

Biochemistry (B.S.)
(Department of Chemistry and Biochemistry)

Major Requirements

| <u>Major Courses</u> | <u>Credits</u> | <u>Semester Completed</u> |
|--|----------------|---------------------------|
| [CHEM 105] General Chemistry I | 4 | |
| [CHEM 106] General Chemistry II | 4 | |
| [CHEM 309] Organic Chemistry I | 4 | |
| [CHEM 310] Organic Chemistry II | 4 | |
| [CHEM 410] Biochemistry I | 4 | |
| [CHEM 412] Biochemistry II | 4 | |
| [CHEM 221] Chemical Analysis I | 4 | |
| [CHEM 321] Chemical Analysis II | 4 | |
| [CHEM 390] Junior Chemistry Seminar | 1 | |
| [CHEM 490] Senior Chemistry Seminar | 1 | |
| [CHEM 495] Capstone: Natural Sciences | 3 | |
| <i>One of the following:</i> | 3 | |
| [CHEM 337] Physical Chemistry (3) | | |
| [CHEM 409] Advanced Organic Chemistry (3) | | |
| [BIOL 160] Molecular and Cellular Biology | 4 | |
| [BIOL 260] Genetics and Development | 3 | |
| [BIOL 413] Molecular Biology | 4 | |
| <i>One of the following:</i> | 4 | |
| [BIOL 382] Microbiology for Health Professions (4) | | |
| [BIOL 412] Cell Biology (4) | | |
| [BIOL 417] Molecular Genetics (4) | | |
| [MATH 111] Calculus I | 4 | |
| <i>One of the following:</i> | 3 or 4 | |
| [MATH 112] Calculus II (4) | | |
| [STAT 269] Introductory Statistics (3) | | |
| <i>One of the following:</i> | 3 | |
| [PHIL 101] Problems in Philosophy (3) | | |
| [PHIL 102] History of Philosophy (3) | | |
| [PHYS 211] General Physics I | 4 | |
| [PHYS 212] General Physics II | 4 | |

All of the courses in this major are vital to our program. If you plan to study abroad, attend the Philadelphia campus, or graduate early, you must talk to your advisor early and make plans to take the required courses when they are offered. Directed study will not be offered for any lab courses, and will only be granted in extreme circumstances for non-lab courses.

General Education requirements on reverse side

Biochemistry (B.S.)
(Department of Chemistry and Biochemistry)

General Education Requirements

| <u>Courses</u> | <u>Credits</u> | <u>Semester Completed</u> |
|--|----------------|---------------------------|
| First Year Seminar | 3 | |
| Oral Communications | 3 | |
| Created and Called for Community | 3 | |
| Mathematical Sciences ([MATH 111]) | 3 or 4 | <u>met by major</u> |
| Laboratory Science ([BIOL 160] or [CHEM 105]) | 3 or 4 | <u>met by major</u> |
| Science, Technology & the World | | <u>waived</u> |
| Two of the following: | 6 | |
| Social Science (3 credits) | | |
| European History (3 credits) | | |
| United States History (3 credits) | | |
| Literature | 3 | |
| Philosophy and Religion ([PHIL 101] or [PHIL 102]) | 3 | <u>met by major*</u> |
| Arts | 3 | |
| Language/Cross Cultural | | |
| First Semester of Language | 3 | |
| Second Semester of Language | 3 | |
| Third Semester of Language or Cross Cultural | 3 | |
| Non-Western Studies | 2 or 3 | |
| Bible | 3 | |
| Christian Beliefs | 3 | |
| Health and Physical Fitness | | |
| Introduction to Wellness | 2 | |
| Activity Course | 1 | |
| One of the following: | 3 | |
| Ethics (3 credits) | | |
| World Views (3 credits) | | |
| Pluralism in Contemporary Society (3 credits) | | |
| Writing Enriched Course | | |

SUMMARY OF DEGREE REQUIREMENTS

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|--------------------|------------|
| General Education | 47-48* |
| Major Requirements | 70-71 |
| Free Electives | 4-6 |
| Total | 123 |

*Philosophy is not counted against the curricular parameters for the major.

Major requirements on reverse side

August 2009