

Anatomy and Physiology I

Learning Guide: Spinal Cord

Overview – In this module, we will consider the lower portion of the central nervous system, the spinal cord. We will also consider the overall structural and functional elements of the spinal cord and peripheral nerves. Finally, we will cover the basic reflex arc, followed by two specific reflexes: the patellar and tendon reflex.

Learning Objectives

- Identify the structural and functional components of the spinal cord.
- Compare and contrast nerve tracks and spinal nerves.
- Compare and contrast the structural and functional elements of spinal grey and white matter.
- Describe the basic reflex arc.
- Describe the details of the tendon and stretch reflexes.
- Identify the dermatomes of the body and their importance in medicine.

Getting Started – Although this is not a large unit, it is important for people pursuing a career in the allied health professions. The [HANDOUTS](#) are valuable and, in many cases, explain and support the content visually. Having the handouts in hand as you study the material is wise.

Exam – The exam will employ a variety of questions derived from this unit. Of particular and unique importance will be the handout on the reflexes. I suggest being able to illustrate the reflexes freehand. I will provide details during the lecture videos.

Particulars to Exam Modality

- **In Class Exam** – be prepared to illustrate both the tendon and stretch reflexes.
- **Blackboard Exam** – be prepared to describe all aspects of the tendon and stretch reflex.

Final Point – A firm understanding of the spinal cord's structure and functions is of great importance in medicine. Please pay particular attention to detail as you study this material, as it is easy to mix terms and functions up. Always make your approach visual.