

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

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 |
| ___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 |
| ___3 | | Elective |
| Total Hours | 14 | |

Total Hours for Four Years: 120

Biochemistry Electives

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