



West Los Angeles Community College
 900 Overland Avenue
 Culver City, CA 90230
www.wlac.edu
 Science Division

SECTION 0261	INTRODUCTION TO HUMAN ANATOMY
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Prerequisites:	Recommended: Biology 3 A&B, English 28, Math115	
Credit Hours:	4 units	
	3 Hours lecture; 3 hours lab per week for 16 weeks	
Time:	Tue & Thu 9:35am–11:00 am & 11:25am – 12:59PM	
Location:	MSA 212	
Required Texts and Other Materials:	Lecture	Marieb, E., Wilhelm, P., and Mallat, J., (2014). <i>Human Anatomy</i> (7 th ed.). Pearson Benjamin Cummings Publishers
	Lab	Marieb, E., et al. <i>Human Laboratory Manual with Cat Dissections</i> (7 th ed.). Pearson Benjamin Cummings Publishers. Text and labs manuals of the Marieb 5 th or 6 th editions will also suffice. Also a recent college level anatomy <u>textbook</u> written by author will work well. Disposable gloves Dissecting instruments Lab coat, apron or cover (optional) Colored pencils, index cards (lab notes) Plenty of SCAN-TRON 882 forms
Useful Websites	www.professorfink.com www.videos.med.wisc.edu	
Instructor & Contact Information:	Dr. M. Gertrude Hennessey Office: MSB 211 Office Hours: M/ W: 9:00-1:00 & T/Th: 1:00-4:00 or by appointment Email: hennesgm@wlac.edu	

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Welcome to Anatomy 001 an intensive study of the morphology of the human body. This is a rigorous anatomy course designed to provide a foundation for health care, allied-health, and medically oriented students.

A **strong recommendation** for this course is Biology 003 A and B or an equivalent course. This means you should enter Anatomy 001 with a working knowledge of scientific methodology and the basics of biological organization from the cellular to organismal level.

COURSE DESCRIPTION: The course consists of both lecture and lab. The basic concepts of systemic anatomy – microscopic, gross, developmental, and clinical – are presented in this course as logical and accessible as possible; hopefully, to convince you that the structures of the body are well organized and make sense.

Laboratory investigations consist of examinations of: histological slides, photomicrographs, anatomical models and charts, human-like skeletons, disarticulated bones, a complete dissection of a cat and other organs, and video cadaver dissection presentations.

There will be exams (formative, summative, and exit), lab practicals, group discussions, and the availability of *Open Lab Sessions* for extra lab and study time. Anatomy is inherently an intense course which requires hard work and dedication to learning.

The course topics include:

- The process and language of anatomy.
- Review of cytology (cellular structures), histology (basic tissues of the body), basic embryology, and systemic anatomy: integumentary, skeletal, muscular, nervous, cardiovascular, lymphatic, immune, digestive, respiratory, endocrine, and urogenital systems.
- Use of cross-sectional anatomy so that computed tomographic (CT) scans, magnetic resonance images (MRI's) sonograms, and echocardiograms findings can be interpreted.
- An introduction to dissection (of a cat) as a visual model of the human musculature and organ systems.
- An introduction to dissection of a human cadaver is introduced via various video presentations.

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- Use of short clinical case reports that dramatize the relevance of anatomy in medicine and other health sciences. The advent of a more violent society has necessitated that greater attention be paid to areas commonly traumatized by gunshot and knife wounds and automobile accidents.

COURSE LEARNING GOAL: The general learning goal of Anatomy 001 is to focus the student on the material that is most important to learn and understand in each chapter or area of enquiry. At the same time, it seeks to go beyond fact-recall of basic anatomical structures to helping students develop the ability analyze and synthesize the separate systems into a conceptual whole in order to apply normal human anatomy to simple clinical settings.

COURSE EXPECTATIONS

Adult education carries adult responsibilities; likewise, science education has its own set of expectations. Below is a brief list of those responsibilities and expectations. The list is not meant to be exhaustive but merely to give you a sense of what it is like to function as a responsible adult learner in a science learning environment.

Understanding Science Content

In adult education, each student is ultimately responsible for understanding course material and performing at the appropriate level. This also involves independently reviewing science materials from prior / prerequisite courses.

It is my intent to help you understand, to the best of your ability, the content of this course; it is your responsibility to fully participate in this learning environment. Each of us doing our part; together we will succeed. I wish you the best in your endeavors in this course; hopefully, you will wish me the best in mine as I work with you to make the anatomical content of this course understandable and meaningful to you.

It is important to understand that I cannot learn for you, I can only help you learn for yourself. You are the person with the intelligent mind. It is, however, my task to help you comprehend the anatomical materials you are studying. Together we will go forward.

As a student in this course, you are expected not only to attend class but actively participate in the learning experiences of this course, accept and seek feedback from the instructor, provide timely feedback to the instructor when requested, and continually self-assess your progress. This is referred to as *active learning*.

Active learning promotes independent thinking and problem-solving; and learning how to seek and confirm answers -- much as a professional would in clinical practice.

ELEMENTS OF PRACTICE: “Creating a Culture of Student Learning and Success”

As we wrestle with the meaning of the anatomical content under investigation there are four key features of practice that will support your learning: (1) attendance (2) collaborative learning, (3) evidence of learning, and (4) academic integrity. Each of these is discussed in turn below.

1. Attendance

The lecture, laboratory, and small group discussion sessions associated with the anatomy course are valuable components of the learning experience. It is highly recommended that students attend all sessions. All lecture and laboratory sessions are regularly assessed and will contribute to your course grade. Whether in attendance or not, you are responsible for all class announcements and schedule changes.

Enrollment status in this course is your responsibility. Failure to notify the Admissions Office of changes in your status will result in academic penalties ranging from a grade of “F” for failure to withdraw in a timely manner to no academic grade for failure to enroll properly. Both are to be avoided by simply filling out the proper paper work according to the schedule provided on the campus website.

2. Collaborative Learning:

Students in this anatomy course are encouraged to engage in collaborative learning to help each other construct their understanding of anatomy and develop the skills necessary to become competent health care, allied health, or medical professionals.

Although gaining admission into specific programs can be highly competitive, succeeding as an individual within the medical professions requires working cooperatively with others for the benefit of each other, patients, the profession and society. Because grading in this course is criterion-based, this is an excellent opportunity for you to practice the behaviors that will help you succeed in an increasingly collaborative professional environment. However, collaboration does not involve copying another student's work, or having one or two members of a group doing all of the work. As a student in this course, you are encouraged to seek/offer help from/to your classmates, but each completed assignment / assessment must represent your own work.

3. Evidence of Learning

How do you know what you know? This course will use both Formative and Summative Assessments.

- *Formative assessment (e.g., pretest, quiz) implies that the results will be used in the formation and revision of your learning process. This constructive feedback is valuable; it will help clarify what you understand and what still needs work.*
- *Summative assessment (e.g., exam) is used for the purpose of document of outcomes and reporting grades. Likewise, it is used for providing feedback to instructors about the quality of course or program, reporting to stakeholders and granting programs, producing reports for accreditation, and marketing attributes of a course or program.*

Formative assessment tasks are ongoing, conducted throughout the length of the entire course. Summative assessment tasks are scheduled periodically. It is without saying that both forms of assessment are meant to serve you as a learner – the former dovetailing into the latter.

4. Academic Integrity

Academic integrity is an integral component of this anatomy course and the health care / medical profession per se. All members of West LA College Community play a role in fostering an environment in which student learning is achieved in a fair, just and honest way.

The opposite of academic integrity is academic dishonesty. Academic dishonesty is defined as cheating of any kind, including misrepresenting one's own work, taking credit for the work of others without crediting them and

without appropriate authorization, and the fabrication of information. This anatomy course strongly up holds a culture of honesty and academic integrity.

Students who engage in academic dishonesty will be subject to appropriate academic penalties.

If content of this course proves too challenging, see me, I will try my best to help you with the content.

Examination Integrity

All health care, allied-health, and medical students are expected to adhere to the highest standards of professional behavior and ethics. Students intending to enter any of the above fields should avoid improper behavior or lack of ethical standards while attending undergraduate schooling and should conduct themselves according to the standards expected of the members of the professions to which they aspire.

That being said, this course follows standards for exam delivery set by most national boards of examiners. As such, the testing environment will be fair, consistent, respectful, and quiet for all students. What students may / may not bring to the testing area will be explained prior to the exam. Any student not adhering to the standards or displaying any form of academic dishonesty will receive a zero for the exam and is in jeopardy of appropriate academic penalties.

EXPECTATIONS OF LEARNERS

Students are expected to take examinations on the date and time they are scheduled. Examinations are administered with a specific starting and ending time and students are expected to arrive on time. Doors to the exam room will close two minutes prior to the start of the exam. To minimize disruptions, late arriving students will be allowed to enter the room after the exam has started. No additional time will be given beyond the scheduled end of the exam without prior approval. Any student absent from a scheduled examination will receive a zero for that examination.

Students with documented conditions restricting certain activities should apply for class / exam accommodations through the Heldman Learning Resource Center (SSB 320). Please speak with me privately at the beginning of the semester about your needs; all information will remain confidential.

Tentative Summative Assessment Schedule

- Lecture Exam 1 THR. MAR 13
- Laboratory Exam 1 THR. MAR 13
- Lecture Exam 2. TUE. APR 01
- Laboratory Exam 2 TUE. APR 01
- Lecture Exam 3. TUE. MAY 06
- Laboratory Exam 3 TUE. MAY 06
- Lecture Exam 4 THR. MAY 29
- Laboratory Exam 4 THR. MAY 29
- Final Exam THR. JUN 05

**There are no make-up examinations given;
please adhere to dates listed above**

Grades

Grades are important to learners. Every learner can have an “off day” so to speak. Assuming that you take all of the Lecture and Laboratory Exams (80% of course grade) and the Final Exam (20% of course grade), class participation and laboratory performance will augment the final average obtained on all Exams counting toward your Course Grade.

100 – 90% = A; 80 – 89% = B; 65 – 79% = C; 50 – 64% = D; Below 50% = F

As a future health care / allied health care professional, it is important for you to try and achieve a minimum of 80% comprehension of the anatomical material under investigation. The various Formative Assessment tasks will help you achieve this goal.

Open Anatomy Lab

To provide more laboratory / lecture study time, the Anatomy Laboratory will be open (with a supervising volunteer) to students enrolled in any section of anatomy. The times the Lab will be open for your use are posted on the room door. The sessions usually run in between afternoon and evening classes and on Friday, that is, when the Lab is not occupied as an instruction space for the other anatomy sessions.

LABORATORY GUIDELINES

General

- **All materials must remain in the lab** and are **not** permitted to be taken home. If you need to spend more time with the lab materials, please attend the *Open Lab Sessions*.
- Eating and drinking are prohibited in the lab. In the combined lecture / laboratory room closed beverage containers are permitted during lecture.
- Be responsible when using electronic devices. Speaking on phone, texting, web-surfing *during* lecture / lab are examples of how electronic devices can be a distraction to your learning and can be discourteous to those around you. A lack of classroom / digital etiquette is certainly unbecoming those who hope to join a cadre of health care or medical professionals. On the other hand, the same devices when used *wisely* can help a student learn productively.
- As a courtesy to your classmates, please do not talk with each other during the lecture phase of the class; there will be allotted time for you to discuss the materials within in your learning group.
- Remain for the entire length of the class and lab. You may miss important information or extra credit.
- Please do not video or audio tape classmates without their explicit consent. Audio recording of class lectures / labs is for personal use only and are not to be made public via the Internet.

Dissection Labs

- During dissections you may want to consider wearing protective clothing such as a lab coat, scrubs, or any other protective covering and gloves.
- Open toed shoes, sandals, flip-flops etc are not considered safe foot apparel in a dissecting environment.
- Lab tables should be clear of all items that are not necessary for the dissecting exercise.
- Long hair tied back during laboratory sessions.

Clean up

- At the end of each lab session, please return all materials to their proper storage areas.
- During dissection labs, please do not "borrow" cats from another classes' storage locker. Students are to dissect and or examine only the specimens assigned to their group and course section.
- Please follow the posted lab clean-up procedures.

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- Wash hands and the lab tables with the appropriate cleaning agents after every laboratory session.
- Make sure all members of the group contribute to the clean-up procedures. This builds cooperation, time-efficiency management, and just plain goodwill among the members.

TIPS FOR SUCCEEDING IN ANATOMY CLASS

A course in anatomy can seem like the “iron man” of your prerequisite load -- physically and emotionally demanding at times. But you will succeed if you budget your time, remember to relax, seek support when necessary, and maintain a sense of perspective.

Attend Lectures and Labs!

Yes, this may appear very obvious to you, but I cannot overemphasize lectures and labs are the opportunities to clarify your understanding of the concepts and expand your knowledge. Be prepared to spend the entire allotted time in the classroom. Use every opportunity to look at available materials, discuss the concepts with your learning team members, and ask questions.

Take Effective Notes

All images used in the lectures will be taken from the text unless specified. Furthermore, the PowerPoint lectures will be made available to you through sharing software. Thus, it will not be necessary to copy every word that is written on each slide during the lecture. Generally, the more time that one takes copying down text, the less time is spent listening to the lecture and learning. Effective notes may be in the variety of forms such as short point-forms, flow chart format, or even pictorial. Discover the technique that works best for you!

Use the Study Guides Provided

A significant amount of study materials will be provided to you throughout the course: objectives, key terms that you are required to understand, diagrams to label, useful websites, and review questions – all to help you comprehend the anatomical materials and study for your exams. These learning guides are provided to help you organize your thinking about the content. Utilize them well so that you will know precisely the type and style of exams you will be required to take.

Practice Writing Terms

In this way you can learn the proper spelling of the anatomical terms. Spelling is important because a difference in one or two letters can change completely the meaning of a word. For example, *adduction* (movement towards the body) and *abduction* (movement away from the body) refer to opposite actions. The *ilium* (one of three fused bones of the adult os coxae) and *ileum* (third part of the small intestine) clearly referring to quite a different part of the body. There are many more examples from which I could draw.

Pace Yourself

There are two types of students those who study for several hours every day, and those who cram like crazy in the days before a test. I recommend the former. You will feel less stress, and actually know the content better if you have a constant, steady study schedule. Studying with peers is also a plus during lab time and before exams.

Study effectively and intelligently; to understand how the anatomical content / material are related, rather than simply memorize isolated bits of information. The greatest hurdle of any anatomy student is the sheer volume of information that must be synthesized. There are two points to keep in mind: First start early in the semester to analyze how various elements the material fit together; and second, study regularly. If you take this approach to studying, then you will improve your understanding of the anatomical content at hand.

Take a Break

Like everyone else, you need time to veg out, reconnect with family and friends, or catch up on sleep. Set aside a few hour each week to relax and enjoy yourself, whatever that means to you. Taking a break (even a short one) from your scheduled studying responsibilities it will improve your focus when you return to your study schedule.

Get Help When Needed

If you are concerned about your performance or feeling overwhelmed, discuss the situation with me. I will be able to advise you on the best course of action. For some students, individual attention and support is enough to get them back on track. Others may want to spend more time in the Open Anatomy Lab, or lighten their course load by deferring the anatomy course to another semester.

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Do Not Sweat the Small Stuff

If you are struggling you are not alone. Many students feel overwhelmed at the volume of materials some point during the course. Remember the measure of success is not whether you feel stress, but how you choose to deal with it. Learning to learn and perform under difficult and demanding circumstances is an important part of becoming a professional.

Always remember, I am here to help you succeed to support your intellectual growth. This is my primary responsibility

TENTATIVE SCHEDULE OF TOPICS

Schedule subject to change

Wk	Day	Date	Lecture Topic	Text	Lab	Lab Man
PART ONE: INTRODUCTORY MATERIALS						
1	T	Feb 11	Introduction to: <ul style="list-style-type: none">• The Course• The Human Body• Anatomical Nomenclature• Medical Imaging Techniques	Ch1	Human torso: cavities, regions Planes & Sections Medical Imaging	Body Orientation Language of Anatomy Organ System Overview
PART TWO: BASIC HISTOLOGY / SYSTEMS OF SUPPORT AND MOVEMENT						
	TH	Feb 13	Gross Anatomy Human Skeleton I: Axial Skeleton	Ch 7	Skeletal System Axial Appendicular Disarticulated bones	Overview of Skeleton Axial Skeleton

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Wk	Day	Date	Lecture Topic	Text	Lab	Lab Man
2	T	Feb 18	Gross Anatomy Human Skeleton I: Axial Skeleton	Ch 7	Skeletal System Axial Appendicular Disarticulated bones	Overview of Skeleton Axial Skeleton Appendicular Skeleton
	TH	Feb 20	Human Skeleton II: Appendicular Skeleton <u>FEB 21</u> LAST DAY TO AVOID "W" ON RECORD	Ch 8	Skeletal System Axial Appendicular Disarticulated bones	Axial Skeleton Appendicular Skeleton
3	T	Feb 25	Gross Anatomy Human Skeleton II: Appendicular Skeleton	Ch 8	Skeletal System Axial Appendicular Disarticulated bones Microscope Cell Review	Axial Skeleton Appendicular Skeleton Microscope Cell Life Cycle
	TH	Feb 27	Microscopic Anatomy Introduction to Histology Cytology: Review	Ch 2 Ch 4	Skeletal System Axial Appendicular Disarticulated bones Histological slides	Axial Skeleton Appendicular Skeleton Basic Tissues
4	T	Mar 04	Microscopic Anatomy Histology: Bone and Skeletal Tissue	Ch 4 Ch 6	Skeletal System Axial Appendicular Disarticulated bones Histological slides	Axial Skeleton Appendicular Skeleton Basic Tissues
	TH	Mar 06	Microscopic Anatomy Histology: Bone and Skeletal Tissue Integument	Ch 4 Ch 6 Ch 5	Skeletal System Axial Appendicular Disarticulated bones Histological slides	Axial Skeleton Appendicular Skeleton Skin

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Wk	Day	Date	Lecture Topic	Text	Lab	Lab Man
5	T	Mar 11	Microscopic Anatomy Histology: Bone and Skeletal Tissue Integument	Ch 4 Ch 6 Ch 5	Skeletal System Axial Appendicular Disarticulated bones Histological slides	Axial Skeleton Appendicular Skeleton Skin
	TH	Mar 13	LECTURE / LAB EXAM 1	Chapters: 1,4, 5, 6, 7,8		
6	T	Mar 18	Muscles of Body Major groups of muscles	Ch 11	Cat dissection as model for human musculature Cadaver dissection videos as assigned	ID muscles of Head & neck Trunk Limbs Cat
	TH	Mar 20	Muscles of Body Major groups of muscles Arthrology / Joints	Ch-11 Ch 9	Cat dissection as model for human musculature Cadaver dissection videos as assigned	ID muscles of Head & neck Trunk Limbs Cat ID joint types
7	T	Mar 25	Muscles of Body Major groups of muscles Joints Myology	Ch 11 Ch 10	Cat dissection as model for human musculature Cadaver dissection videos as assigned	ID muscles of Head & neck Trunk Limbs Cat ID joint types ID muscle tissues
	TH	Mar 27	Major muscle groups Joints Muscle Tissue	Ch 9 Ch 10 Ch 11	Cat dissection as model for human musculature Cadaver dissection videos as assigned	ID muscles of Head & neck Trunk Limbs Cat ID joint types ID muscle tissues

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Wk	Day	Date	Lecture Topic	Text	Lab	Lab Man
8	T	April 01	LECTURE / LAB EXAM 2	Chapters: 9, 10, 11		
PART THREE: MAINTENANCE OF THE HUMAN BODY						
	TH	April 03	Digestive System	Ch 23	Human torso Cat dissection Cadaver dissection videos as assigned	ID organs of alimentary canal Histological structure of canal
	T	April 08	NO CLASS: SPRING BREAK			
	TH	April 10	NO CLASS: SPRING BREAK			
9	T	April 15	Digestive System	Ch 23	Human torso Cat dissection Cadaver dissection videos as assigned	ID organs of alimentary canal Histological structure of canal
	TH	April 17	Cardiovascular System	Ch 18 Ch 19 Ch 20	Heart models Cat dissection Pig hearts Cat dissection Cadaver dissection videos as assigned	ID structures of heart Circulation through heart Cardiac tissue Structures of vessels Trace pulmonary, systemic, hepatic circulations

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Wk	Day	Date	Lecture Topic	Text	Lab	Lab Man
10	T	April 22	Cardiovascular System	Ch 18 Ch 19 Ch 20	Heart models Cat dissection Pig hearts Cat dissection Cadaver dissection videos as assigned	ID structures of heart Circulation through heart Cardiac tissue Structures of vessels Trace pulmonary, systemic, hepatic circulations
	TH	April 24	Cardiovascular System Lymphatic System and Immune	Ch 18 Ch 19 Ch 20 Ch 21	Human torso, larynx model, bronchi models, cat dissection Cadaver dissection videos as assigned	ID structures of the heart blood vessels and blood ID organs of lymphatic and Immune response
11	T	April 29	Respiratory	Ch 22	Human torso, larynx model, bronchi models, cat dissection Cadaver dissection videos as assigned	ID respiratory organs ID selected tissues of tract
	TH	May 01	Respiratory	Ch 22	Human torso, larynx model, bronchi models, cat dissection Cadaver dissection videos as assigned	ID respiratory organs ID selected tissues of tract

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Wk	Day	Date	Lecture Topic	Text	Lab	Lab Man
12	T	May 06	LECTURE / LAB EXAM 3	Chapters: 18, 19, 20, 21, 22, 23		
PART FOUR: CONTROL SYSTEMS OF THE HUMAN BODY						
	TH	May 08	Nervous System MAY 9: LAST DAY TO DROP WITH "W"	Ch 12 Ch 13 Ch 14 Ch 15	Models: vertebral column with spinal nerves, human brain, spinal nerve x-sec. Sheep brain as a model for human Cadaver dissection videos as assigned	ID parts of: Neuron Brain structures Spinal cord CNS, PNS, Autonomics
13	T	May 13	Nervous System Special Senses	Ch 12 Ch 13 Ch 14 Ch 15 Ch 16	Models: vertebral column with spinal nerves, human brain, spinal nerve x-sec. Sheep brain as a model for human Model of eyeball, ear	ID parts of: Neuron Brain structures Spinal cord CNS, PNS, Autonomics ID structures of Eye, ear, olfaction, taste, smell
	TH	May 15	Nervous System Special Senses Endocrine System	Ch 12 Ch 13 Ch 14 Ch 15 Ch 16 Ch 17	Models: vertebral column with spinal nerves, human brain, spinal nerve x-sec. Sheep brain as a model for human Model of eyeball, ear	ID parts of: Neuron Brain structures Spinal cord CNS, PNS, Autonomics ID structures of eye, ear, olfaction, taste, smell

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Wk	Day	Date	Lecture Topic	Text	Lab	Lab Man
14	T	May 20	Endocrine System Urogenital Systems	Ch 17 Ch 24 Ch 25	Kidney model, nephron, model, cat dissection Male / female Reproductive models	ID endocrine organs Urinary system organs Male and female reproductive organs
	TH	May 22	Urogenital Systems		Kidney model, nephron, model, cat dissection Male / female Reproductive models	ID endocrine organs Urinary system organs Male and female reproductive organs
15	T	May 27	NO CLASSES: NON-INSTRUCTIONAL DAY			
	TH	May 29	LECTURE / LAB EXAM 4	Chapters: 12, 13, 14, 15, 16, 17, 24, 25		
16	T	June 3	NO CLASS: FINALS WEEK			
	TH	June 5	FINAL EXAM	Clinical Application of Anatomy Chapters: To Be Determined		