



## 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

<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"/> PCB 4028	Molecular and Cellular Pharmacology	3 hrs
<input type="checkbox"/> PCB 4234	Cancer Biology	3 hrs
<input type="checkbox"/> PCB 4529C	Experimental Molecular Cell Biology	4 hrs

##### Chemistry

<input type="checkbox"/> CHM 2045C*	Chemistry Fundamentals I	4 hrs
	<i>*Prerequisites: Passing Score on Chemistry Placement Exam or CHM 1025</i>	
<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
	<i>*Prerequisites: MAT 1033C, MAC 1105C, MAC 1114C, MAC 1140C</i>	
<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
<b>-OR-</b>		
<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 1 must have a lab component and only 1 can be chosen from the full list of Biomedical Sciences restricted electives).

<input type="checkbox"/> BSC 4434 Bio Informatics: Seq Analysis	<input type="checkbox"/> PCB 4284 Immunobiology
<input type="checkbox"/> MCB 4224 Molecular Biology of Diseases	<input type="checkbox"/> PCB 4521 Tissue Engineering
<input type="checkbox"/> MCB 4721C Methods in Biotechnology	<input type="checkbox"/> PCB 4663 Human Genetics
<input type="checkbox"/> PCB 3703C Human Physiology	<input type="checkbox"/> PCB 4813 Molecular Aspects of Obesity
<input type="checkbox"/> PCB 4174 Foundation Bio-Imaging Science	<input type="checkbox"/> PCB 5275 Signal Transduction Mechanics
<input type="checkbox"/> PCB 4264 Stem Cell Biology	<input type="checkbox"/> ZOO 3744 Neurobiology

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