

**University of the Incarnate Word**  
Unofficial Degree Plan

**School of Mathematics, Science and Engineering**

Degree: **Bachelor of Science**Major: **Biochemistry**

Bachelor's degree institutional requirements: A minimum of 120 hours required for graduation to include: 45 hours of residency, 36 advanced hours (junior/community college courses will not satisfy), 36 of the last 45 hours must be from UIW, 45 clock hours community service.

| University Core Curriculum                           | Credit Hours | Earned | Grade |
|--|--------------|--------|-------|
| <b>Rhetoric (6)</b>                                  |              |        |       |
| ENGL 1311 Composition I                              | 3            |        |       |
| ENGL 1312 Composition II                             | 3            |        |       |
| <b>Wellness Development (3)</b>                      |              |        |       |
| DWHP 1200 (3200 Transfer)                            | 2            |        |       |
| PE Activity Course                                   | 1            |        |       |
| <b>Philosophy and Religion (9)</b>                   |              |        |       |
| 3 hrs from RELS 1305, 1315, 1325, 1335               | 3            |        |       |
| PHIL 1381 Introduction to Philosophy                 | 3            |        |       |
| 3 hrs Advanced Religion/Philosophy                   | 3            |        |       |
| <b>Literature and the Arts (6)</b>                   |              |        |       |
| ENGL 2310 World Literature Studies                   | 3            |        |       |
| 3 hrs Fine Arts                                      | 3            |        |       |
| <b>Mathematics and the Natural Sciences (7)</b>      |              |        |       |
| MATH 1304 or 1306 or higher                          | 3            |        |       |
| Natural Science, BIOL 1402                           | 4            |        |       |
| <b>History and the Social Sciences (6)</b>           |              |        |       |
| HIST 1311, 1312, 1321, 1322                          | 3            |        |       |
| 3 hrs Social Science                                 | 3            |        |       |
| <b>Modern Language (6)</b>                           |              |        |       |
| 6 hrs in one language other than English             | 3            |        |       |
|  | 3            |        |       |
| <b>Community Service (45 Non-Credit Clock Hours)</b> |              |        |       |
| Community Service Requirement                        |              |        |       |

| Program Curriculum                        |   | Credit Hours | Earned | Grade |
|---|---|--------------|--------|-------|
| <b>Biochemistry Curriculum (42 hours)</b> |   |              |        |       |
| CHEM 1301                                 | Chemical Principles I                   | 3            |        |       |
| CHEM 1101                                 | Chemical Principles I Lab               | 1            |        |       |
| CHEM 1302                                 | Chemical Principles II                  | 3            |        |       |
| CHEM 1102                                 | Chemical Principles II Lab              | 1            |        |       |
| CHEM 2311                                 | Organic Chemistry I                     | 3            |        |       |
| CHEM 2111                                 | Organic Chemistry I Lab                 | 1            |        |       |
| CHEM 2312                                 | Organic Chemistry II                    | 3            |        |       |
| CHEM 2112                                 | Organic Chemistry II Lab                | 1            |        |       |
| CHEM 3321                                 | Quantitative Analysis                   | 3            |        |       |
| CHEM 3221                                 | Quantitative Analysis Lab               | 2            |        |       |
| CHEM 3160                                 | Intro to Chemistry Research and Careers | 1            |        |       |
| CHEM 4351                                 | Biochemistry I                          | 3            |        |       |
| CHEM 4251                                 | Biochemistry I Lab                      | 2            |        |       |
| CHEM 4352                                 | Biochemistry II                         | 3            |        |       |
| CHEM 4252                                 | Biochemistry II Lab                     | 2            |        |       |
| CHEM 4331                                 | Physical Chemistry: Thermodynamics      | 3            |        |       |
| CHEM 4231                                 | Physical Chemistry: Thermodynamics Lab  | 2            |        |       |
| CHEM 4260                                 | Chemistry Research                      | 2            |        |       |
| <b>Choose one of the following</b>        |   |              |        |       |
| CHEM 4353                                 | Molecular Biochemistry                  | 3            |        |       |
| CHEM 4354                                 | Enzymology                              | 3            |        |       |

| Support Work Required (24-32 hours) |   | Credit Hours | Earned | Grade |
|-------------------------------------|---|--------------|--------|-------|
| BIOL 1402                           | *General Biology I for Majors and Lab           | 4            |        |       |
| BIOL 3311                           | Cell Biology                                    | 3            |        |       |
| BIOL 3361                           | Genetics  | 3            |        |       |
| MATH 2312                           | *Calculus I                                     | 3            |        |       |
| MATH 2313                           | Calculus II                                     | 3            |        |       |
| PHYS 2305                           | Physics I                                       | 3            |        |       |
| PHYS 2305                           | Physics I Lab                                   | 1            |        |       |
| PHYS 2305                           | Physics II                                      | 3            |        |       |
| PHYS 2305                           | Physics II Lab                                  | 1            |        |       |
| <b>Choose one of the following</b>  |   |              |        |       |
| CHEM 3xxx/<br>CHEM 4xxx             | Upper Division CHEM Course (not already taken)  | 3            |        |       |
| BIOL 3202                           | Research Methods in Cell and Molecular Genetics | 2            |        |       |
| BIOL 3471                           | General Microbiology and Lab                    | 4            |        |       |

| Electives (3–11 hours) |  |  |  |  |
|------------------------|--|--|--|--|
|                        |  |  |  |  |
|                        |  |  |  |  |
|                        |  |  |  |  |

\*Can be used to satisfy the Core.

Grade of C or better required in ENGL 1311, 1312 and all courses for the major/minor/concentration/specialization.

|                 |             |
|-----------------|-------------|
| University Core | 43          |
| Program Core    | 66-74       |
| Electives       | 3-11        |
| Total           | 120 credits |