

## Biological Sciences MS

The Department of Biological Sciences prepares students for career opportunities in professional studies and further graduate studies in areas related to biological sciences and neuroscience. Many graduates pursue careers in state and federal agencies, health care, private industry, research, and teaching. The program strives to develop a clear and unbiased method of critical and logistic thinking, an appreciation and understanding of the natural world, and knowledge of biological principles required to make intelligent and effective decisions. We offer four different graduate degree programs:

- Master of Science (MS) in Biological Science
- MS in Cellular and Molecular Neuroscience

## Faculty

The Department of Biological Sciences is comprised of dedicated and well-prepared faculty with diverse educational backgrounds and areas of research specialization. Small class sizes for graduate courses ensure that students interact closely with faculty in the learning experience. All faculty have published in their respective fields, and they maintain active research involvement. Scholarly involvement and continuous professional development in research keeps the faculty current and able to offer exciting research opportunities to the students in a variety of areas. The Department's faculty are involved not only with individual research projects but also participate in joint collaborative research themes, for example in neuroscience. The students have the opportunity to select their projects from these various arenas.

## Facilities

The Department of Biological Sciences is housed in the Science Center (original) and the Mishoe Science Center. The Department consists of 11 active research laboratories, a common biotechnology-equipped laboratory, six laboratory classrooms with prep rooms, faculty offices, a science reading room, an animal room, and a research greenhouse. These facilities provide strong support capabilities in teaching and research areas of modern Biology. The faculty have active research programs that are funded by research grants in various areas of biology but especially in plant biotechnology, cancer, and neuroscience.

In addition, the department is a cosponsor of the Claude E. Phillips Herbarium. The herbarium is the largest collection of preserved plant materials at any historically black institution in the country and the only such collection on the Delmarva Peninsula.

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## Admission Requirements

For admission to the graduate degree programs in Biology, applicants must have a Bachelor's degree in Biological Science or a related field from an accredited college or university. Applicants must have earned a cumulative grade point average of at least 2.75 with 3.00 minimum in the major. Complete applications will undergo competitive review, with priority review for those applications received by March 15. Fall admission only. Application must include official scores (not be more than five years old) on the Graduate Record Examination (General Test), Personal Statement, Resume, and three letters of reference.

Click here for Graduate Admissions <https://www.applyweb.com/desug/> [1]

## **Degree Requirements**

### **Master of Science (MS) Degree Program in Biological Sciences**

The MS Degree Program in Biological Sciences is designed to prepare students for further advanced study in biology. Faculty with expertise in various areas (ranging from molecular and cellular biology to systemic biology and to ecological systems) have expanded the breadth of scientific backgrounds of students desiring to advance their careers in industry and government or to prepare themselves for other professional endeavors. The degree requirements include, and emphasize, a thesis based on mentored research that is conducted in an individual laboratory in the department, or an approved research laboratory. The program requires 30 DSU graduate credits and is designed for completion by full-time students within two years.

Click here for the curriculum for a [Master of Science Degree in Biological Sciences](#) [2].

### **Master of Science (MS) Degree Program in Molecular and Cellular Neuroscience**

The MS Degree Program in Molecular and Cellular Neuroscience is a specialty degree program designed to prepare students for advanced study in the area of neuroscience. The program capitalizes on the neuroscience expertise of a number of faculty who are active in this area of research. The degree requirements include and emphasize a neuroscience-based research thesis based on mentored research conducted in one of our neuroscience research laboratories. This program is supplemented by a partnership with Drexel University. The program requires 33 graduate credits, including taking two classes at Drexel University, and is designed to allow completion over a two-year period on a full-time basis.

Click here for the curriculum for a [Master of Science Degree in Molecular and Cellular Neuroscience](#) [3].

### **Doctoral Degree Program (PhD) in Neuroscience**

The PhD Degree Program in Neuroscience is a specialty degree program designed to prepare students for professional careers in the area of neuroscience. The degree requirements include and emphasize a neuroscience-based research dissertation based on mentored research conducted in one of our neuroscience research laboratories. To become a candidate for the PhD, the student must complete all courses and pass a qualifying exam.

## **Areas of Specialization for Current Research Faculty within the Department of Biological Sciences**

Dr. Anthea Aikins - Microbiology

Dr. Harb Dhillon - Neurophysiology and behavior in *D. melanogaster* and *C. elegans*

Dr. Vincent Fondong - Plant biotechnology

Dr. Michael Gitcho - Mammalian models for Alzheimer's research

Dr. Krystal Hans - Forensics and Forensic Entomology

Dr. Melissa Harrington - Electrophysiology

Dr. Y. Hwan Kim - Parkinson's Disease modeling

Dr. Hakeem Lawall - Parkinson's Disease modeling

Dr. Karl Miletti- Cancer biology

Dr. Derrick Scott - Bioinformatics

Dr. Murali Temburni - Neurophysiology and synaptic synchronization

**Source URL:** <http://www.desu.edu/mathematics-natural-sciences-and-technology/biological-sciences-ms>

**Links**

[1] <https://www.applyweb.com/desug/>

[2] <http://www.desu.edu/curriculum-ms-biological-sciences>

[3] <http://www.desu.edu/curriculum-ms-molecular-and-cellular-neuroscience>