



Biology, B.A. *major*

A total of 120 semester credits are needed for the **Biology B.A.** degree and include the following:

- Completion of a minimum of 40 upper division credits (level 3000/4000)
- Completion of all required major credits
- Completion of Core Curriculum credits (Minnesota Transfer Curriculum [MnTC] Goal Areas 1-10 with a minimum of 40 credits) required for all baccalaureate degrees
- Completion of BSU Focus and Nisidotaading Course Requirements

Dual Degrees

Students wishing to complete two degrees concurrently, (example: Bachelor of Science and Bachelor of Arts) must complete a minimum of an additional 30 credits above the required 120 credits.

Multiple Credentials

Any additional major, minor or certificate in a degree must have at least 6 credits of course work not used to meet the requirements of another major, minor or certificate in the degree.

Required Credits: 40

Required GPA: 2.25

I REQUIRED BIOLOGY CORE COURSES

Complete the following courses:

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
- BIOL 2360 Genetics (4 credits)
- BIOL 2610 General Ecology (3 credits)

II REQUIRED BIOLOGY ELECTIVES

Select 25 semester credit electives from Biology courses (except 1000 level BIOL classes and BIOL 2925) to achieve a minimum of 40 semester credits in BIOL courses. These electives can also include any of the following options from other departments:

- CHEM 4411 Biochemistry I (3 credits)
- CHEM 4471 Biochemistry Laboratory I (1 credit)
- ENVR 4400 Environmental Microbiology (3 credits)
- ENVR 4500 Environmental Toxicology (4 credits)

Program Learning Outcomes | Biology, B.A.

1. **Communicate:** Effectively present research using common, professional formats (written and/or verbal). This includes using figures, graphs, tables, and illustrations to promote dissemination and clarity of knowledge.
2. **Create Purpose or Hypothesis:** Provide justification for the importance of pursuing a project or construct a testable hypothesis (or hypotheses).
3. **Observe and Question:** Integrate information or observations to promote curiosity and question generation.
4. **Recognize Larger Implications:** Demonstrate understanding of the ethical/social dimensions or societal implications of science, recognize inherent biases, and communicate scientific ideas to non-science audiences.

5. **Re-engage:** Demonstrate an ability to re-engage with the research process by identifying sources of error, possible limitations of their research, next steps in a project, or re-designing more appropriate experimental methods/controls.

6. **Research:** Plan and execute research, experiments, data collection, analysis of the results, and/or synthesis of new or coalesced knowledge.

7. **Review Research Literature:** Search and review appropriate sources with a goal of independent information discovery or critically identifying knowledge gaps.

Suggested Semester Schedule | Biology, B.A.

The following is a list of required Biology Major, B.A. courses arranged by year. This schedule is intended to assist students in planning their courses. There is some flexibility in this schedule, but graduation within four years will require close adherence to the specified sequence of courses. Always consult your Biology academic advisor as to the proper courses and sequence of courses needed for graduation.

Freshman

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 1500 Diversity of Life (4 credits)
- Core Curriculum requirements
- Consult with your Biology academic advisor

Sophomore

- BIOL 2360 Genetics (4 credits)
- BIOL 2610 General Ecology (3 credits)
- Writing course
- Biology degree requirements
- Core Curriculum requirements
- Consult with your Biology academic advisor

Junior

- Biology degree requirements
- Core Curriculum requirements
- Consult with your Biology academic advisor

Senior

- Complete Biology degree requirements
- Complete Core Curriculum requirements
- Consult with your Biology academic advisor