**BACHELOR OF SCIENCE**

**Stu ID:**

**Date:**

**Name:**

**Advisor:**

**Catalog:** 2018-19

**Major:** Biochemistry - BS

**Biochemistry Courses**

15 courses; Minimum 30 credits required; 29 credits must be from SU

<table>
<thead>
<tr>
<th>Course</th>
<th>Course Name</th>
<th>Grade</th>
<th>Credit Required</th>
<th>Supporting Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE51-103</td>
<td>Principles of General Chemistry</td>
<td></td>
<td></td>
<td>MAT52-154 Calculus I E&amp;B 0</td>
</tr>
<tr>
<td>CHE51-101</td>
<td>Chemical Methods and Techniques Lab</td>
<td></td>
<td></td>
<td>MAT52-254 Calculus II</td>
</tr>
<tr>
<td>CHE51-203</td>
<td>Chemical Kinetics &amp; Equilibrium</td>
<td></td>
<td></td>
<td>BIO50-123 Living Systems</td>
</tr>
<tr>
<td>CHE51-201</td>
<td>Chemical Kinetics &amp; Equilibrium Lab</td>
<td></td>
<td></td>
<td>BIO50-121 Investigation into Living Systems</td>
</tr>
<tr>
<td>CHE51-314</td>
<td>Organic Chemistry I*</td>
<td></td>
<td></td>
<td>BIO50-133 Molecular and Population Genetics</td>
</tr>
<tr>
<td>CHE51-311</td>
<td>Organic Chemistry I Lab*</td>
<td></td>
<td></td>
<td>BIO50-131 Investigation into Genetics</td>
</tr>
<tr>
<td>CHE51-324</td>
<td>Organic Chemistry II for Majors*</td>
<td></td>
<td></td>
<td>PHY53-154 Fundamentals of Physics I E&amp;B 0</td>
</tr>
<tr>
<td>CHE51-331</td>
<td>Organic Chemistry II for Majors Lab*</td>
<td></td>
<td></td>
<td>PHY53-164 Fundamentals of Physics II</td>
</tr>
<tr>
<td>CHE51-614</td>
<td>General Biochemistry I**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHE51-624</td>
<td>General Biochemistry II**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHE51-862</td>
<td>Advanced Lab in Biochemistry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHE51-932</td>
<td>Senior Capstone</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Take one additional Biochemistry course (level 600):

- CHE51-6XX

Take one course from the following:

- CHE51-404 Inorganic Chemistry & Biological Systems
- CHE51-504 Instrumentation in Env and Biological Analysis
- CHE51-704 Physical Chemistry: Thermodynamics & Kinetics

Take one additional advanced laboratory course (level 800):

- CHE51-8X2

Take one of the following two options:

**Option #1:**
- Two credits of one of the following two research courses
  - CHE51-91X Methods in Laboratory Research
  - CHE51-92X Laboratory Research with Distinction

**Option #2:**
- Take one additional advanced Lab course (level 800). This option is only available to students who have completed a Methods in Lab Research course.
  - CHE51-8X2

**Biology courses**

- BIO50-232 Methods in Cellular/Molecular Biology

Take one upper level Cellular/Molecular Biology course with lab:

- BIO50-XX4

*At least one course from CHE51-314/311 and CHE51-324/331 must be taken at SU

**General Education Requirements**

At least 30 total credits required, minimum 3 credits required per course

### General Education Part I

- **First Year/Adv. Entry Seminar:**
  - UST05-014 or UST05-214
- **Foreign Language (3 sem.):**
- **Social Justice Course (may double count with any requirement):**
- **2 different FRAs:**

| Total Earned Credits: | 0 |
| Total Southwestern Credits: | 0 |
| Total Major Credits: | 0 |
| Total Gen Ed Credits: | 0 |

### Exploration & Breadth (E&B) - GE Part II

- Six total courses
- CHE major and elective courses cannot be used to satisfy E & B requirements. Additionally, the BIO courses taken under the major requirements will not satisfy the E & B requirements.
- Select one course from each of the four following areas:
  - **Humanities:**
  - **Natural Sciences:**
    - MAT52-154 Calculus I
  - **Social Sciences:**
  - **Fine Arts:**

Select two additional courses from the four areas listed above. Courses must be from different areas and from different subjects from above courses:

- PHY53-154 Fundamentals of Physics I (DVNS)

*Public Speaking, College Writing and Creative Writing courses may not count in Exploration & Breadth*
**Graduation Requirements:**

- Minimum of 127 credits: 
- Cumulative GPA > 2.0
- GPA > 2.0 for Major and/or Areas of Concentration
- All grades C- or higher in major/minor/core?
- At least 64 credits completed at Southwestern*
- Less than 56 credits of any 5 digit prefix**
- Major credits completed (min 30 required)
- 60% of Major courses completed at Southwestern (29cr)
- Gen Ed has minimum of 30 credits

**Minor (optional):**

- Minimum 18 credits
- Minimum of 12 credits taken at Southwestern
- Minimum 2.0 minor courses CGPA

**Other:**

- Degree Audit Completed (Due one year before grad date)
- Graduation Application Submitted (Due last semester)
- Approved to be part time in last semester?