



Bachelor of Science in Biomedical Sciences

Pre-Medical Track

Catalog Year 2024-2025

I. University Requirements

- UCF General Education Program
- 120 Total Credit Hours
- 42 Upper-Level Credit Hours

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

II. Pending Requirements

To transition out of "Pending" status, students must earn a "C" or better in these courses or their equivalents:

- | | | |
|------------------------------------|---|-------|
| <input type="checkbox"/> BSC 2010C | Biology I | 4 hrs |
| <input type="checkbox"/> CHM 2045C | Chemistry Fundamentals I* | 4 hrs |
| | <i>*Prerequisites: Appropriate Chemistry Placement Exam score or CHM 1025 & MAC1105</i> | |
| <input type="checkbox"/> CHM 2046 | Chemistry Fundamentals II | 3 hrs |
| <input type="checkbox"/> CHM 2210 | Organic Chemistry I | 3 hrs |

III. Major Requirements

Students must maintain a 3.0 Science GPA to graduate from this degree program.

A. Core Curriculum

- | | | |
|------------------------------------|------------------------------------|-------|
| <input type="checkbox"/> SLS 2311C | Overview of Select Medical Careers | 2 hrs |
|------------------------------------|------------------------------------|-------|

Life Sciences

- | | | |
|--|---|-------|
| <input type="checkbox"/> ZOO 3733C | Human Anatomy | 4 hrs |
| <input type="checkbox"/> PCB 3703C | Human Physiology | 4 hrs |
| <input type="checkbox"/> BSC 2011C | Biology II | 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 |

Chemistry

- | | | |
|--|---|-------------|
| <input type="checkbox"/> CHM 2046L | Chemistry Fundamentals Lab | 1 hr |
| <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 4024 -OR- BCH 4053 | Medical Biochemistry <u>or</u> Biochemistry I | 4 hrs/3 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 |
| -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

Complete **3 restricted electives**. Choose from the list on the back of this form.

	Course	Credit Hours
Restricted Elective #1		
Restricted Elective #2		
Restricted Elective #3		

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



UCF

College of
Medicine**Biomedical Sciences Restricted Electives**** = recommended for pre-professional students**^ = outside of the College of Medicine*

BCH 4054 Biochemistry II* [^]	PCB 4028 Molecular and Cellular Pharmacology*
BSC 3424 Nanobiotechnology	PCB 4135 Applied Molecular Cell Biology
BSC 4434 Biomed Informatics: Sequence Analysis	PCB 4174 Foundation of Bio-Imaging Science
BSC 4439 Biomed Informatics: Structure Analysis	PCB 4234 Cancer Biology*
MCB 3202 Principles of Infectious Disease*	PCB 4264 Stem Cell Biology
MCB 3903 Explorations in Biomed Sci Research	PCB 4280 Molecular Immunology
MCB 3933 Biomedical Sciences Careers	PCB 4284 Immunobiology
MCB 4201 Microbial Stress Response	PCB 4402 Disease Ecology & Ecoimmunology [^]
MCB 4204 Cell Micro: Host-Pathogen Interactions	PCB 4514 Epigenetics* [^]
MCB 4207 Infectious Processes*	PCB 4521 Tissue Engineering
MCB 4224 Molecular Biology of Diseases*	PCB 4663 Human Genetics
MCB 4276 Epidemiology of Infectious Diseases*	PCB 4723 Animal Physiology* [^] (pre-vet)
MCB 4312 Molecular Biotechnology*	PCB 4805 Endocrinology*
MCB 4404 Bacterial Genetics and Physiology	PCB 4808 Physiology of Reproduction
MCB 4414 Physiology & Biochemistry of Microbes*	PCB 4813 Molecular Aspects of Obesity
MCB 4503 Virology*	PCB 4832 Cell and Molec Basis of Brain Functions
MCB 4603 Environmental Microbiology	PCB 4833 Advanced Human Physiology
MLS 3305 Hematology*	PCB 4843 Cellular and Molecular Neuroscience
MLS 4334 Hemostasis*	ZOO 3744 Neurobiology*
MLS 4505 Immunodiagnostics*	ZOO 4513 Animal Behavior* [^] (pre-vet)
MLS 4625 Advanced Clinical Chemistry I	ZOO 4605 Human Clinical Embryology*
MLS 4630 Advanced Clinical Chemistry II	ZOO 4742 Advanced Neurobiology*

Electives with Labs

BCH 4103L Biochemical Methods [^]	PCB 4708L Lab Virtual Simulations in Physiology
BOT 4434C General Mycology	ZOO 3713C Comparative Vertebrate Anat* [^] (pre-vet)
MCB 3203/L Pathogenic Microbiology + Lab*	ZOO 3755C Introductory Histology*
MCB 4114C Microbial Genetics	ZOO 4603C Embryology/Development* [^]
MCB 4721C Methods in Biotechnology	ZOO 4701 Dissection Techniques*
PCB 3063/L Genetics* [^] + Lab	ZOO 4743C Clinical Neuroanatomy & Neuroscience*
PCB 4529C Experimental Molecular Cell Biology	ZOO 4747C Clinical Neuroscience*
PCB 4683/L Evolutionary Biology + Lab [^]	ZOO 4753C Vertebrate Histology*