

Department of Microbiology

Franklin College of Arts and Sciences

UNIVERSITY OF GEORGIA

PhD Microbiology Program Degree Requirements*

You will need to take a minimum of 20 hours of content courses at the 8000 level (in addition to Doctoral Research and Dissertation courses; 9000 and 9300).

Requirements	Description	Comments
MIBO 8120	Foundations of Microbiology	5 credits
MIBO 8150	Seminar in Diversity of Microbial Research	1 credit, repeated
MIBO 8170	Seminar in Prokaryotic Diversity	1 credit, repeated
*MIBO 8620	Introduction to Proposal Writing (*optional)	1 credit each
MIBO 8630	Quantitative Macromolecule Analysis	Modular: each section meets for 1/3 of the
MIBO 8640	Statistics (or other full-length statistics course)	semester
MIBO 9000	Doctoral Research	
GRSC 7770	Seminar in Graduate Teaching ¹	Dr. Walker
Electives	Approved courses with scientific content ²	5 credits
Teaching Requirement	2 semesters of teaching are required ³	
Publication Requirement	Publish at least one peer-reviewed research manuscript as first or co-first author prior to defending thesis.	
MIBO 9300	Doctoral Dissertation (taken in final semester)	3 credits
GRSC7770 is not an official program requirement but is required to teach at UGA		
For doctoral students without Master of Sciences degrees, the program of study must contain at least 5 credit hours of courses in addition to MIBO8600 and MIBO8120 whose primary purpose is to provide scientific content. Courses related to policy (for example GRSC prefixes), seminar courses (for example MIBO8160, MIBO8170), or independent research (MIBO8900, GRSC8000) do not fulfill this requirement. Eligible courses to fulfill this requirement include but are not limited to: MIBO6030, MIBO6090, MIBO6100, MIBO6120, MIBO6220, MIBO6220S, MIBO6300, MIBO6310, MIBO6320, MIBO6450, MIBO6500, MIBO6600L, MIBO6610, MIBO6620, MIBO6650, MIBO6650, MIBO6650, MIBO6690, MIBO6700, MIBO6710L, MIBO8110L, MIBO8200, MIBO8260, MIBO8270L, MIBO8520, MIBO8700, MIBO8960, and MIBO8980. Other courses can be used to fulfill this requirement with the permission of the dissertation advisor, doctoral committee and graduate coordinator.		
One semester of <u>required teaching</u> may be waived if the student completes an approved professional development experience (expected to be equivalent in time/effort to a semester of teaching).		



"Track System for Timing of MIBO8120"

Changes to the "Typical Program of Study": After gathering feedback from current graduate students, the faculty has voted to adopt an informal "track system" for new microbiology graduate students.

While MIBO8120 Foundations of Microbiology remains a fundamental course to be taken by all of our graduate students, we are altering our recommendation of when to take this course according to the following track system.

Prior to enrolling, you should discuss with your new PI which of these options best fits your background and planned research program. MIBO 8120 conflicts with required coursework for the Genetics T32 program, if you are planning to apply for this program you may want to consider taking MIBO8120 in Spring Year 1.

Bacteriology track A: For students entering labs with projects focused on prokaryotic biology without an existing microbiology BS or MS.

- Take MIBO6090 Prokaryotic Biology in Spring Year 1
- MIBO8120 in Spring Year 2

Bacteriology track B: For students with existing microbiology BS or MS.

- Take MIBO8120 in Spring Year 1
- Consider other electives to take in Spring Year 2 to fulfill our graduate-level elective requirement.

Eukaryotic Microbiology track:

- Take MIBO8960 Fungal Genetics in Spring Year 1
- MIBO8120 in Spring Year 2

^{**} Note that MIBO6090 can be counted towards the 5-credit elective requirement.

^{**}Note that MIBO8960 can count towards the graduate level elective requirement.

Typical Program of Study for PhD Microbiology:

FIRST YEAR

*Select Advisory Committee by end of summer

Fall:

- 1. GRSC8000 (PhD Lab Rotations) (variable credits)
- 2. GRSC8010 (Professional Development) (1 credits)
- 3. GRSC8020 (Primary Literature Skills) (2 credits)
- 4. GRSC8550 (Responsible Conduct of Research) (1 credit)
- 5. Electives: GRSC8200 (Communicating Research and Scholarship) (1 credit)

Total of 18 Credits

Spring:

- 1. MIBO6010 Critical Review of Research in Microbiology, Lab Meeting (2 credits)
- 2. MIBO8120 Foundations of Microbiology (5 credits)
- 3. MIBO8150 (1 credit, repeated 7x)
- 4. MIBO8170 Student Seminar (1 credit, repeated 7 x)
- 5. MIBO9000 PhD Research (Variable credits)
- 6. GRSC7770 Graduate Teaching & Career Development (1 credit)
- 7. Possible Elective

Total of 18 Credits

Summer:

1. MIBO9000 PhD Research (Variable credits)

Total of 15 Credits

SECOND YEAR

*Have <u>research proposal</u> approved by committee before the end of the Fall semester.

*Complete <u>Written Exam</u> by midterm of Spring and pass oral defense of it before last day of class, Fall semester year 3.

Fall:

- 1. MIBO6010 Critical Review of Research in Microbiology, Lab Meeting (2 credits)
- 2. MIBO8150 (1 credit, repeated 7x)
- 3. MIBO8170 Student Seminar (1 credit, repeated 7 x)
- 4. 3 Part Module Below (each module is 1 credit and meets for 1/3 of semester)
 - MIBO8620 Introduction to Proposal Writing (optional)
 - MIBO8630 Quantitative Macromolecule Analysis
 - MIBO8640 Statistics (or other full-length statistics course)
- 5. MIBO9000 PhD Research (variable credits)
- 6. Possible Elective

Total of 18 Credits

Spring

- 1. MIBO6010 Critical Review of Research in Microbiology, Lab Meeting (2 credits)
- 2. MIBO8150 (1 credit, repeated 7x)
- 3. MIBO8170 Student Seminar (1 credit, repeated 7 x)
- 4. MIBO9000 PhD Research (variable credits)
- 5. Possible Elective

Total of 18 Credits

Summer:

1. MIBO9000 PhD Research (variable credits)

Total of 15 Credits

THIRD YEAR AND BEYOND

- *Pass Oral Exam by first day of finals, Fall Year 3
- *Have <u>annual committee meeting</u> with your research committee (beginning one year after achieving candidacy)
- *Serve as <u>Teaching Assistant</u> for two semesters
- 1. MIBO6010 Critical Review of Research in Microbiology, Lab Meeting (2 credits)
- 2. MIBO8150 (1 credit, repeated 7x)
- 3. MIBO8170 Student Seminar (1 credit, repeated 7x)
- 4. Electives (as necessary, many students will have no more electives at this point)
- 5. MIBO9000 PhD Research (variable credits)

Total of 18 hours

SEMESTER OF GRADUATION

- 1. MIBO9000 PhD Research (variable credits)
- 2. MIBO9300 PhD dissertation preparation (3 credits, taken in semester of graduation)

Total of 18 hours (15 if in Summer)