

# BIOLOGICAL SCIENCES

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College of Natural Science and Mathematics  
 Department of Biology and Wildlife  
 907-474-7671  
<http://www.bw.uaf.edu>

## B.A., B.S. Degrees

Minimum Requirements for Degrees: 120 credits

Biological sciences is an appropriate major for students interested in the science of life. Programs in these fields provide a broad education and a foundation in the principles of biology. Graduates are employed in environmental science, health services, biology education, and as field and laboratory technicians. Graduates also pursue advanced M.S., pharmacology, nursing, MD or Ph.D. degrees. Biology faculty advisors can help students choose courses that will best fit their goals.

Biological sciences majors may pursue either a B.A. or B.S. degree. Because biology is an interdisciplinary science, both programs include course work in the physical sciences and mathematics. The B.A. requires fewer credits in natural science and more credits in the social sciences and humanities than the B.S. degree, which focuses more intensively on biological science. The B.S. degree without a concentration provides the most comprehensive education in biology. The B.S. degree with a concentration permits some degree of specialization in one of three sub-disciplines: cell and molecular biology, physiology, or ecology and evolutionary biology.

Incoming students who do not meet the prerequisites for BIOL F115X and those who did not complete a biology course in high school are encouraged to take a biology course for non-majors such as BIOL F103X or BIOL F104X and CHEM F105X and CHEM F106X during their first year, and to begin the BIOL F115X and BIOL F116X series in their sophomore year. Students unprepared for CHEM F105X are encouraged to take CHEM F103X beforehand.

Students majoring in the biological sciences must complete a capstone project during their junior or senior year. The goal of the capstone experience is to integrate skills and information students have learned in previous courses by conducting a mentored research project and communicating the results. Students will signal their intent to complete the capstone requirement by registering for BIOL F400. The capstone research project itself may be completed within one of the designated courses listed below, or by working individually with a faculty mentor. If the capstone project is conducted within a designated course, a passing grade on the project itself is required to satisfy the capstone requirement regardless of the course grade. Biology course credit for mentored research is available as BIOL F490, BIOL F397, or BIOL F497. More information about the capstone requirement is posted on the Biology and Wildlife website (<http://www.bw.uaf.edu>). Students are strongly encouraged to speak to a biology advisor well before their senior year about how they plan to satisfy the capstone requirement.

## Degrees

- B.A., Biological Sciences (<http://catalog.uaf.edu/archives/2018-2019/bachelors/bachelors-degree-programs/biological-sciences/ba>)
- B.S., Biological Sciences (without concentration) (<http://catalog.uaf.edu/archives/2018-2019/bachelors/bachelors-degree-programs/biological-sciences/bs>)

- B.S., Biological Sciences (with concentration) (<http://catalog.uaf.edu/archives/2018-2019/bachelors/bachelors-degree-programs/biological-sciences/bs-concentration>)

## Minor

- Minor, Biological Sciences (<http://catalog.uaf.edu/archives/2018-2019/bachelors/bachelors-degree-programs/biological-sciences/minor>)