

Instructor Contact Information

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Office Hours: By appointment (Please mail Dr. Li to set up the appointment)

General Course information

Course Number: BIO 233Z DE

Course Title: Anatomy and Physiology III

Course Description: Examines the structure and function of the human body through a body systems approach. Explores anatomy and physiology of the respiratory, digestive, immune, lymphatic, urinary, and reproductive systems at the relevant levels of biological organization (chemical, cellular, tissue, organ, and organ system). Covers acid-base balance and human development. This course includes a laboratory component.

Prerequisite: BIO 232(Z)

Credits: Four (4) term or trimester credits
(for transfer to other schools: 1.5 term credits equal 1 semester credit)

Course Requirements

Course Materials:

- Elaine N. Marieb, Katja Hoehn *Human Anatomy & Physiology*, 11th or 12th edition without Mastering A&P access code.
- [Visible Body Suite](#) an interactive 3D anatomy atlas (requires purchasing the access code). If you have purchased Visible Body Suite without Courseware integration, it is sufficient for this course.
- Reliable computer access and internet connection.

Course Learning Outcomes

1. Explain key homeostatic mechanisms and feedback loops in the lymphatic/immune, respiratory, digestive, urinary, and reproductive systems.
2. Describe anatomical structures and their relationships to function in the lymphatic/immune, respiratory, digestive, urinary, and reproductive systems and human development.
3. Explain key processes of the lymphatic/immune, respiratory, digestive, urinary, and reproductive systems and human development.
4. Relate the relevant levels of biological organization to the functions of the lymphatic/immune, respiratory, digestive, urinary, and reproductive systems.
5. Describe how the lymphatic/immune, respiratory, digestive, urinary, and reproductive systems interact with other body systems.
6. Apply physiological and/or anatomical concepts of the lymphatic/immune, respiratory, digestive, urinary, and reproductive systems to practical scenarios such as clinical, public health, and societal issues.
7. Identify major structures in the lymphatic/immune, respiratory, digestive, urinary, and reproductive systems using lab materials.
8. Visually identify major structures in the nervous, endocrine, and cardiovascular systems using lab materials (correct naming and spelling are required).

Grading

Your final grade is determined by your performance in both the lecture and laboratory components of this course. Everything you need to complete each week is outlined and linked in the respective Lecture Agenda and Lab Agenda.

Component & Grading Overview

Component	Assessment Type	Points Per Item	Final Weight	Attempts Allowed	Proctoring Required	Due Date
Lecture (50%)	Lecture HW (Discussions)	20 pt ea.	5%	untimed	No	11:59pm Thu/Sn
	Lecture Quizzes	15 pts ea.	10%	1 attempt, 25 mins	No	Mon –Wed
	Lecture Exams (2)	50 pts ea.	35%	1 attempt, 50 mins	Yes	Exam Weeks Mon –Wed
Laboratory (50%)	Lab HW (Practice Quizzes)	15 pts ea.	5%	Unlimited (highest score), 25 min	No	Mon –Wed
	Lab Quizzes	15 pts ea.	10%	1 attempt, 25 mins	No	Thu –Sun
	Lab Exams (2)	50 pts ea.	35%	1 attempt, 50 mins	Yes	Exam Weeks Thu –Sun
Bonus	Extra Credit Opportunities	Varies	2%	1 attempt, untimed	No	Varies
TOTAL			102%			

Lecture quizzes and exams consist of multiple-choice questions. Lab quizzes and exams on models are in fill-in-the-blank format. The lab midterm exam also includes 10 multiple-choice questions on acid-base balance. The lab final exam includes fill-in-the-blank questions for the anatomy lab and a combination of multiple-choice, true/false, matching, and fill-in-the-blank questions for Pregnancy and Human Development.

Weekly discussion: Students are expected to actively participate in the discussion board each week. Students are required to post an initial response to the discussion board prompt(s) no later than 11:59 pm Thursday of the current week's discussion board. Then each student must respond to the initial postings of at least two classmates by 11:59 pm Saturday. Initial posts should be at least 200 words and each reply to other students should be at least 50 words. Please cite sources for posts and give meaningful replies to classmates.

Reviewing Quizzes: You may review your quiz submissions at any time after the due date has passed by going to Grades and clicking on the specific quiz.

Reviewing Exams: You may review your exam submission **only once**, immediately upon completion, while still under your proctor's supervision.

Academic Integrity: Copying questions by any means (electronically, digitally, or in writing) is a severe violation of the academic integrity policy and will result in disciplinary action.

The grades will be assigned on the following scale:

- 90-100% A
- 80-89.9% B
- 70-79.9% C
- 60-69.9% D
- Less than 60% F

Missed work: All assignments are available during a window of several days. Plan to complete them early so that unexpected circumstances do not prevent you from submitting your work on time. Missed assignments cannot be reopened, regardless of the circumstances.

Rules for Naming Anatomical Structures in Lab:

- Please note that there are numerous variations in the nomenclature of anatomical parts, but we will only accept terms **EXACTLY** as they are listed in the lab manual, for example: *fundus of stomach*, not *fundus*, or *ascending limb of the loop of Henle*, not *ascending limb*. However, use **correct singular or plural forms of the words**. For example: *cerebral peduncle*, not *cerebral peduncles* (if only one structure is pointed at), or *oviduct*, not *oviducts* (when only one duct is pointed at), or *lobar bronchi*, not *lobar bronchus* (when more than one bronchus are pointed at)
- **Spelling** errors count as wrong answer, even if it is just one letter misspelled.
- **Do not use unnecessary words**. For example: *vocal cords*, not *vocal cords of the larynx*
- **Read the question, it specifies what is required**. For example, *Name and side the structure* would require students to include *right* or *left*.
- **Use one, not both of the alternative names**. For example: *fallopian tube*, not *fallopian tube (oviduct)*.
- **Abbreviations**. When abbreviating, please use appropriate punctuation (period). The only allowed abbreviations are
 - a.* for artery *R.* for right *n.* for nerve *l.* for ligament
 - v.* for vein *L.* for left *m.* for muscle *b.* for bone.

Participation

Students are expected to actively participate in the class each week. Students are required to complete each assignment by the due date.

If a student fails to participate appropriately, the following actions may be taken:

- The student will be dropped from the course, OR
- If the date for dropping a course without penalty has passed, the student will receive a failing grade, unless prior arrangements have been made between the instructor and student.

A student who seeks an exception to this policy must do so in advance of the absence and/or provide documentation of the emergency that caused it, as determined by the instructor.

Proctoring

All exams should be taken without any external resource and require proctoring. Violation of proctoring requirements will result in zero points without a retake option. Proctoring is not needed for quizzes.

1. Use [Proctor 360](#) for live remote proctoring. It is student's responsibility to ensure that the computer meets technical specifications for the proctoring session.
2. Take the exam at the KCC testing center on campus. Please contact [KCC testing center](#) at 541-880-2334 or testingcenter@klamathcc.edu to schedule your appointment at least **72 hours prior to your exam**.

Note that testing centers of other schools and universities as well as libraries or workplace supervisors are not an acceptable substitution.

Course Schedule

Week	Lecture	Laboratory
Week 1	Syllabus Unit I, Lecture 1 Anatomy of the GI tract Unit I, Lecture 2 Mouth, pharynx, and esophagus Syllabus quiz (due at 11:59pm Sunday)	Lab 1 Gastrointestinal system
Week 2	Lecture quiz 1 Unit I, Lecture 3 Stomach Unit I, Lecture 4 Liver and gallbladder Unit I, Lecture 5 Pancreas	Lab quiz 1 Lab 2 Respiratory system
Week 3	Lecture quiz 2 Unit I, Lecture 6 Small intestines and absorption Unit I, Lecture 7 Large intestines Unit II, Lecture 1 Overviews of nutrition and metabolism	Lab quiz 2 Lab 3 Urinary system
Week 4	Lecture quiz 3 Unit II, Lecture 2 Metabolism of carbohydrates Unit II, Lecture 3 Metabolism of Lipids Unit II, Lecture 4 Metabolism of proteins	Lab quiz 3 Lab 4 Acid-Base physiology
Week 5	Lecture quiz 4 Unit II, Lecture 5 Vitamins and minerals Unit III, Lecture 1 Anatomy of nose, pharynx, and larynx Unit III, Lecture 2 Anatomy of trachea, bronchi, and lungs	Lab quiz 4 (Lab report) Lab Midterm (Labs 1-4)
Week 6	Lecture Midterm Exam (Units I and II) Unit III, Lecture 3 Mechanisms of breathing Unit III, Lecture 4 Respiration	No quiz Lab 5 Reproductive system
Week 7	Lecture quiz 5 Unit III, Lecture 5 Control of respiration Unit IV, Lecture 1 Anatomy of urinary system Unit IV, Lecture 2 Urinary formation --filtration	Lab quiz 5 Lab 6 Pregnancy and Human Development I
Week 8	Lecture quiz 6 Unit IV, Lecture 3 Urinary formation -- reabsorption Unit IV, Lecture 4 Regulation of urinary function Unit V, Lecture 1 Male reproductive system	Lab quiz 6 Lab 7 Pregnancy and Human Development II
Week 9	Lecture quiz 7 Unit V, Lecture 2 Physiology of male reproductive system Unit V, Lecture 3 Female reproductive system Unit V, Lecture 4 Physiology of female reproductive system	Lab quiz 7 Lab 8 Pregnancy and Human Development III
Week 10	Lecture quiz 8 Unit VI, Lecture 1 Inflammation Unit VI, Lecture 2 Specific immunity	Lab Final Exam (Labs 5-8)
Finals week	Lecture Final Exam (Units I-VI)	

All lecture quizzes and exams will be available during the scheduled week from Monday 12am till Wednesday 11:59pm PST. Lecture quizzes test students' knowledge of the material of the previous week. Lecture Midterm is on Units I and II. Lecture Final is on Units I to VI (30% on Units I and II, 70% on III-VI).

All Lab quizzes and exams will be available during the scheduled week from Thursday 12am till Sunday 11:59pm PST. Lab quizzes are on previous week's lab. Lab Midterm exam is on Labs 1-4. Lab Final exam is on Labs 5-8.

For all quizzes and exams, use **plugin (not wireless) connection** and **Google Chrome, Firefox or Safari (for Apple) browser**. Please always use the most current version of the preferred browser. All lecture and lab video recordings will be available from Monday 12am till Sunday 11:59pm PST of the scheduled week only.