# Biology-Chemistry Major (Fast Forward)

## Year 1

### Fall
- CHEM-111 General Chemistry I
- (MATH-121 Calculus I)
- BIOL-106 Principles of Biology I
- All necessary labs

### January

### Spring
- CHEM-113 General Chemistry II
- (MATH-122 Calculus II)
- BIOL-108 Principles of Biology II
- All necessary labs

## Year 2

### Fall
- CHEM-311 Organic Chemistry I
- PHYS-111 College Physics I or PHYS-210 General Physics I
- All necessary labs

### January

### Spring
- CHEM-312 Organic Chemistry II
- PHYS-112 College Physics II or PHYS-220 General Physics II
- BIOL-229 Introduction to Molecular Biology
- All necessary labs

## Year 3

### Fall
- CHEM-405 Biochemistry I (Lab)
- (BIOL-313 Microbiology)
- BIOL-364 Comparative Vertebrate Anatomy
- Necessary Labs

### January

### Spring
- BIOL-422 Advanced Human Physiology
- (CHEM-406 Biochemistry II)
- CHEM-235 Analytical Chemistry
- (BIOL-356 Cell Biology)
- All necessary labs

*Take admissions tests in spring or summer.*

## Semester Hours
- 55-58 Biology-Chemistry Major
- 46 Core
- 16-19 Electives
- 120 Required
Biology-Chemistry at Manchester University

**The Biology-Chemistry Major:**
- General Chemistry I and II
- Principles of Biology I and II
- (Calculus I and II)
- College or General Physics I and II
- Organic Chemistry I and II
- Analytical Chemistry
- Introduction to Molecular Biology
- Microbiology or Cell Biology
- Biochemistry I (and II)
- Advanced Human Physiology
- Comparative Vertebrate Anatomy

**General**
- Research experiences both on campus and off
- Academic advising with faculty
- Academic science clubs
- Science seminar
- Mentors for shadowing experiences

**After Graduation**
- Acceptance rates to medical, dental, vet, and pharmacy schools are high.
- Admission to graduate programs for master and doctorate degrees in a wide variety of science fields.
- Employment with bachelor’s degree.