

**WEST LOS ANGELES COLLEGE
DEPARTMENT OF SCIENCE**

- I. ANATOMY 001:** Section 0258
MSA 212
- II. PREPARED BY:** PATRICIA ZUK, Ph.D.
- III. REVISED FOR:** Spring 2015
- IV. PREREQUISITES:** BIOLOGY 3A or equivalent;
Recommended courses: English 28 & Math 115
- V. UNITS AND HOURS:** 4 UNITS; SATURDAY
MORNING LABORATORY: 8:00 AM TO 11:15 AM
AFTERNOON LABORATORY: 11:30 AM TO 2:45 PM
- VI. COURSE INSTRUCTOR:** PATRICIA ZUK, Ph.D
- VII. COURSE DESCRIPTION:** This course presents the structure of the human body by subdividing it into individual body systems. It is intended to meet the requirements for students entering Nursing, Dental Hygiene or Occupational Therapy; and for students majoring in Physical Education.
- VIII. REQUIRED TEXT:** Several textbooks are suitable for use in this course. My top three are listed below (in no particular order). The edition of the textbook rarely makes a difference. So if you have the 4th edition of the Martini text or the 11th edition of the Tortora – this will be fine.

Option #1: *Human Anatomy, Martini et al.* 7th edition. Benjamin Cummings Publishing. ISBN-10: 0321688155.

Option #2: *Human Anatomy, McKinley & O'Loughlin.* 3rd edition. McGraw-Hill Publishing. ISBN-10: 0073378097

Option #3: *Human Anatomy & Physiology, Tortora et al.* 12th edition. Wiley Publishing. ISBN-10: 0470084715. Many figures in my lecture notes are taken from this text. It is an excellent text for your collection.

The most recent editions of these texts are usually available at most college and university bookstores. However, older editions will be fine!!!

SUGGESTED REFERENCES:

Atlases: Purchasing an atlas may be very helpful if you don't have a smartphone, computer or a tablet. Do not purchase a new atlas, since a used one will be fine. Some excellent atlases are listed below:

1. *Color Atlas of Human Anatomy, Wolf-Heidegger.* Sterling Publishers. ISBN-10: 1402742002
2. *Netter Atlas of Human Anatomy.* 5th edition. Saunders Publishing. ISBN-10: 1416059512

A Visual Guide to Human Anatomy & Physiology - Paul Krieger: This is another excellent resource that I strongly recommend purchasing. This book has excellent drawings and figures that you can label and color to help you learn your anatomical structures. It is available at the book store under my name.

Interactive Media: You might want to pick up one of these interactive CDs since they often have nice pictures of cadavers and models. They are also quite reasonable price-wise. Note the PAL CD is often sold with new texts – so check before you “double order”

1. *Anatomy & Physiology Revealed:* McGraw Hill Publishers. ISBN 978-0-07-337807-7.
This one is a bit more expensive than the PAL CD I list below.
2. *PAL: practice anatomy lab.* Benjamin Cummings Publishers. ISBN 0-321-54725-X

Smartphone and Tablet Applications: There are also numerous “apps” that are available for your smartphones and tablets. I would definitely recommend getting one of these. They will be especially helpful for the bones and muscle section of the course. The *Human Anatomy Atlas* by *Virtual Body* is amazing! It is \$39.99 but they have a smaller version that concentrates just on the bones and muscles. This one is about half the price.

I will supplement your materials with my own books and atlases. You may borrow these books during lab period.

X. ANATOMY COURSE OBJECTIVES: This course explores anatomical structures of the human body in detail. At the end of the course, students should have an extensive knowledge of the course material and be able to identify relationships between anatomical structure and function in health and disease.

XI. SPECIFIC OBJECTIVES OF THIS COURSE: Through knowledge gained in lecture, reading assignments, and interactive discussion of histologic slides, the student will be able to:

1. Define and apply anatomical terms and directions in the correct manner
2. Describe the bony structure of the axial skeleton
3. Describe the bony structures of the appendicular skeleton
4. Understand the structure and function of the various joints of the body
5. Describe & understand the musculature of the human body, including origins & insertions
6. Describe and understand the vascular supply of the body
7. Describe and understand the nervous system of the body, including how nerves work
8. Describe and understand the lymphatic structures of the body
9. Describe and understand the anatomy of the human heart
10. Describe and understand the anatomical structures of the respiratory system

11. Describe and understand the anatomical structures of the digestive system
12. Describe and understand the anatomical structures of the urinary system
13. Describe and understand the anatomical structures of the reproductive system
14. Describe and understand the anatomical structures of the integumentary system
15. Identify the four major types of tissues found in the human body by using a microscope or a computer presentation
16. Demonstrate reasonable proficiency when asked to dissect certain cat structures

XI. WLAC Student Learning Outcomes: West LA College as an institution is committed to an environment of learning and respect for its students. Its mission is to serve the community by providing quality instructional services through its programs and facilities. The college has created a series of Student Learning Outcomes (SLOs) that are designed to maximize the successes and experiences of the students here at WLAC.

A. Critical Thinking: Analyze problems by differentiating facts from opinions, using evidence, and using sound reasoning to specify multiple solutions and their consequences.

B. Communication: Effectively communicate thought in a clear, well-organized manner to persuade, inform, and convey ideas in academic, work, family, and community settings.

C. Quantitative Reasoning: identify, analyze, and solve problems that are quantitative in nature.

F. Technological Competence: Utilize the appropriate technology effectively for informational, academic, personal, and professional needs.

XII: BIOLOGY PROGRAM SLOs: In addition, the Biology program also has several unique SLOs.

A student who completes this program will be able to:

1. Explain how scientists investigate causes of natural biological phenomena.
2. Explain how living things are organized, reproduce, acquire matter & energy, and inherit & express genetic instructions.
3. Utilize biological information to make informed decisions about environmental issues.
4. Utilize biological information to make informed decisions about personal issues.
5. Perform basic biological lab procedures.

XIII: ANATOMY SLOs: The following is the official approved SLO for Anatomy 001

1. Identify the names and processes of the human skeleton using skulls and disarticulated bones.

However, the anatomy department has additional SLOs – these are:

Upon successful completion of this course, the student should be able to:

1. Demonstrate an understanding of body organization and anatomical nomenclature as it applies to human anatomy.
2. Identify the major types of human tissues under the microscope and understand their basic functions
3. Understand the anatomy and basic functions of the: integumentary system, the skeletal system, the muscular system, the cardiovascular system, the respiratory system, the digestive system, the urinary system, the reproductive system, the nervous system, the immune system and the endocrine system

XIV. ATTENDANCE:

Attendance: I will not take attendance at every lecture/lab. I will be taking attendance for the first few weeks to assess the number of drops. However, you are all adults and must obviously realize that to do well you must come to lecture/lab. Your grade will depend on your active attendance and your participation during lectures. You will be responsible for all information, lecture notes etc... that you miss. There must be DIRE circumstances for you to miss an exam so don't even try it! Practical exams CANNOT be made up. If you miss one – you will lose the marks.

Drop dates: **YOU** are responsible for your enrollment status in this course and in all others!!!

So.....Be aware of drop dates. I will NOT drop you from the course until you confirm your decision with me. Therefore – if you choose to leave the class and do not drop – you will receive a failing grade at the end of the semester. Let me reiterate - You are responsible for obtaining your withdrawals by asking me to drop you from the course. If not, you **will** receive a failing grade and I will NOT comply with any appeals etc.... Therefore, be responsible. Please do NOT assume I will take responsibility for maintaining your enrollment status because I will not.

XV. METHODS OF EVALUATION: Your course will consist of three practical exams and two written exams. These written exams can include multiple-choice, true/false, short answers etc..... The final exam will be cumulative and will cover the anatomical concepts **covered over the entire course.** This exam will be given at the end of the course during regular final exams. Since anatomy is about learning structures, the majority of your exams will be identification practicals. These three practicals will be done during class time and will involve the lab portion of this course – i.e. identification of anatomical structures on human models. **Be warned, these practicals are 45 minutes in duration.**

Course Break-down:

Lecture exams:	1 mid-term exam	50 points	
	1 final exam		50 points
Practicals:	3 tests @ 50 points each	150 points	
TOTAL		250 points	

Grades: I do not know what an A will be or a B etc... until I calculate final grades – so don't ask!!!!

Course letter grades will be based on the following scale

90 – 100% = A

80 – 89% = B

70 – 79% = C

60 – 69% = D

XVI: COURSE MATERIALS:

Materials Needed:

1. Course Textbook
2. Scantrons for written exams. These may be purchased in packets from the bookstore.
3. Number 2 pencils for the scantrons

4. Dissection kits – available in most college and university bookstores. Must have a scalpel, forceps and scissors (large and small).
5. Latex gloves – buy a box per group and share if desired
6. Lab coat – if desired

Dissection: This course offers the chance to dissect a cat in order to learn your anatomical structures through comparative anatomy. To dissect a cat you must buy a dissection kit and gloves from the bookstore. I do not provide these materials. However, I will provide you with your very own skinned and dead cat. I will also provide you with a dissection manual to use during your dissection. I have also dissected cats over the years and will put these out for you as demo models. Please note – this will be your cat throughout the entire semester. So please do not request a cat, dissect it over one or two classes and then decide you don't want to do it anymore. Doing this not only wastes money, it ultimately wastes the life of an innocent kitty!

XVII: CONTACT INFORMATION:

Phone: I do not provide students with a phone number. However, you may communicate with me via email as I check email several times a day and answer relatively quickly. So to contact me, please leave an e-mail message at: zukp@wlac.edu or at: zukpat@yahoo.com. I check both addresses daily. If you are running late – be sure to call one of your classmates so they can let me know. Do NOT even think about being late the day of an exam!

Office hours: Office hours will be held in my office (MSB 210), from:

1. 3:30 PM to 4:30 PM Monday through Thursday
2. Or by appointment
3. Virtual office hours available via email through the school day

The schedule given on the next page is a TENTATIVE schedule of topics. Topics may be changed to accommodate time needed.

ANATOMY 1: Human Anatomy

Patricia Zuk, Ph.D.

Spring 2015

<u>DATE</u>	<u>Topic</u>
Feb 21 - AM	Introduction to Anatomy
Feb 21 - PM	Skeletal System: Osseous Tissue & the Skull
Feb 28 - AM	Skeletal System: The Axial skeleton
Feb 28 - PM	Skeletal System: The Appendicular skeleton
Mar 7 - AM	Skeletal System: Joints
Mar 7 - PM	Tissue Histology & the Skin
Mar 14 - AM	REVIEW SESSION #1
Mar 14 - PM	PRACTICAL #1 (Bones & Tissues)
Mar 21 - AM	Muscular System: Muscle Tissue
Mar 21 - PM	Muscular System: Axial & Appendicular Muscles
Mar 28 - AM	Muscular System cont... (Cat dissection)
Mar 28 - PM	Nervous System: Nervous Tissue
Apr 4 - AM	Nervous System: CNS (Sheep brain dissection)
Apr 4 - PM	Nervous System: PNS (Cow eye dissection)
Apr 11	SPRING BREAK - NO CLASS
Apr 18 - AM	Nervous System: Senses
Apr 18 - PM	Nervous System: Senses cont.... (Cow eye dissection)
Apr 25 - AM	REVIEW SESSION #2
Apr 25 - PM	PRACTICAL #2 (Muscles & Nervous System)
May 2 - AM	MIDTERM WRITTEN EXAM - Tissues, Bones, Muscles & Nervous
May 2 - PM	Cardiovascular System: Heart (Sheep heart dissection)
May 9 - AM	Cardiovascular System: Blood vessels (Cat dissection)
May 9 - PM	Respiratory System (Cat dissection)
May 16 - AM	Digestive System (Cat dissection)
May 16 - PM	Digestive System cont....
May 23	MEMORIAL DAY - NO CLASS
May 30 - AM	Urinary System (Cat dissection)
May 30 - PM	Reproductive System (Cat dissection)

June 6 - AM

June 6 - PM

June 6 - PM

REVIEW SESSION #3 (8AM - 10AM)

PRACTICAL #3 (11AM - 1:15PM)

(CV, Respiratory, Digestive, Urinary and Reproductive systems)

CUMULATIVE FINAL WRITTEN EXAM (1:30 - 3:30PM)