

**Western Nevada College Course Syllabus
Biology 223 – Anatomy and Physiology – Spring 2009**

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Office Hours

Monday	Tuesday	Wednesday	Thursday	Friday
By appt.	2-5 pm	4-5 pm	4-5 pm	By appt.

Communication:

WNC email, cell phone, and WebCT. Be sure and activate the email and phone number you have on file with WNC. For quicker response time, email me at otooleh@wnc.edu and **not through WebCT**.

Cancelled Class Hotline: 775-445-3030 or 1-866-532-5118 or <http://www.wnc.edu/academics/hotline/>

Lecture: 7-10 pm (Th) Piñon 209

Laboratory: F01: 7-10 pm (T) & F02: 1-3:45 pm (Th) Sage 104

Lecture Text: Tortora and Derrickson, *Principles of Anatomy and Physiology*, 12th. ed., John Wiley and Sons (2009). ISBN: 978-0-470-08471-7

Laboratory Texts: Allen and Harper, *Laboratory Manual for Anatomy and Physiology* ISBN: 978-0-470-08470-0, John Wiley and Sons (2009) and Allen and Harper, *Cat Dissection: A Laboratory Guide* John Wiley and Sons

Reference Texts: Elaine N. Marieb, *Anatomy and Physiology Coloring Workbook: A Complete Study Guide (8th ed.)*, Benjamin Cummings

Additional reading sources assigned during the semester

Student Evaluation:

Grades based on:

Exams (65%)

Lab Quizzes & Group Activities (26%)

Muscles Mini-Tests (9%)

Grading Scale

90-100% A⁻ 90-92, A 93-100

80-89 % B⁻ 80-82, B 83-86, B⁺ 87-89

70-79% C⁻ 70-72, C 73-76, C⁺ 77-79

60-69% D

<60% F or W

Course Description:

Offers detailed study of cellular functions and the integumentary, skeletal, muscular, and nervous systems. Primary for physical education, pre-nursing and other pre-health majors. NOTE: For programs that require BIOL 223 and 224, both courses must be completed at the same institution if taken outside Nevada. Four credits.

Course Prerequisite: BIOL 190, CHEM 121 or CHEM 110, or meet nursing program chemistry requirements.

General Education Learning Outcomes: Understand the methods of science and the role of science and technology in the modern world; have problem solving, creative, and critical thinking skills; have effective and efficient learning skills, including the location and evaluation of information.

Specific Course Objectives:

1. Factual knowledge (such as terminology and classification) about anatomy and physiology will be gained
2. Fundamental principles, generalizations and theories of human anatomy and physiology will be learned through active learning, critical thinking and problem solving.
3. Through this course, an interest in learning more by asking questions and seeking answers will be developed to help support lifelong learning.
4. Developed specific skills, competencies and points of view needed by professionals in the field most closely related to Human Anatomy and Physiology I.

Linkage of course to educational program mission and program outcome:

This course is designed to apply toward a WNC degree and/or transfer to other schools within the Nevada System of Higher Education, depending on the degree chosen and other courses completed. It may transfer to colleges and universities outside Nevada. For information about how this course can transfer and apply to your program of study, please contact a counselor.

Programs of Study: Biological Sciences (AS), Nursing (AAS), Surgical Technology (C of A).

Examination Quizzes and Assignment Information:

1. The pedagogy of this class will include lecture, discussion, and laboratory exercises.
2. Exams will be based on lecture, discussion, and the text. Exams will not be cumulative, but information from previous material may be needed to answer questions.
3. Exam questions may consist of multiple choice, true/false, calculations, fill-in, and matching or short answers. Short answers should be answered with complete, organized sentences. Points may be taken off for grammatical errors.
4. The muscles mini-test dates are on your syllabus and will be administered during lecture of that week.
5. The laboratory quizzes will cover materials presented in the laboratory. They will not be cumulative, but information from the previous material may be needed to answer questions.
6. Lab quizzes will be given at the beginning of each lab class period. The two lowest lab quiz scores will be dropped. No makeup quizzes will be given. If you are more than 10 minutes tardy you will not be given a quiz.
7. Objectives and grades will be posted on WebCT and updated weekly. My lecture notes will not be posted.
8. No make up exams will be given for full credit and all make up exams are at discretion of the instructor.
9. Be sure and take advantage of the Companion website that comes with your text.
10. Points, up to 100% of the total points from that day's quiz may be deducted for tardies, leaving early, or other disruptions.

Further Information:

Presentation, lab and additional assignments are part of the course. Extra credit is offered as a reading and presentation. It is worth 15 points and will be averaged with the mini-tests. The class schedule is tentative and will be updated as needed.

Student Classroom Conduct:

WNC is committed to providing a safe effective learning environment for students, faculty, and staff. Disruptive student conduct is subject to strict disciplinary action.

This is a college classroom. You are expected to arrive on time and stay for the entire class period. Late arrivals and early departures are disruptive for the entire class. Three late arrivals/early departures will count as one absence. No children are allowed in class or in the lab. Turn pagers to silent and cellular phones off when you come to class.

Behavior that impedes the teaching/learning process, including private conversations, leaving during a guest lecture, phone or pager calls that do not contribute to the class as a whole is unacceptable. I reserve the right to administratively withdraw any student who presents behavioral issues that impede the learning environment. Use of any conduct or harassment that threatens the quality of this learning environment will result in immediate removal from the class.

Attendance:

Attendance is expected and I will be recording it using a sign in sheet. A student is permitted to miss 2 classes. However, more than three unexcused absences may, at the *discretion of the instructor*, result in the student being dropped from the course with a grade of W or a full grade reduction.

Perfect attendance is worth 10 points which will be averaged into your mini-test grade.

Dishonesty/Cheating:

Any student determined to be cheating or assisting or participating with another student in dishonest behavior will be immediately withdrawn from the course or receive a grade penalty. The penalty for cheating at WNC is outlined on the WNC website.

Study Tips and Techniques:

To get the most out of this class attend each class period and complete all of the required reading and assignments. If you are having difficulty understanding or preparing for this class, please contact me.

Assistance:

Qualified, self-identified students with documented disabilities have the right to free accommodations to ensure equal access to educational opportunities at WNC. For assistance contact Disability Support Services on the Carson Campus in the Bristlecone Bld. Room 103 or call 775-445-3267 or 775-445-3266.

Laboratory Safety Guidelines:

1. No eating, drinking, smoking, handling contact lens, or applying cosmetics in the laboratory.
2. Long hair must be restrained. Dangling jewelry must be removed.
3. Work surfaces will be washed at the beginning and end of class and whenever a spill occurs.
4. Safety glasses will be worn. You may provide your own if mine are not to your liking.
5. Personal protective equipment (aprons and gloves) will be worn when doing experiments where contamination is possible. All protective equipment will be removed when leaving the laboratory.
6. When working with human blood and other body fluid samples, you are to handle only your own sample unless otherwise directed.
7. Laboratory work areas will be cleaned up at the end of class and all equipment and materials returned to the proper location.
8. Report all spills or accidents, no matter how minor to the instructor.
9. Hands will be washed after cleaning work surfaces, when hands become contaminated, and when leaving the laboratory.
10. WNC does not have insurance to cover students on campus. All students should carry personal medical insurance.

Muscles Mini Tests: To learn the muscles in a doable manner without reducing their importance, the muscles will be tested four times during the course as mini-tests.

Study tips and terminology will be available on WebCT

- Principal Superficial Skeletal Muscles: February 3
- Muscles of the Head and Neck: March 3
- Muscles of the Thorax and Abdomen: April 21
- Muscles of the Upper and Lower Limbs: May 12

Study Tips and Techniques: This is a comprehensive course on Anatomy and Physiology. You should plan to spend at least ten to twelve hours outside class each week preparing for the class. **You will be expected to read the assigned material before class so you are prepared to ask or answer questions.** If you are having difficulty understanding or preparing for this class, please consider one or more of the following:

1. Go see Fernando in the Learning Center.
2. Meet with me during my office hours.
3. Start a study group with some of your classmates and study, study, study!

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Subject to revision

Week	Date	Lecture Topics (Th)	Laboratory Topic (T or Th)
1	1-20	Chemistry Chapter 2	Transport
2	1-27	Cellular function Emphasis on Plasma Membrane Chapter 3 Body System Overview Chapters 1	The Plasma Membrane Exercise 3: Microscope: Anatomical Language Directional Terms Body Quadrants
3	2-3	<i>Principal Superficial Skeletal Muscles Mini Test</i> Tissues Chapter 4	Epithelial cells
4	2-10	Exam 1 Integumentary System Chapter 5 Emphasis: Skin Cancer	Tissue Slides Exercise: 7 Integumentary System
5	2-17	Skeletal Tissue Axial Skeleton Chapter 6,7	ID bones and their distinctive features: axial skeleton Exercise: 8,9
6	2-24	Appendicular Skeleton Chapter 8	ID bones and their distinctive features: Appendicular skeleton Case Study: Dem Bones
7	3-3	<i>Muscles of Head and Neck Mini Test</i> Joints Chapter 9	Joints and Synovial Movement Joint Dissection: Exercise: 11
8	3-10	Exam 2 Nervous Tissue Chapter 12	Nervous Tissue Spinal Cord & Spinal Nerves Spinal Cord dissection Exercise: 16, 17
	3-17	Spring Break	
9	3-24	Spinal Cord and spinal nerves Chapter 13	Cat Dissection I
10	3-31	Brain and Cranial Nerves Chapter 14	Brain dissection: Exercise: 20 Cat Dissection II
11	4-7	Exam 3 Autonomic Nervous System Chapter 15	Cat Dissection III
12	4-14	Sensory, Motor, Integrative Systems Chapter 16	Cat Practicum
13	4-21	<i>Muscles of Thorax and Abdomen Mini Test</i> Special Senses Chapter 17	Eye Dissection: Exercise:23, 24
14	4-28	Muscle Tissue Read Chapter 10,11	Guest Lecturer: Dr. Faught DVM Dates may vary

15	5-5	Skeletal Muscles	Guest Lecturer: TBA
16	5-12	<u>Exam 4</u>	<i>Muscles of Upper and Lower Limbs Mini Test</i>