

# College of Health & Sciences

## 2021-2022 Chemistry - Biochemistry Degree Plan

### FIRST YEAR - FRESHMAN

| <u>Fall Semester</u>                             | <u>Spring Semester</u>   |
|--|--|
| BIOL 1114 * General Biology                      | CHEM 1114 * General Chemistry I                                      |
| ENG 1113 * Freshman Composition I                | ENG 1213 * Freshman Composition II                                   |
| HIST 24-3 * United States History Survey**       | MATH 1713 Trigonometry   |
| KIN 2122 * Wellness or Basic Nutrition HHFS 1513 | PS 1113 * United States Government                                   |
| MATH 1513 * College Algebra                      | BIOL 1314 * General Zoology <b>OR</b> BIOL 2344 General Microbiology |
| UNIV 1001 * Freshman Seminar                     |  |

**16 or 17 TOTAL HOURS**

**17 TOTAL HOURS**

### SECOND YEAR - SOPHOMORE

| <u>Fall Semester</u>  | <u>Spring Semester</u>  |
|---|---|
| CHEM 1214 General Chemistry II  | CHEM 3114 Organic Chemistry I   |
| Math 2825 Calculus & Analytic Geometry                                | ---3 * Communication** (Speech or Language)                             |
| PHYS 1114 General Physics I <b>OR</b> PHYS 2115 Engineering Physics I | ---3 * Social Sciences**  |
| BIOL 2184 Human Anatomy   | PHYS 1214 General Physics II <b>OR</b> PHYS 2225 Engineering Physics II |

**17-18 TOTAL HOURS**

**14-15 TOTAL HOURS**

### THIRD YEAR - JUNIOR (beginning in the fall of an even year) **OR** FOURTH YEAR - SENIOR (beginning in the fall of an even year)

| <u>Fall Semester Even Year</u>                            | <u>Spring Semester Odd Year</u>                      |
|---|--|
| CHEM 4514 Physical Chemistry I <sup>^</sup>               | CHEM 4413 Advanced Inorganic Chemistry <sup>^^</sup> |
| CHEM 4213 Biochemistry [offered every fall]               | CHEM 4114 Organic Chemistry II <b>OR</b>             |
| CHEM 4221 Biochemistry Laboratory [offered every fall]    | BIOL 3634 Human Physiology                           |
| BIOL 4313 Cell and Molecular Biology [offered every fall] | ---3 * Humanities-Western Civilization**             |
| ---4 Electives (4 hours)***                               | ---3 * Humanities & Social Sciences**                |
|   | ---3 Electives (3 hours)***                          |

**15 TOTAL HOURS**

**16 TOTAL HOURS**

### THIRD YEAR - JUNIOR (beginning in the fall of an odd year) **OR** FOURTH YEAR - SENIOR (beginning in the fall of an odd year)

| <u>Fall Semester Odd Year</u>                       | <u>Spring Semester Even</u>                                 |
|---|---|
| CHEM 4114 Organic Chemistry II <b>OR</b>            | CHEM 4523 Advanced Biochemistry <sup>^^^</sup>              |
| BIOL 3634 Human Physiology                          | CHEM 3484 Instrumental Analysis <sup>^^</sup>               |
| 4 hours required-not taken previous spring semester | BIOL 4545 Advanced Molecular Biology [offered even springs] |
| ---3 Electives (3 hours)***                         | ---3 * Communication** (Computer Literacy)                  |
| ---3 * Humanities-Cultural/Human Diversity          |   |
| CHEM 3214 Quantitative Analysis I                   |   |

**14 TOTAL HOURS**

**15 TOTAL HOURS**

### TOTAL DEGREE PLAN HOURS 124

\*General Education Requirement      \*\*See current catalog "General Education Requirements" for selection      \*\*\*Minor Not Required/Electives (8-16 hours)  
<sup>^</sup>Offered fall semester even years; <sup>^^</sup>Offered spring semester even years; <sup>^^^</sup>Offered spring semester odd years; <sup>^^^</sup>Offered TBA (To Be Arranged)  
**Students need to plan semester schedules in advance in order to take required electives in the semester offered - junior or senior years**