Following notification of a decision by the Student Promotion and Graduation Committee, a student may appeal the decision in writing within three working days to the Dean. The Dean may grant an appeal only if a student can demonstrate one of the following:

1. Bias of one or more committee members.
2. Material information not available to the committee at the time of its initial decision.
3. Procedural error.

During the appeal process, students must continue to attend classes. The decision of the Dean is final.

## Clinical Rotation Policies

The clinical phase of the curriculum will consist of five quarters that run continuously beginning with the spring quarter of the third year. During the clinical program, students must complete a total of 84 credits of rotations. This will include 57 credits of required on-campus rotations and 27 credits of elective rotations. In general, blocks are 2 weeks in length. However, during certain times when the clinic hours are limited, 3-week blocks may be used. Students are awarded 3 credits for each block, regardless of length. Students have 2 vacation blocks.

## Immunization Policy

Full-time students enrolled in a program with a clinical component are required to follow the immunization policy as outlined in the general policy section of the Student Handbook. Immunization requirements for CVM students include a rabies vaccination series or proof of an adequate antibody titer ("Rabies Vaccine") and is required without exception by all CVM students. Additionally, students may be subject to current applicable Centers for Disease Control and Arizona Department of Health protocols, and/or affiliated practice/institution rotation requirements.

Technical Standard 6, Animal Handling: Candidates must be able to participate in touching, palpating, and/or handling of all animal species as directed in, or required by, the College's curricular requirements. Because various species can be unpredictable in behavior, may have dangerous diseases, and could otherwise inflict personal injury during the course of touching, palpating, and/or handling, the candidate must have a rabies vaccination series or proof of an adequate antibody titer ("Rabies Vaccine"). The Rabies Vaccine is a requirement to ensure the candidate's safety and allow for the candidate's participation in, and successful completion of, the College's curriculum.

## Clinical Rotation Attendance Policy

Students in the clinical rotation segment of the curriculum must attend all clinical rotations to which they are assigned. Attendance and on-call requirements for clinical rotations take precedence over non-rotation events. Students must be sure that the requirements of each clinical rotation are understood and will be met prior to scheduling non-rotation events.

Time off requests and absences must follow the policies set forth in the current Clinical Year Information Guidebook.

## Supervision of Veterinary Students by Off-Campus Veterinarians

While on clinical rotations, veterinary students must have direct, on-premises supervision by a veterinarian (D.V.M. or equivalent) or authorization from the Director of Clinical Education.

## Course Failure Policy

Students who do not demonstrate minimum competencies assume the obligation and responsibility to make up academic failures. First- and second-year students must successfully pass all failed courses before they can be promoted to the second or third years, respectively. Likewise, third-year students must pass all requirements of the preclinical curriculum before advancing to clinical rotations.

Students who fail one or more courses may be placed on academic probation, or recommended for dismissal. If not dismissed, students are required to retake the course and must earn a C or better to proceed in the program. If the course is not given until the subsequent year, the student may be placed on an academic leave of absence until it is offered again. If an equivalent course is available for substitution to be taken in place of the failed course(s), it must be approved by the course director and the Curriculum Committee in advance. If a student fails a course that is a pre-requisite for additional courses offered during that calendar year, and/or there are no available courses for re-take prior to the start of the subsequent academic year, the student may be placed on an academic leave of absence or offered an extended course of study plan.

## Grade for Retaken Course

If a student receives a failing grade, that grade is recorded on the transcript as a letter grade of "F". Upon repetition of a failed course, the original grade of "F" remains on the transcript but is not counted towards GPA calculation. The repeated course and new grade are entered on the transcript. If a repeated preclinical course or clinical rotation is failed, a grade of "F" is again recorded on the transcript. Students who fail a course or clinical rotation a second time will be recommended for dismissal.

## Academic Standing

Good academic standing is achieved by maintaining a >70% cumulative average in all courses at all times. A student on academic warning or academic probation is not considered to be in good academic standing. To return to good academic standing, a student must pass the failed courses and incur no further failures.

## Disciplinary Warning/Probation

Disciplinary warning/probation occurs for student acts of professional misconduct as defined in Appendices 2 and 4 of the Student Handbook. Disciplinary probation is not noted on the transcript but is kept in the student's file.

## Dismissal

Matriculation in veterinary school is a privilege, not a right. Therefore, a student can be dismissed for the following reasons:

1. Failure to achieve minimum academic standards (as outlined and enforced by the Student Promotion and Graduation Committee).
2. Failure to exhibit the professional and personal attributes required for the practice of veterinary medicine, such as acts of dishonesty, including, but not limited to, cheating on any assessments (examinations, quizzes, OSCEs, online assignments, etc.), plagiarism, repeated unexcused absences on rotations, or falsification of patient records, activity logs, or verbal reports.
3. Violation of MWU and/or CVM policies that have been stipulated to be grounds for dismissal.
4. Falsification of admission records.
5. Failure to meet and maintain technical standards.
6. Conviction of a felony or other criminal offense.
7. Failure to report a criminal arrest.

## Readmission after Dismissal for Poor Academic Performance

Students who have been dismissed due to poor academic performance are not eligible for readmission to the CVM.

## Academic Extended Study Program

A student may be placed in the Extended Study Program (ESP) for academic reasons at the recommendation of the Student Promotion and Graduation Committee. A student placed in ESP for academic reasons is automatically placed on academic probation and may not be returned to good

academic standing until all failures are retaken and passed. If a student is placed in ESP, such action does not modify or limit the Student Promotion and Graduation Committee's recommendation for dismissal. Thus, the student may be dismissed for academic reasons while in ESP.

Students will be assessed tuition for any additional years of instruction while enrolled.

### Non-Academic Extended Study Program

The purpose of this program is to provide additional time to address significant personal and academic issues by creating a program of study that allows students to complete the first two years of the curriculum in three years. Students must petition the Dean or Associate Dean of Academic Affairs of CVM to become an ESP student no later than the completion of 50% of a quarter. Requests received after that time are reviewed by the Dean and granted only for reasons of substantiated hardship or medical emergencies.

Students will be assessed tuition for any additional years of instruction.

### Academic and Non-Academic Extended Study Program

Per Midwestern University policy, the transcript will reflect the student's standing in all courses at the time the student enters ESP.

### Grade Point Average

Courses are recorded in terms of quarter hour(s) of credit. The grade point average (GPA) is a weighted average computed using the number of credits assigned to each course and the quality points corresponding to the letter grade earned in each course. The total quality points earned for each course is determined by multiplying the quality points earned per credit (corresponding to the letter grade) by the number of credits assigned to the course. The GPA is calculated by dividing the total quality points earned by the total number of credits carried.

The student's cumulative grade point average is computed and recorded by the Office of the Registrar. It is calculated beginning at the end of the first quarter of enrollment and does not include any grades or credits for courses audited or accepted for transfer, or courses with a grade of withdrawal (W), withdrawal failing (WF), pass (P) or failed (F) that were later repeated.

### Grading System

Students receive letter grades corresponding to the level of achievement, based on the results of examinations, required course work and, as applicable, other established criteria. Courses and clinical rotations are assessed based on a Pass/Fail grading criterion. Recognizing that testing of students may be done by various methods and measurement of achievement may be carried out with various endpoints, the general guidelines for letter grades in lecture courses and the quality points per credit are as follows:

Grade	Percent (%)	Quality Points (per credit)	Courses with Pass/Fail Grading	Comments
A	93-100	4.00	Pass	--
A-	90-92	3.67	Pass	--
B+	87-89	3.33	Pass	--
B	83-86	3.00	Pass	--
B-	80-82	2.67	Pass	--
C+	77-79	2.33	Pass	--
C	70-76	2.00	Pass	--

Grade	Percent (%)	Quality Points (per credit)	Courses with Pass/Fail Grading	Comments
F	<70	0.00	Fail	--
I	--	0.00	--	An Incomplete (I) grade may be assigned by a course director when a student's work is of passing quality but incomplete, or if a student qualifies for re-examination. It is the responsibility of the student to request an extension from the course instructor. By assigning an "I" grade, it is implied that an instructor agrees that the student has a valid reason and should be given additional time to complete required coursework. All incomplete grades must be resolved within 10 working days starting from the first Monday following the end of the quarter unless there is written authorization by the Dean to extend the deadline. If an incomplete grade remains beyond 10 days, it may be converted to a grade of "F", which signifies failure of the course.
IP	--	0.00	--	An In Progress (IP) grade may be assigned by a course director under certain circumstances (illness, family death, etc.) when incomplete work cannot be resolved within a 10-day period. Outstanding grades may extend for more than one quarter only when the scheduling of the student, the availability of the course director, or the scheduling of coursework makes completion impossible in the quarter following the assignment of an "IP" grade. The "IP" grade must be resolved within an academic year.
P	--	0.00	--	A Pass (P) designation indicates that the student has made satisfactory progress or completed the required coursework satisfactorily. A grade of "P" is counted toward credit hour accruals for graduation but is not counted in any GPA calculations.
W	--	0.00	--	Withdrawal/Passing (W) is given for single quarter courses if the grade achieved up to the time of the withdrawal is >70% or >C. Withdrawal/Passing is not counted in the GPA calculation and is not counted in credit hour accrual for graduation.
W/F	--	0.00	--	A Withdrawal/Failing (W/F) is given after 50% of a course duration is completed or up to and including the last day of instruction and the grade achieved up to the time of withdrawal is <70% or <C.  Withdrawal/Failing is not counted in the GPA calculation and is not counted in the credit hour accrual for graduation.
AU	--	0.00	--	This designation indicates an audited course, that is a student registered for a course with the understanding that neither academic credit nor a grade is earned. The possibility does not exist to change the course status from audit to full credit after the start of the quarter. The designation "AU" is not counted in the GPA calculation.
AP	--	0.00	--	This designation indicates the decision of a college to award academic credit that may allow a student to substitute previous course work or experience for required course work. The designation of Advanced Placement (AP) is applied toward credit hour accruals but is not counted in the GPA calculation.

## Leave of Absence

The Leave of Absence (LOA) policy is present in the courses Academic Policy section at the beginning of the University catalog. Any student returning from an Academic Leave of Absence will be placed on Academic Probation.

## Minimum Academic Requirements

Students must have a cumulative GPA of 2.0 or higher to proceed to the clinical component of the program.

## Satisfactory Academic Progress

As required by federal law, reasonable standards of satisfactory academic progress have been established by Midwestern University CVM for the Doctor of Veterinary Medicine program. These standards apply to all students applying for, or currently receiving, financial assistance. The policy and procedure for assessing financial aid status is noted in the Student Financial Services section of the Midwestern University catalog.

# Student Promotion and Graduation Committee

The Student Promotion and Graduation Committee (SPGC) of CVM will review the academic performance of students. This committee monitors the academic progress of all students enrolled in the College against the published academic standards of the College. At a minimum, the committee meets at the end of each academic quarter to assess the status of students with an academic failure, an incomplete, or an in-progress grade. The committee may communicate complaints pertaining to lapses in professional behavior to the Dean of Students, who is responsible for investigating allegations of professional and academic misconduct. Students with one or more failures must meet with the SPGC. Students who attain satisfactory academic and professional progress are promoted to the next academic year, provided all tuition and fees are paid. Students with any failing grades or incomplete courses will receive a letter from the CVM administration listing the requirements they must fulfill for continuation in the CVM program. Students are potentially subject to immediate dismissal from the CVM program if they:

- Accumulate 4 or more failures\* within the DVM curriculum.
- Accumulate 3 or more failures in a single academic year.
- Accumulate 2 or more failures in a single academic quarter.
- Fail the repeat of a didactic course or clinical rotation previously failed.
- Any failures must be repeated within a year, unless an extension is approved by the Associate Dean for Academic Affairs and the Dean.

The SPGC also recommends to the Faculty Senate for graduation those students who have successfully completed all curriculum requirements, and who have paid all tuition and fees. In February each year, the Committee will prepare a list of candidates for the Doctor of Veterinary Medicine degree, and review and approve all graduation requests that are consistent with the University policy.

\*\*Inclusive of both didactic course failures and clinical rotation failures.

## SPGC Guidelines for Preclinical Courses

Students are required to meet with the SPGC if their academic status is subject to change. Students are notified of the date, time, and place of the committee meeting by email to their official Midwestern University email account, or by telephone, at least 48 hours in advance. Decisions of the committee are emailed to the student's official Midwestern University email account.

The committee shall recommend to the Dean an appropriate course of action after reviewing each case presented at the meeting. Among the options available to the committee in regarding unsatisfactory student performance, the committee may recommend that the student:

- Be placed on probation with a written caution provided to the student.
- Be required to take an alternative equivalent course offered at Midwestern University or another university (if available and approved).
- Be placed on an extended course of study plan, with the approval by the Associate Dean for Academic Affairs.
- Be placed on an academic leave of absence in order to repeat the course(s) in which there was a failure when the course(s) is/are offered again.
- Be dismissed from the CVM.

The right to appeal a decision for dismissal or an academic leave of absence exists and is described elsewhere in this catalog. Appeals must be filed in writing with the CVM Dean within three business days following official notification of the committee decision.

## Student Promotion and Graduation Committee Pre-Clinical Guidelines

Didactic Course	Usual Action	Academic Status	Action Following Repeat or Retake
All passed	Promote or graduate	--	--



<b>Didactic Course</b>	<b>Usual Action</b>	<b>Academic Status</b>	<b>Action Following Repeat or Retake</b>
1 course failure	Repeat or take equivalent course	Academic Warning* or Probation	Fail - Dismiss; Pass - Promote
2 course failures in a single academic quarter	Repeat, take equivalent course, or dismiss	Academic Probation or Dismissal	Fail (either or both) - Dismiss; Pass - Promote
3 course failures in a single academic year	Dismiss	Dismissal	--
4 or more failures** within the DVM curriculum	Dismiss	Dismissal	--

These guidelines may be modified by the Student Promotion and Graduation Committee for reasons of additional consideration.

\* Letters of academic warning will indicate that, if another failure occurs, the student will be placed on academic probation or be dismissed.

\*\*Inclusive of both didactic course failures and clinical rotation failures.

## SPGC Guidelines for Clinical Courses

The SPGC meets as needed to review academic and professional progress of students throughout the clinical rotation portion of the curriculum. Students with any failing grades or incomplete courses will receive a letter from the CVM administration listing the requirements they must fulfill for continuation in the CVM program.

These students are required to meet with the committee if their academic status is subject to change. Students are notified of the date, time, and place of the committee meeting by email to their official Midwestern University email account, or by telephone, at least 48 hours in advance. Decisions of the committee are emailed to the student's official Midwestern University email account.

The committee shall recommend to the Dean an appropriate course of action after reviewing each case presented at the meeting. In instances involving more than one failure to maintain satisfactory academic/professional progress, the committee may recommend dismissal. Guidelines for advancement through the clinical curriculum are described in the table below.

The right to appeal a decision of the committee exists and is described elsewhere in this catalog. Appeals must be filed in writing with the Dean of CVM within three business days following official notification of the committee decision.

## Student Promotion and Graduation Committee Clinical Rotation Guidelines

<b>Clinical Rotation</b>	<b>Usual Action</b>	<b>Academic Status</b>	<b>Action Following Repeat or Retake</b>
All passed	Promote or graduate	--	--
1 rotation failure	Repeat or take equivalent rotation	Academic Warning * or Probation	Fail - Dismiss; Pass - Promote
2 rotation failures	Repeat, take equivalent rotation, or dismiss	Academic Probation or Dismissal	Fail (either or both) - Dismiss; Pass - Promote
3 or more rotation failures	Dismiss	Dismissal	--
4 or more failures** within the DVM curriculum	Dismiss	Dismissal	--

These guidelines may be modified by the Student Promotion and Graduation Committee for reasons of additional consideration.

\* Letters of academic warning will indicate that, if another failure occurs, the student will be placed on academic probation or be dismissed.

\*\*Inclusive of both didactic course failures and clinical rotation failures.

## Department Descriptions

### Department of Equine Medicine and Surgery:

The Department of Equine Medicine and Surgery faculty teach, study, diagnose, and treat medical and surgical disorders of horses. The department is involved in classroom and laboratory teaching and is responsible for providing both ambulatory and haul-in clinical services for horses. Members of the department are board-certified in large animal internal medicine or large animal surgery.

### Department of Farm Animal Medicine and Surgery:

The Department of Farm Animal Medicine and Surgery comprises faculty who teach veterinary students in preclinical courses and on clinical rotations. The faculty are specialists who provide primary care and specialized services in medicine, surgery, and reproduction in cattle, sheep, goats, pigs, llamas, alpacas, and backyard poultry. Clinical services are provided to animals by the farm animal ambulatory clinic or on-site at the Large Animal Clinic. The faculty also engage in scientific research involving farm animals.

### Department of Pathology:

The Department of Pathology includes faculty and technical experts in anatomic pathology, clinical pathology, microbiology, and zoological medicine who provide teaching throughout the veterinary curriculum, as well as individual and collaborative research with an emphasis on infectious diseases and pathogenesis. The department also provides diagnostic services to internal and external veterinarians (private veterinary clinics, USDA, the AZ state veterinarian, law enforcement agencies, humane societies, county animal control offices, zoos, and wildlife sanctuaries) located within and outside of the greater Phoenix metropolitan area. The department also maintains a four resident training program for veterinarians preparing to take the American College of Veterinary Pathology (ACVP) board examination in anatomic pathology.

### Department of Small Animal Primary Care:

The Small Animal Primary Care Department focuses on teaching Day-One ready competencies to veterinary students. Its faculty provide didactic and clinical teaching in areas of small animal general practice, exotics, and clinical communications. Shelter Medicine faculty in this department utilize a mobile clinic to provide hands-on shelter medicine experiences for veterinary students, while providing surgical services and basic medical care to under-resourced areas of the region.

### Department of Specialty Medicine:

Faculty members in the Department of Specialty Medicine provide teaching, research, and advanced clinical services in a wide variety of small animal specialty disciplines. The faculty includes specialists in small animal internal medicine, small animal surgery, cardiology, and anesthesiology. The College's urgent care faculty as well as its small animal clinical internships are housed in this department.

## Veterinary Medicine Program Calendar

### Summer 2025

Event	Class	Date
Memorial Day	*No Classes*	May 26, 2025
Juneteenth (Observed)	*No Classes*	June 19, 2025

Event	Class	Date
<b>Independence Day (Observed)</b>	<b>*No Classes*</b>	<b>July 4, 2025</b>

## Fall 2025

Event	Class	Date
Orientation	VM-I	August 18 - 20, 2025
Classes Begin	VM-I, VM-II, VM-III	August 25, 2025
Last Day to Add/Drop Classes	VM-I, VM-II, VM-III	August 29, 2025
<b>Labor Day</b>	<b>*No Classes*</b>	<b>September 1, 2025</b>
<b>White Coat Ceremony</b>		<b>September 27, 2025</b>
Last Day of Classes	VM-I, VM-II, VM-III	October 31, 2025
Quarterly Exams	VM-I, VM-II, VM-III	November 3 - 7, 2025
Thanksgiving Break	VM-I, VM-II, VM-III	November 10 - 28, 2025

## Winter 2025

Event	Class	Date
Classes Begin	VM-I, VM-II, VM-III	December 1, 2025
Last Day to Add/Drop Classes	VM-I, VM-II, VM-III	December 5, 2025
Winter Break	VM-I, VM-II, VM-III	December 22, 2025 - January 2, 2026
Classes Resume	VM-I/VM-II/VM-III	January 5, 2026
<b>Martin Luther King/ Jr. Day</b>	<b>*No Classes*</b>	<b>January 19, 2026</b>
Last Day of Classes	VM-I/VM-II/VM-III	February 20, 2026
Quarterly Exams	VM-I/VM-II/VM-III	February 23 - 27, 2026
Spring Break	VM-I/VM-II/VM-III	March 2 - 6, 2026

## Spring 2026

Event	Class	Date
Last Day to Add/Drop Classes	VM-I, VM-II	March 13, 2026
Last Day of Classes	VM-I, VM-II	May 15, 2026
Quarterly Exams	VM-I, VM-II	May 18 - 22, 2026
<b>Memorial Day</b>	<b>*No Classes*</b>	<b>May 25, 2026</b>
Quarter Break	VM-I, VM-II	May 26 - August 21, 2026
Completion Date	VM-IV	May 9, 2026
Commencement		June 2, 2026 3:00 p.m.

## Rotations

### VM-III (Class of 2027)

Term	Rotation	Date
Spring	Orientation	March 2 - 8, 2026
Spring	Rotation 1	March 9 - 22, 2026
Spring	Rotation 2	March 23 - April 5, 2026

<b>Term</b>	<b>Rotation</b>	<b>Date</b>
Spring	Rotation 3	April 6 - 19, 2026
Spring	Rotation 4	April 20 - May 3, 2026
Spring	Rotation 5	May 4 - 10, 2026
Spring	Rotation 6	May 18 - 31, 2026

## VM-IV (Class of 2026)

<b>Term</b>	<b>Rotation</b>	<b>Block</b>	<b>Date</b>
Summer	Rotation 7		June 2 - 15, 2025
Summer	Rotation 8		June 16 - 29, 2025
Summer	Rotation 9		June 30 - July 13, 2025
Summer	Rotation 10		July 14 - 27, 2025
Summer	Rotation 11		July 28 - August 10, 2025
Summer	Rotation 12		August 11 - 24, 2025
Fall	Rotation 13		August 25 - September 7, 2025
Fall	Rotation 14		September 8 - 21, 2025
Fall	Rotation 15		September 22 - October 5, 2025
Fall	Rotation 16		October 6 - 19, 2025
Fall	Rotation 17		October 20 - November 2, 2025
Fall	Rotation 18		November 3 - 16, 2025
Winter	Rotation 19	3 Week Block	November 17 - December 7, 2025
Winter	Rotation 20		December 8 - 21, 2025
Winter	Rotation 21	Holiday Break Block	December 22, 2025 - January 4, 2026
Winter	Rotation 22		January 5 - 18, 2026
Winter	Rotation 23		January 19 - February 1, 2026
Winter	Rotation 24		February 2 - 15, 2026
Winter	Rotation 25		February 16 - March 1, 2026
Spring	Rotation 26		March 2 - 15, 2026
Spring	Rotation 27		March 16 - 29, 2026
Spring	Rotation 28		March 30 - April 12, 2026
Spring	Rotation 29		April 13 - 26, 2026
Spring	Rotation 30		April 27 - May 10, 2026

Last Revision: 08/28/2024

# Faculty

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Assistant Professor

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Professor

**Delrae Eckman, Ph.D.**

University of Nevada, Reno  
Associate Professor

**Justin Georgi, Ph.D.**

Stony Brook University (S.U.N.Y.)  
Professor

**Aryeh Grossman, Ph.D.**

Stony Brook University (S.U.N.Y.)  
Professor

**Wade Grow, Ph.D.**

University of Idaho  
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**John Hnida, Ph.D.**

University of New Mexico  
Professor

**Vanthida Huang, Pharm.D.**

Temple University School of Pharmacy  
Professor

**Nathan Johnson, Ph.D.**

Arizona State University  
Associate Professor

**Sam Katzif, Ph.D.**

Georgia State University  
Associate Professor

**Shaleen Korch, Ph.D.**

University of Manitoba, Canada  
Professor

**Lisa Kronstad, Ph.D.**

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**Pamela Potter, Ph.D.**

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**Tobias Riede, D.V.M., Ph.D.**

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**Byron Russell, PT, Ph.D.**

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Director, Physical Therapy, Associate Professor

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Professor

**Carrie Veilleux, Ph.D.**

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Assistant Professor

**Mariah Zeigler, D.V.M., M.P.H., DACVPM**

Virginia-Maryland Regional College of Veterinary  
Medicine  
Assistant Professor

## College Of Veterinary Medicine Courses

### ANATG 1555: Veterinary Anatomy I

The Veterinary Anatomy courses focus on mammalian developmental, microscopic anatomy, and gross anatomy. Lecture and laboratory material will concentrate on canine anatomy, with comparisons to feline, equine, and ruminant species. Included in the dissection of each region are the musculoskeletal, vascular, nervous and lymphatic components, and clinically relevant surface anatomy. Embryology lectures cover the general patterns and principles of normal mammalian development and specific aspects of selected systems and species. Microanatomy lectures present basic cytology, tissue types, and specific organ systems.

**Credits** 6.0

**Prerequisites**

None

### ANATG 1556: Veterinary Anatomy II

The Veterinary Anatomy courses focus on mammalian developmental, microscopic anatomy, and gross anatomy. Lecture and laboratory material will concentrate on canine anatomy, with comparisons to feline, equine, and ruminant species. Included in the dissection of each region are the musculoskeletal, vascular, nervous and lymphatic components, and clinically relevant surface anatomy. Embryology lectures cover the general patterns and principles of normal mammalian development and specific aspects of selected systems and species. Microanatomy lectures present basic cytology, tissue types, and specific organ systems.

**Credits** 6.0

**Prerequisites**

[ANATG 1555: Veterinary Anatomy I](#)

### COREG 1560L: Interprofessional Healthcare

This course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy, and Veterinary Medicine. The course is designed to teach clinically based students about each other's clinical programs, i.e. how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations, with associated online quizzes. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

**Prerequisites**

None



## **COREG 1570L: Interprofessional Healthcare**

This course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy, and Veterinary Medicine. The course is designed to teach clinically based students about each other's clinical programs, i.e. how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations, with associated online quizzes. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

**Prerequisites**

None

## **COREG 1580L: Interprofessional Healthcare**

This course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy, and Veterinary Medicine. The course is designed to teach clinically based students about each other's clinical programs, i.e. how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations, with associated online quizzes. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

**Prerequisites**

None

## **MICRG 1522: Veterinary Immunology**

This course focuses on fundamental immunological concepts applicable to most mammals, applying specific examples related to common veterinary species. The clinical immunology section of the course will incorporate case studies to apply basic immunology to veterinary disease, with emphasis on conditions most commonly encountered in practice (autoimmunity, hypersensitivities and cancer).

**Credits** 3.0

**Prerequisites**

None

## **MICRG 1573: Veterinary Parasitology**

This course presents the protozoan, helminth, and arthropod parasites of animals, including those causing zoonotic diseases. Lectures will focus on parasite morphology, biology, and disease manifestations. Laboratory sessions will be sporadically introduced to reinforce lecture material and provide students with opportunities to gain experience in identification of clinically relevant parasites.

**Credits** 3.0

**Prerequisites**

None

## **MICRG 1671: Veterinary Microbiology I**

The bacteriological portion of this course concentrates on diseases in domestic animals caused by pathogenic bacteria. Lectures emphasize basic properties of microorganisms, including identification and pathogenesis and will include discussions on diagnosis and treatment of important veterinary infectious diseases. Laboratory instruction includes basic bacteriology laboratory techniques, with hands-on application of the didactic content.

**Credits** 4.0

**Prerequisites**

[MICRG 1522: Veterinary Immunology](#)

## **MICRG 1672: Veterinary Microbiology II**

This course will present lectures on the biology and morphology of fungal and viral pathogens of importance in veterinary medicine with emphasis on pathogenic mechanisms and will include discussions on diagnosis and treatment of important veterinary infectious diseases. Laboratory instruction includes basic mycology and virology laboratory techniques, with hands-on application of the didactic content.

**Credits** 3.0

**Prerequisites**

[MICRG 1671: Veterinary Microbiology I](#)

## **PHARG 1560: Veterinary Pharmacology I**

Veterinary Pharmacology I focuses on drugs used in veterinary practice. General principles of drug action are covered, including pharmacodynamics, pharmacokinetics, and species-specific differences in these processes. Regulatory issues concerning the use of drugs in veterinary medicine, prescriptions, and compounding are also discussed. Specifics of drugs affecting the autonomic nervous, cardiovascular, and endocrine systems are extensively covered.

**Credits** 3.0

## **PHARG 1662: Veterinary Pharmacology II and Clinical Anesthesiology**

Veterinary Pharmacology II and Clinical Anesthesiology focus on drugs used in veterinary practice. Drugs for managing gastrointestinal and neoplastic diseases are discussed. Drugs for treating bacterial, endoparasitic, ectoparasitic, and protozoal infections are also covered. Veterinary anesthesia, including drugs used for pain management, sedation, and anesthesia is a major focus of the class. Anesthesia delivery systems, monitoring, and intravenous catheters are included in laboratories accompanying this course.

**Credits** 5.0

**Prerequisites**

[PHARG 1560: Veterinary Pharmacology I](#)

## **PHYSG 1512: Veterinary Physiology I**

In the Veterinary Physiology courses, basic physiological principles relevant to veterinary practice are surveyed. The first course introduces the vertebrate physiological principles and concepts common to animals. The course includes core principals relevant to the physiology of cells, cell signaling systems, and cardiovascular and respiratory mechanisms in health and disease. The second course continues with coverage of core concepts in renal, acid-base, and endocrine physiology. The third course presents physiological processes and concepts relevant to reproductive and gastrointestinal function in healthy and diseased animals. It also discusses the role of the central nervous system in controlling movement, sensation, and perception.

**Credits** 3.0

**Prerequisites**

None

## **PHYSG 1522: Veterinary Physiology II**

In the Veterinary Physiology courses, basic physiological principles relevant to veterinary practice are surveyed. The first course introduces the vertebrate physiological principles and concepts common to animals. The course includes core principals relevant to the physiology of cells, cell signaling systems, and cardiovascular and respiratory mechanisms in health and disease. The second course continues with coverage of core concepts in renal, acid-base, and endocrine physiology. The third course presents physiological processes and concepts relevant to reproductive and gastrointestinal function in healthy and diseased animals. It also discusses the role of the central nervous system in controlling movement, sensation, and perception.

**Credits** 2.0

**Prerequisites**

[PHYSG 1512: Veterinary Physiology I](#)

## **PHYSG 1533: Veterinary Physiology III**

In the Veterinary Physiology courses, basic physiological principles relevant to veterinary practice are surveyed. The first course introduces the vertebrate physiological principles and concepts common to animals. The course includes core principals relevant to the physiology of cells, cell signaling systems, and cardiovascular and respiratory mechanisms in health and disease. The second course continues with coverage of core concepts in renal, acid-base, and endocrine physiology. The third course presents physiological processes and concepts relevant to reproductive and gastrointestinal function in healthy and diseased animals. It also discusses the role of the central nervous system in controlling movement, sensation, and perception.

**Credits** 4.0

**Prerequisites**

[PHYSG 1512: Veterinary Physiology I](#)

[PHYSG 1522: Veterinary Physiology II](#)

## **VMEDG 1301/1302: Research Elective (optional)**

This elective course provides an opportunity for students to conduct research under the supervision of a faculty investigator. On a case-by-case basis, the faculty investigator, in conjunction with the interested student, determines the content of the course and the evaluation criteria, and obtains approval of the Associate Dean for Research.

**Credits** 2.0

**Prerequisites**

None

## **VMEDG 1303: IMPROVing Your Odds for Professional Success**

In this elective course, applied improvisation (AI) is taught as an instructional strategy. AI adapts the concepts of improvisational theater to teach complex skills so that they can be applied in other contexts, such as veterinary practice, and teaches participants to accept uncertainty and ambiguity as the conditions in which they must learn and work. Most importantly, this kind of learning experience cultivates an other-oriented sensibility, geared toward empathy and collaboration. Overall, the principles and practices of AI support the basic tenets of relationship-centered care in veterinary medicine, such as partnership and empathic connection with other people.

**Credits** 2.0

**Prerequisites**

None

## **VMEDG 1305: Small Animal Primary Care Bootcamp**

This elective course will provide students with the essentials needed to be a well-rounded and successful primary care veterinarian. Topics critical to primary care are selected and taught by a team with over 180 combined years of practice experience. This course will not only help students be prepared for life after graduation but also aid in a smooth transition into the clinical year. A wide variety of topics, including, but not limited to, dermatology, preventative care, parasitology, caring for all life stages, communicating with veterinary staff, mental well-being, business and contract know-how, utilizing reliable resources, and euthanasia/hospice care will be discussed.

**Credits** 2.0

## **VMEDG 1306: Health and the Human-Animal Bond**

This elective will explore the ways in which the health of humans and animals is inextricably linked through published literature, patient and client narratives, personal experience, and reflection. The types of topics to be covered will include defining the human-animal bond, the roles that an animal can play in the life of an individual or family, the effect an animal's illness can have on a person's psychosocial wellbeing, the effect that a person's illness can have on their ability to care for their animal, caregiver burden, social determinants of human and animal health, the relationship between domestic violence and animal abuse, normalizing the grief associated with pet loss, the role of service and therapy animals in health maintenance, pets and people experiencing homelessness, and the ability of animals to facilitate a sense of community among humans. An introduction will be provided to the emerging field of veterinary social work and the ways in which veterinarians can access these services for their clients. The goal of this elective is to encourage future veterinarians to ask the meaningful questions needed to ensure that illness in either humans or animals does not result in a deterioration of the human animal bond, or detrimental effects on the other party.

**Credits** 2.0

## **VMEDG 1310: Emergency and Critical Patient Care**

This elective course focuses on the clinical knowledge and skills needed to manage the emergency and/or critical veterinary patient from presentation, through medical and surgical treatment, and later during convalescence in the critical care facility or veterinary hospital. The emphasis of this course will be focused on the knowledge, clinical skills, and techniques that are needed to manage commonly seen emergency/critical care patients in clinical companion animal practice.

**Credits** 2.0

## **VMEDG 1321: Advanced Veterinary Anatomy Dissection**

This elective course is a clinically based class in which students will use a variety of surgical and dissection techniques to gain additional anatomical knowledge and hone their surgical skills. Each student will select a clinical topic involving a dissection or surgical technique of the veterinary profession. Students are expected to write a proposal for performing their selected dissection. The students will present their projects to the University community at a poster presentation, followed by the demonstration of their projects in the laboratory.

**Credits** 2.0

## **VMEDG 1322: Foreign Animal Diseases**

This elective course focuses on foreign animal diseases that are important for animal and human health. The elective will include a theoretical and a practical component. Students will be required to join ProMED and instructors will urge the open discussion of postings. The practical component will include a visit to a slaughterhouse and a classroom exercise reproducing a proper response to a FAD. These opportunities will showcase the veterinarian's role in recognizing and preventing the incursion of FADs into the country.

**Credits** 2.0

**Prerequisites**

None

## **VMEDG 1326: Veterinary Medical Spanish**

This elective course teaches basic veterinary medical Spanish for veterinary medical students who may interact with Spanish speaking clients and their pets/livestock . This class is an introduction to Spanish specific veterinary medicine and is designed to prepare the student for clinical conversations between a veterinary physician and clients. The content of this course aims to be specific and practical and therefore many elements of the Spanish language are not included. We will review applicable cultural aspects of communication. There are many Spanish-speaking countries, each with its own variations of the language. The language presented here should be comprehensible to all Spanish speakers.

**Credits** 2.0

**Prerequisites**

High School and/or College Basic Spanish

## **VMEDG 1330: Diagnostic Imaging Elective**

This online elective is designed to reinforce the concepts of diagnostic imaging and the basics of interpreting a diagnostic imaging exams of common diseases encountered in veterinary medicine that were covered during VMEDG 1635 in a case-based format. Students will use the clinical PACS software as a method to familiarize themselves with the system prior to clinics.

**Credits** 2.0

**Prerequisites**

[VMEDG 1635: Diagnostic Imaging](#)

## **VMEDG 1331: Online Veterinary Dental Elective**

This elective is a small animal dentistry course offered by the University of Illinois, College of Veterinary Medicine, with registration paid by Midwestern University. A certificate of completion is awarded upon completion of comprehensive, clinically relevant online modules.

**Credits** 1.0

**Prerequisites**

None

## **VMEDG 1342: Foundations of Biopsy**

This elective course will provide advanced veterinary pathology training focused on common entities diagnosed by biopsy in domestic animals. The focus will primarily be on biopsy samples from dogs and cats but will also include some large animal species. Each session will explore different types of biopsies under the microscope and include discussions on histologic, diagnostic, and prognostic features. Scanned histopathology slides (or glass slides) will be provided to students at the end of each class and students will be expected to interpret the histopathology, list pathologic changes, form a diagnosis, and provide a prognostic comment. Students will gain advanced abilities and knowledge of common biopsy samples, histopathologic interpretation, lesion recognition, and prognostic indicators. Each class, as time permits, biopsies from current clinical cases will be examined. This course will be beneficial to those interested in pursuing advanced training in the fields of veterinary pathology, dermatology, oncology, research, or small animal practice.

**Credits** 2.0

**Prerequisites**

None

## **VMEDG 1343: Infectious Diseases in Veterinary Pathology**

Infectious Diseases in Veterinary Pathology is a 2-credit elective that provides advanced veterinary pathology instruction focusing on select infectious diseases of animals. This class will focus on multiple case-based studies in various species that may include Canidae, Felidae, Bovidae, Equidae, Cervidae, non-human primate, rodent, rabbit, reptile, and other exotic species afflicted by infectious agents such as bacteria, viruses, fungi, arthropods, protozoans, and helminths. Scanned histopathology slides (glass slides, video, or appropriate images) will be provided to the students prior to each class and students will be expected to read/interpret pathological findings and integrate into etiology (or differential lists), pathologic changes, pathogenesis, and additional diagnostic tools. Students will gain superior abilities in histopathologic and cytologic interpretation, infectious agent identification (bacteria, viruses, fungi, and parasites), antimicrobial susceptibility determination of mixed bacterial infections, and results interpretations for patient care. This course will be beneficial for those interested in pursuing advanced training in the fields of veterinary pathology, microbiology, research, or practice in the areas of small, large, or exotic animal medicine.

**Credits** 2.0

**Prerequisites**

None

## **VMEDG 1345: Advanced Clinical Pathology**

This elective course is case based in which students will hone their skills in the interpretation of clinical pathology case data for large and small animals. Students will be expected to interpret case data and integrate their interpretation into relevant pathophysiologic mechanisms of disease, while also identifying additional testing that may aid in confirmation of the suspected diagnosis. This class will require students to think critically and to support their case interpretations with literature from peer-reviewed sources.

**Credits** 2.0

**Prerequisites**

None

## **VMEDG 1352: Veterinary Pain Management**

This elective course will focus on an in-depth understanding of pain pathways, modalities for providing analgesia, and species differences in pain management. Different modalities for treating pain will be explored, including non-steroidal anti-inflammatories, opioids, local anesthetics, physical rehabilitation, low level laser therapy, acupuncture, and more. Students will gain an understanding of the species differences in experience and treatment of pain, and how this affects day-to-day practice. This course will be conducted through online modules with participation expected in online discussions and work outside of class to complete assigned projects.

**Credits** 2.0

**Prerequisites**

None

## **VMEDG 1370: Introduction to Animal Hospice and Palliative Care**

This online elective course is an introduction to companion animal hospice and palliative care. Veterinary professionals need to be able to compassionately care for patients during all their life stages, including end-of-life. This course contains expert delivered content from the International Association of Animal Hospice and Palliative Care (IAAHPC) Certified Hospice and Palliative Care Veterinarian (CHPV) certification program and is designed to inform students about the special needs of patients and their caregivers who are dealing with end-of-life conditions and concerns. The course also serves to provide a basis for developing knowledge of this specialized area of veterinary practice that offers a unique potential practice and/or career opportunity for companion animal veterinarians.

**Credits** 2.0

**Prerequisites**

None

## **VMEDG 1501: Practice of Veterinary Medicine I**

The Practice of Veterinary Medicine courses are a 7-quarter series designed to teach veterinary students the clinical and communication skills necessary to become competent and successful veterinarians. The main objective of these courses is for the student to build the foundational pillars of communication, physical examination skills, medical knowledge, and critical reasoning, all essential for a successful career in the veterinary profession.

**Credits** 4.0

**Prerequisites**

None

## **VMEDG 1502: Practice of Veterinary Medicine II**

The Practice of Veterinary Medicine courses are a 7-quarter series designed to teach veterinary students the clinical and communication skills necessary to become competent and successful veterinarians. The main objective of these courses is for the student to build the foundational pillars of communication, physical examination skills, medical knowledge, and critical reasoning, all essential for a successful career in the veterinary profession.

**Credits** 3.0

**Prerequisites**

None

## **VMEDG 1503: Practice of Veterinary Medicine III**

The Practice of Veterinary Medicine courses are a 7-quarter series designed to teach veterinary students the clinical and communication skills necessary to become competent and successful veterinarians.

The main objective of these courses is for the student to build the foundational pillars of communication, physical examination skills, medical knowledge, and critical reasoning, all essential for a successful career in the veterinary profession.

**Credits** 3.0

**Prerequisites**

None

## **VMEDG 1510: Principles of Veterinary Scholarship**

This course aims to develop skills for the systematic identification, evaluation, integration, and adaptation of scientific evidence. It is also meant to develop the ability to formulate questions and solutions, as well as educate others. This will be accomplished through lecture and the systematic process of building a Knowledge Summary (also known as a Critically Appraised Topic, or CAT), a short critical summary of the best available information on a defined clinical question. Students will also be made aware of research opportunities at Midwestern University.

**Credits** 2.0

**Prerequisites**

None

## **VMEDG 1520: Clinical Anatomy**

The course will emphasize anatomical features for the most relevant clinical disorders, as well as medical and surgical techniques specific to veterinary medicine. Normal anatomy as observed by commonly employed imaging procedures (radiography, ultrasound, CT and MRI) will be presented as a prelude to the Diagnostic Imaging (VMEDG 1635) course later in the curriculum. Students will have the opportunity to learn clinical anatomy as it relates to small and large animals in both wet labs and live animal labs.

**Credits** 4.0

**Prerequisites**

None

## **VMEDG 1593: Preventative Medicine and Veterinary Public Health**

This course focuses on principles of clinical and public health practice, emphasizing a One Health approach and is divided into four major topic areas: public health principles, epidemiology principles, food safety and security, and zoonotic diseases. Delivery of course material will be through a combination of lectures, interactive games, case study scenarios, and an interactive mock outbreak investigation. The main objective of this course is for the student to build the foundational knowledge and skills necessary to become a competent and successful practitioner with an overarching understanding of preventive medicine and veterinary public health.

**Credits** 4.0

**Prerequisites**

None



## **VMEDG 1604: Practice of Veterinary Medicine IV**

The Practice of Veterinary Medicine courses are a 7-quarter series designed to teach veterinary students the clinical and communication skills necessary to become competent and successful veterinarians. The main objective of these courses is for the student to build the foundational pillars of communication, physical examination skills, medical knowledge, and critical reasoning, all essential for a successful career in the veterinary profession.

**Credits** 3.0

**Prerequisites**

None

## **VMEDG 1605: Practice of Veterinary Medicine V**

The Practice of Veterinary Medicine courses are a 7-quarter series designed to teach veterinary students the clinical and communication skills necessary to become competent and successful veterinarians. The main objective of these courses is for the student to build the foundational pillars of communication, physical examination skills, medical knowledge, and critical reasoning, all essential for a successful career in the veterinary profession.

**Credits** 3.0

**Prerequisites**

None

## **VMEDG 1606: Practice of Veterinary Medicine VI**

The Practice of Veterinary Medicine courses are a 7-quarter series designed to teach veterinary students the clinical and communication skills necessary to become competent and successful veterinarians. The main objective of these courses is for the student to build the foundational pillars of communication, physical examination skills, medical knowledge, and critical reasoning, all essential for a successful career in the veterinary profession.

**Credits** 3.0

**Prerequisites**

None

## **VMEDG 1635: Diagnostic Imaging**

This course is an introduction to veterinary diagnostic imaging. Digital radiography, fluoroscopy, MRI, CT, and ultrasound will be discussed, along with the principles of interpreting images of each of these modalities in various species and disease conditions.

**Credits** 3.0

**Prerequisites**

None

## **VMEDG 1641: Veterinary Pathology I**

This course introduces the student to general pathophysiologic mechanisms that cause disease, including biochemical, structural, and functional changes. Concepts covered include normal and altered cell development, metabolic diseases, inflammation, cell aging and repair, immunopathology, and neoplasia. Laboratories will supplement course material.

**Credits** 5.0

**Prerequisites**

None

## **VMEDG 1642: Veterinary Pathology II**

In this course, students apply their knowledge of general pathology to specific disease processes as they affect various organs or systems. Four aspects to be learned for each disease are etiology, pathogenesis, morphologic changes, and biochemical alterations. Laboratories will supplement course material.

**Credits** 5.0

**Prerequisites**

None

## **VMEDG 1645: Clinical Pathology**

This course is an introduction to the evaluation and interpretation of hematology, biochemistry, urinalysis, cytology, and endocrinology tests. Coursework will consist of lectures with integrated case discussions to establish a foundation in the interpretation of lab work in a clinical veterinary setting. The course will also contain separate hematology and urinalysis wet laboratories, to practice and establish proficiency in performing essential clinical practices and techniques. This knowledge base and skill set will be expanded upon in other courses in medicine and surgery, as well as during the clinical year.

**Credits** 4.0

**Prerequisites**

None

## **VMEDG 1651: Principles of Surgery with Lab I**

Principles of Surgery with Lab is a 3-series course that will introduce students to surgical principles and anesthetic techniques. Students will have the opportunity to practice in wet lab and live animal settings. Aseptic technique, intravenous catheterization, tracheal intubation, basic surgical skills, and other techniques will be emphasized. Students will participate in all aspects of the perioperative management of patients.

**Credits** 4.0

**Prerequisites**

None

## **VMEDG 1655: Small Animal Medicine and Surgery I**

Small Animal Medicine and Surgery is a 3-course series designed to be interactive discussions on medical and surgical disorders, based on presenting clinical signs seen in small animal practice. Disorders of the endocrine, neurological, reproductive, hematopoietic, ophthalmologic, urinary, gastrointestinal, cardio-pulmonary, musculoskeletal, and immune systems will be discussed. These courses are designed to emphasize the clinical diagnosis, pathophysiology, and management of common diseases. Medicine and surgery, including pre- and post-operative management of surgical patients, will be integrated in the course to emphasize the problem-based approach to management of small animal patients.

**Credits** 5.0

**Prerequisites**

None

## **VMEDG 1661: Equine Medicine and Surgery I**

Equine Medicine and Surgery is a 2-course series that will introduce students to principles of diagnosis and treatment of medical and surgical conditions found in the equine species. Emphasis will be placed on the clinical assessment of patients, signs of common and uncommon diseases, management of diseases, pharmacologic agents used in equine species, and fundamental techniques used in clinical practice.

**Credits** 4.0

**Prerequisites**

None

## **VMEDG 1662: Equine Medicine and Surgery II**

Equine Medicine and Surgery is a 2-course series that will introduce students to principles of diagnosis and treatment of medical and surgical conditions found in the equine species. Emphasis will be placed on the clinical assessment of patients, signs of common and uncommon diseases, management of diseases, pharmacologic agents used in equine species, and fundamental techniques used in clinical practice.

**Credits** 4.0

**Prerequisites**

None

## **VMEDG 1709: Practice of Veterinary Medicine IX**

The Practice of Veterinary Medicine courses are a 7-quarter series designed to teach veterinary students the clinical and communication skills necessary to become competent and successful veterinarians.

The main objective of these courses is for the student to build the foundational pillars of communication, physical examination skills, medical knowledge, and critical reasoning, all essential for a successful career in the veterinary profession. This course will be completed by mixed animal track students in the winter quarter and by small animal/small animal internship track students in the spring quarter.

**Credits** 3.0

**Prerequisites**

None

## **VMEDG 1724: Personal Finance for Veterinary Professionals**

This course will focus on financial literacy to help students make informed personal financial decisions. Shortly after graduation, veterinarians are faced with major financial decisions involving student loans, retirement savings, homes, children, insurance, etc. Making simple but financially savvy decisions early in one's career can provide significant rewards later in life.

**Credits** 2.0

**Prerequisites**

None

## **VMEDG 1748: Clinical Toxicology**

This course will introduce the most common toxins encountered in veterinary medicine with emphasis on the mechanism of action of these toxins and the pathophysiology in the animal body. Clinical presentation of animals exposed to various toxins, and treatment of toxic exposures, will also be presented.

**Credits** 2.0

**Prerequisites**

None

## **VMEDG 1754: Principles of Surgery with Lab II**

Principles of Surgery with Lab is a 3-series course that will introduce students to surgical principles and anesthetic techniques. Students will have the opportunity to practice in wet lab and live animal settings. Aseptic technique, intravenous catheterization, tracheal intubation, basic surgical skills, and other techniques will be emphasized. Students will participate in all aspects of the perioperative management of patients.

**Credits** 2.0

**Prerequisites**

None

## **VMEDG 1756: Small Animal Medicine and Surgery II**

Small Animal Medicine and Surgery is a 3-course series designed to be interactive discussions on medical and surgical disorders, based on presenting clinical signs seen in small animal practice. Disorders of the endocrine, neurological, reproductive, hematopoietic, ophthalmologic, urinary, gastrointestinal, cardio-pulmonary, musculoskeletal, and immune systems will be discussed. These courses are designed to emphasize the clinical diagnosis, pathophysiology, and management of common diseases. Medicine and surgery, including pre- and post-operative management of surgical patients, will be integrated in the course to emphasize the problem-based approach to management of small animal patients.

**Credits** 5.0

**Prerequisites**

[VMEDG 1655: Small Animal Medicine and Surgery I](#)

## **VMEDG 1757: Small Animal Medicine and Surgery III**

Small Animal Medicine and Surgery is a 3-course series designed to be interactive discussions on medical and surgical disorders, based on presenting clinical signs seen in small animal practice. Disorders of the endocrine, neurological, reproductive, hematopoietic, ophthalmologic, urinary, gastrointestinal, cardio-pulmonary, musculoskeletal, and immune systems will be discussed. These courses are designed to emphasize the clinical diagnosis, pathophysiology, and management of common diseases. Medicine and surgery, including pre- and post-operative management of surgical patients, will be integrated in the course to emphasize the problem-based approach to management of small animal patients.

**Credits** 5.0

**Prerequisites**

None

## **VMEDG 1766: Farm Animal Medicine I**

This course is the first of a 2-course series that will introduce students to principles of diagnosis and treatment of medical and surgical conditions found in the bovine, porcine, caprine, and ovine species. The clinical presentation and treatment of common disorders and fundamental clinical techniques will be taught. Zoonotic disorders and importance of animals in the human food chain (relative to food-borne illness) will also be discussed.

**Credits** 4.0

**Prerequisites**

None

## **VMEDG 1767: Farm Animal Medicine II**

This course is the second of a 2-course series that will introduce students to principles of diagnosis and treatment of medical and surgical conditions found in the bovine, porcine, caprine, and ovine species. The clinical presentation and treatment of common disorders and fundamental clinical techniques will be taught. Zoonotic disorders and importance of animals in the human food chain (relative to food-borne illness) will also be discussed.

**Credits** 3.0

**Prerequisites**

None

## **VMEDG 1776: Exotic Animal Medicine**

This course will introduce veterinary students to the practice of veterinary medicine on species other than dogs, cats, cattle, and horses. Emphasis will be placed on common species, preventive medicine, and diseases encountered in companion pet exotic veterinary practice. Coverage will be broad and will include birds, non-avian reptiles, amphibians, rodents, rabbits, ferrets, and fish. General husbandry needs, safe handling, diagnostic options, and common diseases of concern will be discussed.

**Credits** 2.0

### **Prerequisites**

None

## **VMEDG 1800: On-Campus Clinical Electives**

Varied credits. Students must complete a total of 27 credits of clinical elective rotations to complete the clinical component of the curriculum. A variety of on-campus rotations are available.

## **VMEDG 1801: Small Animal Primary Care**

This rotation will require students to spend a continuous block functioning as primary care practitioners. Students, under the supervision of veterinarians, will work in groups of two and will have primary responsibility for all aspects of primary care for dogs, cats, and exotics in the CVM's Companion Animal Clinic. Students will be scheduled to see patients and do procedures comparable to a high-functioning small animal primary care practice. There will also be designated daily times for teaching rounds. Students will follow up on their cases, maintain their patient medical records, prescribe treatments and diets, and provide wellness/preventive medicine services.

**Credits** 24.0

## **VMEDG 1802: Emergency/ICU**

Varied credit (6-12 credits), depending on track. The rotation will provide students with experience handling small animal emergency cases in the Animal Health Institute, Companion Animal Clinic, or at an off-campus partner site(s). Students will provide primary care for critically ill patients.

**Credits** 6.0

## **VMEDG 1803: Shelter and Community Medicine**

This rotation takes place primarily off-campus on the mobile clinic or at various shelters. Students on the rotation will refine their knowledge and clinical skills in shelter medicine, with the main areas of focus being shelter animal physical health, shelter animal behavioral health, community and public health, companion animal homelessness, shelter management, animals and public policy, research and critical review of the literature, and communication.

**Credits** 3.0

## **VMEDG 1804: Veterinary Diagnostics**

This is a 2-block rotation based focused on anatomic pathology, clinical pathology, and diagnostic microbiology. During the anatomic pathology section of the rotation, students will be assigned cases for postmortem examination (necropsy). Students will be expected to write gross reports that include descriptions and diagnoses, present their gross findings at regularly scheduled rounds, and attend histopathology and other assigned rounds. During the clinical pathology section of the rotation, students will attend and actively participate in sessions focusing on blood work and glass slide interpretation and reviewing practical clinical pathology techniques. At the end of the clinical pathology section, students are required to give a short presentation on a pathology topic of interest and relevance. During the microbiology section of the rotation, students will work on microbiology cases under supervision of a faculty member focusing on the correct handling of diagnostic samples, bacterial and fungal culture tests, and identification at a species level. At the end of the microbiology section, students will give a short presentation on a diagnostic case of choice, focusing on the different advantages and disadvantages of the different techniques performed, if applicable, and the use of test results in veterinary practice.

**Credits** 6.0

## **VMEDG 1805: Equine Primary Care**

This rotation occurs in the Large Animal Clinic of the Animal Health Institute and at Chaparral Veterinary Medical Center. Students on the Equine Medicine and Surgery rotation will refine their knowledge and clinical skills in primary and referral equine medicine and surgery through a blend of institutional instruction, ambulatory practice, and private practice experience.

**Credits** 12.0

## **VMEDG 1806: Farm Animal Primary Care**

This rotation will introduce the student to the art and science of the practice of veterinary medicine in farm animal medicine, surgery, and population health. The student will work cooperatively with instructors, peers, clients, and farm personnel, in the examination, evaluation, diagnosis, and treatment of diseases of various species of farm and fiber animals. The student will also be working with the public and will gain skills in client communications, medical record keeping and basic familiarity with the medical diseases and management of farm animal species.

**Credits** 12.0

## **VMEDG 1807: Mixed Track Small Animal Primary Care**

This rotation is similar to VMEDG 1801 Small Animal Primary Care but is eight weeks in duration.

**Credits** 12.0

## **VMEDG 1808: Small Animal Internal Medicine**

This rotation builds upon the student's knowledge from coursework, laboratory sessions, and prior clinical rotations (if applicable) toward the diagnosis and treatment of patients evaluated through the Companion Animal Clinic Internal Medicine service.

**Credits** 6.0

## **VMEDG 1809: Small Animal General Surgery**

This rotation will allow students to participate in the diagnosis and treatment of canine and feline patients with surgical disease in the Companion Animal Clinic.

**Credits** 6.0

## **VMEDG 1810: Clinical Anesthesiology**

This rotation will require students to participate in the anesthetic and pain management of patients. The application of medical knowledge to patient care through critical thinking and communication skills is emphasized. The primary goals of this rotation will be to refine the students' knowledge and clinical techniques needed to safely anesthetize small and large animal patients in clinical practice.

**Credits** 6.0

## **VMEDG 1811: Off-Campus Clinical Electives**

Varied credits. Students must complete a total of 27 credits of clinical elective rotations to complete the clinical component of the curriculum. Off-campus clinical elective rotations may be completed at research institutions, other veterinary teaching hospitals, government sponsored programs, industry sponsored programs, or any approved program associated with veterinary medical education or careers in the profession. To be eligible for academic credit, off-campus elective rotations must be planned with the assistance and approval of the off-campus site and be approved by the Director of Clinical Education. Some off-campus clinical electives may have additional fees.

# Arizona College of Podiatric Medicine

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## Mission

The mission of the Midwestern University Arizona College of Podiatric Medicine (AZCPM) is to prepare quality students to enter residency through rigorous education and training, and to exceed professional standards.

## Vision

The vision of AZCPM is to demonstrate excellence in podiatric medical education. The College strives to cultivate diversity and promote professionalism in an interdisciplinary environment through exemplary:

- Curriculum
- Service to community
- Scholarly activity
- Patient care
- Post-doctoral education

## Accreditation

The Arizona College of Podiatric Medicine is accredited by the **Council on Podiatric Medical Education**. Accreditation is an indication of public approbation, attesting to the quality of the podiatric medical education program and the continued commitment of the institution to support the educational program. The Council is recognized as the professional institutional accrediting agency for podiatric medical education by the U.S. Department of Education and by the council for Higher Education Accreditation. For further information, please contact the Council on Podiatric Medical Education at the following address: Council on Podiatric Medical Education, 9312 Old Georgetown Road, Bethesda, MD 20814, 301/571-9200.

Midwestern University is accredited by The Higher Learning Commission (HLC), 230 South LaSalle Street, Suite 7-500, Chicago, IL 60604-1413.

## Degree Description

AZCPM offers a four-year course of study leading to the Doctor of Podiatric Medicine degree. Maximum time for completion of the degree is six years. Courses in the clinical sciences are integrated with basic science courses during the first two years of the curriculum. Clinical courses continue through the summer and part of the fall quarter of the third year. All basic science courses and some clinical courses are shared with osteopathic medical students during the first and second years. Students experience part-time clinical training in the second year. Full-time clinical training occurs eight months of the third year and all of the fourth year. The overall goal of the College is to prepare the finest possible podiatric physicians for entry into residency training.

## Admissions

AZCPM considers for admission those students who possess the academic, professional, and personal qualities necessary for development as exemplary podiatric physicians. The College uses multiple criteria to select the most qualified candidates including cumulative grade point average (GPA), science GPA, Medical College Admissions Test (MCAT) scores, personal experiences and character, ability to



communicate, familiarity with the profession, volunteer and community involvement, research experience, and other considerations. The College uses a competitive rolling admissions process and candidates are encouraged to apply early in the year prior to admission.

## Admission Requirements

To be considered for admission to AZCPM, the successful candidate must submit the following documented evidence:

1. Minimum cumulative GPA and science GPA of 2.75 on a 4.00 scale of undergraduate courses from a regionally accredited university.
2. Ability to successfully complete a rigorous curriculum that requires critical thinking skills, effective oral and written communication skills, and voluminous reading, as well as the capacity for responsible, self-directed learning.
3. Competitive scores on the Medical College Admissions Test (MCAT) or Dental Admission Test (DAT) earned no more than 3 years prior to the planned enrollment year.
4. Completion of the necessary course prerequisites.
  - Candidates must complete a minimum of 90 semester hours/135 quarter hours at regionally accredited colleges or universities
  - A bachelor's degree or higher is preferred
  - Ordinarily, prerequisite courses must have been completed within seven years of the date of admission
5. Two Letters of Recommendation are not required but will be accepted.
6. A good understanding of podiatric medicine and a sincere interest in a career in the field.
  - Candidates are required to visit at least one podiatric practice
  - It is strongly encouraged that the candidates have podiatric shadowing experience
7. Demonstration of extracurricular or community activities that indicate a well-rounded background and a service orientation.
8. Medically-related experiences that indicate sufficient exposure for candidates to make informed decisions about medical careers.
9. Personal integrity and sound moral character.
10. Interpersonal and communication skills necessary to relate effectively with others.
11. Passage of the Midwestern University criminal background check.
12. Commitment to abide by the Midwestern University Drug-Free Workplace and Substance Abuse Policy.

## Prerequisite Courses

Course	Semester/Hour Requirements
Biology with lab	8 Sem/12 Qtr hour
General/Inorganic Chemistry with lab	8 Sem/12 Qtr hour
Organic Chemistry with lab	8 Sem/12 Qtr hour
Physics	8 Sem/12 Qtr hour
English	6 Sem/9 Qtr hours

Grades less than C are not acceptable for any prerequisite courses.

## Application Process and Deadlines

Individuals interested in applying for admission to AZCPM must complete an on-line application at the American Association of Colleges of Podiatric Medicine Application Service (AACPMAS) website at <https://portal.aacpmas.org/> or obtain application information by writing or calling:

The American Association of Colleges of Podiatric Medicine Application Service (AACPMAS)  
P.O. Box 9200

To initiate the competitive application process applicants must:

1. Complete the online AACPMAS application with all required materials (i.e., official transcripts, fees, etc.) before the published deadline date. The application deadline is June 1<sup>st</sup>.
2. Submit competitive test scores on the Medical College Admissions Test (MCAT) or Dental Admissions Test (DAT) earned no more than 3 years prior to the planned enrollment year.

*Please note:* Applicants are responsible for notifying the Office of Admissions of any changes in their mailing address or email address. All application withdrawal requests must be made in writing via email, fax, or letter to:

Midwestern University Office of Admissions  
19555 N. 59th Ave.  
Glendale, AZ 85308  
Phone: 888/247-9277 or 623/572-3215  
Fax: 623/572-3229  
[admissaz@midwestern.edu](mailto:admissaz@midwestern.edu)

## Interview and Selection Process

To be considered for interviews, applicants must meet the admissions requirements listed previously. After the Office of Admissions receives these materials, applicant files are reviewed to determine whether applicants merit interviews based on established criteria of the Admissions Committee. The Admissions Director, with the approval of the AZCPM Dean, may also place students on an interview "wait list" pending possible interview openings toward the end of the interview cycle.

Applicants who accept interviews will be individually interviewed by an interview panel, which is selected from a volunteer group of basic scientists, clinicians, and Office of Admissions officials. Team members question students about their preparedness for AZCPM and rate applicants on a standardized evaluation form relative to each of these variables. At the conclusion of the interviews, the team members forward their evaluations of each applicant to the Admissions Committee. The Committee may recommend to accept, to deny, or to place applicants on the alternate list. Recommendations are then forwarded to the Dean for final approval. The Dean, via the Office of Admissions, typically notifies applicants of their status within one or two weeks of their interviews.

## Reapplication Process

After receiving either a denial or an end-of-cycle letter, prospective students may reapply for the next enrollment cycle. Before reapplying, however, students should seek the advice of an admissions counselor. To initiate the reapplication process, prospective students must complete and submit a new application and proceed through the standard application process.

## Transfer Admission

AZCPM may elect to accept transfer students from other U.S. podiatric medical schools as long as these students are in good academic standing and have an acceptable reason(s) for seeking transfer. Typically, transfers are only granted to students desiring to transfer into the third or fourth year; however, transfers to the second year may be granted. To be considered for transfer, the student must meet the College's general requirements for admission. Accepted students must sign a matriculation agreement and indicate that they meet the technical standards. The student must also submit:

1. A letter to the Director of Admissions indicating the reason for requesting to transfer and explaining any difficulties encountered at the previous institution(s).
2. The AZCPM Transfer Application (available through the Office of Admissions).
3. Official MCAT or DAT score report.
4. Official transcripts from all schools attended, including undergraduate, graduate, and professional.

5. A letter from the dean of the college in which the student is enrolled that describes the current academic status and terms of withdrawal or dismissal of the prospective transfer student.
6. Additional documents or letters of recommendation as determined to be necessary by the Director of Admissions.

Following receipt of these materials, the Admissions Committee determines whether the student merits an on-campus interview. Students who receive interview invitations will meet with an interview team. The interview team offers recommendations to the College Dean, who approves both the admissions status and class standing of transfer students.

Transfer applications must be received at least three months before the desired matriculation date. This allows time for processing of applications, interviews, and student relocations before the start of the next academic term.

Students with prior medical training, such as international podiatric, allopathic, or osteopathic medicine, may apply for advanced standing, in which portions of prior course work will be reviewed for acceptability by the relevant course director of AZCPM courses. Transfer students desiring a course waiver must submit the related course syllabus and a decision will be made by the course director before matriculation.

## Technical Standards, Podiatric Medicine

### Technical Standards

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the college.

Candidates must have abilities and skills:

1. **Observation:** The candidate must be able to accurately make observations at a distance and close at hand. Observation necessitates the functional use of the sense of vision and sense of touch and is enhanced by the functional use of all of the other senses.
2. **Communication:** The candidate must be able to communicate effectively, efficiently, and sensitively in both oral and written form and be able to perceive nonverbal communication.
3. **Motor:** Candidates must, after a reasonable period of training, possess the capacity to independently perform physical examinations and diagnostic maneuvers, e.g., palpation, auscultation, percussion, and other diagnostic maneuvers. A candidate must be able to respond to clinical situations in a timely manner and provide direct general and emergency treatment to patients in a range of situations and conditions. Examples include cardiopulmonary resuscitation; the administration of intravenous medication; the application of pressure to stop bleeding; the opening of obstructed airways; and the suturing of simple wounds among others. These activities require some physical mobility, coordination of both gross and fine neuromuscular functions, and equilibrium. Candidates also must meet safety standards appropriate for assigned settings and adhere to universal precautions procedures.
4. **Intellectual, Conceptual, Integrative, and Quantitative Abilities:** The candidate must be able to problem-solve, measure, calculate, reason, analyze, record, and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
5. **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of the student's intellectual abilities, the exercise of good judgment, the consistent, prompt completion of all responsibilities, and the development of mature, sensitive, and effective relationships. Candidates must be able to tolerate physically, mentally, and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and learn to function in the face of uncertainties.

Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, and interest and motivation to learn are all personal qualities required during the educational process.

Candidates are required to certify that they understand and meet these Technical Standards. Candidates must provide such certification prior to matriculation.

Candidates who may not meet the Technical Standards must inform the Director of Admissions, who will then contact the Dean of Students. The Dean of Students, in consultation with the College Dean, will identify and discuss what accommodations, if any, the College would reasonably need to make that would allow the candidate to complete the curriculum. The College is not able to grant accommodations that alter the educational standards of the curriculum. Students must meet the Technical Standards for the duration of enrollment at the College.

## Graduation Requirements (D.P.M)

To receive the degree of Doctor of Podiatric Medicine (D.P.M.), the student must complete all requirements within six years of matriculation. To be eligible for graduation the student must:

1. Follow an approved course of study of 207.5 credits leading to the completion of all academic requirements.
2. Satisfactorily complete all academic requirements with a cumulative GPA of at least 2.25.
3. Repeat and pass any required course for which an F grade has been issued.
4. Complete the Service Learning requirement (10 hours of volunteer service in a healthcare environment during the first and second years of study).
5. Pass Part I and take Part II of the American Podiatric Medical Licensing Examination, administered by the National Board of Podiatric Medical Examiners.\*
6. Be of good moral character.
7. Receive a favorable recommendation from the AZCPM Student Promotion and Graduation Committee.
8. Be recommended for conferral of the Doctor of Podiatric Medicine degree by the University Faculty Senate.
9. Settle all financial accounts with the University.
10. Complete all graduation clearance requirements as instructed by the Office of the Registrar.

\* It is an AZCPM requirement that both Part I and Part II of the APMLE exams be taken the first time they are offered once the student is eligible to take the exams. Students will not be allowed to start rotations during their third year until they have taken and passed Part I of the American Podiatric Medical Licensing Examination (APMLE). In addition, students who fail Part I of the APMLE three times may be subject to dismissal. Additionally, the National Board of Podiatric Medical Examiners requires that the student must pass Part I prior to taking Part II and must also pass Part II prior to taking Part III.

## AZCPM Competencies

Graduating students of AZCPM will achieve the following competencies:

### I. MEDICAL KNOWLEDGE

1. Apply current and emerging knowledge of human structure, function, development, pathology, pathophysiology, and psychosocial development, and of pharmacology and microbiology to the foundation of podiatric clinical training, residency and practice.
2. Describe normal development, structure and function of the body with emphasis on the lower extremities.
3. Explain the genetic, molecular, biochemical and cellular mechanisms important to maintaining the body's homeostasis.

4. Relate the altered development, structure and function of the body and its major organ systems to diseases and pathological conditions.
5. Apply knowledge from pre-clinical and clinical sciences in simulated and clinical settings to patient care.
6. Use current and emerging knowledge of health and disease to identify and solve problems in patient care.

## **II. PATIENT CARE**

1. Provide effective, appropriate and compassionate patient-centered care that promotes overall health to diverse populations.
2. Apply medical knowledge to distinguish between wellness and disease.
3. Perform and interpret appropriate, accurate, and problem-focused history and physical examinations.
4. Perform lower extremity exams required for the diagnosis and management of disorders and conditions.
5. Formulate a prioritized differential diagnosis based on examination and clinical assessments.
6. Perform and/or Interpret appropriate diagnostic studies, and tests required for management and treatment.
7. Participate actively in the performance of treatment techniques using medical and surgical means.
8. Recommend appropriate referrals of patients ensuring continuity of care through transitions between providers or settings and determining patient progress.
9. Recognize evidence of mental or physical impairment of oneself or other in order to protect patients from harm.
10. Develop and implement patient specific management plans and prevention strategies.
11. Demonstrate awareness of issues related to culture, religion, age, gender, sexual orientation, and mental and physical disabilities.
12. Engage patients and their families in shared decision-making through counseling and education.
13. Use information technology to access online medical information, manage information and assimilate evidence from scientific studies to patient care.

## **III. RESEARCH AND SCHOLARSHIP**

1. Apply concepts of research to further one's understanding of contemporary podiatric medicine and its application to appropriate care for patients.
2. Identify responsible practices and ethical behaviors used in research.
3. Demonstrate the acquisition and interpretation of medical and scientific literature.
4. Apply knowledge of the principles of research methodology and its relevance for clinical decision making.
5. Investigate opportunities that enhance life-long learning and contribute to the body of knowledge in podiatric research and scholarship.

## **IV. INTERPERSONAL AND INTERPROFESSIONAL COMMUNICATIONS**

1. Demonstrate communication and interpersonal skills that result in relevant information exchanges and decision- making with patients, their families, and members of the healthcare team.
2. Effectively communicate by utilizing oral, digital and written communication formats.
3. Communicate effectively (including non- verbal cues) with patients, families, and other healthcare professionals, especially when special barriers to communication exist.
4. Interact appropriately with peers, faculty, staff, and healthcare professionals in academic, research and healthcare settings.
5. Exhibit behavior that demonstrates the capacity to establish a doctor/patient relationship.

## **V. PROFESSIONALISM**

1. Exhibit the highest standards of competence, ethics, integrity, and accountability to patients. Place the patient's interest above oneself.
2. Apply theories and principles that govern ethical decision-making to the practice of medicine and research.
3. Recognize potential conflicts of interest inherent in various financial and organizational arrangements for the practice of medicine, in medical education and research.
4. Practice the standards that ensure patient privacy and confidentiality.
5. Demonstrate dependability, commitment and reliability in interactions with patients and their families and other health professionals.
6. Recognize and address in a constructive manner, unprofessional behaviors in oneself and others with whom one interacts.
7. Demonstrate personal behaviors that promote patient safety.
8. Identify personal deficiencies in knowledge and skills and address them by implementing methods for improvement.
9. Employ strategies for seeking and incorporating feedback from patients, peers, and other health professionals to improve personal and patient outcomes.

## **VI. INTERPROFESSIONAL COLLABORATIVE PRACTICE**

1. Demonstrate the ability to work as an effective member of a healthcare team.
2. Demonstrate an understanding of and respect for other health care professionals and to work collaboratively with them in caring for patients.
3. Perform effectively in diverse health care delivery settings and diverse health care systems.
4. Describe the structure and function of health care delivery and payer systems used in the United States.
5. Identify resources for patients in situations in which social and economic barriers limit access to health care.

## **VII. SOCIAL AWARENESS/PAIN AND ADDICTION**

1. Demonstrate an understanding of common societal problems including issues of addiction or abuse and their impact on patients and their families.
2. Use a socio-psycho-biological model to develop individualized prevention strategies for persons with pain and/or opioid use disorder.
3. Employ an integrated, team-based approach to the patient.
4. Engage family and social support in the care to the patient.

# **Licensure Requirements**

Podiatric physicians are licensed in all 50 states, Guam, and Puerto Rico as well as Canada, Israel, Australia, and many other foreign countries. To obtain licensure, graduates must have completed a residency and must meet the requirements established by each state or national licensing board. Licenses require successful passage of all three parts of the National Boards and may require the passage of an additional state licensing exam. Postdoctoral requirements may vary among states. For additional information regarding licensure, contact the Federation of Podiatric Medical Boards (FPMB) or the American Podiatric Medical Association (APMA).

Midwestern University's Podiatry program meets the educational requirements for licensure to practice as a podiatric physician in the following states and territories: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, District of Columbia, Delaware, Florida, Georgia, Guam, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming. In addition, they are licensed in Canada, Israel,

Australia and many other foreign countries. Midwestern University Arizona School of Podiatric Medicine has not made a determination that its Doctor of Podiatric Medicine curriculum meets the territorial educational requirements for licensure or certification in the following territory: U.S Virgin Islands.

Each student should check the additional licensure requirements for the state, district or territory in which they intend to pursue employment.

FPMB

12116 Flag Harbor Drive

Germantown, MD 20874-1979 202/810-3762

[www.fpmb.org](http://www.fpmb.org)

APMA

9312 Old Georgetown Road B

Bethesda, Maryland 20814-1621 301/581-9200

[www.apma.org](http://www.apma.org)

## Podiatric Medicine Curriculum

### Degree Type

Doctor of Podiatric Medicine (D.P.M.)

The Arizona College of Podiatric Medicine reserves the right to alter its curriculum however and whenever it deems appropriate. Information in this catalog does not establish a contractual relationship between MWU and the students.

Total Quarter Credits in the Professional Program: 207.5

## First Professional Year

### Fall Quarter

Course Code	Title	Credits
ANATG 1517	Anatomical Sciences I	7.5
BIOCG 1512	Biochemistry I	6.0
COREG 1560G	Interprofessional Healthcare	0.5
PMEDG 1512	Podiatric Medicine I	1.5
<b>Sub-Total Credits</b>		<b>15.50</b>

### Winter Quarter

Course Code	Title	Credits
ANATG 1527	Anatomical Sciences II	6.0
BIOCG 1523	Biochemistry II	3.0
COREG 1570G	Interprofessional Healthcare	0.5
PHYSG 1523	Physiology I	5.0
PMEDG 1521	Biomechanics of Lower Extremity Function I	3.0
<b>Sub-Total Credits</b>		<b>17.50</b>

## Spring Quarter

Course Code	Title	Credits
ANATG 1537	Anatomical Sciences III	4.0
COREG 1580G	Interprofessional Healthcare	0.5
FMEDG 1534	Public Health, Medical Ethics and Jurisprudence	2.0
MICRG 1532	Immunology	2.5
PHYSG 1534	Physiology II	4.5
PMEDG 1531	Podiatric Surgery I	3.0
<b>Sub-Total Credits</b>		<b>16.50</b>

## Second Year

### Summer Quarter

Course Code	Title	Credits
PMEDG 1619	Podiatric Basic Skills Practicum	1.0
PMEDG 1642	Evidence Based Medicine	1.5
PMEDG 1643	Advanced Lower Extremity Anatomy	6.5
PMEDG 1644	Medical Imaging	3.0
PMEDG 1651	Biomechanics of Lower Extremity Function II	3.5
PMEDG 1675	Pediatric Orthopedics	3.0
<b>Sub-Total Credits</b>		<b>18.50</b>

### Fall Quarter

Course Code	Title	Credits
MICRG 1616	Microbiology I	4.0
PATHG 1612	Pathology I	5.0
PHARG 1612	Pharmacology	3.0-10
PMEDG 1620	Podiatric Basic Skills Practicum	0.5
PMEDG 1670	Physical Diagnosis	3.0
<b>Sub-Total Credits</b>		<b>15.50-22.5</b>

### Winter Quarter

Course Code	Title	Credits
MICRG 1626	Microbiology II	4.0
PATHG 1623	Pathology II	5.0
PHARG 1612	Pharmacology	3.0-10
PMEDG 1621	Podiatric Basic Skills Practicum	0.5
PMEDG 1662	General Medicine I	3.0
<b>Sub-Total Credits</b>		<b>15.50-22.5</b>

### Spring Quarter

Course Code	Title	Credits
PATHG 1634	Pathology III	5.0
PHARG 1612	Pharmacology	3.0-10
PMEDG 1631	Podiatric Surgery II	3.5
PMEDG 1641	Podiatric Medicine II	3.5
PMEDG 1672	General Medicine II	3.0
PMEDG 1678	Behavioral Medicine	1.5
<b>Sub-Total Credits</b>		<b>19.50-26.5</b>



## Third Year

### Summer/Fall/Winter Quarters

Course Code	Title	Credits
PMEDG 1702	Radiology	2.0
PMEDG 1724	Orientation to the Operating Room & Anesthesia	1.5
PMEDG 1726	ACLS	1.0
PMEDG 1731	Podiatric Surgery III	5.0
PMEDG 1732	General Medicine III	3.0
PMEDG 1741	Podiatric Dermatology	2.5
PMEDG 1751	Applied Clinical Biomechanics	2.0
PMEDG 1773	Sports Medicine and Rehabilitation	3.0
<b>Sub-Total Credits</b>		<b>20.00</b>

### Rotations (Integrated October through May)

Course Code	Title	Credits
PMEDG 1701A	Podiatric Medicine CORE	4.0
PMEDG 1701B	Podiatric Medicine CORE	4.0
PMEDG 1701C	Podiatric Medicine CORE	4.0
PMEDG 1701D	Podiatric Medicine CORE	4.0
PMEDG 1701E	Podiatric Medicine CORE	4.0
PMEDG 1706	Outpatient Medicine	4.0
PMEDG 1733A	Clerkship	4.0
PMEDG 1733B	Clerkship	4.0
<b>Sub-Total Credits</b>		<b>32.00</b>

## Fourth Professional Year

**Rotations (Integrated June through April) During the fourth year, each student may take up to four weeks of vacation time.**

Course Code	Title	Credits
PMEDG 1801A	Podiatric Medicine CORE	4.0
PMEDG 1803	General Surgery Rotation	4.0
PMEDG 1804	Inpatient Medicine	4.0
PMEDG 1805A	Clinical Clerkship	4.0
PMEDG 1805B	Clinical Clerkship	4.0
PMEDG 1805C	Clinical Clerkship	4.0
PMEDG 1805D	Clinical Clerkship	4.0
PMEDG 1805E	Clinical Clerkship	4.0
PMEDG 1805F	Clinical Clerkship	4.0
PMEDG 1808	Optional Rotation (4 weeks)	4.0
<b>Sub-Total Credits</b>		<b>36.00</b>
Total Credits		207.5

## Student Academic Policies

The following academic policies apply to all students who matriculate during the academic year of this catalog publication. These policies will apply throughout the entire time a student is enrolled in the college. If in the event that these policies need to be revised as the result of new accreditation requirements, mandates by the United States Department of Education, or other unforeseen circumstances, students will be notified in writing prior to the effective date of the new policy.

Faculty and students should also refer to the University Academic Policy section for additional policies that apply to all students at Midwestern University.

## Academic Monitoring

All students enrolled in AZCPM are expected to:

1. Maintain satisfactory academic progress in their course of study.
2. Understand and meet all established College academic and professional requirements and standards as described in the course syllabi, program-related manuals, University Catalog, and Student Handbook.
3. Self-monitor their academic performance in all required courses.
4. Complete all course-related requirements in a timely and satisfactory manner.
5. Seek assistance if encountering academic difficulty.
6. Contact the Dean and/or course director when performance has been unsatisfactory; and
7. Regularly check home or campus mailbox at least twice a week and university e-mail account daily for information concerning educational programs. This is particularly important at the end of the quarter and during quarter breaks when information concerning academic performance may be distributed.

## Academic Promotion and Graduation Committee

The Student Promotion and Graduation Committee is comprised of AZCPM faculty and a representative from Student Services who review the academic performance of students and assess students for promotion to the next academic year, or for graduation.

## Student Promotion and Graduation Committee

The Student Promotion and Graduation Committee is comprised of AZCPM faculty and a representative from Student Services. The Student Promotion and Graduation Committee is charged with maintaining academic and professional standards of excellence in the preclinical courses as well clinical rotations. At a minimum, it meets after the conclusion of each academic quarter to assess the academic status of students with an academic failure, an incomplete, or an in-progress (IP) grade. The committee assesses the progress of each student at the end of the academic year. Students who attain satisfactory academic and professional progress are promoted to the next academic year, provided all tuition and fees have been paid. Students who accumulate 2 or more failures in the preclinical or clinical block are required to meet with the Promotion and Graduation Committee. Failure of the student to meet with the Student Promotion and Graduation Committee, when duly notified, does not constitute a reason for appeal. Students who have 1 failure have the option to meet with the committee but are not required to meet. Notification of the date, time and place of the committee meeting is sent to the student by priority e-mail to their official MWU e-mail account, or by telephone, at least 48 hours in advance. Decisions of the committee are confidentially e-mailed to the student's official MWU e-mail account. The right to appeal a grade exists and is described elsewhere in this catalog. The right to appeal a decision for dismissal, program extension or leave of absence must be filed in writing, using the student's official MWU e-mail account to the Dean of AZCPM within three working days following official notification of the committee decision.

The Student Promotion and Graduation Committee also recommends to the Faculty Senate for graduation those students who have successfully completed all curriculum requirements, who have passed APMLE Boards Part I and who have taken APMLE Boards Part II and the CSPE portion of the National Boards exams, and who have paid all tuition and fees.

## Satisfactory Academic Progress

To achieve satisfactory academic progress, a student enrolled in AZCPM must pass all required courses and maintain a minimum cumulative GPA of 2.25 or higher.

## Student Promotion and Graduation Committee

### Guidelines for Course and Rotation Failures\*

Clinical Rotation or Didactic Course	Usual Action*	Academic Status	Repeat Course Timing**	Action Following Remediation
All Passed	Promote or Graduate	Good Standing	N/A	N/A
One course or one rotation failure	Retake course/rotation	Warning	Committee recommended schedule	Pass: Promote Fail: Dismiss
Any combination of course or rotation failures resulting in two failures	Retake courses/rotations	Probation	Committee recommended schedule	Pass both: Promote Fail either: Dismiss
Any combination of course or rotation failures resulting in three failures	Recommend Dismissal			

All course and/or rotation failures are cumulative throughout the duration of enrollment at AZCPM.

\*Action may be modified by the Student Promotion and Graduation Committee

\*\*Course repeat schedule is at the discretion of the Student Promotion and Graduation Committee

Withdrawal/Failing grade (W/F) may be considered a course failure by the Student Promotion and Graduation Committee.

## Unsatisfactory Academic Progress

If a student fails to make satisfactory progress in completing the prescribed course of study, the student is placed on academic warning, academic probation, academic leave of absence, or is dismissed. The Promotion and Graduation Committee may recommend any of the options listed among the usual actions described for each academic situation under review.

Good academic standing is achieved by maintaining a “C” or better average in all courses/rotations at all time. A student on academic warning or academic probation is not considered to be in good academic standing. To return to good academic standing, a student must pass the failed courses/rotations, and incur no further failures.

Academic warning is issued by the AZCPM Dean and does not require the student to meet with the Student Promotion and Graduation Committee when a student is currently failing or has failed a course/rotation.

Academic warning represents notice that continued substandard academic performance may compromise the student’s ability to pass one or more courses/rotations. Academic warning is not noted on the transcript. A student who is failing a course/rotation is required to meet with the course director or course faculty to formulate a plan of action. A student who is failing more than one course/rotation is required to meet with the Dean to formulate a plan to achieve academic success. Students on academic warning, academic probation, disciplinary warning, disciplinary probation or leave of absence for longer than one month must relinquish their elected office.

Academic probation is defined as failure of 2 or more courses/rotations. Academic probation is recommended by the Student Promotion and Graduation Committee and is issued by the Dean of AZCPM when a student meets this criterion, which represents notice that continued substandard academic performance may result in dismissal. When a student is placed on academic probation it is noted in the student’s permanent academic file. A student on academic probation is required to meet with the Dean to formulate a plan for academic success. When a student passes the failed courses and returns to good academic standing, this is also noted in the student’s file. Academic probation is not noted on the transcript.

Students on academic probation are ineligible to hold student organization offices, or to participate in international rotations.

## Academic Leave of Absence

Academic leave of absence may occur when a student has failed one or more courses, has accumulated two or more quarters when the cumulative GPA is less than required, or has not met programmatic criteria required to proceed in the curriculum. Academic leave of absence may or may not be preceded by academic probation. This action results in the suspension of the student from all academic courses for a period of up to one year, or until all requirements for re-entry have been fully met. A mandatory academic leave of absence is noted on the student's transcript.

The student who has been placed on a mandatory academic leave of absence does not have to re-apply for admission and is guaranteed reentry into the academic program upon successful completion of all failed courses and/or when all programmatic requirements are met. Upon reentry to the academic program, the student is routinely placed on academic probation for the following quarter.

## Academic Dismissal

A student may be dismissed from the College for academic reasons upon the recommendation of the Student Promotion and Graduation Committee. The dismissal is based on the determination that the student has not satisfactorily demonstrated that the individual can successfully achieve the standards and requirements set forth in the academic policies and professional expectations for the College. Students who accumulate two or more failures or three quarters below the minimum required grade point average may receive a recommendation for dismissal. The course failures and/or the three-quarters with less than the required minimum cumulative GPA do not have to be consecutive.

## Retake of a Failed Course

If a student passes a repeated course, the original failure remains on the transcript as an "F" grade and is included in the total number of accumulated failures in the student's academic record. The repeated course and new grade are entered on the transcript. The grade for a failed course repeated and passed at Midwestern University, or at an outside institution is recorded on the transcript as a grade of "C." For all failed clinical rotations at Midwestern University that are repeated and passed, a grade of "C" will be recorded on the transcript.

For both preclinical coursework and clinical rotations that are repeated, the original failing grade will remain on the transcript but will not be included in the GPA calculations. The grade of "C" will be included in the GPA calculation. If a repeated preclinical course or clinical rotation is failed, a grade of "F" is again recorded on the transcript. Students who fail a course a second time will be recommended for dismissal.

All repeated courses are subject to additional tuition. Students should consult with their financial aid advisor regarding the financial implications of repeated coursework.

## Appeal Process

Following notification of a decision by the Student Promotion and Graduation Committee, a student may appeal the decision in writing within three working day to the Dean of AZCPM. The Dean may grant an appeal only if a student can demonstrate one of the following:

- Bias of one or more committee members
- Material information not available to the committee at the time of its initial decision (not to include student's decision not to appear at required attendance meeting of the committee)
- Procedural error

During the appeal process, students must continue to attend didactic classes. Failure of the student to meet with the Student Promotion and Graduation Committee does not constitute a reason for appeal.

## Grading System

Students receive letter grades corresponding to the level of achievement in each course, based on the results of examinations, required course work, and as applicable, other established criteria. The letter grades, percent ranges, and quality points per credit are as follows:

Grade	Percent (%)	Quality Points (per credit)	Comments
A	93-100	4.00	--
A-	90-92	3.67	--
B+	87-89	3.33	--
B	83-86	3.00	--
B-	80-82	2.67	--
C+	77-79	2.33	--
C	70-76	2.00	--
F	<70	0.00	--
I	--	0.00	An Incomplete grade may be assigned by a course director when a student's work is of passing quality but incomplete, or if a student qualifies for re-examination. It is the responsibility of the student to request an extension from the course instructor. By assigning an "I" grade, it is implied that an instructor agrees that the student has a valid reason and should be given additional time to complete required coursework. All incomplete grades must be resolved within 10 calendar days from the end of finals for the quarter. In the case of courses ending prior to final exam week, it is the obligation of the course director to monitor the use and resolution of the incomplete grade, with notice to the Registrar. If an incomplete grade remains beyond 10 days, it may be converted to a grade of "F," which signifies failure of the course.
IP			In Progress grades may be assigned by a course director under certain circumstances (illness, family death, etc.) when incomplete work cannot be resolved within a 10-day period. An outstanding grade should not extend for more than one quarter with notification to the Registrar.
P	--	0.00	A Pass designation indicates that the student has made satisfactory progress or completed required coursework satisfactorily. Grade of 'P' is counted toward credit hour accruals for graduation but is not counted in any GPA calculations.
W	--	0.00	Withdrawal is given if the grade achieved up to the time of the withdrawal is >70% or >C. Withdrawal is not counted in the GPA calculation and is not counted in credit hour accrual for graduation. Refer to Midwestern University academic policies for more information.
W/F	--	0.00	Withdrawal Failing is given if the work completed up to the time of withdrawal is below the passing grade level from the program. This grade is not counted in any GPA calculation and is not counted in credit hour accruals for graduation.
AU	--	0.00	This designation indicates an audited course, that is, a student registered for a course with the understanding that neither academic credit nor a grade is earned. The course status may not be changed from audit to full credit after the start of the quarter. The designation AU is not counted in the GPA calculation.
PG	--	0.00	The designation of PG indicates a pending grade.

## Attending Off-Campus Meetings, Conferences, and Events

Students interested in attending podiatric conferences, lobby days, specialty-focused meetings, or any medically or educationally related presentation offered while classes are in session must submit a written request for an excused absence a minimum of 30 days prior to the event date.

First- and second-year students must be in good academic standing and receive written approval from the Course Directors of the courses they will miss and from a representative of the Office of the Dean to attend the event. Third- and fourth-year students should follow the procedure for obtaining an excused absence from rotations as described in the Clinical Handbook.

Students are advised to wait until approval has been granted prior to making travel arrangements. Any costs incurred due to a student being denied approval to attend an off-campus event are the sole responsibility of the student.

Please refer to the Clinical Handbook for further information regarding third- and fourth-year students making similar requests.

## Clerkship Attendance Policy

Third- and fourth-year students must attend all clerkship rotations. The Office of Clinical Education establishes its own attendance requirements as stated in the Clinical Handbook. Attendance and on-call requirements for clinical rotations, as well as AZCPM scheduled events, take precedence over non-rotation events. Students must assure that the requirements of each clinical rotation are understood and will be met prior to scheduling non-rotation events. Students are advised to refer to the Clinical Handbook for more details.

## Immunization and Screening Policy

Full-time students enrolled in a program with a clinical component are required to follow the immunization and screening policy as outlined in the general screening policy section of the Student Handbook.

Immunization requirements for AZCPM students are subject to current applicable state health department protocol and affiliated hospital rotation requirements. Students who do not follow the immunization and screening policy by the stated deadline may jeopardize their acceptance or continued enrollment in the College. If, at any time, testing attestation of disease-free state, or immunizations expire, students may be placed on a mandatory leave of absence until such time that they are in full compliance with this requirement.

## Insurance Coverage Policy

AZCPM students are required to follow the insurance policy as outlined in the Student Handbook. Insurance requirements for AZCPM students are subject to state health department protocol and affiliated hospital rotation requirements. Students who do not follow the insurance policy by the stated deadline may jeopardize their acceptance or continued enrollment in the College. Proof of insurance will be required annually.

## Class Standing

To progress to the next year of the College, students must have satisfactorily completed all academic requirements for the preceding year.

## Supervision of Medical Students by Licensed Healthcare Providers

While on clinical rotations, medical students must have direct, on-premises supervision by licensed healthcare providers within their scope of practice who are licensed to practice in the state in which care is being provided. Any licensed healthcare provider, as defined above, who is designated as a teacher for AZCPM students, is recognized to be a member of the extended faculty.

## Criminal Background Check

AZCPM conducts pre-matriculation criminal background checks as required by Arizona state law. Students are expected to obtain and produce a copy of their fingerprint background card obtained at their own expense upon matriculation. Affiliation agreements may require additional background checks, which will be done at the expense of AZCPM.

## Grade Point Average

The grade point average is a weighted average computed using the number of credits assigned to each course and the quality points corresponding to the letter grade earned in each course. It is determined by calculating the total number of quality points earned and dividing them by the total number of credits carried. The total quality points earned for each course is determined by multiplying the quality points earned per credit (corresponding to the letter grade) by the number of credits assigned to the course. The student's cumulative grade point average is computed and recorded by the Office of the Registrar. It is calculated beginning at the end of the first quarter of enrollment and does not include any grades or credits for courses audited or coursed with a grade of withdrawal (W), withdrawal failing (WF), pass (P) or failed (F) that were later repeated.

## Readmission after Dismissal

Students who have been dismissed are not eligible for readmission. Students who have withdrawn when facing dismissal are not eligible for readmission.

## Postdoctoral Education

AZCPM supports students with the transition from pre- doctoral training to postdoctoral training through the Office of Clinical Education and the Department of Postdoctoral Education. AZCPM also benefits from its membership in the Midwestern University Graduate Medical Education (GME) Consortium. AZCPM is associated with residencies at healthcare facilities nationwide that are approved by the Council on Podiatric Medical Education (CPME). Affiliated programs include Franciscan Health Hammond/Dyer (Indiana) and Tucson Medical Center (Arizona). AZCPM graduates have successfully matched with top ranked residencies throughout the country. AZCPM assists hospitals in the development of new residency programs and continues to support affiliated programs. Because residency development is a high priority, AZCPM also continues to work with national organizations in developing and sustaining residency programs for future podiatrists.

## Scholarships and Awards

### *Scholarships*

*American Association of Women Podiatrist Founders Scholarship*

*American College of Foot and Ankle Surgeon's Division IV Student Travel Scholarship*

*American College of Foot and Ankle Surgeon's Division VIII New England States Scholarship*

*APMA Educational Foundation*

*Association of Schools of Allied Health Professionals Scholarship*

*Basil M. Tucker Scholarship*

*Hispanic Scholarship Foundation Scholarship*

*Indian Health Service Health Professions Scholarship*

*John R. Burdick Endowed Fund for International Medicine*

*Johnson & Johnson Wound Management Scholarship*

*Meyer Friedlander and Milton Klasky Tikkun Olam Scholarship*

*Podiatry Insurance Company of America Scholarship The Puerto Rico Podiatric Medicine Scholarship*

*Washington State Podiatric Medical Association Ed Erickson Scholarship*

*Western Interstate Commission for Higher Education (WICHE)*

*Zelda Walling Vicha Memorial Scholarship*

## Research Scholarships

*Carol A. Jensen Innovation in Podiatric Medicine Research Scholarship*

*Irvin O. Kanat, D.P.M. Diabetic Foot Care Research Scholarship*

*Earl G. Kaplan, D.P.M. Surgical Research Scholarship Anita J. Moynihan Wound Care Research Scholarship*

*William F. Todd, D.P.M. Biomechanics/Sports Medicine Research Scholarship*

## Awards

*American Board of Podiatric Medicine Graduate of Merit Award*

*Michael L. Stone, DPM Outstanding Professional Conduct Award*

*Samuel Mason, DPM Pioneering Service Award Timothy Holbrook, DPM Memorial Award of Excellence Jeffrey C. Page, DPM Distinguished Student Award Kathleen M. Stone, DPM Leadership Award*

*Ken Suarez, Ph.D. Award of Research Excellence*

# Podiatric Medicine Program Calendar

## Summer 2025

Event	Class	Date
Boards Break	PM-III	May 5 - July 11, 2025
<b>Memorial Day</b>	<b>*No Classes*</b>	<b>May 26, 2025</b>
Classes Resume	PM-II	May 27, 2025
Last Day to Add/Drop Classes	PM-II	May 30, 2025
<b>Juneteenth (Observed)</b>	<b>*No Classes*</b>	<b>June 19, 2025</b>
<b>Independence Day (Observed)</b>	<b>*No Classes*</b>	<b>July 4, 2025</b>
Last Day of Classes	PM-II	July 25, 2025
Quarterly Exams	PM-II	July 28 - August 1, 2025
Quarter Break	PM-II	August 4 - August 8, 2025
Last Day of Classes	PM-III	September 26, 2025
Quarterly Exams	PM-III	September 22 - 26, 2025
Quarter Break	PM-III	September 29 - October 3, 2025

## Fall 2025

Event	Class	Date
Orientation	PM-I	August 4 - 6, 2025
Classes Begin	PM-I, PM-II	August 11, 2025
Last Day to Add/Drop Classes	PM-I, PM-II	August 15, 2025



Event	Class	Date
<b>Labor Day</b>	<b>*No Classes*</b>	<b>September 1, 2025</b>
<b>White Coat Ceremony</b>		<b>September 26, 2025</b>
Last Day of Classes	PM-I, PM-II	October 17, 2025
Quarterly Exams	PM-I, PM-II	October 20 - 24, 2025
Fall Break	PM-I, PM-II	October 27 - 31, 2025
Thanksgiving Break		November 10 - 28, 2025

## Winter 2025

Event	Class	Date
Classes Begin	PM-I, PM-II	November 3, 2025
Last Day to Add/Drop Classes	PM-I, PM-II	November 7, 2025
Thanksgiving Break	PM-I, PM-II	November 24 - 28, 2025
Winter Break	PM-I, PM-II	December 22, 2025 - January 2, 2026
Classes Resume	PM-I, PM-II	January 5, 2026
<b>Martin Luther King/ Jr. Day</b>	<b>*No Classes*</b>	<b>January 19, 2026</b>
Last Day of Classes	PM-I, PM-II	January 30, 2026
Quarterly Exams	PM-I, PM-II	February 2 - 6, 2026
Spring Break	PM-I, PM-II	February 9 - 13, 2026

## Spring 2026

Event	Class	Date
Classes Begin	PM-I, PM-II	February 16, 2026
Last Day to Add/Drop Classes	PM-I, PM-II	February 20, 2026
Last Day of Classes	PM-I, PM-II	April 24, 2026
Quarterly Exams	PM-I, PM-II	April 27 - May 1, 2026
Quarter Break	PM-II	May 11 - 22, 2026
<b>Memorial Day *No Classes*</b>	<b>*No Classes*</b>	<b>May 25, 2026</b>
Program Completion	PM-IV	May 29, 2026
Commencement		June 2, 2026 12:00 p.m.

## Rotations

### PM III

Term	Rotation	Date
Fall	Rotation 1	October 6 - 31, 2025
Fall	Rotation 2	November 3 - 28, 2025
Fall	Rotation 3	December 1 - 19, 2025
Winter	*Vacation*	December 22 - 26, 2025
Winter	Rotation 4	January 5 - 30, 2026
Winter	Rotation 5	February 2 - 27, 2026
Winter	Rotation 6	March 2 - 27, 2026
Spring	Rotation 7	March 30 - May 1, 2026

<b>Term</b>	<b>Rotation</b>	<b>Date</b>
Spring	Rotation 8	May 4 - 29, 2026

## PM IV

<b>Term</b>	<b>Rotation</b>	<b>Date</b>
Summer	Rotation 1	June 2 - 27, 2025
Summer	Rotation 2	June 30 - August 1, 2025
Summer	Rotation 3	August 4 - 29, 2025
Fall	Rotation 4	September 2 - October 3, 2025
Fall	Rotation 5	October 6 - October 31, 2025
Fall	Rotation 6	November 3 - 28 2025
Winter	Rotation 7	December 1, 2025 - January 2, 2026
Winter	Rotation 8	January 5 - 30, 2026
Winter	Rotation 9	February 2 - 27, 2026
Spring	Rotation 10	March 2 - 27, 2026
Spring	Rotation 11	March 30 - May 1, 2026
Spring	Rotation 12	May 4 - 29, 2026

Last Revision: 05/15/2025

# Faculty

**Donald R. Curtis, D.P.M.**

Rosalind Franklin University  
Dr. William M. Scholl College of Podiatric Medicine  
Associate Professor

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Midwestern University  
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Assistant Professor

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California College of Podiatric Medicine  
Director, Curriculum and Student Learning  
Outcomes Associate Professor

**Melanie Violand, D.P.M.**

New York College of Podiatric Medicine  
Associate Dean  
Associate Professor

**Lance Wissman, D.P.M.**

Rosalind Franklin University  
William M. Scholl College of Podiatric Medicine  
Associate Professor

## Arizona College Of Podiatric Medicine Courses

### ANATG 1517: Anatomical Sciences I

This is an integrated course combining the four traditional medical school anatomical disciplines: gross anatomy, histology, embryology, and neuroscience. The curriculum is organized into six modules over three quarters, with multiple exams per module. The modules cover broad anatomical themes. Fall quarter begins with the segmented body plan, which includes back dissections, and finishes with tubes within tubes, which includes thorax, abdomen, and pelvis dissections.

**Credits** 7.5

### ANATG 1527: Anatomical Sciences II

This is an integrated course combining the four traditional medical school anatomical disciplines: gross anatomy, histology, embryology, and neuroscience. The curriculum is organized into six modules over three quarters, with multiple exams per module. The modules cover broad anatomical themes. Winter quarter begins with limb outgrowth, which includes lower extremity and upper extremity dissections, and finishes with pharyngeal arches and cranial nerves, which includes head and neck dissections.

**Credits** 6.0

## **ANATG 1537: Anatomical Sciences III**

This is an integrated course combining the four traditional medical school anatomical disciplines: gross anatomy, histology, embryology, and neuroscience. The curriculum is organized into six modules over three quarters, with multiple exams per module. The modules cover broad anatomical themes. Spring quarter begins with the sensorimotor head, which includes head and neck dissections, and finishes with brain and behavior. Curriculum delivery is through lectures, laboratory-based dissection workshops, ultrasound workshops, small group activities, and on-line resources. Student progress is evaluated through written and practical examinations.

**Credits** 4.0

## **BIOCG 1512: Biochemistry I**

Course modules feature proteins and enzymes emphasizing structure-function relationships; cell biology emphasizing how cells move and divide; molecular biology emphasizing the role of nucleic acids in expression of genetic information; intermediary metabolism emphasizing metabolism of carbohydrates, lipids, and amino acids; organs emphasizing the customization of biochemical pathways; hemostasis emphasizing the mechanisms leading to platelet plug and fibrin clot formation, including tests available to identify hemostasis disorders; and medical biostatistics emphasizing the concepts of sensitivity, specificity, positive predictive value and negative predictive value. Clinical aspects of biologic processes during the fed and fasted states are emphasized. Workshops introduce the biochemical basis of clinical laboratory tests and illustrate clinical applications of biochemical concepts.

**Credits** 6.0

## **BIOCG 1523: Biochemistry II**

Course modules feature human nutrition emphasizing importance of nutrition in health and preventive medicine; human genetics emphasizing the inheritance of selected genetic disorders; cell cycle regulation and molecular basis of cancer emphasizing the molecular and genetic basis of cancer and tumor progression; various types of anemia focusing on causes, lab tests and its related topics. Workshops introduce the biochemical basis of exercising muscle, myocardial infarction, obesity, common clinical laboratory tests and/or illustrate clinical applications of biochemical concepts. Selected workshops feature a modified problem-based learning environment.

**Credits** 3.0

## **COREG 1560G: Interprofessional Healthcare**

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

## **COREG 1570G: Interprofessional Healthcare**

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

## **COREG 1580G: Interprofessional Healthcare**

The Interprofessional Healthcare course involves the Colleges of Dental Medicine, Health Sciences, Optometry, Osteopathic Medicine, Pharmacy and Veterinary Medicine. The course is designed to teach all clinically-based students about each other's clinical programs, how they might interact together as part of an interprofessional healthcare team, and the importance of an interprofessional approach to patient care. The class consists primarily of online presentations that are delivered by interprofessional team members from each of the clinical programs. Associated quizzes will also be completed online. Occasional lectures, panel presentations, or group assignments may also be incorporated.

**Credits** 0.5

## **FMEDG 1534: Public Health, Medical Ethics and Jurisprudence**

The course provides an overview of fundamental concepts and principles related to public health, epidemiology, clinical ethics, and medical jurisprudence. Core concepts necessary for the practice of evidence-based medicine will be presented in addition to examining topics related to the legal and ethical aspects of medicine frequently encountered in clinical practice. In addition to preparing students for board examinations, completion of the course will provide students with the foundation needed to practice evidence-based medicine, provide compassionate and humane patient care, and ensure compliance with the law and standards of professional conduct.

**Credits** 2.0

## **MICRG 1532: Immunology**

This course uses a didactic approach for a comprehensive coverage of immunology. Students are presented with information pertinent to fundamental principles of immunology, the cells and cell products involved in host defense mechanisms, their origin, function, and their roles in health, infectious processes. The course is designed not only to instill basic principles in immunology but also to discuss important topics for clinical practice and research, including immunizations, immunodiagnostics, and immunologically-mediated diseases, disorders, and deficiencies.

**Credits** 2.5

## **MICRG 1616: Microbiology I**

Fall quarter of this two-quarter course uses a didactic approach for a comprehensive coverage of medical microbiology. This course sequence includes discussion of basic classification, structure, metabolism and genetics of bacteria, viruses, parasites, and fungi, as well as discussion of individual pathogens in the context of infectious disease. The infectious disease portion of each course uses an organ systems approach, focusing on basic morphologic, culture and diagnostic modalities, physiology, virulence determinants, epidemiology, host-pathogen interactions, and management of disease with special emphasis on factors pertinent to clinical medicine and public health. Clinical correlations and case presentations are featured for each organ system.

**Credits** 4.0

## **MICRG 1626: Microbiology II**

Winter quarter of this two-quarter course uses a didactic approach for a comprehensive coverage of medical microbiology. This course sequence includes discussion of basic classification, structure, metabolism and genetics of bacteria, viruses, parasites, and fungi, as well as discussion of individual pathogens in the context of infectious disease. The infectious disease portion of each course uses an organ systems approach, focusing on basic morphologic, culture and diagnostic modalities, physiology, virulence determinants, epidemiology, host-pathogen interactions, and management of disease with special emphasis on factors pertinent to clinical medicine and public health. Clinical correlations and case presentations are featured for each organ system.

**Credits** 4.0

## **PATHG 1612: Pathology I**

Introduction to basic concepts of pathology stressing altered cellular, genetic, and molecular mechanisms, and attempts to convey the dynamic nature of processes involved. By focusing on the organism as a whole system, the discipline of pathology can provide a bridge for transition by showing the interrelationship between basic scientific principles and the practice of clinical medicine. This approach provides a complete, medical overview of the disease process in relation to its histological, functional, and structural changes. Students have an opportunity to develop necessary skills to interpret and use laboratory data in describing and recognizing various types of injury to cells, tissues, and organs.

**Credits** 5.0

## **PATHG 1623: Pathology II**

Continuation of basic pathology; course identifies causes and mechanisms of disease as they relate to specific organ systems as well as stressing the need for the medical student to understand the pathophysiology of disease and its implications to both the patient and the physician. Emphasis is also placed on the dynamic process of the pathogenic progression of changes, adaptive responses, and therapeutic modifications as well as discovering how all these changes produce the ultimate clinical manifestations of disease processes.

**Credits** 5.0

### **Prerequisites**

[PATHG 1612](#) Pathology I

## **PATHG 1634: Pathology III**

Continuation of basic pathology; course identifies causes and mechanisms of disease as they relate to specific organ systems as well as stressing the need for the medical student to understand the pathophysiology of disease and its implications to both the patient and the physician. Emphasis is also placed on the dynamic process of the pathogenic progression of changes, adaptive responses, and therapeutic modifications as well as discovering how all these changes produce the ultimate clinical manifestations of disease processes.

**Credits** 5.0

### **Prerequisites**

[PATHG 1612](#) Pathology I; [PATHG 1623](#) Pathology II

## **PHARG 1612: Pharmacology**

This course deals with the general principles of pharmacology, all aspects of absorption, distribution, metabolism, and elimination of drugs, mechanisms of drug actions, drug testing in humans, and prescription writing. In addition, this course describes in great detail the pharmacologic actions and clinical uses of autonomic and cardiovascular drugs, and the principles of toxicology. Topics covered include the chemotherapy of microbial and parasitic diseases, chemotherapy of neoplastic diseases, drugs acting on blood and blood-forming organs, hormones and hormone antagonists, principles of toxicology, vitamins, gastric antacids, digestants, laxatives, antihistamines, and drugs causing birth defects. In addition, these courses include several lectures in clinical pharmacology. Workshops are conducted to demonstrate the application of pharmacologic principles in simulated human cases. In these presentations, emphasis is placed on problem solving, formulating hypotheses, making therapeutic decisions, and evaluating the patient's response to pharmacotherapy. This course is taught during three quarters with a single grade given at the completion of the course. 3.5 credits first quarter, 3.5 credits second quarter, 3 credits third quarter, for a total of 10 credits.

**Credits** 3.0

-10

## **PHYSG 1523: Physiology I**

This course presents the biophysics, functional properties, and regulation of membrane transport, excitable cells, skeletal muscle, cardiovascular and respiratory systems. A discussion of circulatory fluid dynamics, peripheral vascular tone, blood pressure, and electrical and mechanical activity of the heart is included in the cardiovascular section of the course. Small group case discussions, workshops and simulations facilitate development of critical thinking and problem-solving skills as students use basic physiologic concepts to understand the pathogenesis of signs and symptoms in specific case studies.

**Credits** 5.0

## **PHYSG 1534: Physiology II**

Sequel to [PHYSG 1523](#) and builds on physiologic foundations developed during the preceding semester. Course covers the function, mechanism of action, regulation, and integration of the renal and gastrointestinal systems that maintain body homeostasis through fluid, electrolyte and nutrient balance. The endocrine section of the course presents the function, mechanism of action, and regulation of specific hormones. Small group discussions and workshops will refine critical thinking and problem-solving skills as students identify physiologic and pathophysiologic mechanisms underlying the signs and symptoms described in pertinent clinical case studies.

**Credits** 4.5

## **PMEDG 1512: Podiatric Medicine I**

This course introduces students to the podiatric medical profession and the role podiatric physicians play in healthcare delivery. Students will be introduced to basic podiatric and anatomical nomenclature and terminology. They will understand the importance of protecting both themselves and patients from bloodborne pathogens, learn the names and functions of common clinical instruments, and practice their use. Students will become familiar with common podiatric conditions and will be taught to perform a simple medical history and lower extremity physical examination.

**Credits** 1.5

## **PMEDG 1521: Biomechanics of Lower Extremity Function I**

This course introduces the principles of podiatric biomechanics including body planes and movement, normal locomotion, the mechanics of normal muscle and joint function, open and closed kinetic chain movement, and the basic biomechanical examination. Computer animation, videotapes, and live demonstrations are used to demonstrate normal gait patterns and the steps of a standard biomechanical examination. Practical labs are held to teach the proper techniques of biomechanical analysis.

**Credits** 3.0

## **PMEDG 1531: Podiatric Surgery I**

This course teaches the fundamental principles of surgery, including normal wound, tendon and bone healing. The perioperative and postoperative management of a surgical patient are discussed along with basic concepts of hemostasis, patient positioning, and management of postoperative complications. Specific minor surgical techniques are discussed and practiced, including instrumentation, injection techniques, incision placement, suturing, knot tying and basic skin flaps. The students also practice basic nail surgery and soft tissue mass excision techniques.

**Credits** 3.0

## **PMEDG 1619: Podiatric Basic Skills Practicum**

The Podiatric Basic Skills practicum is one course consisting of clinical training experiences that span three quarters during the second year. Its purpose is to help each student develop fundamental clinical skills in preparation for full time clinical rotations during the third year. Training experiences include refresher skills labs and hands on patient care at a variety of different clinical settings. PMEDG 1618 1 credits summer quarter, PMEDG 1620 0.5 credits fall quarter, PMEDG 1621 0.5 credits winter quarter. Summer, Fall & Winter Quarters Second Year.

**Credits** 1.0

## **PMEDG 1620: Podiatric Basic Skills Practicum**

The Podiatric Basic Skills practicum is one course consisting of clinical training experiences that span three quarters during the second year. Its purpose is to help each student develop fundamental clinical skills in preparation for full time clinical rotations during the third year. Training experiences include refresher skills labs and hands on patient care at a variety of different clinical settings. PMEDG 1618 1 credits summer quarter, PMEDG 1620 0.5 credits fall quarter, PMEDG 1621 0.5 credits winter quarter. Summer, Fall & Winter Quarters Second Year.

**Credits** 0.5

## **PMEDG 1621: Podiatric Basic Skills Practicum**

The Podiatric Basic Skills practicum is one course consisting of clinical training experiences that span three quarters during the second year. Its purpose is to help each student develop fundamental clinical skills in preparation for full time clinical rotations during the third year. Training experiences include refresher skills labs and hands on patient care at a variety of different clinical settings. PMEDG 1618 1 credits summer quarter, [PMEDG 1620](#) 0.5 credits fall quarter, PMEDG 1621 0.5 credits winter quarter. Summer, Fall & Winter Quarters Second Year.

**Credits** 0.5

## **PMEDG 1631: Podiatric Surgery II**

Podiatric Surgery II informs students of the common deformities that occur in the foot that have underlying biomechanical etiologies. Students correlate the abnormal mechanics of the foot with the selection of and techniques utilized for surgical correction. The clinical skills component will demonstrate the components and techniques used in basic internal fixation, the skills, and techniques used in the radiographic assessment of a Hallux Abducto Valgus deformity, and proper dressing application.

**Credits** 3.5

### **Prerequisites**

[PMEDG 1531](#) Podiatric Surgery I; [PMEDG 1512](#) Podiatric Medicine I; [PMEDG 1521](#), 1651 Biomechanics of Lower Extremity Function I, II; [PMEDG 1531](#) Introduction to Podiatric Surgery; [PMEDG 1643](#) Advanced Lower Extremity Anatomy; [PMEDG 1644](#) Medical Imaging

## **PMEDG 1641: Podiatric Medicine II**

This course expands on the knowledge, skills, and attitudes developed in Part I. Focus will be placed on the management of the lower extremity manifestations of diabetes, infectious disease and peripheral vascular disease. The diagnosis, medical and surgical management of the diabetic foot, including lower extremity ulcerations, neuropathy and Charcot are discussed in detail. Infectious disease and wound care considerations will be presented in both lecture and lab formats, providing hands-on experiences with many of the advanced treatment options available.

**Credits** 3.5

### **Prerequisites**

[ANATG 1517](#), 1527, 1537 Anatomical Sciences I, II, & III; [BIOCG 1512](#), 1523 Biochemistry I, II; [PHYSG 1523](#), 1534 Physiology I, II; [PMEDG 1512](#) Podiatric Medicine I



## **PMEDG 1642: Evidence Based Medicine**

This course explores the relationships between research and evidence based healthcare. The subjects covered include: research methodology, bioethical issues related to human subject research, the role of the Institutional Review Board, research protocol writing, and biostatistics. Current and clinically relevant articles will be used for problem-based analysis.

**Credits** 1.5

**Prerequisites**

[FMEDG 1534](#) Public Health, Medical Ethics and Jurisprudence.

## **PMEDG 1643: Advanced Lower Extremity Anatomy**

The purpose of this course is to provide students a firm foundation in the structure of the lower extremity. The course will emphasize a functional and clinical approach to the study of the anatomy of the lower extremity. The anatomical terminology learned will be the vocabulary necessary to understand podiatric surgery, radiology, orthopedics and biomechanics. This knowledge is essential to the podiatrist's assessment of a patient's status, and in the interpretation of laboratory and diagnostic tests; and in learning pathology.

**Credits** 6.5

**Prerequisites**

[ANATG 1517](#), 1527, 1537 Anatomical Sciences I, II, & III

## **PMEDG 1644: Medical Imaging**

The purpose of this medical imaging course is to introduce podiatric medical students to diagnostic radiology which will prepare them for their podiatric medical career. Emphasis will be on plain film x-rays and will include the biology, safety, physics, and x-ray interpretation. Students will also learn basic foot and ankle X-ray positioning and be able to perform and obtain appropriate views. The course will also introduce the podiatric medical student to special imaging (MRI, CT scan, bone scan, diagnostic ultrasonography) and how it pertains to the diagnosis of foot and ankle pathology.

**Credits** 3.0

**Prerequisites**

[ANATG 1517](#), 1527, 1537 Anatomical Sciences I, II, III

## **PMEDG 1651: Biomechanics of Lower Extremity Function II**

Biomechanics of Lower Extremity Function II is designed to provide a comprehensive study of biomechanics with an emphasis on normal and abnormal structure and function. General treatment concepts will be considered for a range of conditions with special emphasis on orthosis therapy and footwear correlated to the clinical setting. Short presentations will be followed by hands-on exercises for clinical application.

**Credits** 3.5

**Prerequisites**

[PMEDG 1521](#) Biomechanics of Lower Extremity Function I

## **PMEDG 1662: General Medicine I**

Students study diseases of the cardiovascular, pulmonary and hematology systems through the integration of the basic and clinical sciences. Case-based approaches are used in addition to didactic instruction.

**Credits** 3.0

**Prerequisites**

[PMEDG 1670](#) Physical Diagnosis; [PHYSG 1523](#), 1534 Physiology I, II

## **PMEDG 1670: Physical Diagnosis**

This course is designed to teach the student the art and technique of physical assessment. Course content includes lectures and reading assignments covering normal and abnormal physical findings. In addition, there are weekly physical exam laboratory sessions designed to provide the student with hands-on practice in exam techniques. At the conclusion of the course the student will be expected to pass a written final exam and satisfactorily perform a complete physical examination.

**Credits** 3.0

### **Prerequisites**

[ANATG 1517](#), 1527, 1537 Anatomical Sciences I, II, & III

## **PMEDG 1672: General Medicine II**

General Medicine II includes geriatrics, gastroenterology and nephrology. Students study diseases of the genitourinary and gastrointestinal systems and study issues related to aging through the integration of the basic and clinical sciences. Case-based approaches include a required written history and physical examination and a case presentation is used in addition to didactic instruction.

**Credits** 3.0

### **Prerequisites**

[PMEDG 1662](#) General Medicine I

## **PMEDG 1675: Pediatric Orthopedics**

Pediatric Orthopedics is designed to provide the podiatric medical student with a comprehensive understanding of the diagnosis and treatment of normal and abnormal pediatric lower extremity conditions and pediatric gait patterns. This course includes lectures on child development, normal pediatric growth, ontogeny, common pediatric foot and ankle deformities, pediatric arthritides, congenital abnormalities, pediatric radiographs, and common pediatric gait problems.

**Credits** 3.0

### **Prerequisites**

[ANATG 1517](#), 1527, 1537 Anatomical Sciences I, II, III; [PMEDG 1521](#) Biomechanics of Lower Extremity Function I

## **PMEDG 1678: Behavioral Medicine**

This course is designed to introduce the podiatry student to behavioral medicine and important interrelationships between the mind, emotions, and physical health that they will encounter in daily practice. Emphasis is placed on the student's role as an advocate and in referral management, development of skills in both understanding the patient and facilitating effective treatment in diverse patient presentations. Clinical cases, in-class exercises, and audiovisual presentations will enhance the student's understanding and mastery of the material presented.

**Credits** 1.5

## **PMEDG 1701A: Podiatric Medicine CORE**

The Podiatric Medicine CORE rotation consists of a one month training experience at each of four different locations (A, B, C, D) during the third year. The overall goal of the rotation is to develop skills in documentation, history taking, interpretation of diagnostic tests and physical examination techniques. Students will be exposed to a wide variety of patients of all ages and differing pathologies.

**Credits** 4.0

## **PMEDG 1701B: Podiatric Medicine CORE**

The Podiatric Medicine CORE rotation consists of a one month training experience at each of four different locations (A, B, C, D) during the third year. The overall goal of the rotation is to develop skills in documentation, history taking, interpretation of diagnostic tests and physical examination techniques. Students will be exposed to a wide variety of patients of all ages and differing pathologies.

**Credits** 4.0

## **PMEDG 1701C: Podiatric Medicine CORE**

The Podiatric Medicine CORE rotation consists of a one month training experience at each of four different locations (A, B, C, D) during the third year. The overall goal of the rotation is to develop skills in documentation, history taking, interpretation of diagnostic tests and physical examination techniques. Students will be exposed to a wide variety of patients of all ages and differing pathologies.

**Credits** 4.0

## **PMEDG 1701D: Podiatric Medicine CORE**

The Podiatric Medicine CORE rotation consists of a one month training experience at each of four different locations (A, B, C, D) during the third year. The overall goal of the rotation is to develop skills in documentation, history taking, interpretation of diagnostic tests and physical examination techniques. Students will be exposed to a wide variety of patients of all ages and differing pathologies.

**Credits** 4.0

## **PMEDG 1702: Radiology**

The Radiology course is a five-week practicum presented by podiatrists, radiologists, orthopedists and sub-specialists in internal medicine. Learning methodologies include extensive laboratory practice in the interpretation of images plus student presentations. The goal of this experience is to familiarize the student with clinical correlations of imaging abnormalities and indications for appropriate consultations. Students will develop a broader understanding of various imaging modalities including plain radiograph, MRI, CT scans, nuclear medicine and diagnostic ultrasound.

**Credits** 2.0

## **PMEDG 1704: Podiatry Office (2 weeks)**

This Podiatric Office rotation is a two-week training experience at the office of an affiliated preceptor during the third year. The overall goal of the experience is for the student to further develop the ability to perform a thorough podiatric history and physical, order and interpret common lab tests, and formulate a reasonable differential diagnosis and treatment plan for common podiatric pathologies. In addition, students will develop an enhanced understanding of practice management and professionalism through observation in a private practice setting.

**Credits** 2.0

## **PMEDG 1705: Podiatric Office (4 weeks)**

This Podiatric Office rotation is a four-week training experience at the office of an affiliated preceptor during the third year. The overall goal of the experience is for the student to further develop the ability to perform a thorough podiatric history and physical, order and interpret common lab tests, and formulate a reasonable differential diagnosis and treatment plan for common podiatric pathologies. In addition, students will develop an enhanced understanding of practice management and professionalism through observation in a private practice setting.

**Credits** 4.0

## **PMEDG 1706: Outpatient Medicine**

The Outpatient Medicine/Medical Subspecialty rotation is a four-week training experience at an outpatient primary care clinic. The overall goal of the experience is for the student to develop fundamental skills in evaluating and managing patients with common, general medical conditions, including history taking, physical examination, ordering and interpreting labs, and the use of imaging. It is expected that the student will enhance their ability to formulate a differential diagnosis and treatment plan appropriate to the medical pathologies encountered.

**Credits** 4.0

## **PMEDG 1716: Orthotic Fabrication (2 weeks)**

The Orthotic Fabrication rotation is a two-week training experience at a prescription foot orthotic laboratory. The overall goal of the experience is for the student to develop fundamental skills with orthosis design, construction and materials. In addition, students will gain an in-depth insight into the indications, construction and use of all types of foot orthoses.

**Credits** 2.0

## **PMEDG 1724: Orientation to the Operating Room & Anesthesia**

This one credit online course will serve as a final step toward residency interview preparation and clinical case presentations, and will nurture an appreciation for comprehensive understanding of podiatric medicine, biomechanics, and surgery. Clinical Correlates uses small group discussion/interaction and student presentations to meet the course objectives. The course will review selected topics previously reviewed in the AZCPM curriculum as they pertain to advanced clinical knowledge and skills.

**Credits** 1.5

### **Prerequisites**

[PMEDG 1512](#) Podiatric Medicine I; [PMEDG 1531](#) Podiatric Surgery

## **PMEDG 1725: Clinical Correlates**

This one credit online course will serve as a final step toward residency interview preparation and clinical case presentations, and will nurture an appreciation for comprehensive understanding of podiatric medicine, biomechanics, and surgery. Clinical Correlates uses small group discussion/interaction and student presentations to meet the course objectives. The course will review selected topics previously reviewed in the AZCPM curriculum as they pertain to advanced clinical knowledge and skills.

**Credits** 1.0

## **PMEDG 1726: ACLS**

In this course, students will be working on their Advanced Cardiovascular Life Support (ACLS) and Basic Life Support (BLS) certifications. The American Heart Association certificates in both areas are required to pass the course.

**Credits** 1.0

### **Prerequisites**

[PMEDG 1512](#) Podiatric Medicine I; [PMEDG 1531](#) Podiatric Surgery; [PMEDG 1641](#) Podiatric Medicine II; [PMEDG 1662](#), 1672, 1732 General Medicine I, II, III; PMEDG 1722 Advanced Pathomechanics

## **PMEDG 1731: Podiatric Surgery III**

This course expands on the principles discussed in both Podiatric Surgery I and II with a focus on rearfoot and reconstructive surgical principles. The emphasis will include the entire treatment course from early detection and diagnosis to conservative and surgical management. The topics of discussion include conditions such as heel pain, flat feet, cavus foot, subtalar and ankle joint arthrosis, arthroscopy of the foot and ankle, total ankle arthroplasty, and the use of external fixation.

**Credits** 5.0

### **Prerequisites**

[PMEDG 1531](#) Podiatric Surgery I; [PMEDG 1631](#) Podiatric Surgery II; [PMEDG 1512](#), 1641 Podiatric Medicine I, II; [PMEDG 1521](#), 1651 Biomechanics of Lower Extremity Function I, II; [PMEDG 1531](#) Introduction to Podiatric Surgery; [PMEDG 1643](#) Advanced Lower Extremity Anatomy; [PMEDG 1644](#) Medical Imaging; PMEDG 1663 Podiatric Pathomechanics I

## **PMEDG 1732: General Medicine III**

General Medicine III includes endocrinology and neurology. Students study endocrine and nervous system diseases through the integration of the basic and clinical sciences. Case-based approaches are used in addition to didactic instruction.

**Credits** 3.0

### **Prerequisites**

[PMEDG 1662](#), 1672 General Medicine I, II

## **PMEDG 1733A: Clerkship**

Each clerkship consists of a 4-week training experience at a hospital-based podiatry clinic associated with a residency. The overall goal of the experience is for the student to improve the skills of evaluation and management of patients with podiatric medical, biomechanical, and surgical disorders. In addition, students will enhance skills in documentation, history taking, interpretation of diagnostic tests and physical examination techniques.

**Credits** 4.0

## **PMEDG 1733B: Clerkship**

Each clerkship consists of a 4-week training experience at a hospital-based podiatry clinic associated with a residency. The overall goal of the experience is for the student to improve the skills of evaluation and management of patients with podiatric medical, biomechanical, and surgical disorders. In addition, students will enhance skills in documentation, history taking, interpretation of diagnostic tests and physical examination techniques.

**Credits** 4.0

## **PMEDG 1734: Practice Management**

Students will have the opportunity to build upon their experiences and mentorship by learning the "how and why" of podiatric practice management and the relationship with quality patient care and a gratifying professional and personal life. Students will practice interviewing for an associateship and will learn the principles of personal finance. Students will gain an understanding of how healthcare is financed in the U.S.

**Credits** 2.0

## **PMEDG 1740: International (2 weeks)**

The International rotation is a two-week training experience that may include both inpatient and outpatient settings and often takes place as a medical mission to underdeveloped nations. The overall goal of the experience is for the student to expand his or her awareness of public health needs and improve cultural competence while learning to provide medical care without all of the technological capacities typically available in the United States. Requires the approval of the University President and AZCPM Dean.

**Credits** 2.0

## **PMEDG 1741: Podiatric Dermatology**

Students learn to recognize, diagnose, and manage cutaneous disorders that commonly manifest in the lower extremities. Case-based instruction is employed.

**Credits** 2.5

### **Prerequisites**

[MICRG 1616](#), 1626, Microbiology I & II; [PMEDG 1512](#), 1641 Podiatric Medicine I, II

## **PMEDG 1751: Applied Clinical Biomechanics**

This course will serve as a final step toward clinical practice and will nurture an appreciation for comprehensive understanding of lower extremity biomechanics. The course will cover currently accepted concepts as well as introduce new theories under investigation in the field of podiatric biomechanics. This course will illustrate the power and dynamic nature of biomechanics within clinical podiatric practice.

**Credits** 2.0

### **Prerequisites**

[PMEDG 1521](#), 1651 Biomechanics of Lower Extremity Function I, II; [PMEDG 1643](#) Advanced Lower Extremity Anatomy; PMEG 1663 Podiatric Pathomechanics I

## **PMEDG 1773: Sports Medicine and Rehabilitation**

This course introduces the student to the evaluation, diagnosis and management of athletic injuries. This course will also present various physical therapy evaluative techniques and modalities used in the rehabilitation of athletic injuries. The clinical skills component will include exam techniques for specific athletic injuries, application and use of immobilizing devices, physical therapy modalities, and assessment of running shoes and proper bike fit.

**Credits** 3.0

### **Prerequisites**

[PMEDG 1512](#), 1641 Podiatric Medicine I, II; [PMEDG 1521](#), 1651 Biomechanics of Lower Extremity Function I, II; [PMEDG 1643](#) Advanced Lower Extremity Anatomy; [PMEDG 1644](#) Medical Imaging

## **PMEDG 1774: General Orthopedics and Disorders of Bone**

This course is designed to introduce the student to many of the conditions that afflict the bone. Topics will include osseous tumors and an extensive review of the rheumatologic conditions that can manifest in the lower extremity. In preparation for orthopedic and trauma rotations, conditions that affect the spine, hip, knee and upper extremity are also reviewed. The clinical skills component is designed to demonstrate to the student the classic radiographic findings seen with the more commonly encountered bone tumors.

**Credits** 2.5

### **Prerequisites**

[PMEDG 1512](#), 1641 Podiatric Medicine I, II; [PMEDG 1521](#), 1651 Biomechanics of Lower Extremity Function I, II; [PMEDG 1643](#) Advanced Lower Extremity Anatomy; [PMEDG 1644](#) Medical Imaging

## **PMEDG 1801A: Podiatric Medicine CORE**

The Podiatric Medicine CORE rotations consist of two 1-month training experiences in podiatric medicine, biomechanics and surgery. In collaboration with the Office of Clinical Education, students play a role in selecting the location of this rotation. The training experiences take place at established student training programs in association with residencies nationwide. The goal is to enhance skills of diagnosis and management of podiatric patients. Students will improve skills in documentation, history taking, interpretation of diagnostic tests and physical examination techniques.

**Credits** 4.0

## **PMEDG 1801B: Podiatric Medicine CORE**

The Podiatric Medicine CORE rotations consist of two 1-month training experiences in podiatric medicine, biomechanics and surgery. In collaboration with the Office of Clinical Education, students play a role in selecting the location of this rotation. The training experiences take place at established student training programs in association with residencies nationwide. The goal is to enhance skills of diagnosis and management of podiatric patients. Students will improve skills in documentation, history taking, interpretation of diagnostic tests and physical examination techniques.

**Credits** 4.0

## **PMEDG 1803: General Surgery Rotation**

The Surgery rotation is a four-week training experience on a surgical service, i.e., orthopedics, vascular, general or plastics. The overall goal of the experience is for the student to develop fundamental skills in evaluating and managing patients with non-podiatric pathologies that warrant surgical intervention. Students will utilize diagnostic and treatment modalities throughout the peri-operative period.

**Credits** 4.0

## **PMEDG 1804: Inpatient Medicine**

The Inpatient Medicine rotation is a four-week training experience on an inpatient service. The overall goal of the experience is for the student to develop fundamental skills in evaluating and managing patients with general medical pathologies that require inpatient management. Participating with other medical students and residents on the house staff, students will assist in the management of various serious medical conditions.

**Credits** 4.0

## **PMEDG 1805A: Clinical Clerkship**

The rotation consists of six 4-week training experiences at affiliated student/residency training programs involving both an ambulatory and a hospital based component. The overall goal of the experience is for the student to improve the skills of evaluation and management of patients with podiatric medical, biomechanical, and surgical disorders. In addition, students will enhance skills in documentation, history taking, interpretation of diagnostic tests and physical examination techniques.

**Credits** 4.0

## **PMEDG 1805B: Clinical Clerkship**

The rotation consists of six 4-week training experiences at affiliated student/residency training programs involving both an ambulatory and a hospital based component. The overall goal of the experience is for the student to improve the skills of evaluation and management of patients with podiatric medical, biomechanical, and surgical disorders. In addition, students will enhance skills in documentation, history taking, interpretation of diagnostic tests and physical examination techniques.

**Credits** 4.0

## **PMEDG 1805C: Clinical Clerkship**

The rotation consists of six 4-week training experiences at affiliated student/residency training programs involving both an ambulatory and a hospital based component. The overall goal of the experience is for the student to improve the skills of evaluation and management of patients with podiatric medical, biomechanical, and surgical disorders. In addition, students will enhance skills in documentation, history taking, interpretation of diagnostic tests and physical examination techniques.

**Credits** 4.0

## **PMEDG 1805D: Clinical Clerkship**

The rotation consists of six 4-week training experiences at affiliated student/residency training programs involving both an ambulatory and a hospital based component. The overall goal of the experience is for the student to improve the skills of evaluation and management of patients with podiatric medical, biomechanical, and surgical disorders. In addition, students will enhance skills in documentation, history taking, interpretation of diagnostic tests and physical examination techniques.

**Credits** 4.0

## **PMEDG 1805E: Clinical Clerkship**

The rotation consists of six 4-week training experiences at affiliated student/residency training programs involving both an ambulatory and a hospital based component. The overall goal of the experience is for the student to improve the skills of evaluation and management of patients with podiatric medical, biomechanical, and surgical disorders. In addition, students will enhance skills in documentation, history taking, interpretation of diagnostic tests and physical examination techniques.

**Credits** 4.0

## **PMEDG 1805F: Clinical Clerkship**

The rotation consists of six 4-week training experiences at affiliated student/residency training programs involving both an ambulatory and a hospital based component. The overall goal of the experience is for the student to improve the skills of evaluation and management of patients with podiatric medical, biomechanical, and surgical disorders. In addition, students will enhance skills in documentation, history taking, interpretation of diagnostic tests and physical examination techniques.

**Credits** 4.0

## **PMEDG 1805G : Clinical Clerkship**

The rotation consists of six 4-week training experiences at affiliated student/residency training programs involving both an ambulatory and a hospital based component. The overall goal of the experience is for the student to improve the skills of evaluation and management of patients with podiatric medical, biomechanical, and surgical disorders. In addition, students will enhance skills in documentation, history taking, interpretation of diagnostic tests and physical examination techniques.

**Credits** 4.0

## **PMEDG 1808: Optional Rotation (4 weeks)**

Students are provided a month during the fourth year that may be utilized as a vacation month, a month to remediate a prior rotation, or that may be filled with a four-week Optional Rotation selected from available fourth year clerkships or third year elective rotations. See the course description for Clinical Clerkship or the specific elective rotations of interest.

**Credits** 4.0