

NEUROSCIENCE



SVSU's Neuroscience program empowers students with the opportunity to explore another dimension of our intellectual and personal growth through cognition, emotion and behavior — all while using the state-of-the-art equipment available on campus. The program provides students with a multi-disciplinary grounding in neuroscience by exposing them to major theoretical and research issues in the field and by developing skills in critical thinking, experimental analysis, research design and scientific writing and communication. These resources equip students with the ability to contribute meaningfully to the scientific enterprise.

WE ARE WAITING FOR YOU, SO JOIN US!

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SV
SU **SAGINAW VALLEY**
STATE UNIVERSITY.

COLLEGE OF HEALTH AND HUMAN SERVICES

ADMISSION REQUIREMENTS

Students with a neuroscience major are required to complete at least 37 credit hours in science-related foundational courses, which range from various mathematics and statistics courses, chemistry courses, biology courses, psychology courses and health science courses. Among completion of these basic foundational classes, students must finish at least 33 credit hours of upper-division level and core neuroscience-related courses before completion of the program.

CAREERS IN NEUROSCIENCE

The overarching goal of the neuroscience program is to provide students with the requisite academic background, technical skills and hands-on research experience that will allow them to successfully compete for admission to high-quality graduate or professional (medical, physical therapy, dentistry, etc.) schools and/or to allow them to successfully compete for neuroscience-related jobs in both the private and public sector.

Foundation Courses (39-40 credits)

BIOL 111A - Principles of Experimental Biol: Biology (GE4) 4 cr
BIOL 111B - Principles of Experimental Biol: Zoology (GE4) 3 cr
BIOL 232 - Physiology & Anatomy I 4 cr
BIOL 233 - Physiology & Anatomy II 3 cr
BIOL 233L - Physiology & Anatomy Laboratory 1 cr
CHEM 111 - General Chemistry I Lecture (GE4) 4 cr
CHEM 111L - General Chemistry I Lab (GE4) 1 cr
CHEM 112 - General Chemistry II Lecture 4 c
CHEM 112L - General Chemistry II Lab 1 cr
HS 201 - Introduction to Health Science Research 3 cr
or
PSYC 305 - Experimental Psychology 4 cr
PSYC 100 - General Psychology (GE6) 4 cr
PHIL 205B! - Professional Ethics: Health Care (GE5) 3 cr
MATH 132A - Statistical Methods: General Statistics (GE3) 4 cr
o
MATH 132B - Statistical Methods: Biostatistics (GE3) 4 cr
or
PSYC 299 - Statistics (GE3) 4 cr

Additional Required Courses (3-6 cr)

ENGL 111 - Composition I 3 cr
ENGL 212 - Topics in Critical Writing (GE10) 3 cr

Courses in Neuroscience (31-34 cr)

HS 109 - Neuroscience and Society 3 cr
HS 209 - Neuroscience Seminar I 2 cr
HS 309 - Neuroscience Seminar II 2 cr
HS 350 - Introduction to Neuroscience I 3 cr
HS 351 - Introduction to Neuroscience II 3 cr
HS 352 - Procedures in Neuroscience I 3 cr
HS 353 - Procedures in Neuroscience II 3 cr
HS 355 - Translational Neuroscience 3 cr
HS 358 - Developmental Neuroscience 3 cr
HS 359 - Neuropharmacology 3 cr
HS 409 - Neuroscience Seminar III 2 cr
HS 496 - Field Experience in Health 3 cr

Brain Research Lab

OUR PRIMARY RESEARCH AREAS

The work we do revolves around how the brain (and behavior) changes following traumatic brain injury.

1. Understanding the mechanisms that impact recovery following brain injury
2. Exploring how the context of the injury affects recovery
3. Developing and testing treatments to reduce (or eliminate) the consequences of traumatic brain injury

Students have always played a key role in the research conducted in the BRL. As a member of the lab, you will be involved in all aspects of neuroscience research, everything from animal care, surgery, and histology as well as data analysis, writing up the research, and presenting the data at local and national scientific meetings.