The Bachelor of Arts major provides a broad training in biology and allows specializations through choice of electives. It offers basic preparation for entry-level employment positions, graduate work or an advanced degree in all health-related areas. The combination of required and elective courses needs to equal a minimum of 58 credit hours.

**Introductory Track**
- □ BIOL 2051 – General Biology: Organismal Diversity, 4 hrs.
- □ BIOL 2052 – General Biology: Cell Structure & Function, 4 hrs.
- □ BIOL 3100 – Evolution, Ecology, & the Nature of Science, 3 hrs.
- □ BIOL 3140 – Genetics, 4 hrs.

**Required Chemistry**
- □ CHEM 1110 – General Chemistry I, 4 hrs.
- □ CHEM 1120 – General Chemistry II, 4 hrs.

**Required Advanced Chemistry**
(Choose one of the options below)
- □ CHEM 2040 – Applied Organic & Biochemistry, 4 hrs.
  OR
  □ CHEM 2210 – Organic Chemistry I, 3 hrs. **AND**
  □ CHEM 2230 – Organic Chemistry Lab, 2 hrs.

**Required Math**
(Choose one of the options below)
- □ MATH 1120 – Math for the Biological Sciences, 3 hrs. **AND**
  □ MATH 1130 – Trigonometry, 2 hrs.
  OR
  □ MATH 1140 – Precalculus, 4 hrs.
  OR
  □ MATH 1420 – Calculus, 4 hrs.

**Required Earth Science or Physics**
(Choose one of the options below)
- □ EARTHSCI 1300 – Intro to Geology, 4 hrs. **AND**
  □ EARTHSCI 1320 – Earth History, 4 hrs.
  OR
  □ PHYSICS 1511 – General Physics I, 4 hrs. **AND**
  □ PHYSICS 1512 – General Physics II, 4 hrs.

**Major Elective Credit Courses**
(Choose 17-19 hrs. of elective credits to total 58)
- Biology electives are listed on reverse side
- Science courses at Iowa Lakeside Laboratory satisfy elective requirements. Check with your advisor for more information.

**Additional Chemistry courses that satisfy elective requirement:**
- □ CHEM 4510 – Biochemistry I, 3 hrs.
  □ CHEM 2220 – Organic Chemistry II, 3 hrs.

**Notes:**
- Must have a UNI cumulative and UNI major/plan GPA of 2.0, or higher, with a grade of C- (1.67), or better, in all courses applied to the major.
- A minimum of 7 credits of 4000 level biology electives are required (BIOL 4198 – Independent Study and CHEM 4510 – Biochemistry I cannot be counted toward this 7 credits).
- At least 4 credits of biology electives at the 4000 level need to be taken at UNI.
- BIOL 3101 – Anatomy & Physiology I counts as university elective credit, not as a biology major elective.
- Cannot count more than a combined 4 credits of the following courses toward the biology major elective requirements:
  - BIOL 3185 – Readings in Biology
  - BIOL 3190 – Undergraduate Research
  - BIOL 4198 – Independent Study
- If *CHEM 1130 – General Chemistry I-II, 5 hrs., is taken, then 3 additional biology electives are required to reach a 58 credit major.
- Students invited to do Honors Research will complete 4 credit hours of BIOL 3190 – Undergraduate Research and 1 credit hour of BIOL 3191 – Senior Thesis. Students must declare the Honors Research Emphasis in order for it to reflect on the degree.
BIOL 3102  Anatomy & Physiology II  Fall, Spring, Summer  4 hrs. *
BIOL 3106  Vertebrate Anatomy  Spring  4 hrs.
BIOL 3107  Environmental Physiology  Variable  3 hrs.
BIOL 3108  Vertebrate Histology  Variable  4 hrs.
BIOL 3112  Invertebrate Zoology  Variable  4 hrs.
BIOL 3118  Marine Biology  Variable  3 hrs.
BIOL 3120  Plant Diversity & Evolution  Spring  4 hrs.
BIOL 3147  Cancer & Emerging Infectious Diseases  Spring  3 hrs.
BIOL 3151  General Microbiology  Fall & Spring  4 hrs.
BIOL 3160  Field Zoology of Vertebrates  Spring  4 hrs.
BIOL 3170  Entomology  Variable  3 hrs.
BIOL 4105  Wildlife Ecology & Management  Odd Falls  4 hrs.
BIOL 4108  Biodiversity Conservation Policy  Even Springs  3 hrs.
BIOL 4114  Comparative Animal Physiology  Even Falls  4 hrs. #
BIOL 4116  Neurobiology  Spring  3 hrs.
BIOL 4121  Plant Biotechnology  Odd falls  4 hrs.
BIOL 4122  Plant Physiology  Variable  4 hrs.
VIOI 4127  Bioinformatics Applications for Biology  Variable  3 hrs.
BIOL 4128  Cell Biology  Spring  4 hrs. #
BIOL 4129  Genomics  Even Falls  3 hrs.
BIOL 4137  Vertebrate Physiology  Odd Falls  4 hrs. #
BIOL 4142  Evolutionary Biology  Spring  3 hrs.
BIOL 4144  Virology  Even Springs  4 hrs.
BIOL 4146  Developmental Biology of Animals  Fall  4 hrs.
BIOL 4150  Immunology  Fall  4 hrs.
BIOL 4157  Biostatistics  Fall  3 hrs.
BIOL 4164  Mammalogy  Fall  4 hrs.
BIOL 4166  Plant Systematics  Odd Falls  4 hrs.
BIOL 4167  Conservation Biology  Spring  3 hrs.
BIOL 4168  Ecology  Fall  4 hrs.
BIOL 4172  Developmental Plant Anatomy  Even Falls  4 hrs.
BIOL 4180  Restoration Ecology  Odd Springs  4 hrs.
BIOL 4198  Independent Study  Fall, Spring, Summer  1 – 6 hrs. ***

Research Associated Credits:
BIOL 3185  Readings in Biology  Fall, Spring, Summer  1 – 3 hrs.
BIOL 3189  Seminar  Variable  1 – 2 hrs.
BIOL 3190  Undergraduate Research in Biology  Fall, Spring, Summer  1 – 3 hrs. ***
BIOL 3191  Senior Thesis  Fall, Spring, Summer  1 hr.

Science courses at Iowa Lakeside Laboratory, lakesidelab.org, satisfy elective requirements. Check with your advisor for more information.

Notes:
1. Prerequisite for 3000 level courses include completion of BIOL 2051, BIOL 2052, CHEM 1110 and CHEM 1120. All with a C- or higher.
2. Prerequisite for 4000 level courses include junior standing and completion of
   a. Two semester sequence of General Biology and General Chemistry (listed above).
   b. BIOL 3100 – Evolution, Ecology & the Nature of Science and BIOL 3140 – Genetics. All with a C- or higher
   c. Courses with # have additional prerequisites. Check courses catalog for complete details.
3. * BIOL 3101 – Anatomy and Physiology I counts as university elective credit, not biology elective credit. A student must take BIOL 3101 – Anatomy and Physiology I OR BIOL 3106 – Vertebrate Anatomy AND BIOL 3102 – Anatomy and Physiology II at UNI for BIOL 3102 to count as biology elective credit for a major or minor.
4. *** BIOL 3190 - Undergraduate Research in Biology and BIOL 4198 – Independent Study require students to contact faculty members to inquire about available opportunities.
5. The official degree requirements as well as policies and procedures can be found at www.uni.edu/catalog
6. Students pursuing a biology major or minor must earn a C- or better in all coursework required for their major or minor. Additionally, students must have a UNI Major/Plan GPA and UNI Cumulative GPA of 2.0 or better at the time of graduation.