

Neuroscience Career Exploration Track

Major Description:

Neuroscience is a multidisciplinary science that involves the study of the structure and function of the nervous system. Majoring in Neuroscience allows you to develop and test new drugs and therapies to improve brain function, analyze the connections between genetics and brain activity, study the impact of immune challenges on brain health, work at the intersection of human and artificial intelligence, or apply neuroscience principles to address important societal problems such as mental health, crime, cyber-bullying, political divisions and more. Career options include medicine, counseling, research, marketing, and law.

Course Plan:

Semester	Course
1 st Semester	NEU 101: Neuroscience for Life
2 nd Semester	Pick one of the following: <ul style="list-style-type: none"> • PSY 100: Intro to PSY • INF 120: Elementary Programming
3 rd Semester	BIO 150/L, Intro to BIO I with lab
4 th Semester	BIO 151/L, Intro to BIO II with lab

Course Descriptions:

NEU 101: Neuroscience for Life: Sex to Society (3 credits)

A transdisciplinary course that covers the fundamental principles of neuroscience and their applications to critical and current issues in interpersonal relationships and society. Case studies will be drawn from a multitude of disciplines such as marketing, communications, political science, sports, law, and education.

General Education Credit: Individual & Society.

PSY 100: Intro to Psychology (3 credits)

Systematic and scientific study of behavior from biological, behavioral, and cognitive perspectives; methods, history, biopsychology, perception, learning, development, cognition, personality, mental disorders, therapy, and social psychology.

General Education Credit: Individual and Society

INF 120: Elementary Programming (3 credits)

Prerequisite(s): C- or better in [MAT 102](#) or [MAT 114](#) or placement. Not open to students who have passed [CSC 260](#) or [CSC 270](#) or [CSC 360](#).

An elementary introduction to programming for those with no previous programming experience. Emphasis on understanding how to read and write basic procedural programs, and on understanding the concepts of algorithm and execution.

General Education Credit: Natural Science

Course Descriptions:

BIO 150: Intro to Biology I (4 credits)

Prerequisite(s): Math ACT of 22 or higher (or equivalent placement), P in [MAT 101](#), or C- or better or higher in [MAT 102](#) or higher.

Co-requisite(s): [BIO 150L](#).

The chemistry of life; cell structure and function; photosynthesis and respiration; cellular reproduction and Mendelian genetics; gene regulation and DNA technology. Suggested only for students majoring or minoring in biological sciences, other natural sciences or other preprofessional programs.

General Education Credit: Natural Science

BIO 150L: Intro to Biology I Lab (0 credits)

Co-requisite(s): [BIO 150](#).

Laboratory to accompany [BIO 150](#).

General Education Credit: Natural Science

BIO 151: Intro to Biology II (4 cr)

Prerequisite(s): [BIO 150](#) with a C- or better.

Co-requisite(s): [BIO 151L](#).

Population genetics and evolution; systematic and diversity of life; organismal systems anatomy and physiology; interrelationships among organisms and between organisms and their environment.

BIO 151L: Intro to Biology II Lab (0 credits)

Co-requisite(s): [BIO 151](#).

Laboratory to accompany [BIO 151](#).

Links:

[Neuroscience Program Website](#)

Questions? Please email Neuroscience@nku.edu