

## ANATOMY 001 SYLLABUS

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|  | <p><b>West Los Angeles Community College</b><br/> <b>900 Overland Avenue</b><br/> <b>Culver City, CA 90230</b><br/> <a href="http://www.wlac.edu">www.wlac.edu</a><br/> <b>Science Division</b></p> |
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| <b>SECTION 0263</b> | <b>INTRODUCTION TO HUMAN ANATOMY</b> |
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| <b>Prerequisites:</b>                        | Biology 3A. Recommended: English 28, Math 115  |  |
| <b>Credit Hours:</b>                         | 4 units  |  |
|  | 3 Hours lecture; 3 hours lab per week for 16 weeks   |  |
| <b>Time:</b>                                 | Mon & Wed 1:00pm-2:25 pm & 2:50pm – 4:15PM   |  |
| <b>Location:</b>                             | MSA 212  |  |
| <b>Required Texts and Other Materials:</b>   | <b>Lecture</b>   | Marieb, Elaine, Patricia Wilhelm, and Jon Mallatt (2011). <i>Human Anatomy</i> (6 <sup>th</sup> ed.), Pearson Benjamin Cummings Publishers [ISBN 0-321-61611-1]  |
|  | <b>Lab</b>   | <p>Marieb, Elaine and Susan Mitchell (2011). <i>Human Laboratory Manual with Cat Dissections</i> (6<sup>th</sup> ed.), Pearson Benjamin Cummings Publishers [ISBN 0-321-66706-9]<br/> Assigned text / labs manual of the 5<sup>th</sup> or 7<sup>th</sup> editions will suffice.</p> <p style="text-align: center;"><b>Disposable gloves</b><br/> <b>Dissecting instruments</b><br/> <b>Lab coat, apron or cover (optional)</b><br/> <b>Colored pencils, index cards (lab notes)</b><br/> <b>SCAN-TRON 882 forms</b></p> |
| <b>Useful Websites</b>                       | <a href="http://www.professorfink.com">www.professorfink.com</a><br><a href="http://www.videos.med.wisc.edu">www.videos.med.wisc.edu</a>                                     |  |
| <b>Instructor &amp; Contact Information:</b> | Dr. M. Gertrude (Elizabeth) Hennessey<br>Office: MSB 211<br>Office Hours: Prior to class; or by arrangement<br>Email: <a href="mailto:hennesgm@wla.edu">hennesgm@wla.edu</a> |  |

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.

**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.
- 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 reviewing material from 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) seeking 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 board 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 . . . . . MON. SEP, 23
- Laboratory Exam 1 . . . . . MON. SEP, 23
- Lecture Exam 2. . . . . MON. OCT, 14
- Laboratory Exam 2 . . . . . MON. OCT, 14
- Lecture Exam 3. . . . . MON. NOV, 18
- Laboratory Exam 3 . . . . . MON. NOV, 18
- Lecture Exam 4 . . . . . WED. DEC, 04
- Laboratory Exam 4 . . . . . WED. DEC, 04
- Final Exam . . . . . WED. DEC, 11

**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 student 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.

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.
- 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.

### **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.

### **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.

### **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.

**TENTATIVE SCHEDULE OF TOPICS**  
**Schedule subject to change**

| Wk   | Day | Date    | Lecture Topic  | Text                     | Lab   | Lab Man                                |
|--|-----|---------|--|--------------------------|---|--|
| <b>PART ONE: INTRODUCTORY MATERIALS</b>                            |     |         |  |                          |   |  |
| 1  | M   | Aug 26  | Introduction and Syllabus,<br>Nomenclature<br>Organization of Human Body<br>Medical Imaging,<br><br>Cytology: review | Ch1<br>Ch2               | Human torso:<br>cavities, regions<br>Planes & Sections<br>Medical Imaging<br>Microscope: light,<br>SEM, TEM                     | Ex 1<br>Ex 2 rev<br>Ex 3 rev           |
| <b>PART TWO: BASIC HISTOLOGY / SYSTEMS OF SUPPORT AND MOVEMENT</b> |     |         |  |                          |   |  |
|  | W   | Aug 28  | Cytology: review<br><br>Skeletal System: Intro   | Ch 2<br><br>Ch 7<br>Ch 8 | Cell Model<br>Cell Life Cycle: rev<br>Mitosis / meiosis:rev<br>Skeletal System<br>Axial<br>Appendicular<br>Disarticulated bones | Ex 4 rev<br><br>Ex 9<br>Ex 10<br>Ex 11 |
| 2  | M   | Sept 2  | NO CLASS<br>LABOR DAY  |                          |   |  |
|  | W   | Sept 4  | Skeletal System<br><br>Histology: Intro  | Ch 7<br>Ch 4<br>Ch 8     | Skeletal System<br>Axial<br>Appendicular<br>Disarticulated bones  | Ex 9<br>Ex 10<br>Ex 11<br>Ex 5         |
| 3  | M   | Sept 9  | Histology<br><br>Histology of Bone   | Ch 4<br><br>Ch 8         | Skeletal System<br>Axial<br>Appendicular<br>Disarticulated bones<br>Histological slides   | Ex 9<br>Ex 10<br>Ex 11<br>Ex 5<br>Ex 8 |
|  | W   | Sept 11 | Embryology   | Ch 3<br>Ch 24-<br>755ff  | Skeletal System<br>Axial<br>Appendicular<br>Disarticulated bones<br>Histological slides   | Ex 9<br>Ex 10<br>Ex 11<br>Ex 5<br>Ex 8 |

| Wk | Day | Date    | Lecture Topic  | Text                | Lab  | Lab Man  |
|----|-----|---------|--|---------------------|--|--|
| 4  | M   | Sept 16 | Embryology   | Ch 3<br>Ch 24-755ff | Skeletal System<br>Axial<br>Appendicular<br>Disarticulated bones<br>Histological slides    | Ex 9<br>Ex 10<br>Ex 11<br>Ex 5<br>Ex 8         |
|    | W   | Sept 18 | Integumentary System                                     | Ch 5                | Skeletal System<br>Axial<br>Appendicular<br>Disarticulated bones<br>Histological slides    | Ex 9<br>Ex 10<br>Ex 11<br>Ex 5<br>Ex 8<br>Ex 6 |
| 5  | M   | Sept 23 | LECTURE / LAB EXAM 1                                     | Chapters: 1-4, 6-8  |  |  |
|    | W   | Sept 25 | Muscle of Body<br>Major groups of muscles                | Ch 11               | Cat dissection as model for human musculature<br><br>Cadaver dissection videos as assigned | Ex 14<br>Cat dissection begins on page 230     |
| 6  | M   | Sept 30 | Muscles of Body<br>Major groups of muscles               | Ch 11               | Cat dissection as model for human musculature<br><br>Cadaver dissection videos as assigned | Ex 14<br>Cat dissection continued              |
|    | W   | Oct 2   | Muscles of Body<br>Major groups of muscles<br>Arthrology | Ch-11<br><br>Ch 9   | Cat dissection as model for human musculature<br><br>Cadaver dissection videos as assigned | Ex 14<br>Ex 12<br>Cat dissection continued     |
| 7  | M   | Oct 7   | Muscles of Body<br>Major groups of muscles<br>Myology    | Ch 10<br>Ch 11      | Cat dissection as model for human musculature<br><br>Cadaver dissection videos as assigned | Ex 14<br>Ex 13<br>Cat dissection continued     |

| Wk   | Day | Date   | Lecture Topic         | Text                    | Lab  | Lab Man                                    |
|--|-----|--------|-----------------------|-------------------------|--|--|
|  | W   | Oct 9  | Myology               | Ch 10<br>Ch 11          | Cat dissection as model for human musculature<br><br>Cadaver dissection videos as assigned | Ex 14<br>Ex 13<br>Cat dissection continued |
| 8  | M   | Oct 14 | LECTURE / LAB EXAM 2  |                         | Chapters: 5, 9-11  |  |
| <b>PART THREE: MAINTENANCE OF THE HUMAN BODY</b> |     |        |                       |                         |  |  |
|  | W   | Oct 16 | Digestive System      | Ch 23                   | Human torso<br>Cat dissection<br><br>Cadaver dissection videos as assigned                 | Ex 7<br>Ex 27<br>Cat organs pg. 486        |
| 9  | M   | Oct 21 | Digestive System      | Ch 23                   | Human torso<br>Cat dissection<br><br>Cadaver dissection videos as assigned                 | Ex 7<br>Ex 27<br>Cat organs pg. 486        |
|  | W   | Oct 23 | Cardiovascular System | Ch 18<br>Ch 19<br>Ch 20 | Heart models<br>Cat dissection<br>Pig hearts<br><br>Cadaver dissection videos as assigned  | Ex 22<br>Ex 23<br>Ex 24                    |
| 10   | M   | Oct 28 | Cardiovascular System | Ch 18<br>Ch 19<br>Ch 20 | Heart models<br>Cat dissection<br>Pig hearts<br><br>Cadaver dissection videos as assigned  | Ex 22<br>Ex 23<br>Ex 24                    |
|  | W   | Oct 30 | Cardiovascular System | Ch 18<br>Ch 19<br>Ch 20 | Heart models<br>Cat dissection<br>Pig hearts<br><br>Cadaver dissection videos as assigned  | Ex 22<br>Ex 23<br>Ex 24                    |

| Wk  | Day | Date   | Lecture Topic                | Text                             | Lab  | Lab Man                 |
|---|-----|--------|------------------------------|----------------------------------|--|-------------------------|
| 11  | M   | Nov 4  | Lymphatic and Immune Systems | Ch 21                            | Cat dissection<br>Lymphatic system model<br><br>Cadaver dissection videos as assigned  | Ex 25                   |
|   | W   | Nov 6  | Respiratory System           | Ch 22                            | Human torso, larynx model, bronchi models, cat dissection<br><br>Cadaver dissection videos as assigned   | Ex 26                   |
| 12  | M   | Nov 11 | NO CLASS:<br>VETERAN'S DAY   |                                  |  |                         |
|   | W   | Nov 13 | Urogenital Systems           | Ch 24<br>Ch 25                   | Kidney model, nephron, model, cat dissection<br>Male / female Reproductive models<br><br>Cadaver dissection videos as assigned                                 | Ex 28<br>Ex 29          |
| 13  | M   | Nov 18 | LECTURE / LAB EXAM 3         | Chapters: 18 – 25                |  |                         |
| <b>PART FOUR: CONTROL SYSTEMS OF THE HUMAN BODY</b> |     |        |                              |                                  |  |                         |
|   | W   | Nov 20 | Nervous System               | Ch 12<br>Ch 13<br>Ch 14<br>Ch 15 | Models: vertebral column with spinal nerves, human brain, spinal nerve x-sec.<br>Sheep brain as a model for human<br><br>Cadaver dissection videos as assigned | Ex 15<br>Ex 16<br>Ex 17 |

| <b>Wk</b> | <b>Day</b> | <b>Date</b>   | <b>Lecture Topic</b>           | <b>Text</b>                                | <b>Lab</b>  | <b>Lab Man</b>                   |
|-----------|------------|---------------|--------------------------------|--|---|----------------------------------|
| <b>14</b> | <b>M</b>   | <b>Nov 25</b> | <b>Nervous System</b>          | <b>Ch 12<br/>Ch 13<br/>Ch 14<br/>Ch 15</b> | <b>Models: vertebral column with spinal nerves, human brain, spinal nerve x-sec.<br/>Sheep brain as a model for human</b> | <b>Ex 18<br/>Ex 19<br/>Ex 20</b> |
|           |            |               | <b>Special Senses</b>          | <b>Ch 16</b>                               | <b>Model of eyeball, ear</b>  |                                  |
|           | <b>W</b>   | <b>Nov 27</b> | <b>Nervous System</b>          | <b>Ch 12<br/>Ch 13<br/>Ch 14<br/>Ch 15</b> | <b>Models: vertebral column with spinal nerves, human brain, spinal nerve x-sec.<br/>Sheep brain as a model for human</b> | <b>Ex 18<br/>Ex 19<br/>Ex 20</b> |
|           |            |               | <b>Special Senses</b>          | <b>Ch 16</b>                               | <b>Model of eyeball, ear</b>  |                                  |
| <b>15</b> | <b>M</b>   | <b>Dec 2</b>  | <b>Endocrine System</b>        | <b>Ch 17</b>                               |   | <b>Ex 21</b>                     |
|           | <b>W</b>   | <b>Dec 4</b>  | <b>LECTURE / LAB EXAM 4</b>    | <b>Chapters: 12-17</b>                     |   |                                  |
| <b>16</b> | <b>M</b>   | <b>Dec 9</b>  | <b>FROM THEORY TO PRACTICE</b> |  |   |                                  |
|           | <b>W</b>   | <b>Dec 11</b> | <b>FINAL EXAM</b>              |  |   |                                  |