Bachelor of Science in Biomedical Sciences
Molecular and Cellular Biology 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
- PCB 4028  Molecular and Cellular Pharmacology  3 hrs
- PCB 4234  Cancer Biology  3 hrs
- PCB 4529C  Experimental Molecular Cell Biology  4 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
  *-OR-
- 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 1 must have a lab component and only 1 can be chosen from the full list of Biomedical Sciences restricted electives).
- BSC 4434 Bio Informatics: Seq Analysis  PCB 4284 Immunobiology
- MCB 4224 Molecular Biology of Diseases  PCB 4521 Tissue Engineering
- MCB 4721C Methods in Biotechnology  PCB 4663 Human Genetics
- PCB 3703C Human Physiology  PCB 4813 Molecular Aspects of Obesity
- PCB 4174 Foundation Bio-Imaging Science  PCB 5275 Signal Transduction Mechanics
- PCB 4264 Stem Cell Biology  ZOO 3744 Neurobiology

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