

## Chemistry Major - Pre-Health Professional Biochemistry Option (BS)

Suggested Plan of Study

2023-2024 Catalog

| Fall - Semester 1                                                                                                                                         |    | Spring - Semester 2                                                                                                                                                      |    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| ENGL 1113 Composition I                                                                                                                                   | 3  | ENGL 1123 Composition II                                                                                                                                                 | 3  |
| MATH 1525 Calculus I                                                                                                                                      | 5  | Social Science choice<br>(CRJU 2003, ECON 2103, FIN 2003, GEOG 2003, PSCI 2003, PSYC 2003, SOC 1003, SOC 1013, or SOC 2003)                                              | 3  |
| CHEM 1501 Background and Strategies in Chemistry                                                                                                          | 1  | HIST 1003 or 1013 World History I or II<br>OR HIST 2013 or 2023 U.S. History I or II or<br>PSCI 2003 American Government: National                                       | 3  |
| CHEM 1023/1021 University Chemistry I/Lab                                                                                                                 | 4  | CHEM 1123/1121 University Chemistry II/Lab                                                                                                                               | 4  |
| GSTD 1002 Freshman Seminar                                                                                                                                | 2  | SPCH 1113 Introduction to Public Speaking                                                                                                                                | 3  |
| Total Semester Hours                                                                                                                                      | 15 | Total Semester Hours                                                                                                                                                     | 16 |
| Fall - Semester 3                                                                                                                                         |    | Spring - Semester 4                                                                                                                                                      |    |
| World Literature I/II or Philosophy<br>(ENGL 2213, ENGL 2223, or PHIL 2403)                                                                               | 3  | Fine Arts/Humanities<br>(ART 1103 or ART 2013, HUM 2003, HUM 2103, ENGL 2213, ENGL 2223, MUS 2003 or<br>MUS 2013 or MUS 2023, PHIL 2403, THEA 2003, or Foreign Language) | 3  |
| BIOL 1203/1201 Principles of Biology I/Lab                                                                                                                | 4  | BIOL 1213/1211 Principles of Biology II/Lab                                                                                                                              | 4  |
| PHYS 2003/2001 College Physics I/Lab or<br>PHYS 2203/2201 University Physics I/Lab                                                                        | 4  | CHEM 3313/3311 Instrumentation I/Lab or<br>CHEM 4313/4311 Instrumentation II/Lab                                                                                         | 4  |
| HIST 1003 or 1013 World History I or II<br>OR HIST 2013 or 2023 U.S. History I or II or<br>PSCI 2003 American Government: National                        | 3  | PHYS 2103/2101 College Physics II/Lab or<br>PHYS 2213/2211 University Physics II/Lab                                                                                     | 4  |
| CHEM 212/2011 Analytical Chemistry/Lab                                                                                                                    | 3  |                                                                                                                                                                          |    |
| Total Semester Hours                                                                                                                                      | 17 | Total Semester Hours                                                                                                                                                     | 15 |
| Fall - Semester 5                                                                                                                                         |    | Spring - Semester 6                                                                                                                                                      |    |
| CHEM 3003/3001 Organic Chemistry I/Lab                                                                                                                    | 4  | ENGL 3023 Technical Writing                                                                                                                                              | 3  |
| **BIOL elective                                                                                                                                           | 4  | BIOL 3023/3021 Microbiology/Lab                                                                                                                                          | 4  |
| BIOL 3033/3031 Genetics/Lab                                                                                                                               | 4  | CHEM 3073/3071 Biochemistry I/Lab                                                                                                                                        | 4  |
| Fine Arts/Humanities<br>(ART 1103 or ART 2013, HUM 2003, HUM 2103, ENGL 2213, ENGL 2223, MUS 2003 or<br>MUS 2013 or MUS 2023, PHIL 2403, or<br>THEA 2003) | 3  | SCI 3101 Pre Health Colloquium                                                                                                                                           | 1  |
|                                                                                                                                                           |    | CHEM 3103/3101 Organic Chemistry II/Lab                                                                                                                                  | 4  |
| Total Semester Hours                                                                                                                                      | 15 | Total Semester Hours                                                                                                                                                     | 16 |
| Fall - Semester 7                                                                                                                                         |    | Spring - Semester 8                                                                                                                                                      |    |
| CHEM 4073 Biochemistry II                                                                                                                                 | 3  | **CHEM elective                                                                                                                                                          | 3  |
| CHEM 4403/4401 Physical Chemistry:<br>Thermodynamics or CHEM 4413/4411<br>Physical Chemistry: Quantum and<br>Kinetics/Lab                                 | 4  | Science & Engineering elective                                                                                                                                           | 3  |
| CHEM 4051 Senior Seminar - Chemistry                                                                                                                      | 1  | **BIOL elective                                                                                                                                                          | 4  |
| **CHEM elective (Jr/Sr)                                                                                                                                   | 4  | CHEM 4722 Senior Research in Chemistry II                                                                                                                                | 2  |
| CHEM 4712 Senior Research in Chemistry I                                                                                                                  | 2  |                                                                                                                                                                          |    |
| Total Semester Hours                                                                                                                                      | 14 | Total Semester Hours                                                                                                                                                     | 12 |

Total hours required for major – 120

Scholarship requirements may require students to enroll in a minimum number of hours each semester.

\*Note: Must have six hours of history/government. Three hours must be World History I or II. Three hours must be U.S. History I, U.S. History II or American Government: National.

\*\*Pre-Professional Students such as Pre-Pharmacy and Pre-Medicine should consult with their advisor and review the admission requirements of their desired program.