

# BS in Chemistry

Milligan University

Biochemistry Concentration  
Catalog Year 2024-2025

This document is designed as a guide for students planning their course selection and is only a suggested schedule. Actual course selections should be made with the advice and consent of the academic advisor. While accurately portraying the information contained in the College Catalog, this form is not considered a legal substitute for that document. Students should become familiar with the Catalog in effect at the time in which they enter Milligan.

| FALL SEMESTER 1      |  |             |
|----------------------|--|-------------|
| COURSE               | TITLE  | CREDITS     |
| CHEM 170             | General Chemistry I                          | 4           |
| MATH 211             | Calculus I                                   | 4           |
| BIOL 111             | Principles of Biology I                      | 4           |
| HUMN 101             | Ancient & Medieval Cultures                  | 4           |
| GNSC100              | Intro to College & Service in the Sciences** | 0.5         |
| <b>TOTAL CREDITS</b> |  | <b>16.5</b> |

| FALL SEMESTER 2      |                              |           |
|----------------------|------------------------------|-----------|
| COURSE               | TITLE                        | CREDITS   |
| CHEM 270             | Organic Chemistry I          | 4         |
| PHYS 203             | General Physics I            | 4         |
| HUMN 201             | 18th & 19th Century Cultures | 4         |
| BIBL 124             | New Testament Survey         | 3         |
| <b>TOTAL CREDITS</b> |                              | <b>15</b> |

| FALL SEMESTER 3      |                                  |           |
|----------------------|----------------------------------|-----------|
| COURSE               | TITLE                            | CREDITS   |
| CHEM 410             | Biochemistry I                   | 4         |
|                      | Suggested elective: Anatomy I    | 4         |
| COMP 211             | Found. of Analytical Composition | 3         |
| BIOL310              | Genetics                         | 4         |
| <b>TOTAL CREDITS</b> |                                  | <b>15</b> |

| FALL SEMESTER 4      |                             |           |
|----------------------|-----------------------------|-----------|
| COURSE               | TITLE                       | CREDITS   |
| CHEM494              | Capstone*                   | 3         |
| BIBL 471             | Christ & Culture            | 3         |
|                      | Suggested GER: ES***        | 3         |
|                      | Suggested elective: CHEM340 | 4         |
|                      | General Electives           | 3         |
| <b>TOTAL CREDITS</b> |                             | <b>16</b> |

| SPRING SEMESTER 1    |                                  |           |
|----------------------|----------------------------------|-----------|
| COURSE               | TITLE                            | CREDITS   |
| CHEM 171             | General Chemistry II             | 4         |
| BIBL 123             | Old Testament Survey             | 3         |
| HUMN 102             | Renaissance & Early Modern Cult. | 4         |
| EXSC 101M            | Lifetime Wellness                | 1         |
|                      | Suggested Elective: BIOL112      | 4         |
| <b>TOTAL CREDITS</b> |                                  | <b>16</b> |

| SPRING SEMESTER 2    |                                 |           |
|----------------------|---------------------------------|-----------|
| COURSE               | TITLE                           | CREDITS   |
| CHEM 271             | Organic Chemistry II            | 4         |
| BIOL 352             | Cell                            | 3         |
| PHYS 204             | General Physics II              | 4         |
| HUMN 202             | Cultures of 20th & 21st Century | 4         |
| COMP 111             | Rhetorical Composition          | 3         |
| <b>TOTAL CREDITS</b> |                                 | <b>18</b> |

| SPRING SEMESTER 3    |                                |           |
|----------------------|--------------------------------|-----------|
| COURSE               | TITLE                          | CREDITS   |
| CHEM 411             | Biochemistry II                | 4         |
|                      | Suggested elective: Anatomy II | 4         |
|                      | BIOL380 or BIOL450             | 4         |
| COMM 102             | Speech Communication           | 3         |
|                      | General Electives              | 3         |
| <b>TOTAL CREDITS</b> |                                | <b>18</b> |

| SPRING SEMESTER 4                        |                               |              |
|--|-------------------------------|--------------|
| COURSE                                   | TITLE                         | CREDITS      |
|  | Suggested Elective: CHEM/BIOL | 4            |
| CHEM 341                                 | Analytical Chemistry II       | 4            |
|  | Social Learning GER           | 3            |
|  | General Electives             | 4            |
| <b>TOTAL CREDITS</b>                     |                               | <b>15</b>    |
| <b>MINIMUM 128 NEEDED FOR GRADUATION</b> |                               | <b>129.5</b> |

Depending upon a student's post-bacc plans, other courses may be required for admission to graduate programs, so CONSULT with your adviser.

#### Chemistry Electives:

CHEM 499A, B, and C are offered every semester

CHEM491 Internship is offered every semester and summer

#### FALL Odd Years Chemistry Electives:

CHEM410 Biochemistry I  
CHEM402 Physical Chemistry II

#### FALLEven Years Chemistry Electives:

CHEM340 Analytical Chemistry I  
CHEM494 Capstone  
CHEM410 Biochemistry I

\*Fulfills MLGN200; \*\*Fulfills MLGN100; \*\*\*Fulfills SLO10 GER

**Major Hours 58**

**Core Hours 41.5**

**Electives 30**

#### SPRING Even Years Chemistry Electives:

CHEM411 Biochemistry II  
CHEM401 Physical Chemistry I

#### SPRING Odd Years Chemistry Electives:

CHEM341 Analytical Chemistry II  
CHEM405 Inorganic Chemistry