## BIOCHEMISTRY, B.S.

This B.S. in Biochemistry major emphasizes the role of chemical processes in living systems through a combination of coursework in biology, chemistry and allied fields. It is appropriate for students interested in pursuing an advanced degree in biochemical sciences, forensic science, medicine (including pharmacy, dentistry, optometry, physician's assistant), or for those seeking entry-level employment in the biochemistry or biotechnology industry.

The Bachelor of Science (B.S.) in Biochemistry at The College of St. Scholastica is accredited by the American Society for Biochemistry and Molecular Biology (ASBMB), www.asbmb.org (https://www.asbmb.org/).

## Contact Information

chemistry@css.edu

## Learning Outcomes

Upon completing the B.S. in Biochemistry, students will be able to:

1. Show a deep understanding of biochemistry principles.
2. Effectively communicate research findings and biochemical principles orally and in writing.
3. Analyze data produced in the lab and found in primary literature.

## Requirements

Students must achieve the following program requirements for all courses listed under Program Requirements and Program Required Courses for the Biochemistry major.

## Program Requirements

Major Credits: 72
Major Residency Credits: 16
Minimum GPA: 2.0
Minimum Grade: C-

## Program Required Courses

| Code | Title | Credits |
| :--- | :--- | ---: |
| BIO 1125 | Foundations in Biology | 4 |
| BIO 2020 | Microbiology | 3 |
| BIO 2021 | Microbiology Lab | 1 |
| BIO 3500 | Genetics | 4 |
| BIO 3600 | Cell Biology | 4 |
| CHM 1110 | General Chemistry I | 4 |
| CHM 1120 | General Chemistry II | 4 |
| CHM 2200 | Organic Chemistry I | 4 |
| CHM 2210 | Organic Chemistry II | 4 |
| CHM 3000 | Analytical Chemistry | 4 |
| CHM 3240 | Biochemistry I | 4 |
| CHM 3430 | Biochemistry II | 2 |
| CHM 3431 | Biochemistry II Lab | 2 |
| CHM 3460 | Physical Chemistry I | 4 |
| CHM 4000 | Senior Assessment | 0 |
| MTH 2221 | Calculus I | 4 |
| MTH 2222 | Calculus II | 4 |
| PSC 2011 | General Physics I | 4 |


| PSC $2012 \quad$ General Physics II | 4 |
| :--- | ---: |
| Select 4 credits in upper-division BIO or CHM courses | 4 |
| Select 4 credits in upper-division BIO, CHM, MTH, PSC courses | 4 |
| Total Credits | $\mathbf{7 2}$ |

Each professional school may have additional, specific admission requirements. Pre-professional students should consult with their advisor and professional school catalogs for further details. A student majoring in chemistry may earn a second degree in biochemistry by completing the additional course requirements.

## Degree Requirements

To graduate from The College of St. Scholastica, baccalaureate students must meet the following minimum degree requirements.

Total Credits: 128
Upper Division Credits: 42
Residency Requirement: 32
Minimum GPA: 2.0

