

Biochemistry ACS-Certified Major (BCH)

Biochemistry is an interdisciplinary major appropriate for students who plan to go to health professional programs (such as medical, dental, veterinary, or pharmacy school) or to graduate studies in Biochemistry.

Current students and graduates will

- demonstrate a core of knowledge in inorganic, organic, biological, analytical, and physical chemistry
- demonstrate basic laboratory skills and the ability to select and utilize appropriate instrumentation to conduct scientific investigations and analyses
- communicate competently, in the form of an oral presentation, the results of literature research and laboratory experimentation.
- understand the major concepts and developments at the interface of chemistry and biology
- demonstrate laboratory skills and the ability to utilize and select instrumentation specific to biochemical investigations

Degree Type: Bachelor of Science (BS)

Program Contact: Assistant Professor Amanda Hughes

No minor required.

Department: Biochemistry

Type: ACS-Certified B.S.

Core Courses 58 hours

Allied Courses 14 hours

Total 72

Core Courses

| Item # | Title | Credit Hour(s) |
|---------|---|----------------|
| CHE111 | General Chemistry I | 3 |
| CHE111L | General Chemistry I Laboratory | 1 |
| CHE112 | General Chemistry II | 3 |
| CHE113 | General Chemistry II Lab | 1 |
| CHE201 | Organic Chemistry I | 3 |
| CHE202 | Organic Chemistry Lab I - Techniques and Synthesis | 1 |
| CHE211 | Descriptive Inorganic Chemistry | 3 |
| CHE213 | Descriptive Inorganic Chemistry Lab | 1 |
| CHE305 | Analytical Chemistry | 4 |
| CHE309 | Organic Chemistry II | 3 |
| CHE310 | Organic Chemistry Lab II - Qualitative Analysis and Synthesis | 1 |
| CHE325 | Advanced Inorganic Chemistry Lab | 1 |
| CHE331 | Physical Chemistry I | 4 |
| CHE332 | Physical Chemistry II | 3 |
| CHE333 | Physical Chemistry II Lab | 1 |
| CHE341 | Biochemistry | 3 |
| CHE342 | Biochemistry Lab | 1 |
| CHE400 | Advanced Inorganic Chemistry | 3 |
| CHE450 | Junior Seminar | 1 |
| CHE451 | Senior Seminar | 1 |
| BIO111 | Biological Principles | 4 |
| BIO212 | Cellular and Molecular Biology | 4 |
| BIO335 | Genetics and Molecular Biology | 4 |
| BIO337 | Cell Biology | 4 |

Allied Courses

| Item # | Title | Credit Hour(s) |
|-----------------------|--------------------|----------------|
| MAT125 | Calculus I | 3 |
| MAT225 | Calculus II | 3 |
| PHY211 | College Physics I | 4 |
| PHY212 | College Physics II | 4 |
| Total credits: | | 72 |