

## **Structure of the Human Body Course Goals and Objectives**

### **Overview:**

The central goal of the Structure of the Human Body course is to provide students with a firm understanding of the general anatomy and development of the human body, including the osteology, musculature, circulatory system, viscera, and the human nervous system, including the cortex, brainstem, cerebellum, deep brain structures, spinal cord, peripheral nerves, sensory systems, motor systems, and the autonomic nervous system. This will be achieved through demonstrations using prosected cadavers, student dissection, anatomical models, plastinated specimens, online learning modules (SoftChalk, Camtasia, etc.), QR codes, labeled gross specimens and models, medical imaging, lecture, guided review sessions, and self-directed learning.

**Specific key concepts and learning objectives will be provided for each individual lecture topic. However, the general course goals are as follows:**

To provide students with a firm understanding of the general anatomy of the human body. Specifically:

1. Recognize the essential terminology necessary to properly describe the fundamental relationships and orientation of structures in the human body.
2. Define the basic embryological processes associated with development of the various components and systems of the human body.
3. Identify the osteology of the human skeleton in both the gross specimen and through medical imaging.
4. Differentiate the muscles of the human body, including their attachments to the skeleton, innervation by the nervous system and the function of each muscle when contracted.
5. Distinguish between the various components of the cardiovascular system, including the heart, major arteries and veins, and the lymphatic system.
6. List the components of the respiratory system, including the lungs, trachea, bronchi, and upper respiratory system components.
7. Recognize the components of the gastrointestinal system, beginning at the oral cavity and ending at the rectum, including the major organs associated with digestion, and their innervation by the autonomic nervous system.
8. Recall the components of the urogenital systems, classify their control by the autonomic nervous system, and differentiate the similarities and differences of the male and female pelvis and perineum.
9. Define the major components of the human nervous system, including the cortex, brainstem, cerebellum, deep brain structures, spinal cord, peripheral nerves, sensory systems, motor systems, and the autonomic nervous system.

10. Distinguish the clinically relevant brainstem nuclei and their pathways associated with the human nervous system.
11. List clinical uses of the various forms of medical imaging in identifying anatomical structures, including x-ray, CT, MRI, and ultrasound. Identify major anatomical structures using these techniques.
12. Recognize clinically relevant injuries, lesions and malformations of the human body and the central nervous system.
13. Identify the borders of the named anatomical regions along with their associated fascia, ligaments, tendons, or cartilages.
14. Demonstrate the ability to effectively communicate and work collaboratively together with peers in the laboratory and review settings to successfully address problems of anatomical significance.
15. Contribute to the education of peers by actively engaging in laboratory and review sessions.
16. Critically evaluate one's performance in the course to identify strengths and personal limitations in either anatomical knowledge or study methods; develop learning goals to address any deficiencies and actively seek out assistance from appropriate sources to successfully remediate these deficiencies.
17. Demonstrate an ability to use online resources to objectively identify and evaluate the primary basic scientific and clinical literature relevant to the anatomy of the human body and anatomical principles.
18. Demonstrate professionalism by behaving in a professional, courteous and respectful manner with respect to cadavers and anatomical specimens, and when engaged in course activities or interacting with course faculty and staff.
19. Demonstrate professional behavior by completing all course requirements, including course evaluations, in a timely manner.
20. Demonstrate responsibility and accountability by attending and being punctual at all required course activities such as laboratory sessions, blessing ceremonies, and exams.
21. Demonstrate professional behavior by requesting any excused absence from required course activities well ahead of the scheduled date.
22. Demonstrate professional behavior by responding to direct communication from the Course Director in a timely fashion, particularly in circumstances when a face-to face meeting is requested to discuss issues related to academic performance.
23. Demonstrate professional and ethical behavior by honestly completing course examinations without attempting to seek an advantage by unfair means; and by reporting any unethical behavior of peers to the course administration.