

Microbiology and Immunology Requirements 2016-17

Course requirements† (Quarter Offered)	Subject/Course Number	Course Title	Units
Autumn	BIOS 200	Foundations in Experimental Biology	5 units
	MI 210	Adv. Pathogenesis of Bacteria, Viruses, and Eukaryotic Parasites	4 units
	MI 399	Graduate Research	1 units
Winter	BIO 214/ BIOC 224/ MCP 221	Advanced Cell Biology	4 units
	MED 255	The Responsible Conduct of Research	1 unit
	MI/IMMUNOL 211	Advanced Immunology	3 units
	MI 250*	Frontiers in Microbiology & Immunology	1 unit
	MI 399	Graduate Research	1 unit
Spring	MI 215	Principles of Biological Technologies	3 units
	MI 399	Graduate Research	4 units

† In addition to the courses listed, students are required to complete an elective course. Please see list of approved electives.
*Register for MI 250 (Journal Club) once in first year and once in second year, for a total of 2 units.

Students register for MI 399 Graduate Research as needed to maintain enrollment in 10 units each quarter, including Summer, until they complete a minimum of 135 units and are eligible for TGR status.

Other requirements

- 1st year
 - M&I Noon Seminar and speaker luncheon attendance
 - M&I Journal Club (MI 250) participation Aut, Wtr and Spr quarters
 - Two to four laboratory rotations (commitment to join a lab is made after Apr. 1st)
 - Faculty research seminars (Thursday evening Autumn quarter)
 - Short summaries of three possible qualifying exam topics due Aug. 1st
 - 10-page double-spaced qualifying exam research proposal due Sept. 1st
- 2nd year
 - Qualifying exam to be completed by Nov. 1st
 - Application for Candidacy for Advanced Degrees due by the end of Aut. quarter
 - Doctoral Dissertation Reading Committee Form due by the end of Aut. quarter
 - M&I Noon Seminar and speaker luncheon attendance
 - M&I Journal Club (MI 250) participation Aut., Wtr., Spr. quarters
 - 10-page double-spaced thesis research proposal due May 1st
 - Oral defense of research proposal to be completed by the end of Spr. Quarter
- 3rd year
 - University Teaching Assistant orientation and training
 - Two courses Teaching Assistantship
 - Seminar attendance
 - Annual thesis committee meeting
 - Poster presentation at Department Retreat and chair sessions
- 4th, etc.
 - Semi-annual thesis committee meeting
 - Seminar attendance
 - Oral presentation at Department Retreat
 - One additional oral presentation (Friday Noon Seminar Series, CMB Symposium, National or International Meeting or Department Retreat)

List of Approved Electives

Prior approval from the student's adviser and department Graduate Program Director is required to use a course not from the elective list.

Quarter Offered	Subject/Course Number	Course Title	Units
Autumn	STAT 141/BIO 141	Biostatistics	3-5 units
Winter	CSB 210	Cell Signaling	4 units
	GENE 205	Advanced Genetics	3 units
	GENE 211	Genomics	3 units
Spring	BIOC/BIOPHYS/SBIO 241	Biological Macromolecules	3-5 units
	DBIO 210	Developmental Biology	4 units
	IMMUNOL/MCP 202	Advanced Immunology II	3 units
	CSB 220	Chemistry of Biological Processes	3 units
	MCP 256	How Cells Work: Energetics, Compartments and Coupling in Cell Biology	4 units
	MI 221/BIOE 221G	Gut Microbiota in Health and Disease	2-3 units
Summer	GENE/PATH/MI 218	Computational Analysis of Biological Information: Introduction to Python for Biologists	2 units
Not Offered in 2016-17	BIOE 115/MI 245	Computational Modeling of Microbial Communities	4 units