

East Tennessee State University
College of Public Health
Dept. of Health Sciences
Human Anatomy
HSCI 3000-001
Spring 2024

Text: Gray's Basic Anatomy, 2nd ed. 2012: paper copy or e-book (free via Library)
Anatomy and Physiology Revealed: on-line version 3.0

Human Anatomy Course Diagrams (download from the content area of the d2L site)

Day & Time: Monday and Wednesday. 8:10 a.m. – 11:25 p.m.

Location: Lamb Hall Rm 232

Instructor: Dr. Allan Forsman

Office: Lamb Hall Rm 246

Phone: 439-4502

Office Hours: By appointment

forsman@etsu.edu

Course web page: <http://faculty.etsu.edu/forsman>

IMPORTANT NOTE: This is a Technology Intensive Course: see homework section on page 2

Human Anatomy Course objectives:

The objectives of this course are to:

- Introduce students to the use of anatomical terminology. This includes, but is not limited to, terms relating to motion such as flexion/extension, abduction/adduction, etc.
- Provide instruction regarding the bones of the human body and the various features of the bones.
- Provide instruction regarding the muscles of the human body, their general origins/insertions, innervation, and their actions.
- Provide instruction regarding the major blood vessels of the human body and the general area supplied by those vessels.
- Provide instruction regarding the major areas of the brain, spinal cord, and peripheral nervous system.
- Provide instruction regarding the organs of the body and their functions. This includes the GI tract and its accessory structures, the heart, lungs, kidneys, and reproductive organs.

Human Anatomy Course Competencies:

Upon completion of this course:

- The student will be proficient in the use of anatomical terms. This includes, but is not limited to, terms relating to motion such as flexion/extension, abduction/adduction, etc.
- The student will be proficient in identifying the bones of the human body and be able to describe the general features of those bones.
- The student will be proficient in identifying the muscles of the human body, their general origins/insertions, and their actions.
- The student will be able to identify the major blood vessels of the human body and the general area supplied by those vessels.

- The student will be able to identify the major areas of the brain and spinal cord. They will also be able to name/identify the major nerves of the human body and relate these to their functions. For the major nerves they will be able to identify the muscle/s that they supply as well as the spinal cord segment/s from which they arise.
- The student will be well versed regarding the organs of the body and their functions. This includes the GI tract and its accessory structures, the heart, lungs, kidneys, and reproductive organs.

Examinations/Grading:

There will be four (4) examinations in both the lecture **and** laboratory, plus a comprehensive lecture final examination. There will be opportunities to earn extra credit. Extra credit announcements will be sent via email. Grades will be based on the total number of points earned out of the total number of points possible in the course. Lecture exams will be held in Lamb Hall, room 318. Lab exams will be in Lamb Hall, room 232. Lab exams will begin at 8:10 am. We then take a 10 minute break, followed by the lecture exam.

Lecture exams will be predominantly in multiple choice format and will consist of 50 questions worth 2 points each. There may be a few completion questions or diagram related questions. Laboratory exams will be administered in the classroom and are in lab practical format and will range from approximately 40 to 50 questions worth 2 points each. The final exam will consist of 75 questions worth 2 points each and will be administered in the classroom.

Quizzes/Grading:

There will be a five point quiz given at the beginning of almost every class period. **This quiz will cover material to be presented in class on that day.** There will be a total of 23 quizzes. Your three lowest quiz scores will be dropped so that there are 100 points possible from the quizzes. No make-up quizzes will be given. If you arrive after the quiz has started you will receive a zero for that quiz. Consult the course schedule for days on which there will not be a quiz. **NOTE: There will be a quiz on the first day of class over the items mentioned in the syllabus.**

Homework/Grading:

There will be 4 homework assignment sets worth 50 points each. These assignments will use the Anatomy and Physiology Revealed program. These assignments will be turned in using the “digital drop box” function in the course d2L site. These assignments will be detailed as we progress through the course. In order to complete these assignments, you will need to be familiar with both the d2L system and the Anatomy and Physiology Revealed program. If you are not familiar with d2L and the digital drop box please contact Dr. Forsman as soon as possible. DO NOT wait until the assignment is due to find out that you do not know the proper procedure. **See further instructions on the course d2L site. Because this is a technology intensive course, and the majority of the technology portion of the course is related to the online homework, the student must complete a minimum of 50% of the homework or they will receive a failing grade in the course regardless of their test scores.**

Grade Scale:

| | | | |
|------------|----|------------|----|
| 93 – 100 | A | 78 - 79.99 | C+ |
| 90 -92.99 | A- | 73 -77.99 | C |
| 88 - 89.99 | B+ | 70 - 72.99 | C- |
| 83 - 87.99 | B | 67 - 69.99 | D+ |
| 80 - 82.99 | B- | 60 - 66.99 | D |

Attendance:

Attendance is required. On most days we will have both lecture and lab. **Students are expected to stay for the entire duration of the class. A student may leave class early three times. On the 4th and any subsequent early departures, the student will have 5 points per early departure deducted from their total points.** In addition, only 4 absences will be allowed throughout the semester. On the 5th and subsequent absences the

student will have 5 points per absence deducted from their total points in the class. Failure to attend an examination will result in a score of zero for that exam. If you miss an examination (**and have an excused absence**) there will be a make-up examination given on April 29th. Make up exams may be in any format, i.e., multiple choice, discussion, short answer, essay, oral, etc. You may only take one set of make-up examinations, i.e., lecture and lab. This means that if you miss more than one set of the regularly scheduled examinations you will have to decide which set you would like to make up and which you would like to keep at a score of zero. Only students that are mathematically capable of earning a grade of D or higher will be allowed to take make up examinations.

IT IS THE STUDENTS RESPONSIBILITY TO CONTACT THE INSTRUCTOR AS SOON AS POSSIBLE AFTER MISSING AN EXAMINATION TO DETERMINE THE STATUS OF THEIR ABSENCE.

Generally, only two forms of excused absences will be accepted: 1. verifiable hospitalization or physicians care or 2. a death in your immediate family (including your own). Occasionally special circumstances arise. Please see Dr. Forsman if you believe this applies to you.

Tardiness demonstrates a lack of respect for your instructor and your fellow classmates and will not be tolerated. Chronic tardiness may result in the door being locked when class begins.

Class disturbances will not be tolerated. Anyone causing a disturbance will be asked to leave the classroom. Chronic offenders may be assigned a specific seat or be subject to review by a student conduct review board.

Electronic devices/cell phones (ED/CP) should be set to vibrate or turned off during class. At no time should an ED/CP be allowed to “ring” during class time. At no time should an ED/CP be used during class. **This includes e-mails and text messaging.** If you are seen using your electronic device during class time for activities other than Human Anatomy coursework you can expect that Dr. Forsman will bring it to the attention of the entire class and that you will be asked to leave for the remainder of that day. The **only exception** to this is the use of electronic devices for taking notes and actually studying course material. **ABSOLUTELY no ED/CPs will be allowed on examination days. Anyone found to have their ED/CP on during an examination will receive a failing grade in the course.**

All work submitted for a grade in this course must be the **original** work of the student submitting the material. Written assignments will be turned in via the course digital drop box which utilizes the “turn-it-in” software system. With regard to academic integrity, I have a ZERO TOLLERANCE policy. If you are repeating this course, all materials turned in for a grade must be from this current semester.

Models: Models and charts **MAY NOT** be removed from the lab without written permission from the instructor. Anyone caught removing these items from the lab will be subject to university and civil discipline.

VERY IMPORTANT RESOURCES

- **Dr. Forsman’s web page:** The diagrams that will be used in this class, along with other diagrams, can be found in the course d2L site and on the web at: <http://faculty.etsu.edu/forsman>. The lecture notes for many of our lectures are also posted on this web site. In addition, labeled pictures of the laboratory models used for this class can also be found on this web site.
- **Course d2L site:** Almost everything that you need for this course can be found in the “content” area of the site, including course diagrams, power point presentations, instructions regarding homework assignments, etc. I will post grades on the d2L grade page, but be aware that the d2L grade page is not trustworthy. Hopefully that grade page will be accurate, but your official grade is in MY grade book. I will also post practice lab exams in this site. These will consist of full length laboratory exams as well as short, randomly generated topic specific quizzes. These can be found

under the “evaluation” tab, then click on “assessments,” then select the exam/quiz you desire to practice. These quizzes make be taken as many times as you wish.

- **Sherrod Library Room 212:** has at least 1 of almost all of our laboratory models on reserve. These models are for student use for a few hours at a time. They cannot be removed from the library. Remember, these models are placed in the library to assist you in your studying. They ARE NOT a substitute for attending lab. Additionally, often many students want to study these models at the same time. Be aware that you may go to the library to study a model that is already being used by another student, so you SHOULD NOT rely on these models being available when you want them.
- **Videos of the laboratory models** that we use for this class can be found in 2 different areas:
 - 1: they can be downloaded from i-tunesU at:
<https://itunes.apple.com/us/itunes-u/anatomy-physiology-vidcast/id384931548?mt=10>
 - 2: they can be viewed on youtube at:
http://www.youtube.com/playlist?list=PLAjrsWY6TkLD7FpU1mS_NgeBYd0X2caiH

Course schedule:

The dates and topics listed are provisional. **The actual dates of the lectures will depend upon many factors and will be adjusted as needed.** *Suggested readings for each class period are printed in italics.* Due to the nature of the quizzes it is **STRONGLY** recommended that you read this material **BEFORE** attending class. SPECIAL NOTE: Due to slight differences between the e-book version of Gray’s Basic Anatomy and the paper version, the pages for the suggested reading below may vary by a few pages either ahead of or behind the listed page.

| <u>Date</u> | <u>Topic</u> |
|-------------|--|
| Jan. 17 | Course Introduction, Anatomical concepts, Cytology, Epithelium GRAY’S: Chapter 1, d2L content area – cytology, epithelium |
| Jan. 22 | Histology of muscles, Brief bone histology, Brief Neuro-histology d2L content area – histology of bone, histology of muscles, histology of nervous tissue |
| Jan. 24 | Upper Limb Concepts, Superficial back, Superficial chest pp. 43 – 45 & 60 Note: bones of upper extremity will be covered in lab. Shoulder and proximal arm (pp. 342 – 346), distal arm and proximal forearm (pp.371 – 373), forearm (pp. 382 – 384), hand (pp. 394 – 397) |
| Jan. 29 | Rotator cuff, Muscles of Brachium, Brachial Plexus pp. 342 – 352, 362 – 375 |
| Jan. 31 | Muscles of forearm pp. 382 – 393 |
| Feb. 5 | Intrinsic Hand Muscles, Review vessels of upper extremity pp. 375 – 376, 387 – 389, 394 – 412 |
| Feb. 7 | Exam I Prerecorded Lecture: Bones of thorax (Ribs and Sternum) NOTE: NO QUIZ pp. 62 – 69 |
| Feb. 12 | Thorax: Walls, Mechanism of Breathing pp. 70 – 79, 126 – 127, 187 – 189 |
| Feb.14 | Lungs pp. 79 – 94 |
| Feb. 19 | Heart & coronary vessels pp. 93 – 124 |

| <u>Date</u> | <u>Topic</u> |
|----------------|---|
| Feb. 21 | Abdomen: concepts, walls, & contents pp. 134 – 146, 185 – 189 |
| Feb. 26 | Abdomen: walls, & contents (continued), Review Lumbar Plexus pp. 134 – 146, 149 – 172, 185 – 189, 202 – 205 |
| Feb. 28 | Abdominal vessels, urinary system pp. 189 – 195, 221 – 223 (also see Urinary: Anatomy notes on Dr. Forsman’s web page) |
| March 4 | Exam II Prerecorded Lectures: Concepts of the pelvis, Begin Female Reproductive system NOTE: NO QUIZ pp. 147, 208 – 216, 223, 227 – 230, (also see Female Reproductive System notes on Dr. Forsman’s web page) Also be familiar with the information from the following diagrams Mitosis vs. Meiosis Meiosis and Fertilization Pituitary and Ovarian Cycles Ovarian and Uterine Cycles |
| March 6 | Female reproductive system (continued). NOTE: THERE WILL BE A QUIZ |
| March 11-13 | Spring Break (No Classes) |
| March 18 | Male reproductive system pp. 146, 223 – 227, 245 – 251 (also see Male Reproductive System notes on Dr. Forsman’s web page) |
| March 20 | Lower Limb Concepts, Gluteal region, Anterior thigh, Sacral Plexus pp. 232 – 236, 266 – 286, 291 – 293, Note: bones of lower extremity will be covered in lab. Bony pelvis (pp. 208 – 212), femur (pp. 270 – 271, 288), leg (pp. 290 – 291, 308 – 309), foot (pp. 316 – 319) |
| March 25 | Medial & Posterior thigh, Knee Joint, Anterior leg, Dorsum of foot, Lateral leg pp 293 – 297, 300 – 309, 313 – 315, 328 – 329 |
| March 27 | Posterior leg, plantar foot, review vessels of lower extremity pp. 286 – 287, 294 – 299, 309 – 313, 329 – 332 |
| Apr. 1 | Exam III Prerecorded Lectures: Bones of Skull, Functions of nasal cavity, Tooth NOTE: NO QUIZ pp. 415 – 429, 563 – 565, 591 – 595 |
| Apr. 3 | Vertebrae, Intrinsic back muscles pp. 32 – 43, 45 – 47 |
| Apr. 8 | Brain, meninges, & cranial nerves pp. 429 – 446, NOTE: Brain is not covered well in this text. Refer to written information in the course d2L site. |
| Apr. 10 | Spinal Cord & Autonomic nervous system pp. 23 – 30, 49 – 55, 180 – 184 |
| Apr. 15 | Muscles of facial expression, Muscles of mastication (head and neck), Cervical plexus, Oral Cavity, Tongue pp. 446 – 456, 499, 519 – 521, 530 – 531, 533 – 534, 542 – 543, 547 – 550, 580 – 584 |
| Apr. 17 | Special senses: Eye pp. 463 – 482 |

| <u>Date</u> | <u>Topic</u> |
|-------------|--------------------------------------|
| Apr. 22 | Special Senses: Ear pp. 482 – 495 |
| Apr. 24 | Exam IV |
| May 1 | Final Exam 3:50 pm – 5:50 pm |

Other important dates:

Jan. 29th last day to drop without W (4:30 pm)

Mar. 5th: last day to drop without Dean's permission (4:30 pm)