# Biomedical Sciences BS

Department of Biology, College of Liberal Arts and Sciences  
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## Four-Year Graduation Plan

### Year 1 – Fall
- CHEM 1110  Principles of Chemistry I
- SOC 1010  Intro Sociology
- *MATH 1460  Calculus for Bio Sci

### Year 1 – Spring
- CHEM 1120  Principles of Chemistry II
- BIOL 1411  Foundations of Biology
- PSY 1001  Elementary Psychology

### Year 2 – Fall
- CHEM 2210  Organic Chemistry I
- MICR 2157  General Microbiology
- **MICR 2158  General Microbiology Lab
- PHYS 1611  Intro Physics I
  (or PHYS 1511 College Physics I)

### Year 2—Spring
- CHEM 2220  Organic Chemistry II
- HHP 3500  Human Physiology
- STAT 3510  Biostatistics
- PHYS 1612  Intro Physics II
  (or PHYS 1512 College Physics II)

### Year 3 – Fall
- BIOC 3120  Biochem and Molecular Bio I
- ***CHEM 2410  Organic Chem Lab or
  BIOC 3140  Experimental Biochemistry
- BIOL 2211  Genes, Genomes, Hum Cndtn

### Year 3 – Spring
- BIOC 3130  Biochem and Molecular Bio II
- ***CHEM 2410 Organic Chem Lab or
  BIOC 3140 Experimental Biochemistry
- BIOL 3373  Human Population Genetics & Variation
- PSY 2130  Advanced Psychology Pre-Med

### Year 4 – Fall
- Honors Research or additional Lab
- Elective Lecture
- ****Investigative Lab

### Year 4 – Spring
- Honors Research or additional Lab
- Elective Lecture
- ****Investigative Lab

*Choose one:  MATH 1460 Calculus for Bio Sci, or MATH 1850 Calculus I, or MATH 1550 Engineering Math I

**MICR 2158 Genl Microbiology Lab should be taken with MICR 2157 Genl Microbiology

***Choose one:  Organic Chemistry Lab or Experimental Biochemistry; may take in fall or spring of Year 3

****Choose one Investigative Lab; may take in fall or spring of Year 4

See over for information about admission to the major >>>>
The interdisciplinary Biomedical Sciences major is designed for the undergraduate student with an aptitude for the sciences and who plans to attend medical school or to conduct biomedical research in graduate school and beyond. This BS degree is intended particularly for students preparing for research and/or practice in the chemical, genetic, cellular, or physiological basis of human disease. The major requires a minimum of 78 semester hours of course work in the natural sciences, mathematics, statistics, and the social sciences.

The major is selective, with a limited number of students admitted, and the curriculum is challenging, requiring extreme dedication by its students who will be mentored by UI faculty members from the participating disciplines.

Admission Requirements and Procedures

Students applying for admission to UI and to CLAS directly from high school with the following profile will be considered for admission to the major as space in the program permits:

- A minimum ACT composite score of 29 or the equivalent SAT composite
- A minimum ACT Math and Scientific Reasoning score of 29 or the equivalent SAT score
- A minimum high school cumulative GPA of 3.70
- A record of completing advanced science courses in high school such as AP, IB, or Honors courses if offered by the high school and/or of completing a second course in a sequence of courses (such as Chemistry I and Chemistry II), with grades in key science courses considered
- A dedication to and passion for the sciences and mathematics as indicated in a statement of purpose

A student may also be admitted to the major as a continuing student at Iowa or as a transfer student, with the understanding that a late declaration of the major may delay graduation. Applicants must demonstrate a record of academic excellence in the sciences through their outstanding grades in related UI or transfer course work. A statement of purpose and one letter of reference from a science or mathematics instructor is required. Before admission to the program, a student must meet with the Director of the major, Dr. Bryant McAllister. Admission to the program also depends on the number of spaces available in the program and the logistics of faculty mentorship as well as the student’s ability to work in a team, to show a strong work ethic, and to have a high level of academic integrity, as necessary for research in a faculty lab.

AAC, Fall 2020