

# BIOLOGY

## About the Department

Division of Natural Sciences Faculty (<https://spu.edu/academics/college-applied-natural-sciences/faculty-staff?d=Natural%20Sciences>)

Biology Department Website (<https://spu.edu/academics/college-applied-natural-sciences/biology>)

Biology majors at Seattle Pacific University graduate with a broad understanding of living organisms. Through immersion in scientific inquiry and problem solving, you'll develop fundamental skills and knowledge for entering a wide range of careers, including those in medicine, environmental science, research, and teaching.

The primary goals of the department include:

- Cultivating students who understand and apply the scientific method to the study of life.
- Preparing students to think critically and to effectively communicate biological principles.
- Producing graduates who make informed decisions based on reliable evidence and guided by their Christian worldview.
- Emboldening graduates to lead lives of grace-filled wholeness, and personal and professional integrity.

Please consult with your faculty advisor to select the best major for your interests. Be sure to discuss coursework modifications that may be required to meet your specific career goals.

## Our Mission

The Department of Biology at Seattle Pacific University embraces the notion of intellectual rigor, enriched and enhanced by diversity along a number of dimensions, including cultural, ethnic, and national origins; gender, gender identity, and sexuality; disability; neurodiversity; and socio-economic class. We are especially committed to increasing the representation of populations that have been historically excluded from participation in U.S. higher education and academia. It is our intent to present materials and activities that are respectful and inclusive across all forms of diversity, for only when biology includes different perspectives can we truly understand God's creation to the fullest of human comprehension.

## Majors

- Applied Human Biology (BS) (<https://catalog.spu.edu/undergraduate/college-schools/cans-natural-science/biology-programs/applied-human-biology-bs/>)
- Biology (BA) (<https://catalog.spu.edu/undergraduate/college-schools/cans-natural-science/biology-programs/biology-ba/>)
- Biology (BS) (<https://catalog.spu.edu/undergraduate/college-schools/cans-natural-science/biology-programs/biology-bs/>)
- Ecology (BS) (<https://catalog.spu.edu/undergraduate/college-schools/cans-natural-science/biology-programs/ecology-bs/>)
- Physiology (BS) (<https://catalog.spu.edu/undergraduate/college-schools/cans-natural-science/biology-programs/physiology-bs/>)

## Minors

- Bioethics and Humanities Minor (<https://catalog.spu.edu/undergraduate/college-schools/cans-natural-science/biology-programs/bioethics-humanities-minor/>)
- Biology Minor (<https://catalog.spu.edu/undergraduate/college-schools/cans-natural-science/biology-programs/biology-minor/>)

## Interdisciplinary Programs

Learn more about this interdisciplinary program:

- Ecotheology (<https://catalog.spu.edu/undergraduate/college-schools/school-seattle-pacific-seminary/ecotheology-minor/>) (minor)

## Program Learning Outcomes

- Students learn the major themes and core concepts of cell biology, molecular biology, genetics, organismal biology, ecology, and evolution by natural selection.
- Students develop a graduation plan and learn to access resources that support academic success.
- Students use appropriate supporting data and analyses to effectively communicate in oral and written forms.
- Students explore the integration of science with a Christian worldview.
- Students participate in authentic laboratory and/or field research.
- Students are prepared for graduate or professional training and careers related to the biological sciences.

## Undergraduate Research

Many biology majors will require you to complete an undergraduate research project for graduation. You will collaborate with a faculty member on an investigation that requires a formal proposal (BIO 4978 Biological Research Proposal), and participation in original research and public presentation of your results (BIO 4979 Biological Research).

No more than 6 credits of courses numbered from BIO 4900 Independent Study in Biology through BIO 4982 Advanced Biological Research may be applied to any major.

Please visit the Biology department website (<https://spu.edu/academics/college-applied-natural-sciences/biology>) for more information on research opportunities.

## Pre-Professional Health Programs

SPU offers specialized faculty advising in the Pre-Professional Health Sciences (<https://catalog.spu.edu/undergraduate/interdisciplinary-programs/pre-professional-health-sciences/>) (PPHS) to help prepare you for acceptance into graduate-level professional health programs including medicine, osteopathic medicine, dentistry, veterinary medicine, physicians assistant, optometry, pharmacy, physical therapy, and occupational therapy.

## Future Teachers

If you are interested in teaching Biology at the middle school to high school level, you should plan to complete the Biology (BA) major along with the Secondary Certification (<https://catalog.spu.edu/undergraduate/college-schools/hea-education/certifications/secondary-certification/>)

program through the Division of Education. This program leads to an endorsement in Biology for grades 5-12.

Contact the Certification Office ([soe-cert@spu.edu](mailto:soe-cert@spu.edu)) for complete information on the certification program.