



Department of Biology

BACHELOR OF SCIENCE IN BIOTECHNOLOGY

The UNO Department of Biology, in cooperation with UNMC, offers an undergraduate degree program in biotechnology. This program utilizes courses taught at UNO in conjunction with a biotechnology internship experience at UNMC or other area location. For more information please contact a biotechnology advisors - Dr. Paul Davis, 402-554-3379 or Dr. William Tapprich, 402-554-3380 or the Biology Department, 402-554-2641.

BIOTECHNOLOGY CURRICULUM

In addition to the general requirements of the College of Arts & Sciences for graduation, the following courses are required for a B. S. in Biotechnology.

REQUIRED BIOLOGY COURSES:

Biol. 1450 Biology I	5 cr. hr.
Biol. 1750 Biology II	5 cr. hr.
Biol. 2140 Genetics	4 cr. hr.
Biol. 3020 Molecular Biology of the Cell	3 cr. hr.
Biol. 3240 Immunology	3 cr. hr.
Chem./Biol. 4650 Biochemistry I	3 cr. hr.
Chem./Biol. 4654 Biochemistry I Lab	1 cr. hr.
Biol. 4550 Biotechnology Internship	3 cr. hr.

SUPPORTING BIOTECHNOLOGY COURSES:

(Students must complete 3 of the following courses)

Biol. 4130 Molecular Genetics (usually offered in Fall)	4 cr. hr. ^W
Biol. 4450 Virology (usually offered in Fall)	4 cr. hr. ^W
Biol. 4640 Microbial Physiology (usually offered in Fall)	4 cr. hr. ^W
Biol. 4140 Cellular Biology (usually offered in Spring)	4 cr. hr. ^W
Biol. 4850 Developmental Biology (usually offered in Spring)	4 cr. hr. ^W
Chem./Biol. 4660 Biochemistry II and Chem./Biol. 4664 Biochem. II Lab (usually offered in Spring)	4 cr. hr. ^W

REQUIRED CHEMISTRY COURSES:

Chem. 1180 + Chem. 1184 General Chemistry I	4 cr. hr.
Chem. 1190 + Chem. 1194 General Chemistry II	4 cr. hr.
Chem. 2250 Organic Chemistry I	3 cr. hr.
Chem. 2260 Organic Chemistry II	3 cr. hr.
Chem. 2274 Organic Chemistry Laboratory	2 cr. hr.

REQUIRED PHYSICS COURSES:

Phys. 1110 (or 2110) + Phys. 1154 General Physics	5 cr. hr.
Phys. 1120 (or 2120) + Phys. 1164 General Physics	5 cr. hr.

SUPPORTING COURSEWORK IN MATHEMATICS: 9 Semester Credit Hours

To include Math 1930 (Calculus) with additional course work in statistics and computer science recommended.

REQUIRED WRITING COURSE:

See information on reverse side.

REQUIRED WRITING COURSE:

The Writing in the Discipline requirement can be met by completing two courses from each of the three tiers below:

Tier I: Biology 1450 – Biology I, Biology 1750 – Biology II

Tier II: Biology 2140 – Genetics, Biology 3020 – Molecular Biology of the Cell, Biology 3340 – Ecology.

Tier III: Designated biology courses at the 3000 – 4000 level. The majority of 3000-4000 level biology courses will be designated as Tier III courses. Tier III courses approved for meeting this requirement are listed with ^w in the supporting biotechnology requirements above.

All courses used to meet the writing requirement must be taken at UNO. Only courses completed in 2010 or later qualify. Completion of the writing requirement will not exempt students from completing assigned writing in subsequent courses.

Option II

Alternatively, students may meet the writing requirement by completing BIOL 3150 Writing in Biology or ENGL 3980 or ENGL 2400