



BIOLOGICAL SCIENCES

What YOU will learn:

Majoring in biological sciences means YOU can explore the living world—from molecules to ecosystems! You will have the opportunity to take an anatomy course that utilizes cadavers, or study on site at the Cedar Point Biological Station. Cedar Point offers hands-on lab and field courses during the summer where you will put concepts of biology into real-world practice in a unique setting.

You are invited to explore your particular interests—microbiology, ecology, genetics, or physiology—through research course work and independent study directed by a faculty member. Requirements for the major include course work in cell and molecular biology, biodiversity, genetics, ecology, and evolution. As you progress into the upper level courses you can enroll in electives such as Molecular Biology, Biology of Viruses, Cancer Biology, Biopsychology, Invertebrate or Vertebrate Zoology, Plant Taxonomy, and many more.

Career opportunities YOU will have:

Biology is a broad field providing numerous, diverse career options. You may choose to continue on to professional school for a career in clinical healthcare, or work in public health, health policy, or health care administration. You might choose to work as a food industry researcher, conservationist, or as a zoo keeper. You can also explore the pharmaceutical realm in sales or production. Biomedical research, genetic counseling, and bioinformatics are additional career options. Employment of recent Nebraska graduates include:

- Associate Analyst, Celerion Labs
- Burn Tech, St. Elizabeth Regional Health Center
- Histotech, Pathology Medical Services
- Laboratory Technician, POET Research Center, Inc
- Missionary, Hong Kong Adventist College
- Phlebotomist, BryanLGH
- Plant Research Biologist, Midwest Research Inc
- Research Technician II - Bio Process Development Facility, UNL

Why NEBRASKA for Biological Sciences?

Biology is integrative at the University of Nebraska–Lincoln, and the facilities and research areas are numerous. Nebraska’s Center for Virology combines the expertise of Nebraska’s leading biomedical research institutions: University of Nebraska-Lincoln, University of Nebraska Medical Center, and Creighton University. Ranked 4th in the nation, the Harold W. Manter Laboratory of Parasitology is one of the most important centers of Systematic Parasitology and has produced three Henry Baldwin Ward Medalists—the highest annual award that is given by the American Society of Parasitologists. The Center for Biotechnology promotes research on all aspects of molecular life sciences research, leading to improvements in agriculture, health care, and the environment. Other labs and facilities include the Ecosystems Analysis Laboratory, Nebraska Bioenergy Facilities, and the Center for Plant Science Innovation.

Picture yourself engaging in research such as these current student projects: *The Role of IRF-3 in Immune Response to Infection*, *Factors Affecting the Immune System of the Ornate Box Turtle (Terrapene ornata)*, *T-follicular regulatory cell response to HIV infection*, *Integrating Short and Long Term Effects of Climate Change on Predator-Prey Interactions*, and *Role of UGDH in Prostate Cancer Cells and Thier Treatment*; or getting involved on campus through the Biology Club student organization aimed at providing interactions between students, faculty, and staff, while helping you explore research and career opportunities.





BIOLOGICAL SCIENCES

	COURSE NAME	HOURS
FIRST Semester	CHEM 109: General Chemistry I (CDR F)	4
	MATH 106: Calculus I (ACE 3)	5
	ACE 1: Written texts/research & knowledge skills	3
	ACE 5: Humanities	3
	Total Hours	15

	COURSE NAME	HOURS
SECOND Semester	CHEM 110: General Chemistry II	4
	LIFE 120: Fundamentals of Biology I	3
	LIFE 120L: Fundamentals of Biology I Laboratory	1
	College Distribution Requirement (CDR) A: Written Communication	3
	Language Pre-requisite - 101 Level (Elective)	5
	Total Hours	16

THIRD Semester	LIFE 121: Fundamentals of Biology II	3
	LIFE 121L: Fundamentals of Biology II Laboratory	1
	CHEM 251: Organic Chemistry I	3
	CHEM 253: Organic Chemistry I Laboratory	1
	ACE 2: Communication skills	3
	Language Pre-requisite - 102 Level (Elective)	5
	Total Hours	16

FOURTH Semester	BIOS 205: Genetics, Molecular and Cellular Biology Laboratory	2
	BIOS 206: General Genetics	4
	Statistical Methods or Introduction to Statistics	3
	ACE 6: Social Sciences	3
	Language Requirement - 201 Level (CDR E)	3
	Total Hours	15

FIFTH Semester	Biological Sciences Course	4
	PHYS 141: Elementary General Physics I	5
	ACE 8: Ethics/civics/stewardship	3
	Language Requirement - 202 Level (CDR E)	3
	Total Hours	15

SIXTH Semester	BIOS 207: Ecology and Evolution	4
	BIOS 310: School of Biological Sciences Seminar	1
	BIOC 321: Elements of Biochemistry	3
	PHYS 142: Elementary General Physics II	5
	CDR D: Social Sciences	3
	Total Hours	16

SEVENTH Semester	BIOS 300 or 400 Level Course	3
	BIOS 400 Level Course	3
	CDR C: Humanities	3
	Elective/Minor/Secondary Major/Science/Pre-Professional	3
	Elective/Minor/Secondary Major/Science/Pre-Professional	2
	Total Hours	14

EIGHTH Semester	BIOS 400 Level Course (ACE 10)	3
	BIOS Course	4
	BIOS 099: Assessment of the Major	0
	ACE 7: Fine Arts	3
	ACE 9: Global awareness & human diversity	3
	Total Hours	13

DISCLAIMER: This document represents a sample 4-year plan for degree completion with a major of interest in the College of Arts and Sciences. Actual course selection and sequence may vary and should be discussed individually with an Academic Advisor at the college and department level.