BIOLOGICAL SCIENCES DEPARTMENT



Study in the Biological Sciences at Edgewood College offers students the opportunity to build an understanding in the biological sciences and a life-long link with discovery. We are committed to innovation and excellence in our programs, and to preparing our majors to be successful in science-related careers that are vital for meeting future local, national, and global needs. The Biological Sciences Department seeks to prepare all our students to be well-informed citizens and leaders in a world increasingly shaped by science and technology.

Biological Sciences graduates go on to become ecologists, environmental consultants, life science illustrators, biomedical engineers, doctors, veterinarians, physical therapists, teachers, research scientists, and laboratory technicians. In addition, a degree in the biological sciences can prepare students for continuing education in many graduate or professional schools.

MAJORS

Biology Broad Field: Biology Concentration Cytotechnology

MINORS

Biology

TEACHING MAJORS

Biology Teaching Biology Teaching: Environmental Science Broad Field Science: Life and Environmental Science

TEACHING MINORS

Biology Teaching Natural Science Teaching Science Education



Our campus student organizations, Edgewood Science Society, Achievement in Medicine, and Wood's Edge, offer students opportunities to build friendships, extend classroom learning, and engage in community outreach.

The Biological Sciences Department is located in the Sonderegger Science Center, which opened in January 1999 and Mazzuchelli Center on the north shore of Lake Wingra, renovated in 2004. Both facilities provide opportunities for students to engage in undergraduate research projects. Students study diverse biological topics: Lake Wingra, its watershed, plant communities found in the Arboretum located on the south shore of Lake Wingra as well as biomechanics, animal behavior, neuroscience, microbiology, and animal development.

SAMPLE OF COURSES

BIO 206 - Natural Communities of Wisconsin

An exploration of Wisconsin's natural communities, including wetlands, lakes, streams, prairies, and forests. Field trips and labs focus on the identification of local plants and animals, the historical and current distribution of natural communities in Wisconsin, the science behind our current understanding of the various factors that draw species together, and our efforts to preserve our natural heritage.

BIO 415 - Exercise Physiology

An advanced study of how the body responds and adapts to exercise. Topics include a comprehensive study of changes in physiology during different training regimes, metabolism theory, how physiology affects fitness, and the development of training and nutrition plans. Laboratory experiences provide students with opportunities to work with cutting edge physiology technology.

BIO 402 - Cell and Molecular Biology

Explores how life works at the cellular level. Topics include cell structure and function: energy, molecular interactions, flow of genetic information, regulation of cell functions, and interactions of cells with their environment. Laboratory work includes qRT-PCR, gel electrophoresis, cell culture, and the use of other molecular biology tools

For a complete list of courses and course descriptions, please visit www.edgewood.edu/catalogue.aspx.

FACULTY

Nadia Dominguez, Ph.D Microbiology and Molecular Biology ndominguez@edgewood.edu

Jacob Griffin, Ph.D Ecosystem Ecology jacobgriffin@edgewood.edu

Kelley Grorud, Ph.D Biomedical Engineering kgrorud@edgewood.edu

Diana Huepenbecker, M.S. Ecology, Conservation, and Environmental Studies dhuepenbecker@edgewood.edu

Nicole Kime, Ph.D Animal Behavior and Physiology nkime@edgewood.edu

MaryRuth Kotelnicki Geobiology and Environmental Studies mkotelnicki@edgewood.edu

Tim Kuhman, Ph.D Botany, Ecology, and Environmental Studies tkuhman@edgewood.edu

Jim Lorman, Ph.D Sustainability and Environmental Studies lorman@edgewood.edu

Brenda del Moral, Ph.D Neuroscience

Francie Rowe, Ph.D Genetics & Development frowe@edgewood.edu

Amy Schiebel, Ph.D Science Education and Science Outreach aschiebel@edgewood.edu