MAJOR LEARNING OUTCOMES:
Upon completion of this course a student will be able to:

A. Select the proper terminology to describe the location and orientation of anatomical structures.
B. Categorize the subcellular components of the eukaryotic cell based on location, ultrastructure, and function; and classify tissues based on their cell types, extracellular materials, and functions.
C. Differentiate between the bones of the skeleton and their named processes; differentiate between the major joints of the body and classify them; and compare and contrast the microscopic anatomy of cartilage and bone.
D. Describe the microscopic and macroscopic anatomy of muscle tissue; and discriminate between individual skeletal muscles based on their location and attachments, and demonstrate their functions.
E. Describe the functional microscopic and gross anatomy of the heart and the functional microscopic anatomy of blood and lymphatic vessels; distinguish between the formed elements of blood based on their morphology and function; differentiate between the individual vessels of the systemic and pulmonary circuits and analyze the sequential flow of blood through them; and describe the functional gross and microscopic anatomy of the lymphatic organs.
F. Describe the functional microscopic and gross anatomy of the respiratory system components; analyze the sequential flow and processing of inspired air through the system; and distinguish the system components from each other and from those of other systems.
G. Describe the functional microscopic and gross anatomy of the digestive system components; analyze the sequential movement and processing of ingested materials through the system; and distinguish the system components from each other and from those of other systems.
H. Describe the functional microscopic and gross anatomy of the urinary system components; analyze urinary system function from filtrate formation to urine excretion; and distinguish the system components from each other and from those of other systems.
I. Describe the functional microscopic and gross anatomy of the reproductive system components; compare and contrast the male and female systems; analyze the production and movement of sperm and ova through the systems; and distinguish the system components from each other and from those of other systems.
J. Describe the functional microscopic and gross anatomy of the endocrine system components; relate the endocrine glands to each other and their targets; and distinguish the system components from each other and from those of other systems.
K. Distinguish between types of neurons and neuroglia structurally and functionally; compare and contrast the CNS, PNS, and ANS structurally and functionally; discriminate between the major parts of the brain structurally and functionally; describe the gross and microscopic anatomy of the spinal cord and spinal nerves; describe the formation and distribution of the cranial nerves and spinal nerve plexuses; distinguish between the cranial nerves in terms of their origins, courses, functions; compare and contrast the functional anatomy of the sympathetic and parasympathetic systems; discriminate between the general sensory receptors in microscopic anatomy and function; describe the functional gross and microscopic anatomy of the special sensory organs.
L. Describe the functional microscopic and gross anatomy of the integumentary system; and discriminate between the layers of the skin and the different appendages of the integument.
M. Describe the major events of fertilization, implantation, and embryo formation.
N. Reconstruct each organ system from cellular to tissue to organ level.

ASSESSMENT METHODS

Lecture exams, quizzes, and take-home assignments.
These tests consist of variable combinations of multiple-choice, true-false, matching, fill-in, and short answer / short essay questions that require definitions, identification of structures, information retrieval, and analytical thinking. At least 80% of the questions are random selections from the review questions available on the website. A maximum of 20% may be entirely new questions or revised versions of the review questions.

Laboratory practicals and cadaver quizzes
Practicals consist of 30-36 “stations.” Each station consists of anatomical materials studied during the regular laboratory sessions and a series of four questions about those materials. The questions are multiple-choice, true-false, or matching and involve identification of structures, information retrieval, and analytical thinking. You will have two minutes at each station.
Cadaver quizzes are team exercises requiring the written identification of gross anatomical structures studied on cadavers during the regular lab sessions. A team typically consists of 3 students. Spelling must be unambiguous.