Neuroscience

Are you interested in the cellular and molecular underpinnings of the brain? Or perhaps researching the effects of drugs on our behavior? Are you interested in finding out how the human mind works and working to develop cures/treatments for certain disorders? If you answered "yes" to any of these questions, then you may want to consider a degree in Neuroscience.

The Department of Psychological Science and the Biology Department at NMU work together to promote research, discovery, and application of the scientific principles emphasized in each field of study, within the university and community. As a Neuroscience major, you will learn the integration of biology and psychology, and then focus your knowledge on an area of emphasis. The list of career opportunities as a Neuroscience major are vast, and depend strongly on the competencies and skills you acquire through your academic work and extracurricular activities.

Skills and Competencies

A strong foundation in math and science is especially recommended for this area of study, and interpersonal communication and organizational skills are a must for any professional. You should develop a strong interest in cellular research and have the ability to work independently, as well as part of a team. Other skills and competencies specific to a degree in Neuroscience are academic diligence and steady concentration, along with having an aptitude for grasping complex calculations and scientific principles.

Course Work

This degree includes the following courses as part of the program requirements, and specific major requirements along with general education courses and graduation requirements.

Core

PSY100	Introduction to Psychology (4 cr.)
PSY230	Learning and Cognition (4 cr.)
PSY250	Brain and Behavior (4 cr.)
PSY450	Methods in Psychophysiology (4 cr.)
BI111	Introductory Biology: Principles (4 cr.)
BI207	Human Anatomy and Physiology II (5 cr.)
BI218	Introduction to Cell and Molecular Biology
	(4 cr.)
BI420	Neuroscience (4 cr.)

Choose a concentration:

Cellular and Molecular

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BI215	Principles of Evolution (4 cr.)
BI312	Genetics (4 cr.)
BI406	Advanced Cell Biology (4 cr.)
BI417	Comparative Vertebrate Neuroanatomy (4 cr.)
BI425	Endocrinology (3 cr.)
BI488	Advanced Research in Biology (1-4 cr.) or
	BI499 Internship (1-6 cr.)

Introductory Biology: Diversity (4 cr.)

Electives (6-8 cr.)

Behavioral and Cognitive

PSY303	Human Neuropsychology (4 cr.)	
PSY311	Thinking and Cognition (4 cr.)	
PSY309	Psychopharmacology (4 cr.) or	
	PY410 Sensation and Perception (4 cr.) or	
	PY441 Individual Differences in Development	
SL459	SL Cognitive Neuroscience (4 cr.)	
PSY498	Directed Research/Study (1-4 cr.)	
Electives (8 cr.)		

Other Required Courses

CH111	General Chemistry I (5 cr.)
CH112	General Chemistry II (5 cr.)

Required Minor (16 credits)

Select one of these options: 1) integrative science minor; 2) pre-professional minor; 3) chemistry, physics, or math minor. If option 3, it is recommended that the student take 8 additional credits from science areas outside of the selected minor

Detailed course descriptions can be found at www.nmu.edu/bulletin.

Career Development

You should begin the resume-building process as soon as you can. The Academic and Career Advisement Center can assist you with career planning, while Career Services will help you fine tune your resume and look for jobs related to your field. In the meantime, the more handson experience you have, the better the chances are that you will find a job. Becoming involved in a professional related internship is a way to develop your professional skills and gain experience. Your academic course work is important as well, so be sure to maintain a high grade point average.

Additional Considerations

These jobs cover a broad range of areas and therefore competencies and skills acquired through academic courses, internships, extracurricular and work experience are extremely important. Strong communication skills, patience, understanding, and organization are beneficial to these occupations. Many of these occupations require further education and training in the field. Seek advice of faculty in the department of Psychological Science for graduate school preparation

Job Outlook

Starting salaries are contingent upon geographic location and the individual applicants work experience and initiative, and usually range from \$35,000 to \$105.000. The Psychology field is expected to grow as fast as average at a 5% rate.

Potential Careers

NMU's Neuroscience Program prepares students for employment in the following careers:

Biostatistician

Clinical Neuroscience

Clinical Research Assistant

EEG Technologist

Epidemiology

Forensic Science Technician

Health Educator

Laboratory Technician

Medical Technician

Medical and Healthcare Manager

Neural Engineer

Neuro Imaging Technician

Neuropsychologist

Patient Care Assistant

Pharmaceutical Sales

Pharmacist

Pharmacy Technician

Psychometrist

Special Education Assistant

Additional Resources and Information

For Career Planning and Opportunities: Academic & Career Advisement Center 3302.1 C.B. Hedgcock 906-227-2971 www.nmu.edu/acac

> Department of Psychological Science 1001 New Science Facility 906-227-2935 www.nmu.edu/psychology

For Job Search, Resume and Career Information: Career Services 3302.3 C.B. Hedgcock 906-227-2800 www.nmu.edu/careers

For Information about NMU Student Organizations Associated with this Major Contact:

Center for Student Enrichment
1206 University Center
906-227-2439

www.nmu.edu/cse

Student Psychological Association Neuroscience Club

Internet Resource Links: www.careers.org www.bls.gov

For Career Information with National Organizations: www.apa.org -American Psychological Assoc. www.nasponline.org -National Association of School Psychologists



The Academic & Career Advisement Center 2022

