



## ANATOMY & PHYSIOLOGY I ~ BIOL 237.501 (22773)

SYLLABUS FOR FALL 2015 SEMESTER

MW 12-1:15 PM – HEALTH SCIENCES BUILDING 101

Dr. Claudia Barreto

**OFFICE HOURS:** My office is HS100A. You do **not** need an appointment to come to my regularly scheduled office hours on MONDAYS 7:30-8:30AM & 1:30-2:30PM, WEDNESDAYS 7:30-8:30AM & 10:30-11:30AM, & THURSDAYS 10:30-11:30AM. If you have a conflict at these times, please contact me by email ([barr@unm.edu](mailto:barr@unm.edu)) so we can schedule an alternate time to meet.

**LEARNING OUTCOMES:** Upon successful completion of this course you are expected to be able to demonstrate in written and exam formats that you can:

- + **Recognize and use** anatomical and physiological terminology.
- + **Describe** the major organic and inorganic chemicals and **explain** their functions in the context of human physiology.
- + **Apply** the concept of homeostasis to human physiological activity.
- + **Describe** cellular structure and **explain** cellular metabolic activities.
- + **Explain** anatomical, histological, and physiological features of the integumentary, skeletal, muscular, and nervous systems.
- + **Evaluate** pathological conditions as they relate to normal functioning of the above-named systems.

### REQUIRED LEARNING RESOURCES:

1. Custom Edition for UNM Valencia Anatomy & Physiology, ISBN: 1323237194 / 9781323237199. This includes:
  - ♣ Custom loose-leaf textbook, using all of Marieb A&P 5/e (0321861582) adding Chapter 27 from Martini, Visual A&P
  - ♣ Mastering A&P Access code (**You MUST COMPLETE the learning activities at this site**)
  - ♣ Brief Atlas (A great resource for A&P Lab)
2. UNM email account to get class reflector messages. I will send you important course information & resources over our reflector. **You are responsible for all announcements, information, and any changes to the syllabus that I send over the reflector**, so please check your UNM email for A&P messages from me frequently.
3. Course Webpage (<https://learn.unm.edu/>). I'll put our class presentations & other learning resources on our webpage so you can have 24/7 access to them.

**COURSE POLICIES:** Noncompliance with the following is grounds for being dropped from the course.

1. **Reading Quizzes.** To prepare for class you must **study** the assigned readings. If you fail 2 reading quizzes (<70%), you must attend 2 hours of tutoring per week. If you fail 4, you will be dropped from the course.
2. **Special needs.** Students with documented disabilities/special learning needs should please come speak with me during office hours the first week of classes so I can best facilitate your achievement of the learning outcomes for this course.
3. **Attendance** is necessary for you to participate in class learning activities so you can fully understand the material we study. **You are responsible for “signing in” before the start of class to document your attendance (= ready to learn when class starts, remaining for the entire class period, & participating in all learning activities).** After 3 unexcused absences you will be dropped from the course.
4. **Syllabus Agreement:** Carefully read this syllabus and honestly complete the contract. Turn it in before the start of our 3<sup>rd</sup> class meeting.
5. **Academic Misconduct.** Cheating on exams and plagiarism are violations of University Policy (see Appendix B: Student Code of Conduct and Related Policies in the UNMVC catalog). Anyone caught cheating or plagiarizing (= copying the work of others) will be dealt with as per University Policy **W**.
6. **Make-up Exams & Quizzes** will only be given to a student with a documented medical or family emergency. In such an event, contact me ASAP.
7. **Changing Your Grade Option** requires a valid reason and a passing grade (71% or better).
8. **Cell Phones.** As a courtesy to the class, turn off your cell phones. **Texting is prohibited during class.**
9. **The Federal Family Educational Rights & Privacy Act** prohibits disclosing grade information to anyone but the student. I will not share your grades with anyone but you. Grades will **not** be sent over email as this is **not** a secure medium. To discuss your grade, please come to office hours.

**COURSE GRADING:** Your course grade will be determined as follows: Reading Quizzes (8) = 80 pts.; Exam-Prep Quizzes (4) = 80 pts.; Exams #1-3 (3) = 300 pts.; Exam #4 = 90 points; Final Comprehensive Exam = 50 pts.; Patient Reports (2) = 100 pts.; Attendance = 31 pts.; Syllabus Agreement = 5 pts. Classroom activities include opportunities to evaluate your comprehension & to earn extra credit. Use the Student Learning Outcomes and the class presentations (posted on Blackboard Learn) to focus your study time (at least 1 hours per day). Your points will be added and divided by the total possible points (736). Grades will be assigned based on your percentage, as follows: 100% or higher = A+; 91-99% = A; 90 = A-; 89% = B+; 81-88% = B; 80 = B-; 79% = C+; 71-78% = C; 70 = C-; 60-69% = D; below 60% = F

**WE ARE REQUIRED TO TAKE EXAM #4 & OUR COMPREHENSIVE EXAM ON WEDNESDAY, DECEMBER 9<sup>TH</sup>, FROM 11:30AM – 1:30PM**

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**W Dishonesty in Academic Matters:** Each student is expected to maintain the highest standards of honesty and integrity in academic and professional matters. The University reserves the right to take disciplinary action, including dismissal, against any student who is found responsible for academic dishonesty. Any student who has been judged to have engaged in academic dishonesty in course work may receive a reduced or failing grade for the work in question and/or for the course. Academic dishonesty includes, but is not limited to, dishonesty on quizzes, tests or assignments; claiming credit for work not done or done by others; hindering the academic work of other students; and misrepresenting academic or professional qualifications within or outside the University.

### PROPOSED PLAN OF STUDY

DATE	ASSIGNMENTS TO <u>PREPARE</u> FOR TODAY'S CLASS	TODAY'S TOPIC
08/17		A&P I ORIENTATION
19	<b>STUDY</b> Text Ch. 1 (pp.1-18) & <b>STUDY</b> Ch. 2 (19-37)	CHEMISTRY OF LIFE
24	<b>STUDY</b> Ch. 2 (37-53) & <b>Play</b> Quia Games Set 1	CHEMISTRY OF LIFE
26	<b>STUDY</b> Ch. 3 (54-89) & <b>Play</b> Quia Games Set 2 & <b>Complete</b> A&P Cell Study Guide	CELL FORM & FUNCTIONS
31	<b>STUDY</b> Ch. 3 (89-104) & <b>Complete</b> Mitosis Worksheet	CELL GROWTH & REPRODUCTION
09/02	<b>Review Ch. 1 – 3 &amp; Play Quia Games Set 3</b>	<b>REVIEW &amp; QUIZ #1</b>
07	<b>LABOR DAY: SORRY, NO CLASS MEETING!</b>	
09	<b>Study for exam 1</b>	<b>EXAM #1</b>
14	<b>STUDY</b> Ch. 4 (105-133) & <b>Complete</b> Tissues Tutorial <a href="http://www.zoology.ubc.ca/~biomania/tutorial/tuthisto/outline.htm">http://www.zoology.ubc.ca/~biomania/tutorial/tuthisto/outline.htm</a>	TISSUES
16	<b>STUDY</b> Ch. 5 (134-151) & <b>Complete</b> Integumentary Tutorial <a href="http://www.zoology.ubc.ca/~biomania/tutorial/skin/outline.htm">http://www.zoology.ubc.ca/~biomania/tutorial/skin/outline.htm</a>	INTEGUMENTARY SYSTEM
21	<b>STUDY</b> Ch. 6 (152-173) & <b>Complete</b> Bone Tissue Tutorial <a href="http://www.zoology.ubc.ca/~biomania/tutorial/bonets/intro.htm">http://www.zoology.ubc.ca/~biomania/tutorial/bonets/intro.htm</a>	BONE TISSUE
23	Study Text Ch. 7 (174-201)	SKELETAL SYSTEM
28	<b>Study</b> Ch. 7 (202-219) & <b>Complete</b> Skeleton Tutorial <a href="http://www.zoology.ubc.ca/~biomania/tutorial/bonesk/intro.htm">http://www.zoology.ubc.ca/~biomania/tutorial/bonesk/intro.htm</a>	SKELETAL SYSTEM
30	<b>Study</b> Ch. 8 (220-243) & <b>Complete</b> Joint Tutorial <a href="http://www.zoology.ubc.ca/~biomania/tutorial/bonejt/intro.htm">http://www.zoology.ubc.ca/~biomania/tutorial/bonejt/intro.htm</a>	JOINTS
10/05	<b>Review Ch. 4-8 &amp; STUDY the Tutorials Again</b>	<b>REVIEW &amp; QUIZ #2</b>
07	<b>Study for exam 2</b>	<b>EXAM #2</b>
12	<b>Study</b> Ch. 9 (244-260) & <b>Complete</b> Tutorials <a href="http://bcs.whfreeman.com/thelifewire/content/chp47/4702001.html">http://bcs.whfreeman.com/thelifewire/content/chp47/4702001.html</a> <a href="http://muscle.ucsd.edu/musintro/over.shtml">http://muscle.ucsd.edu/musintro/over.shtml</a>	MUSCLE TISSUE
14	<b>Study</b> Ch. 9 (261-280) & <b>Complete all 3</b> Tutorials: <a href="http://www.getbodysmart.com/ap/muscle/tissue/menu/menu.html">http://www.getbodysmart.com/ap/muscle/tissue/menu/menu.html</a>	MUSCLE TISSUE
19	<b>Study</b> Text Ch. 10 (281-307) & <b>Complete</b> Tutorial <a href="http://www.gwc.maricopa.edu/class/bio201/muscle/mustut.htm">http://www.gwc.maricopa.edu/class/bio201/muscle/mustut.htm</a>	MUSCULAR SYSTEM
21	<b>Study</b> Ch. 10 (308-344) & <b>Complete Interactive Physiology Muscular System Module</b>	MUSCULAR SYSTEM
26	Study Ch. 11, Text (345-381) & <b>Complete Interactive Physiology Nervous System I &amp; II Modules</b>	NERVOUS TISSUE
28	<b>Study</b> Ch. 12, Text (382-407 & 413-416)	CNS: BRAIN
11/02	<b>Complete</b> Tutorials : <a href="http://www.sophia.org/tutorials/chapter-8-nervous-system-anatomy-cns-and-pns">http://www.sophia.org/tutorials/chapter-8-nervous-system-anatomy-cns-and-pns</a> <a href="http://www.zoology.ubc.ca/~biomania/tutorial/tuthisto/nx01.htm">http://www.zoology.ubc.ca/~biomania/tutorial/tuthisto/nx01.htm</a>	CNS: BRAIN
04	<b>Study</b> Ch. 12, Text (418-430) & <b>Complete all 9</b> Tutorials: <a href="http://www.getbodysmart.com/ap/nervoussystem/menu/menu.html">http://www.getbodysmart.com/ap/nervoussystem/menu/menu.html</a> <b>Complete</b> tutorial: <a href="http://www.biology-online.org/9/11_control_body_movement.htm">http://www.biology-online.org/9/11_control_body_movement.htm</a>	CNS: SPINAL CORD
09	<b>Review Ch. 9-12 &amp; STUDY the Tutorials Again</b>	<b>REVIEW &amp; QUIZ #3</b>
11	<b>Study for exam 3</b>	<b>EXAM #3</b>
16	<b>Study</b> Ch. 13 (431-437) & <b>Complete</b> tutorial: <a href="http://www.sophia.org/tutorials/sensory-receptors">http://www.sophia.org/tutorials/sensory-receptors</a>	PNS: SENSORY RECEPTORS
18	<b>Study</b> Ch. 13 (471-502)	PNS: NERVES, GANGLIA, MOTOR ENDINGS & ACTIVITY; SOMATIC REFLEXES
23	<b>Study</b> Ch. 14 (503-512)	AUTONOMIC NS
25	<b>EARLY THANKSGIVING: SORRY, NO CLASS MEETING!</b>	
30	<b>Study</b> Ch. 14 (512-518) & <b>Complete</b> NS Tutorial <a href="http://www.emc.maricopa.edu/faculty/farabee/biobk/BioBookNERV.html">http://www.emc.maricopa.edu/faculty/farabee/biobk/BioBookNERV.html</a>	AUTONOMIC NS
12/02	<b>Review for final exams</b>	<b>REVIEW &amp; QUIZ #4</b>

## How To SUCCEED IN A&P

You have enrolled in this course because you have chosen to prepare for a profession in the health sciences. This is a praiseworthy goal because you will bring comfort and healing to many. In this course **YOU MUST TAKE THE RESPONSIBILITY** for learning anatomy & physiology. The goal of this course is **not** to memorize inconsequential facts, but to help you gain a **thorough comprehension and appreciation of the complexities of how the human body functions**. To achieve this **YOU** have to take an **ACTIVE** role in your education. You'll need to acquire the ability to be a life-long learner so that you can be an effective professional. As a biomedical professional you must have a comprehensive understanding of biology, chemistry, physics and mathematics. As a practitioner, you will be inundated with new discoveries in the causes & prevention of, and the treatments for a vast array of diseases and disorders. The material we cover in this course is fascinating, besides being essential to your career, so **plan on setting aside on 1-2 hours to seriously and effectively study every day**.

### "What YOU Need to Do" Checklist!

#### ☞ Come to class prepared by:

- ✚ Reading & STUDYING each chapter as per the dates assigned on this syllabus.
- ✚ Using all of the study tools in the "Study Area" of Mastering A&P.
  - **Completing all of the Mastering A&P (MAP) activities as we study each chapter.**
- ✚ Completing all the tutorials that are on your syllabus and on the PowerPoint slides.
- ✚ Completing the Interactive Physiology Assignments as per this syllabus.

#### ☞ Organize the material in your own mind so it makes sense to you.

#### ☞ Make sure you are able to explain, in your own words, the concepts & processes to someone else who does not have a science education.

- ✚ Forming study groups is a great way to practice explaining A&P the material we are studying.
- ✚ To teach someone else, the knowledge must be firmly established in your mind.
- ✚ Work with Jon & the tutors @ the Learning Center & STEM Resource Center.

#### ☞ Self-test your understanding of the material by:

- ✚ Compressively completing the "Learning Outcomes" from the PPT slides.
- ✚ Completing the "Review Questions" questions in our text, **in your own words**.
- ✚ Playing the Quia Games

#### ☞ Ask questions during class &/or my office hours.

#### ☞ Attend Jon's tutoring sessions & office hours.

#### ☞ Take advantage of all of the learning resources provided to you.