

Minnesota State University Moorhead

PSY 235: Introduction to Neuroscience

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: 0

OJT Hours/Week: *.*

Prerequisites:

This course requires the following prerequisite

PSY 113 - General Psychology

Corequisites: None

MnTC Goals: None

This course examines the broad and growing field of neuroscience and introduces students to neural anatomy and communication, as well as the structure and function of cells, synapses, networks, major systems in the central and peripheral divisions of the human and animal nervous system, and their relation to behavior.

B. COURSE EFFECTIVE DATES: 12/01/2019 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Neural anatomy and communication
2. Structure and function of cells, synapses, networks, major systems in the central and peripheral divisions of the human and animal nervous system
3. History of brain science
4. Neuronal function
5. Synaptic transmission
6. Sensory processing
7. Movement, sleep, consciousness/wakefulness
8. Recovery of function after brain damage
9. Neurological and psychiatric disorders
10. Current applications and careers

D. LEARNING OUTCOMES (General)

1. Identify multiple viewpoints of major topics and debates within the field.
2. Articulate career paths within the various subfields.
3. Apply critical thinking to application of neuroscientific methods and research.
4. Identify and differentiate major structures of the nervous system.
5. Identify and describe characteristic properties of cells, synapses, networks, and major systems with the nervous system.
6. Communicate neuroscientific ideas and theories to peers.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted