

DEPARTMENT OF BIOLOGICAL AND HEALTH SCIENCES

Contact Information

Chair: Enrique Massa
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Building Name: Biological and Health Sciences Building
Room Number: 101

The Department of Biological and Health Sciences offers a Master of Science degree in Biology.

A variety of research projects are available: a student can select a field or a laboratory oriented project. Fiscal support for qualified graduate students is available through scholarships, research assistantships and teaching assistantships. Many research projects are funded through federal and private sources.

Faculty Graduate Faculty

Baskin, Jon A Professor, Department of Biological and Health Sciences; B.A., New York University; M.A., University of Arizona; Ph.D., University of Florida.

Bohm, Rudolf Assistant Professor, Department of Biological and Health Sciences; B.S., The University of Texas at Austin; Ph.D., The University of Texas at Austin.

Massa, Enrique Associate Professor, Department of Biological and Health Sciences; Chair; B.S., Pan American University; M.S., University of Michigan; Ph.D., University of Michigan.

Perez-Ballester, Rafael Professor, Department of Biological and Health Sciences; B.S., Universidad Autónoma de Madrid; M.S., University of Michigan; Ph.D., University of Michigan.

Perrigo, Glenn H Professor, Department of Biological and Health Sciences; B.S., State University College, Brockport; Ph.D., The University of Texas at Austin.

Powell, Randy Associate Professor, Department of Biological and Health Sciences; B.S., Logan College of Chiropractic; D.C., Logan College of Chiropractic; B.S., Southern Illinois University at Carbondale; M.S., Southern Illinois University at Carbondale; Ph.D., The University of Texas at El Paso.

Sung, Chang K Assistant Professor, Department of Biological and Health Sciences; B.S., Yeungnam University (South Korea); M.S., Illinois Institute of Technology; Ph.D., University of Illinois.

Xi, Weimin Associate Professor, Department of Biological and Health Sciences; B.S., Capital Normal University (China); M.S., Southwest University (China); Ph.D., University of North Carolina at Chapel Hill.

Associate Member

He, Fang Assistant Professor, Department of Biological and Health Sciences; B.S., Jiangxi Institute of Education (China); M.S., Nanjing University (China); Ph.D., Louisiana State University.

Kim, Haeyoung Assistant Professor, Department of Biological and Health Sciences; B.A., Chonnam National University (South Korea); M.A., Chonnam National University (South Korea).

Laughlin, Richard Assistant Professor, Department of Biological and Health Sciences; B.S., Stetson University; Ph.D., Clemson University.

Velez-Hernandez, Maria Assistant Professor, Department of Biological and Health Sciences; B.S., University of Puerto Rico at Mayaguez (Puerto Rico); Ph.D., University of Puerto Rico at Mayaguez (Puerto Rico).

Emeritus

Peacock, J. Talmer Professor of Biology, Department of Biological and Health Sciences; B.S., Maryville College; M.S., University of Alabama; Ph.D., The University of Texas at Austin.

Perez, John Professor of Biological and Health Sciences, Department of Biological and Health Sciences; Regents Professor; B.S., University of Utah; M.A., Mankato State College; Ph.D., Utah State University.

Wood, Carl Professor of Biology, Department of Biological and Health Sciences; B.S., Texas A&M University; M.S., Texas A&M University; Ph.D., Texas A&M University.

Courses Biology (BIOL)

BIOL 5102 Research Problems I **1 SCH (1)**

Individual problems assigned, defined and supervised by a Biology graduate faculty member with permission of the department chair. Provides experience in individual design, execution and reporting of small units of research of professional caliber.

BIOL 5104 Graduate Seminar **1 SCH (1)**

An advanced study of biological literature and research with critical class reports. Must be taken four times for credit.

BIOL 5202 Research Problems II **2 SCH (2)**

Individual problems assigned, defined and supervised by a biology graduate faculty member with permission of the department chair. Provides experience in individual design, execution and reporting of small units of research of professional caliber.

BIOL 5302 Advanced Topics in Biology **3 SCH (3)**

Lectures in selected topics. May be repeated for credit once under a different topic. Prerequisites: 12 semester hours of biology or equivalent.

BIOL 5305 Graduate Research Project **3 SCH (3)**

Designed for project option students and requires completion of research project. Prerequisite: departmental approval. May be repeated for a maximum of 6 semester hours.

BIOL 5306 Thesis **3 SCH (3)**

Designed for thesis option students. The course requires completion of thesis research. Prerequisite: departmental approval. May be repeated for maximum of 6 semester hours.

BIOL 5316 Advanced Biology Concepts **3 SCH (3)**

A study of traditional biological phenomena using modern research techniques. Cell, organismal and population biology will be analyzed with an emphasis on molecular and evolutionary concepts. Prerequisite: graduate standing in biology.

BIOL 5320 Research Problems III **3 SCH (3)**

Individual problems assigned, defined and supervised by a biology graduate faculty member with permission of the department chair. Provides experience in individual design, execution and reporting of small units of research of professional caliber.

BIOL 5401 Molecular Biology **4 SCH (3-3)**

Modern concepts and lab techniques in molecular biology. Fundamental principles and important new processes in the use of molecular techniques to address biological problems. The laboratory portion will introduce basic and advanced molecular techniques. Prerequisite: graduate standing in the sciences, agriculture or engineering. Laboratory fee, \$6.
Fee: \$6.00

BIOL 5402 Advanced Topics in Biology **4 SCH (4-3)**

Lectures, literature, investigation and research at the graduate level in selected advanced topics. May be repeated for credit under different topics. Laboratory fee, \$6.
Fee: \$6.00

Degree Requirements

Biology, M.S.

The Thesis option is research-oriented and requires completion of a thesis. This program is for students who plan to pursue a Ph.D. or who want research experience. The Research Project option is content-oriented, and a shorter research problem is required. This program is for those needing more background in formal course work. The prerequisites for full admission are a grade point average of 3.0 on a 4.0 scale and a Graduate Record Examination (quantitative plus verbal) score of 294. Additional information is provided in the *Biology Graduate Handbook*, which may be obtained from the Graduate Coordinator or Department Chair.