



Bachelor of Science in Biomedical Sciences

Molecular Microbiology Track

Catalog Years Prior to Summer 2019

I. University Requirements

- UCF General Education Program**
- 120 Total Credit Hours**
- 48 Upper Level Credit Hours**

**Refer to your degree audit to ensure all University requirements are Satisfied*

II. Major Requirements

- Students must maintain a 3.2 Science GPA to graduate with this degree.**

A. Core Curriculum

Life Sciences

<input type="checkbox"/> BSC 2010C	Biology I	4 hrs
<input type="checkbox"/> PCB 3233 -OR- PCB 4280	Immunology <u>or</u> Molecular Immunology	3 hrs
<input type="checkbox"/> PCB 3233L	Immunology Lab	1 hr
<input type="checkbox"/> MCB 3020C	General Microbiology	5 hrs
<input type="checkbox"/> BSC 3403C	Quantitative Biological Methods	4 hrs
<input type="checkbox"/> PCB 3522	Molecular Biology I	3 hrs
<input type="checkbox"/> PCB 4524	Molecular Biology II	3 hrs
<input type="checkbox"/> MCB 4201	Microbial Stress Response	3 hrs
<input type="checkbox"/> MCB 4204	Cellular Microbiology: Host-Pathogen Interactions	3 hrs
<input type="checkbox"/> MCB 4404	Bacterial Genetics and Physiology	3 hrs
<input type="checkbox"/> MCB 4414	Microbial Metabolism	3 hrs

Chemistry

<input type="checkbox"/> CHM 2045C*	Chemistry Fundamentals I	4 hrs
	*Prerequisites: Passing Score on Chemistry Placement Exam or CHM 1025	
<input type="checkbox"/> CHM 2046	Chemistry Fundamentals II	3 hrs
<input type="checkbox"/> CHM 2046L	Chemistry Fundamentals Lab	1 hr
<input type="checkbox"/> CHM 2210	Organic Chemistry I	3 hrs
<input type="checkbox"/> CHM 2211	Organic Chemistry II	3 hrs
<input type="checkbox"/> CHM 2211L	Organic Laboratory Techniques I	2 hrs
<input type="checkbox"/> BCH 4053 -OR- BCH 4024	Biochemistry I <u>or</u> Medical Biochemistry	3 hrs/4 hrs

Math

<input type="checkbox"/> MAC 2311C	Calculus with Analytic Geometry I*	4 hrs
	*Prerequisites: MAT 1033C, MAC 1105C, MAC 1114C, MAC 1140C	
<input type="checkbox"/> STA 2023	Statistical Methods I	3 hrs

Physics

Select One Sequence:

<input type="checkbox"/> PHY 2053C (<u>or</u> PHY 2053+2053L)	College Physics I	4 hrs
<input type="checkbox"/> PHY 2054C (<u>or</u> PHY 2054+2054L)	College Physics II	4 hrs
-OR-		
<input type="checkbox"/> PHY 2048C (<u>or</u> PHY 2048+2048L)	General Physics Using Calculus I	4 hrs
<input type="checkbox"/> PHY 2049C (<u>or</u> PHY 2049+2049L)	General Physics Using Calculus II	4 hrs

B. Restricted Electives

Must take at least **3 restricted elective courses** (at least 2 must have a lab component and only 1 can be chosen from the full list of Biomedical Sciences Restricted Electives).

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| <input type="checkbox"/> BOT 4434C General Mycology | <input type="checkbox"/> MCB 4503 Virology |
| <input type="checkbox"/> MCB 3202 Principles of Infectious Disease | <input type="checkbox"/> MCB 4603 Environmental Microbiology |
| <input type="checkbox"/> MCB 3203/L Pathogenic Microbiology + Lab | <input type="checkbox"/> MCB 4721C Methods in Biotechnology |
| <input type="checkbox"/> MCB 4207 Infectious Processes | <input type="checkbox"/> PCB 4028 Molecular and Cellular Pharmacology |
| <input type="checkbox"/> MCB 4276 Epidem of Infectious Diseases | <input type="checkbox"/> PCB 4284 Immunobiology |

Note: Participating in AIM, GEAR, HIM (with approval), PILOT, or PURE will substitute for one lab restricted elective.