

BIOLOGY, B.S. - MOLECULAR BIOLOGY/BIOTECHNOLOGY OPTION

Designed to prepare students both for careers in the fast-growing industry associated with molecular biology and for admission into graduate and professional schools, this program allows students to concentrate in molecular and cellular biology while obtaining a broad background in biology and in the liberal arts. Students in this program complete advanced courses in biochemistry and in molecular and cellular techniques; many take advantage of opportunities to complete independent research projects in genetics, developmental biology, virology, cell and molecular biology, or endocrinology.

Major in Biology, BS

| Code | Title | Hours |
|--|---|----------|
| CORE COURSES (C- or higher required) | | 0 |
| Foundations of Biology - See Appendix 1 | | |
| BIOL 211 | Concepts of Zoology | |
| BIOL 221 | Concepts of Botany | |
| BIOL 343 | Principles of Ecology & Evolution | |
| BIOL 362 | Cell and Developmental Biology | |
| BIOL 364 | Foundations of Genetics & Molecular Biology | |
| Option in Molecular Biology - See separate block | | |
| Total Hours | | 0 |

Appendix 1. Foundations of Biology

| Code | Title | Hours |
|-------------------------------------|------------------------|-------|
| Foundations of Biology C- or Higher | | 0 |
| BIOL 101 | Foundations of Biology | |

Concentration in Molecular Biology

| Code | Title | Hours |
|---|-------------------------------|----------|
| REQUIRED MOLECULAR/BIOTECHNOLOGY COURSES | | |
| BIOL 462 | Molecular Biology | 0 |
| BIOL 466 | Molecular and Cell Techniques | 0 |
| Seminar in Molecular Biology | | 1 |
| BIOL 472 | Seminar In Biology | |
| ELECTIVES | | |
| undefined - Choose 6 hours from: | | 6 |
| Any 3-level BIOL course(s) | | |
| Any 4-level BIOL course(s) | | |
| Any 5-level BIOL course(s) | | |
| Note: This requirement may not be satisfied with BIOL 340, BIOL 390, or BIOL 324. | | |
| BIOL 463, 465, and 467 are recommended. | | |
| Total Hours | | 7 |

Req Related for Biology, BS

| Code | Title | Hours |
|------|-------|-------|
|------|-------|-------|

For Biology Majors the G2 block of the Liberal Arts Core will be fulfilled by your required related coursework.

CHEMISTRY

A C- or higher in CHEM 111 and 112 is a pre-requisite for CHEM 235. A C- or higher in CHEM 231 is a pre-requisite for CHEM 232. Students interested in graduate or professional school should take CHEM 231 and 232.

| | | |
|--|--------------------------|---|
| CHEM 111 | Introductory Chemistry 1 | 0 |
| CHEM 112 | Introductory Chemistry 2 | 0 |
| Organic Chemistry I (C- minimum) and II | | 0 |
| CHEM 231 | Organic Chemistry 1 | |
| CHEM 232 | Organic Chemistry 2 | |
| CHEM 326 | Biochemistry 1 | 0 |
| Plant Biochemistry or Biochemistry II - Choose 1 of the following: | | 0 |
| BIOL 324 | Plant Biochemistry | |
| CHEM 324 | Plant Biochemistry | |
| CHEM 327 | Biochemistry 2 | |

MATHEMATICS AND COMPUTER SCIENCE

| | | |
|---|-------------------|-----|
| Calculus I or Honors Calculus - Choose 1 of the following: | | 4-5 |
| MATH 161 | Calculus 1 | |
| MATH 163H | Honors Calculus 1 | |
| Addl Mathematics or Computer Science Electives - Choose 1 class from: | | |
| Any CSCI 140-599 course(s) | | |
| Any MATH 160-599 course(s) | | |
| Note: This requirement may not be satisfied with CSCI 101, CSCI 111, or CSCI 121. | | |

PHYSICS

| | | |
|--|-------------------------|------------|
| undefined - Choose 1 of the following options 1-2: | | 0 |
| Option 1. Physics with Algebra | | |
| PHYS 131 | Physics 1 with Algebra | |
| PHYS 132 | Physics 2 with Algebra | |
| Option 2. Physics with Calculus | | |
| PHYS 231 | Physics 1 with Calculus | |
| PHYS 232 | Physics 2 with Calculus | |
| Total Hours | | 4-5 |