



College of Agricultural and Life Sciences
Department of Microbiology and Cell Science

Please read the requirements below that you must follow to graduate. If you have questions about admission, course planning, or registration contact your academic advisor at mcs-clm@ifas.ufl.edu.

Graduation Requirements

- Students must take at least three credits in the final fall/spring (two credits in summer) semester to graduate.
- Thirty-six credits are required to complete both MS degree (Microbiome/Host Interactions Track) and CLM certificate. Thirty-nine credits are required to complete both MS degree (Microbiome Quantitative track) and CLM certificate.
- Only courses completed with a grade of C or higher can be counted towards the degree.
- Students must maintain both a 3.0 overall GPA and 3.0 major GPA to graduate.
 - A lower GPA will result in academic probation and possible dismissal from the program
- Fifteen credits must be completed in major courses with a MCB, PCB, or BSC prefix.
- Satisfactorily complete MCB 6900 Final Assessment - Literature Review in the last semester of coursework to fulfill the final exam requirement:
<http://microbiologyonline.ifas.ufl.edu/student-resources/graduation-info/>

Required courses

- Students are required to complete the thirteen courses listed below (31 credits):

Course	Course title	Credits	Fall	Spring	Summer
MCB6670C	The Microbiome (Pre-Req: microbiology course)	3		✓	Sum C**
MCB6424	Probiotics (Pre-Req: microbiology course)	3		✓	
MCB5505	Virology (Pre-Req: microbiology course)	3	✓	✓	Sum C**
BSC6895C	AI in Agriculture and Life Sciences (Pre-Req: microbiology course)	3	✓		
MCB6900	Final Assessment - Literature Review (must be taken in final semester)	1	✓	✓	Sum C**
MCB5252	Microbiology, Immunology & Basis for Immuno-Therapeutics (pre-req: microbiology course)	4		✓	Sum A*

PCB5235	Immunology (pre-req: microbiology course)	3		✓	
MCB5270	AMR (pre-req: microbiology course)	3	✓	✓	
MCB5666	Clinical research, quality control	1	✓	✓	
MCB5256	Clinical Mycology, Virology and Parasitology (pre-req: microbiology course)	3	✓	✓	
MCB5942L	Clinical Microbiology Lab (pre-req: microbiology lab course)	2	✓		Sum A*
MCB5945L	Clinical Experience in Microbiology (pre-req: MCB5942L)	2	✓		Sum B*

- Students are required to complete two of the courses listed below (two credits):

Course	Course title	Credits	Fall	Spring	Summer
MCB6937	Regulatory Aspects of Microbiome Research (Pre-Req: MCB6424 or MCB4422)	1	✓		Sum C**
MCB7922	Journal Colloquy: Mechanisms of Host/Microbial Interactions (Pre-Req: none)	1	✓	✓	
MCB7922	Journal Colloquy: Virome/Host Interactions (Pre-Req: none)	1	✓	✓	
MCB7922	Journal Colloquy: Microbiome-based Clinical Trials (Pre-Req: none)	1			Sum C**

Replacement courses

Students are required to take one of the following elective courses **IF** they have already taken MCB4271.

Course	Course title	Credits	Fall	Spring	Summer
MCB6796	Analysis, interpretation and visualization of microbiological data (pre-req: microbiology course)	3		✓	
MCB6656	Environmental microbiology (pre-req: microbiology course)	3		✓	

Students are required to take the following courses **IF** they have already taken PCB4233 or PCB5235.

Course	Course title	Credits	Fall	Spring	Summer
MCB5215	Clinical Immunology (pre-req: microbiology course)	1	✓	✓	

Choose a Track

Students are required to choose one of two available tracks:

1. Microbiome/Host Interactions Track (6 credits)
2. Microbiome Quantitative Track (6 credits)

1. Microbiome/Host Interactions Track (6 credits):

- Students are required to complete the course listed below (three credits):
 - This will be met through the CLM required courses

Course	Course Title	Credits	Fall	Spring	Summer
PCB5235	Immunology (Pre-Req: microbiology course)	3		✓	

- Students are required to complete one of the courses listed below (three credits):

Course	Course Title	Credits	Fall	Spring	Summer
MCB5205	Microbiology of Human Pathogens (Pre-Req: microbiology course)	3	✓	✓	
MCB6151	Prokaryotic Diversity (Pre-Req: microbiology course)	3			Sum C**
MCB6407	Prokaryotic Cell (Pre-Req: courses in microbiology and biochemistry)	3	✓		

2. Microbiome Quantitative Track (6 credits):

- Students are required to complete two of the courses listed below (five or six credits):

Course	Course Title	Credits	Fall	Spring	Summer
MCB6796	Microbiological Data Analysis (Pre-Req: microbiology course)	3	✓		
MCB6326	Computational Genomics and Epigenomics (Pre-Req: microbiology course)	3		✓	
BSC6459	Fundamentals in Bioinformatics (Pre-Req: molecular biology and biochemistry course)	3	✓		
MCB6318	Comparative Microbial Genomics (module) (Pre-Req: grade of A- in BSC6459)	2		✓	

If MCB6318 is selected in the section above, take one of the courses listed below (one credit):

Course	Course Title	Credits	Fall	Spring	Summer
MCB6937	Regulatory Aspects of Microbiome-Based Therapies (Pre-Req: MCB6424 or MCB4422)	1	✓		Sum C**
MCB7922	Journal Colloquy: Mechanisms of Host/Microbial Interactions (Pre-Req: none)	1	✓	✓	
MCB7922	Journal Colloquy: Virome/Host Interactions (Pre-Req: none)	1	✓	✓	
MCB7922	Journal Colloquy: Microbiome Therapeutics/Clinical Trials (Pre-Req: none)	1			Sum C**

Introductory Course Track

These 2 courses are required in addition to the standard 18 credits for students who are lacking a foundation in biochemistry, microbiology and microbiology laboratory. It will be noted in your admission email if you are required to take either of these courses.

Course	Course title	Credits	Fall	Spring	Summer
MCB5305L	Microbiology lab	2			Sum A*
MCB6937	Biology of Microorganisms	3	✓	✓	Sum A*
BCH 5404	Fundamentals of Biochemistry and Molecular Biology	4	✓	✓	Sum C**

* Sum A refers to the first six-week summer session, mid-May through late June

** Sum C refers to the 12-week summer session, mid-May through early August

***Sum B refers to the second six-week summer session, early July through early August