

DEPARTMENT OF BIOLOGICAL SCIENCES

Science Complex 4101
Phone: 410-704-3042
Email: biolsci@towson.edu

Programs of the Department

The Department of Biological Sciences offers the following programs of study: the major in Biology, the minor in Biology and the Master of Science in Biology. For more information about the master's program, consult the *Graduate Catalog*.

A major in Biology is recommended for students interested in pursuing general careers in botany, zoology, ecology, microbiology, or molecular biology. It is also recommended for individuals preparing for graduate studies in biology, medicine, dentistry or medically oriented fields, including optometry, pharmacy, podiatry, or veterinary science; teacher education in secondary schools, i.e., teaching of biological or natural sciences; basic or applied research in the biological sciences; or environmental biology, including conservation, wildlife biology, forestry, fisheries, pollution control, and marine biology.

Students selecting this major should contact the department to be assigned an adviser to assist them in designing a program to meet their special needs. Students will meet with their adviser each term to discuss their progress and to facilitate necessary changes in their programs of study.

Honors Program

To graduate with departmental honors in Biology, students must complete BIOL 491 and BIOL 499 before graduation. The research thesis must be presented at either an oral defense before the student's Honors Research Committee, or a presentation open to the public, at the discretion of the student's research adviser. The Honors College has a handbook that describes all of the requirements for the departmental honors program.

Internship/Cooperative Education

The department participates in TU's cooperative education program, which provides junior- and senior-level students of high academic standing practical work experience while earning college credit. Students have served as interns at such facilities as the National Aquarium and the Smithsonian Institution. For further information, contact the Career Center.

Student Organizations

The Biology Club, the Premed/Preudent Club, the Animal Behavior Club and the local chapter of Beta Beta Beta, the national honor society in biology, are active organizations composed of and led by students. Among the events organized by members of the Biology Club are field trips, which are designed to enhance participants' knowledge of the biological sciences, and athletic and social events, which provide opportunities for student and faculty interaction in an informal atmosphere.

Tri Beta, whose members have achieved high scholarship, functions primarily to encourage and provide for the academic growth of its members.

Graduate Program

The course of study leading to the Master of Science in Biology is designed to provide greater knowledge and understanding of biology and to help students develop a proficiency in independent thought, inquiry and research. Students may pursue either the thesis program (30 units and a thesis) or the non-thesis program (36 units). Detailed information regarding both programs is given in the *Graduate Catalog*.

Department Animal Policy

In accordance with federal laws and regulations, Towson University, through its Institutional Animal Care and Use Committee, reviews the use of animals in teaching to assure compliance with the standards established by the U.S. Department of Agriculture and the National Institutes of Health for the humane treatment of animals. TU makes every effort to minimize the use of animals and seeks alternatives wherever possible. Although TU recognizes that some students may believe the use of animals as teaching tools is inhumane, certain curricula require the use of animals as a necessary part of instruction. Accordingly, where the use of animals in class demonstrations or experiments is a requirement for successful completion of any course, as determined by the department, students will be obliged to comply with those requirements as set forth by the instructor in the course syllabus. TU will not provide optional procedures for students who do not comply with course requirements.

If a course requires the use of animals in class demonstrations or experiments, however, the syllabus will specifically state that animals will be used in class demonstrations or experiments and that such use is a requirement for successful completion of the course. Notice of this requirement will be made a part of the course description and will be published in this catalog.

Majors

- Major in Biology
- Major in Biology - Cellular, Molecular & Organismal Physiology Concentration
- Major in Biology - Ecology, Evolution and Conservation Concentration
- Major in Biology - Secondary Education Concentration

Minors

- Minor in Biology

Faculty

Professors: Vanessa Beauchamp, Harald Beck, Mark Bulmer, Elana Ehrlich, Brian Fath, Laura Gough, Sarah Haines, David Hearn, John LaPolla, Brian Masters, Jay Nelson, Christopher Oufiero (Graduate Program Director), Christopher Salice, Vonnice Shields, Erik Silldorff, Michelle Snyder, Petra Tsuji (Chairperson)

Associate Professors: Renee Dickie, Jacqueline Doyle, Anne Estes, Cynthia Ghent, Matthew Hemm, Jack Shepard, Faith Weeks, John Weldon, Colleen Winters

Assistant Professors: Alice Besterman, Daniel Caetano, Erin Harberts, Iskander Ibrahim, Sarah Longo, Wilbur Ryan

Senior Lecturer: Laurie Williams-Hogarth

Lecturers: Philip Clark, Kate Kosewicz, Alexis Nobleman, Leann Norman, Christa Partain, Catherine Scollick

Clinical Associate Professors: Steven Kimble, Kathryn McDougal, Elizabeth O'Hare

Clinical Assistant Professors: Katherine Sayers, Cheryl Warren

Clinical Instructor: Sarah Mamaril (Master Teacher (Towson UTeach))

Research Assistant Professor : Daniela Chavez

Lecturer II: Angela Cox, Stella Evans, Laura Martin, Charlotte Saylor, Catherine Wijnands