

Anatomy 001: Introduction to Human Anatomy
Fall 2018
Section 15899 & 15912: M & W 6:45-10:00 PM
MSA 212
Ryan R. Williams, M.D., Ph.D.

Email: TBA

Office: MSB 211

Phone: (305) 401-2772 (but I prefer email)

Office Hours: TBA

Required Textbooks: Principles of Human Anatomy, 14th Ed. by Tortora and Nielsen,
Plus Wiley online access
Laboratory Manual for Human Anatomy & Physiology, 6th Ed. by Allen and Harper
use in conjunction with the free, downloadable cat dissection manual on the publisher site

Optional Textbooks: The Anatomy Coloring Book, by Kapit and Elson
Medical Dictionary, by Stedman

Required Materials:

1. 5 Scantrons #882E or equivalent (100 question scantron a-e answer options), #2 pencils, and eraser
2. 12 Scantrons form 815E (green) quiz strips or the equivalent (15 question mini scantron, a-e)
3. Filler paper/notebook paper, pens
4. 3x5 lined index cards/notecards
5. For the lab portion of the course:
 - a. **Each student** must have:
 1. Lab coat that covers the arm to the wrist and goes down to the knees
 2. Safety goggles/glasses
 3. Closed toed shoes that cover the foot up to the ankles
 4. A box of gloves for your sized hands
 - b. **Each lab group** must have:
 1. A Dissection kit
 2. A Sharpie, extra fine tip (any dark color)
 3. A spray bottle of disinfecting solution and 1 roll of paper towels; OR disinfecting wipes
 4. Optional items: Hand sanitizer, liquid soap

Course Description (4 Units): This course is an intensive study of the structure of the human body including the four major types of tissue and their subgroups, and the following organ systems: integumentary, skeletal, muscular, circulatory, respiratory, digestive, urinary, reproductive and nervous. Functions of the organ systems are included at the introductory level to prepare students for a course in Human Physiology. Laboratory assignments develop the skills of observation, investigation, identification, discovery and dissection. The use of actual specimens, including cat dissection and observation of a human cadaver, is emphasized to assure that students learn the relative structure, functions, textures, and variations in tissues not incorporated in models. Supplemental materials such as models, photographs, charts, videotapes, and computer illustrations are also provided. This course is required for students preparing for many allied health professions including nursing, respiratory therapy, physical therapy, physical education training, and physician's assistant.

Transfer: UC, CSU

Prerequisite: Biology 3A and Biology 3B

Recommended: English 28, Math 115

Course Objectives:

Upon successful completion of this course students will be able to:

1. Clearly focus materials of a variety of sizes, thickness, and densities under a microscope.
2. Identify tissues, organs, and body structures of the human body at a detailed level in actual specimens as well as in models and other representations.
3. Describe the structures, interrelationships and general functions of major structures, organs, and organ systems of the human body.
4. Demonstrate skills in observation, investigation and discovery using biological materials.
5. Correlate concepts of microscopic structure, macroscopic structure, and function to the whole human body.
6. Exhibit manual dexterity in dissection and prepare clear dissections.
7. Use surface features of the human body as landmarks to identify and evaluate underlying structures.

Student Learning Outcomes:

1. Name the systems of the human body, their general functions, the major organs that make up these systems and the general contribution each organ makes to the system.
2. Identify microscopically and describe the structure and basic function of the tissue and cell types used to make up the major organs of the human body.
3. Demonstrate confidence in their understanding of biological concepts and the scientific method to evaluate and critique current media or a scientific report.
4. Each student will be able to independently: identify and safely use the basic instruments of dissection (scissors, scalpel, forceps, probe); perform the basic dissection techniques of identifying, exposing, and/or removing tissues and organs and other structures; demonstrate dissections to others (i.e. classmates and instructor).

Schedule

Date	Day	Lecture Topic	Text C	Lab Topic	Lab Cl	Exams
8/27/2018	M	Orientation, Intro Body	1	Language, Microscope	1, 3	
8/29/2018	W	Cells	2	Systems, Cells	2, 4	Quiz 1 (Ch 1)
9/3/2018	M	NO CLASS- Labor Day				
9/5/2018	W	Tissues	3	Tissues	6	Quiz 2 (Ch 2)
9/10/2018	M	Development, Surface Anatomy	4, 27	Development, Surface	15, 40	
9/12/2018	W	Integumentary, Review	5	Integumentary	7	Quiz 3 (Ch 3, 4, 27)
9/17/2018	M	Midterm 1				Midterm 1
9/19/2018	W	Bone Tissue	6	Bone Tissue	8	
9/24/2018	M	Axial Skeleton	7	Axial Skeleton	9	
9/26/2018	W	Appendicular Skeleton	8	Appendicular Skeleton	10	Quiz 4 (Ch 6, 7)
10/1/2018	M	Joints, Muscular Tissue	9, 10	Joints, Muscular Tissue	11, 12	
10/3/2018	W	Axial Muscles	11	Axial Muscles	14	Quiz 5 (Ch 8-10)
10/8/2018	M	Appendicular Muscles	11	Appendicular Muscles	14	
10/10/2018	W	Review				Quiz 6 (Ch 11)
10/15/2018	M	Midterm 2				Midterm 2
10/17/2018	W	Blood, Heart	12, 13	Blood, Heart	26-28	
10/22/2018	M	Blood Vessels	14	Heart Dissection, Vessels	29, 30	
10/24/2018	W	Lymphatics, Respiratory	15, 23	Lymphatics, Respiratory	31, 32	Quiz 7 (Ch 12-14)
10/29/2018	M	Urinary System	25	Urinary System	36	
10/31/2018	W	Digestive System	24	Digestive System	34	Quiz 8 (Ch 15, 23, 25)
11/5/2018	M	Reproductive System	26	Reproductive System	38, 39	
11/7/2018	W	Review				Quiz 9 (Ch 24, 26)
11/12/2018	M	Midterm 3				Midterm 3
11/14/2018	W	Nervous Tissue	16	Nervous Tissue	16	
11/19/2018	M	Brain	18	Brain Dissection	20	
11/21/2018	W	Spinal cord and Nerves	17	Spinal cord and Nerves	17, 18	Quiz 10 (Ch 16, 18)
11/26/2018	M	Major Tracts and Autonomics	19, 20	Reflexes, Autonomics	19, 22	
11/28/2018	W	General and Special Senses	20, 21	Senses, Eye Dissection	23, 24	Quiz 11 (Ch 17, 19, 20)
12/3/2018	M	Endocrine System	22	Endocrine System	25	
12/5/2018	W	Review		Human Cadaver		Quiz 12 (Ch 20-22)
12/10/2018	M	Final Exam				Final Exam

Grades

A	450-500	≥90%
B	400-449	≥80%
C	350-399	≥70%
D	300-349	≥60%
F	0-299	≤59%

Participation	Class attendance	31	1 pt per class
	Home work questions (online)	54	2 pt per text chapter
	Lab activities and questions	35	1 pt per lab chapter
Quizzes	12 Quizzes (8 questions each)	88	Drop the lowest
Midterm 1	Lecture	44	
	Practical	20	
Midterm 2	Lecture	44	
	Practical	20	
Midterm 3	Lecture	44	
	Practical	20	
Final Exam	Lecture	80	40 Qs on recent, 40 Qs cumulative
	Practical	20	Recent material only
Total		500	

Participation

Participation is worth a total of 120 points and is based on attendance, homework, and lab participation.

There are 31 classes scheduled (plus the final exam). One point will be given if the student is both on time and present until dismissed. Being absent, showing up late, or leaving early will be excused no more than three times at the instructor's discretion.

There are 27 chapters in the textbook. Homework must be completed online, after the relevant lecture and prior to the start of the next class. Homework will consist of the online **assessment** for each chapter. There will be two possible points awarded per chapter. One point for completing all the questions and one point if **greater than 70%** are correct on the first attempt.

Lab participation will be based on completing the designated activities and associated questions in class. There are 35 lab exercises. One point will be awarded at the end of each lab for completing all the assigned activities and questions for each chapter (exercise).

Quizzes

Quizzes, together with homework, are intended to motivate you to read and study regularly. If you read the chapters before class, pay attention in class, and practice the questions in the textbook and online, these will be very easy. Each quiz will start at the beginning of class and will consist of 8 questions each, all multiple choice. There will be 60 seconds to complete each question. You are allowed to make up only two quizzes at the instructor's discretion. The lowest quiz score will be dropped.

Midterm exams

There will be three midterm exams. Each midterm exam will have 64 questions, one point each. 44 questions will be based on the lectures, 20 questions will be practical. For the practical questions 10 will be fill-in and 10 will be multiple choice. The lecture questions will be all multiple choice. The practical will be given first, followed by a 10-min break, and then the lecture component. Both portions will be completed in approximately two hours.

Final Exam

The final exam will be **cumulative** and will have 100 multiple choice questions. 80 questions will be based on the lectures, with 40 from recent material (i.e. the last quarter of the course), and 40 from all parts of the course. There will also be **20 practical questions only from recent material** (again 10 fill-in and 10 multiple choice). There will be 85 seconds to complete each question. The practical will be given first, followed by a 10-min break, and then the lecture component. Both portions will be completed in approximately three hours.

Academic Integrity

Each student is expected to do his/her own work on all assignments, reports, examinations, etc. While students are encouraged to work collaboratively in lab activities, lab work that is handed in must be written in each student's own words. In accordance with code 9803.28, academic dishonesty is prohibited and will not be tolerated in this class. Violations of academic integrity include, but are not limited to, the following actions: talking during an exam, failing to keep your eyes on your own paper, having identical or similarly worded answers on quizzes/lab activities/lab reports to a classmate or another source, using unauthorized notes of any kind, using any electronic device (cell phone use during an exam constitutes cheating), showing a fellow student your exam or passing information in any way, using translation dictionaries, turning in someone else's work, exiting the room during the exam before its completion, plagiarism (including copying parts of a lab report from the internet), or providing your work for someone else to copy. Academic dishonesty of any type by a student provides grounds for disciplinary action by the instructor or college. Plagiarism will result in a zero for the lab report/activity/quiz/exam, possible dismissal from the class and disciplinary action from the college. Students may be referred for disciplinary action in accordance with the Los Angeles Community College Student Discipline Procedures as stated in Board Rule 91101. For more information on college policies regarding student conduct, see:

http://www.wlac.edu/academics/pdf/WLAC_Catalog_Policies.pdf

Student Conduct Students are expected to adhere to the "Rules, Regulations & Policies of Student Conduct". Refer to the catalog and the Standards of Student Conduct in the Schedule of Classes for more information:

http://www.wlac.edu/academics/pdf/WLAC_Catalog_Policies.pdf

Disruption of classes or college activities is prohibited and will not be tolerated. Violators of these rules are subject to disciplinary action under Board Rule 9803.15 of the Los Angeles Community College District. Recording Devices State law in California prohibits the use of any electronic listening or recording device in a classroom without prior consent of the instructor and college administration. Any student who needs to use electronic aids must secure the consent of the instructor. If the instructor agrees to the request, a notice of consent must be forwarded to the Vice President of Academic Affairs for approval (WLAC College Catalog). For more information, refer to the link below:

http://www.wlac.edu/academics/pdf/WLAC_Catalog_Policies.pdf

Tips to Success

Anatomy 001 is a very rigorous course that requires one to learn an enormous amount of information, and requires considerable discipline, time and dedication. Students need to come prepared to class and be motivated to learn. Some students who do not have prior science courses do fine, while others may find the course overwhelming and may have to drop or fail. It is important that you pay attention to how you are doing and confront yourself soon enough as to your preparedness.

Take time to build up your academic skills so that you can ensure your own success in the professional program of your choice. Being in a hurry can work for someone who already has the studying skill and knows how to study effectively for a rigorous course. Plan your own schedule and manage your time wisely.

- Leave for class with plenty time to find a parking place or to catch the bus. Avoid being late.
- Do not arrive late nor leave class early for any reason (do not schedule doctor appt during class time).
- Manage your time wisely and effectively so that you are well rested and alert during class.
- Complete your assignments on time. Be prepared for class and for quizzes and exams.
- Practice effective study habits. Such as:
 - Study 30 min to 1hr every day
 - Study lecture notes for a day's lecture ASAP after the class to ensure your notes are complete and to pinpoint what you need to clarify
 - Recite the material you have studied as many times as possible without looking at your notes
 - **Read ahead of class.** Follow the course outline and skim the chapter before class
 - Practice drawing the anatomical structures from memory
- Plan ahead of time for childcare, employment, MAKE SCHOOL YOUR # 1 PRIORITY
- Keep track of your grades follow your academic performance CLOSELY

Enrollment

It is the responsibility of the student to look up and know all pertinent dates and deadlines related to this course, as well as those related to WLAC. Please print out a copy of the college date and deadlines and keep it on hand for easy referral, along with a copy of this syllabus. It is also the responsibility of the student to become familiar with college policies regarding enrollment, grade status, and withdrawal dates and procedures as laid out in the college catalogue and schedule of classes. The instructor will drop students from the class who have not attended both **the first class** and **second class in its entirety** and have not contacted the instructor about the absences.

General information regarding drop dates, withdrawals, and other enrollment matters may be found at the Admissions section of the WLAC website:

<http://www.wlac.edu/admissions/index.aspx>

Campus Resources

Office of Disabled Student Programs and Services (DSP&S) Student Services Building (SSB) room 320

Telephone: (310) 287-4450

Email: dsps@wlaac.edu

West Los Angeles College recognizes and welcomes its responsibility to provide an equal educational opportunity to all disabled individuals. The Office of Disabled Students Programs and Services (DSP&S) has been established to provide support services for all verified disabled students pursuing a college education. DSP&S students may qualify for: priority registration, registration assistance, special parking permits, sign language interpreters and assistive technology (WLAC College catalog). Students with special needs due to physical, communication, or learning challenges need to contact the DSPS to enquire about eligibility Human Anatomy 001. Please contact me for special accommodations such as tutoring, test proctoring, extended exam hours, or other accommodations. I must receive documentation from DSPS regarding what accommodations you require. You must meet with me to discuss any arrangements during the first week of class.

Heldman Learning Resources Center (HLRC)

Telephone: (310) 287-4269 & (310) 287-4486

The WLAC Library provides instruction on how to use the online catalog, periodical and research databases. In addition to a large collection of books, periodicals and videos the WLAC Library has course textbooks which students may use while in the Library. Web access is available in the Library Instructional Research Lab (LIRL) as well as meeting rooms. For more information, see:

<http://www.wlaac.edu/library/services/LIRL.aspx>

The Learning Resource Center offers tutoring. They are located on the first floor of the HLRC. For more information, you can contact them at: 310-287-4404. Please refer to their website for the tutoring schedule:

<http://www.wlaac.edu/Library/LearningCenter.aspx>

Campus Sherriff's Office (Emergency Preparedness)

C3 Building, Parking Lot 5

Telephone: (310) 287-4311 & (310) 287-4314

For more information, refer to: <http://www.wlaac.edu/Sheriff/Index.aspx>

The Sherriff's Office website includes information about drill or emergency building evacuations, Title IX resources (if you have been the victim of Sexual Harassment; Sexual Violence and/or Gender-Based Discrimination), and what do to in the event of a lock-down or active shooter situation.

Absences

As described in the grading section on participation. A maximum of three excused absences are permitted at the discretion of the instructor. However, there will be no make-up exams. If a quiz is missed, the student will receive a zero and the lowest score will be dropped. Due to the practical portion, midterms and the final exam cannot be made-up. There will be no extra-credit assignments. There may be a few extra credit questions on the midterms or final, at the discretion of the instructor. For any absence, due to any reason, please make sure to come to office hours or arrange to get notes from a friend if you do miss class.

Anatomy laboratory safety rules

The following is a list of rules that is designed to ensure your safety as well as the safety of your classmates and instructor. Failure to follow these safety rules may result in loss of points from the related assignments. It can also result in the removal from class on the day of the incident and one subsequent class session. In addition, violation of the rules may result in disciplinary action.

1. Chemical agents used as preservatives in this course are believed to be safe when used according to the precautions outlined in these safety rules. Their total or long-term effects on the body, however, are not known.
2. The effects of chemical agents used in this course on human pregnancy are unknown. In addition, pregnant women are advised to consult their physicians before taking this course.
3. Treat all specimens and cadavers with respect.
4. Photography and videos of human cadavers are NOT permitted under any circumstances. It will be considered a serious disciplinary offence for a student to take pictures or possess pictures of the College's human cadavers.
5. Photography, videos, and recordings (of materials and activities unrelated to the human cadavers) can only be taken with instructor consent. They may not be given, sold, or published in print or online without the written consent of the instructor, and can only be used for the purposes of the class.
6. Eating, drinking, or gum chewing is not permitted anywhere in the interior of the Medical Science building, including the laboratory. Keep fingers, pencils, and other objects out of your mouth. In addition, smoking is **never** permitted anywhere within the Science complex, including the rooms, corridors, stairways, landings, and atrium.
7. Students are never allowed in the preparation storeroom.
8. Appropriate clothing including shirt, shoes, etc. are required. During laboratory exercises, particularly when working with any preserved specimens or dissecting, protective clothing, including closed-toe shoes, gloves, lab coat, and protective eyewear (i.e. goggles and eyeglasses) must be worn. Gloves must be disposed of properly before leaving the lab.
9. Keep all areas clear of extra books, clothing, and other personal items to allow for emergency evacuation.
10. Use extreme care when using sharp instruments. Keep all dissection instruments on the dissection trays. It is recommended that you do not change scalpel blades, until given proper directions by your instructor. Dispose of scalpel blades **ONLY** in the **RED** sharps/biohazard containers, located by each of the stainless steel sinks.
11. Students are **NOT** permitted to turn on the garbage disposals.
12. After completion of dissection, return the cat to appropriate storage area. Any leftover tissues on your tray should be disposed appropriately in the RED biohazard containers under the stainless steel sink. Paper towels and gloves should be disposed in the regular trash bins.
13. Wash the trays with soap and scrub tabletops with the table cleaning solution followed by disinfectant at the end of each lab period in which you have used preserved specimens.
14. At the end of the lab period, wash your hands with hand soap and water at the designated sink the black sink in the back of the room.
15. Keep all laboratory work areas neat and safe. Discard all used paper towels and trash in the trash receptacles **ONLY**. Do **NOT** leave items in the sink, on tabletops, or at the sides of the room. Push in all chairs before leaving to allow technicians to prepare the room for the next class.
16. If you should splash preservative fluid, disinfectant, or specimen fragments into your eyes immediately notify your instructor for assistance in thoroughly rinsing them in the eyewash fountain. Immediately follow with a visit to the Health Office on campus. Be aware of the location of the emergency shower.

17. If you should break microscope slides or any other glassware, immediately notify your instructor, avoid contact with the sharp pieces and do not attempt to clean up the broken glassware.
18. If you should cut, puncture, or wound yourself with any instruments, notify your instructor for assistance in thoroughly washing the wound.
19. If you get an irritating chemical in your eye or on your skin notify the instructor so that you may be escorted to the eyewash station or the safety shower in the lab.
20. If it should become necessary to evacuate the lab, follow the instructor to the lawn around the Clock Tower. Evacuation routes are posted on the classroom doors. Do **NOT** stand in parking lots, driveways, or other potential fire lanes.

Statement on dissection of animal specimens

The Faculty of the Sciences Division at WLAC unanimously and unequivocally concludes that the dissection of preserved animal specimens is an essential part of learning about animal form, function and evolution. The Faculty support animal dissection provided that such use conforms with federal and state statutes governing such use, and fulfills clearly defined educational objectives including (1) Individual course objectives (2) matriculation requirements of careers for which animal dissection prepares students and (3) articulation agreements between WLAC and various colleges and universities.

The dissection of preserved specimens is the only way in which students develop an understanding of the spatial (three-dimensional) relationships among organs and organ systems, normal variation both within and among species, and the texture and composition of structures and tissues. Alternatives, including labeled diagrams, photographs, models, charts, video presentations and computer simulations can be and are integrated with study of preserved animals to provide a more integrative understanding of animal form and function, but cannot alone replace dissection.

An in-depth and thorough understanding of animal anatomy through dissection is of particular importance for students whose educational and professional objectives include the treatment and care, or study of animal subjects including (but not limited to): nursing, physical therapy, chiropractic, medicine, respiratory therapy, physicians' assistant, veterinary sciences, zoology, or other related academic fields. Many classes that do not involve animal dissection are available for students whose goals for transfer or degree completion are met through general education courses in biology.

The Faculty further agrees that instructors should retain sole responsibility for decision-making regarding the educational use of animals to meet the learning goals established through the curriculum development and approval process. The Faculty promotes respect for animal specimens used in dissection as a way of appreciating the value of all living organisms. The Faculty opposes any sweeping restrictions on animal use as encroachments on academic freedom and on the role of instructors in choosing how to best meet the educational objectives of their students.