

CHEMISTRY – BIOCHEMISTRY

Bachelor of Science

Curriculum Guide

▪ FIRST YEAR

First Semester

| | | | |
|-------|-----|-------------------|----|
| CHEM | 151 | General Chemistry | 4 |
| MATH* | 121 | Precalculus | 5 |
| ENGL | 111 | College Writing I | 3 |
| BIOL | 151 | General Biology | 4 |
| Total | | | 16 |

Second Semester

| | | | |
|-------|-----|----------------------|----|
| CHEM | 152 | General Chemistry | 4 |
| MATH | 184 | Calculus I | 4 |
| ENGL | 112 | College Writing II | 3 |
| BIOL | 152 | General Biology | 4 |
| HHPA | 155 | Concepts of Wellness | 2 |
| Total | | | 17 |

▪ SECOND YEAR

First Semester

| | | | |
|-------|-----|-------------------|------|
| CHEM | 211 | Organic Chemistry | 4 |
| MATH | 285 | Calculus II | 4 |
| PHYS | 251 | College Physics | 4.5 |
| RELT | 141 | Christian Beliefs | 3 |
| HHPA | | Activity Elective | 1 |
| Total | | | 16.5 |

Second Semester

| | | | |
|-------|-----|---------------------------------|------|
| CHEM | 212 | Organic Chemistry | 4 |
| CHEM | 296 | Research Methods I | 1 |
| PHYS | 252 | College Physics | 4.5 |
| ENGL* | 236 | Approaches to Literature: World | 3 |
| | | Advanced Math or Elective | 3 |
| Total | | | 15.5 |

▪ THIRD YEAR

First Semester

| | | | |
|-------|-----|----------------------|----|
| CHEM | 311 | Analytical Chemistry | 3 |
| CHEM | 445 | Biochemistry I | 4 |
| CHEM | 386 | Research Methods II | 1 |
| RELB | | Religion Elective | 3 |
| HHPA | | Activity Elective | 1 |
| HIST | | History Elective | 3 |
| | | Fine Arts Elective | 2 |
| Total | | | 17 |

Second Semester

| | | | |
|---------|-----|------------------------------------|----|
| CHEM | 312 | Instrumental Analysis | 3 |
| CHEM^ | 446 | Biochemistry II | 3 |
| or BIOL | 406 | Cell and Molecular Biology (4 hrs) | |
| COMM | 105 | Public Speaking | 2 |
| CHEM* | 396 | Research III or Elective | 1 |
| CHEM^ | 412 | Physical Chemistry II | 4 |
| or REL | | Religion Elective (3 hrs) | |
| BIOL | 321 | Genetics | 4 |
| Total | | | 17 |

▪ FOURTH YEAR

First Semester

| | | | |
|-------|-----|-----------------------------|----|
| CHEM* | 496 | Research IV or Elective | 1 |
| CPTR | 226 | Computer Science I | 4 |
| BIOL | | Biology Selected Contextual | 3 |
| REL | | Religion Elective | 3 |
| | | Social Science Elective | 3 |
| Total | | | 14 |

Second Semester

| | | | |
|----------|-----|-------------------------------|----|
| BIOL | 406 | Cell and Molecular Biology | 4 |
| or CHEM^ | 446 | Biochemistry II (3 hrs) | |
| CHEM^ | 412 | Physical Chemistry II (4 hrs) | |
| or REL | | or Religion Elective | 3 |
| PHIL* | 335 | Introduction to Philosophy | 2 |
| | | Social Science Elective | 3 |
| | | Electives | 3 |
| Total | | | 15 |

128 hours are required for graduation. 40 hours must be upper division (300 level or above).

* Other courses may also meet this requirement. See the Union College Bulletin 2010.

^ Alternate year course.

This sample guide is intended only to show you how a program might be arranged. Course schedules may change and it is possible that your courses will not be taken exactly in the order shown. Your academic advisor will help you design a program around your educational needs and goals.