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

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

Math
- MAC 2311C   Calculus with Analytic Geometry I* 4 hrs
*Prerequisites: MAT 1033C, MAC 1105C, MAC 1114C, MAC 1140C
- STA 2023   Statistical Methods I 3 hrs

Physics
Select One Sequence:
- PHY 2053C (or PHY 2053+2053L)   College Physics I 4 hrs
- PHY 2054C (or PHY 2054+2054L)   College Physics II 4 hrs
- PHY 2048C (or PHY 2048+2048L)   General Physics Using Calculus I 4 hrs
- PHY 2049C (or 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).
- BOT 4434C General Mycology
- MCB 3202 Principles of Infectious Disease
- MCB 3203/L Pathogenic Microbiology + Lab
- MCB 4207 Infectious Processes
- MCB 4276 Epidemic of Infectious Diseases
- MCB 4503 Virology
- MCB 4603 Environmental Microbiology
- MCB 4721C Methods in Biotechnology
- PCB 4028 Molecular and Cellular Pharmacology
- PCB 4284 Immunobiology

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