# Bachelor of Science (B.S.) Degree with Major in Biochemistry

## Sample Four-Year Plan Starting in Odd Year

### First Year Fall (Odd Year)
- BBL 1013 Old Testament Survey
- CHM 1123 General Chemistry I
- CHM 1121 General Chemistry I: Lab
- COR 1002 Gateway Seminar
- EGL 1013 English I: Composition
- MTH 1163 Calculus I

**Total Hours 15**

### Second Year Fall (Even Year)
- BBL 1023 New Testament Survey
- CHM 3133 Organic Chemistry I
- CHM 3131 Organic Chemistry I: Lab
- HST 2013 Integrated Humanities I
- PHY 2213 General Physics I
- PHY 2211 General Physics I: Lab
- CHM 2131 Introduction to Computational Chem

**Total Hours 15**

### Third Year Fall (Odd Year)
- BIO 3173 Molecular Cell Biology
- BIO 3171 Molecular Cell Biology: Lab
- CHM 3183 Advanced Inorganic Chemistry
- CHM 3121 Integrated Chemistry Lab
- BBL 2022 Essentials of Christian Formation
- ____3 Biology/Chemistry Elective
- ____2 Elective

**Total Hours 15**

### Fourth Year Fall (Even Year)
- CHM 3112 Advanced Analytical Chemistry
- CHM 3012 Advanced Analytical Chemistry: Lab
- CHM 2161 Chemical Communication Literacy
- CHM 3163 Biochemistry I
- CHM 3121 Integrated Chemistry Lab
- ____3 Arts & Humanities (AH) Elective
- ____3 SBS or AH Elective (see above)

**Total Hours 15**

### First Year Spring (Even Year)
- BIO 1123 Cell Biology
- BIO 1121 Cell Biology: Lab
- CHM 1133 General Chemistry II
- CHM 1131 General Chemistry II: Lab
- EGL 1023 English II: Literary Analysis/Research
- MTH 1173 Calculus II
- ____2 Elective

**Total Hours 16**

### Second Year Spring (Odd Year)
- CHM 3143 Organic Chemistry II
- CHM 3141 Organic Chemistry II: Lab
- HST 2023 Integrated Humanities II
- PHY 2313 General Physics II
- PHY 2311 General Physics II: Lab
- ____3 Elective
- ____2 Whole Person Wellness Elective

**Total Hours 16**

### Third Year Spring (Even Year)
- BBL 2013 Essentials of Evangelical Theology
- BIO 4103 Bioethics (or GSC 4133 senior year)
- CHM 3121 Integrated Chemistry Lab
- ____3 Social/Behavioral Sci. (SBS) Elective
- ____3 Elective
- ____3 Elective

**Total Hours 16**

### Fourth Year Spring (Odd Year)
- CHM 3173 Biochemistry II
- CHM 4501 Chemistry/Biochemistry Capstone
- CHM 3121 Integrated Chemistry Lab
- CHM 4000 Standard Exam
- ____4 Biochemistry Elective
- ____3 Intercultural Engagement Elective

**Total Hours 12**

### Total Hours for Four Years: 120

#### Biochemistry Electives

- BIO 3333 Microbiology (Spring)
- BIO 3523 Human Physiology (Spring)
- BIO 3613 Virology (Fall, EVEN)
- BIO 4221-3 Biological Research (Every)
- CHM 4223 Chemistry Research (Spring)
- CHM 4123 Phys Chem Thermodynamics (Spring, EVEN)
- CHM 4133 Phys Chem Quantum (Spring, ODD)
- CHM 4310 Chemistry Internship (Every)

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# Bachelor of Science (B.S.) Degree with Major in Biochemistry

## Sample Four-Year Plan Starting in Even Year

### First Year Fall (Even Year)
- BBL 1013 Old Testament Survey
- CHM 1123 General Chemistry I
- CHM 1121 General Chemistry I: Lab
- COR 1002 Gateway Seminar
- EGL 1013 English I: Composition
- MTH 1163 Calculus I

**Total Hours:** 15

### First Year Spring (Odd Year)
- BIO 1123 Cell Biology
- BIO 1121 Cell Biology: Lab
- CHM 1133 General Chemistry II
- CHM 1131 General Chemistry II: Lab
- EGL 1023 English II: Literary Analysis/Research
- MTH 1173 Calculus II
  - 2 Elective

**Total Hours:** 16

### Second Year Fall (Odd Year)
- BBL 1023 New Testament Survey
- CHM 3133 Organic Chemistry I
- CHM 3131 Organic Chemistry I: Lab
- HST 2013 Integrated Humanities I
- PHY 2213 General Physics I
- PHY 2211 General Physics I: Lab
- CHM 2131 Introduction to Comp Chem

**Total Hours:** 15

### Second Year Spring (Even Year)
- CHM 3143 Organic Chemistry II
- CHM 3141 Organic Chemistry II: Lab
- HST 2023 Integrated Humanities II
- PHY 2313 General Physics II
- PHY 2311 General Physics II: Lab
  - 2 Whole Person Wellness Elective
  - 3 Social/Behavioral Sci. (SBS) Elective

**Total Hours:** 16

### Third Year Fall (Even Year)
- CHM 2161 Chemical Communication Literacy
- CHM 3112 Advanced Analytical Chemistry
- CHM 3012 Advanced Analytical Chemistry: Lab
- CHM 3163 Biochemistry I
- CHM 3121 Integrated Chemistry Lab
- BBL 2022 Essentials of Christian Formation
  - 3 Biochemistry Elective

**Total Hours:** 14

### Third Year Spring (Odd Year)
- BBL 2013 Essentials of Evangelical Theology
- CHM 3173 Biochemistry II
- CHM 3121 Integrated Chemistry Lab
  - 3 Biochemistry Elective
  - 3 Elective

**Total Hours:** 16

### Fourth Year Fall (Odd Year)
- BIO 3173 Molecular Cell Biology
- BIO 3171 Molecular Cell Biology: Lab
- CHM 3183 Advanced Inorganic Chemistry
- CHM 3121 Integrated Chemistry Lab
  - 3 Arts & Humanities (AH) Elective
  - 3 SBS or AH Elective (see above)

**Total Hours:** 14

### Fourth Year Spring (Even Year)
- BIO 4103 Bioethics (or GSC 4133)
- CHM 4501 Chemistry/Biochemistry Capstone
- CHM 3121 Integrated Chemistry Lab
- CHM 4000 Standard Exam
  - 3 Intercultural Engagement Elective
  - 3 Elective

**Total Hours:** 14

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**Total Hours for Four Years:** 120

### Biochemistry Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
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<td>BIO 3333</td>
<td>Microbiology (Spring)</td>
</tr>
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<td>Human Physiology (Spring)</td>
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<td>BIO 3613</td>
<td>Virology (Fall, EVEN)</td>
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<td>BIO 4221-3</td>
<td>Biological Research (Every)</td>
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<td>Chemistry Research (Spring)</td>
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