

Master of Science in Precision Medicine Curriculum (For Students Entering Summer 2023 and Later)

Degree Type

Master of Science (M.S.)

Year 1

Summer Quarter

Course Code	Title	Credits
PMSG 501	Introduction to Genetics and Genomics	2.0
PMSG 502	Genomics of Rare and Complex Diseases	3.0
PMSG 503	Introduction to Bioinformatics, Statistics, and Data Interpretation	3.0
Sub-Total Credits		8

Fall Quarter

Course Code	Title	Credits
	Precision Medicine Elective	1
Sub-Total Credits		1

Winter Quarter

Course Code	Title	Credits
	Precision Medicine Elective	1
Sub-Total Credits		1

Spring Quarter

Course Code	Title	Credits
PMSG 504	'Omics and Biomarkers	3.0
Sub-Total Credits		3

Year 2

Summer Quarter

Course Code	Title	Credits
PMSG 601	The Application of Precision Medicine to Cancer	3.0
PMSG 602	Pharmacogenomics	2.0
PMSG 603	Microbial Genetics, the Microbiome, and Infectious Diseases	3.0
PMSG 604	Ethical, Legal, and Social Issues of Precision Medicine	1.0
PMSG 605	Counseling and Communication Skills for Precision Medicine	1.0
Sub-Total Credits		10

Fall Quarter

Course Code	Title	Credits
PMSG 606	Introduction to Personal Genomic Analysis, Genomics Laboratory, Part 1	1.0
Sub-Total Credits		1

Winter and Spring Quarters

Course Code	Title	Credits
PMSG 607	Capstone Project, Genomics Laboratory Part 2	2.0
Sub-Total Credits		2

Winter or Spring Quarter

Course Code	Title	Credits
	Precision Medicine Elective	1
Sub-Total Credits		1

Electives - Students complete four elective courses. Not all electives may be offered in every academic quarter.

Course Code	Title	Credits
PMMSG 801	Application of Precision Medicine to Inflammatory and Autoimmune Disease	1.0
PMMSG 802	The Application of Precision Medicine to Neurological Diseases	1.0
PMMSG 803	Application of Precision Medicine to Cardiovascular Diseases	1.0
PMMSG 804	Advanced Topics in Pharmacogenomics	1.0
PMMSG 805	A One Health Approach to Genomics and Precision Medicine	1.0
PMMSG 806	Epigenomics and Functional Genomics in Health and Disease	1.0
PMMSG 807	Genetic Technologies for the Treatment of Disease	1.0
PMMSG 808	Precision Medicine Journal Club	1.0
PMMSG 809	Understanding and Interpreting Direct-to-Consumer Genetic Testing	1.0
Sub-Total Credits		9
Total Credits		46