

Neuroscience, M.S.

Degree Requirements

Code	Title	Hours
A minimum GPA of 3.0 is required.		
BIOL 548	Introduction to Cellular and Molecular Neuroscience	3
NSCI 793	Special Topics (Proseminar)	3
NSCI 774	Fundamentals of Neuroscience	4
Journal Club		4
NSCI 760	Neuroscience Journal Club	
BMS 700	Scientific Integrity	1
BMS 701	Scientific Rigor and Ethics	1
Research Forum		4
NSCI 761	Neuroscience Research Forum	
NSCI 764	Human Functional Neuroanatomy	3
NSCI 697	Research	3
NSCI 797	Research	4
Total Hours		30

Major Learning Goals

NEUROSCIENCE

The goal of the Master's in Neuroscience is to develop a biomedical work force with expertise in the techniques needed to advance in the field of Neuroscience. Successful completion of this degree program will expand employment opportunities well beyond what is available to individuals with a Bachelor's Degree.

The intent is to prepare the highest caliber post-baccalaureate personnel so that they can effectively compete for jobs in biomedical science, particularly in areas where an understanding of Neuroscience will provide a competitive advantage. The program will include training in research techniques or in didactic teaching methodology.

Learning goals:

- Develop skills in critical thinking and problem solving;
- Read and critically interpret current scientific literature, both generally and specifically in Neuroscience;
- Gain an understanding of the functional complexities of systems neuroscience, including motor and somatosensory systems, behavior, cognitive function, developmental biology, and diseases of the nervous system;
- Develop skills to acquire and integrate knowledge in molecular and cellular structure and function of the nervous system;
- Gain experience in conducting experimental protocols, collecting scientific data, making accurate interpretations based on the evidence, and drawing appropriate scientific conclusions;
- Develop awareness of the ethical issues related to animal and human experimentation and the relevant laws and regulations
- Understand responsible and ethical research;
- Learn to identify what qualifies as scientific misconduct and how to avoid it and gain an appreciation for the critical need for intellectual honesty and scientific integrity in research;
- Learn to ascertain that studies are scientifically rigorous, and results are robust and unbiased; and
- Engage in beneficial collaborations with peers and colleagues;
- Students must maintain a 3.0 overall GPA. In addition to the Plan of Study, MS students are expected attend all Neuroscience-sponsored seminars (students are not required to enroll, but expected to attend).