



BAKER COLLEGE
STUDENT LEARNING OUTCOMES

OCC 5450 Functional Neuroanatomy
2 Semester Credit Hours

Student Learning Outcomes and Enabling Objectives

1. Classify the anatomical structures and physiology of the brain and spinal cord.
 - a. Identify the gross anatomy and function of the brain, including cerebrum, cerebellum, brainstem, and lobes.
 - b. Discuss components of the sensory system.
 - c. Explain the role of cranial nerves and their functions.
 - d. Distinguish the function of the spinal cord and its relationship to sensory and motor input.
 - e. Summarize the purpose of neurotransmitters as related to neuronal function.

2. Examine peripheral nerves and their contributions to sensory and motor function.
 - a. Compare and contrast the functional differences between afferent and efferent neurons.
 - b. Classify patterns of innervation of dermatomes and myotomes in the nervous system.
 - c. Describe the major sensory systems.
 - d. Explain the following terms in regards to sensory receptors:
 - i. Proprioceptors
 - ii. Mechanoreceptors
 - iii. Thermoreceptors
 - e. Describe the four types of plexuses, including the general distribution of their nerves.
 - f. Identify the distinct function of the Autonomic and the Somatic nervous system.
 - g. Identify the distinct function of the Sympathetic and the Parasympathetic nervous system.

3. Examine the functional consequences of damage to neural pathways in the nervous system.
 - a. Explain ways in which nervous system damage can occur.
 - b. Interpret the functional implications of neuron injury and the repair process to functional outcomes.

- c. Translate the mechanisms of pain and how it is perceived and modulated by the nervous system.

Big Ideas and Essential Questions

Big Ideas

- Central Nervous System
- Peripheral Nervous System
- Nervous System Dysfunction

Essential Questions

1. How can knowledge of the structure and function of the Central Nervous System (CNS) help OT practitioners understand the barriers to occupational function?
2. Why is it important for Occupational Therapy practitioners to understand the structure and function of the Peripheral Nervous System (PNS) and its relationship to occupational performance?
3. How does a compromised nervous system impact occupational performance?

These SLOs are not approved for experiential credit.

Effective: Spring 2024