

Instructor Contact Information

Name: Dr. Hui-Yun Li and Dr. Tanya McVay

E-mail: hui-yun.li@klamathcc.edu and tatiana.mcvay@klamathcc.edu; instructors will read and respond to emails at least once daily except weekends and holidays.

Office Hours: Dr. Li By appointment (e-mail Dr. Li to set up the appointment)
Dr. McVay MWF 7-8am PST; Zoom F 7-8am PST (see Canvas) or on demand.

General Course information

Course Number: BIO 232Z DE

Course Title: Anatomy and Physiology II

Course Description: Examines the structure and function of the human body through a body systems approach. Explores anatomy and physiology of the central and peripheral nervous, endocrine, and cardiovascular systems at the relevant levels of biological organization (chemical, cellular, tissue, organ, and organ system). Covers special senses and the autonomic nervous system. This course includes a laboratory component.

Prerequisite: BIO 231(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 nervous, endocrine, and cardiovascular systems.
2. Describe anatomical structures and their relationships to function in the nervous, endocrine, and cardiovascular systems.
3. Explain key processes of the nervous, endocrine, and cardiovascular systems.
4. Relate the relevant levels of biological organization to the functions of the nervous, endocrine, and cardiovascular systems.
5. Describe how the nervous, endocrine, and cardiovascular systems interact with other body systems.
6. Apply physiological and/or anatomical concepts of the nervous, endocrine, and cardiovascular systems to practical scenarios such as clinical, public health, and societal issues.
7. 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 Homework	1 pt ea.	5%	Unlimited (best score), untimed	No	11:59pm Sun
	Lecture Quizzes	15 pts ea.	10%	1 attempt, 15 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 (best score), 15 min	No	Mon –Wed
	Lab Quizzes	15 pts ea.	10%	1 attempt, 15 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 have varied format questions, mostly multiple-choice. All lab assignments are in fill-in-the-blank format.

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,
internal carotid a., not *internal branch of carotid a.*;
profunda femoris a., not *deep femoral a.* or any other combination of thereof.
Please note that for cranial nerves, both Name and Roman Numeral are always required. For example,
optic n. (II), not *optic n. (2)* or *optic n.*
- **Spelling** errors count as wrong answer, even if it is just one letter.
- **Use the correct singular or plural form of the word.** For example,
cerebral peduncle, not *cerebral peduncles*, if only one structure is pointed at;
atria, not *atriums* when both structures are indicated.
- **Do not use unnecessary words.** For example: *apex*, not *apex of the heart*.
- **Use one, not both of the alternative names.** For example,
bicuspid valve or *mitral valve*, but not *bicuspid (mitral) valve*.
Please note that for cranial nerves, both Name and Roman Numeral are always required. For example,
optic n. (II), not *optic n. (2)* or *optic n.*
- **Read the question, it specifies what is required of you.** For example, *Name and side the vessel* would require you to include *right* or *left*. The exception is the heart and the great vessels where the side should always be included. For example: *Name the chamber of the heart*. Answer: *right ventricle*.
- **Abbreviations.** When abbreviating, please use appropriate punctuation (period). The only allowed abbreviations are

<i>a.</i> for artery	<i>R.</i> for right	<i>n.</i> for nerve	<i>l.</i> for ligament
<i>v.</i> for vein	<i>L.</i> for left	<i>m.</i> for muscle	<i>b.</i> for bone.

Duplication of letters in abbreviation indicates plural. For example: *intestinal a.a.*

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

	<u>Lecture:</u>	<u>Lab:</u>
Week 1	Syllabus, Syllabus quiz	Introduction
	Ch. 12 Development of the NS Cerebral hemisphere	Lab 1 The brain
Week 2	Lecture quiz 1 Diencephalon and brainstem	Lab quiz 1
	Ch. 12 Cerebellum and functional system Higher mental functions	Lab 2 Peripheral nervous system and spinal cord
Week 3	Lecture quiz 2 Protection of the brain	Lab quiz 2
	Ch. 12 Spinal cord Somatosensory and motor systems	Lab 3 Eye
Week 4	Lecture quiz 3 Ch. 13 PNS and reflex	Lab quiz 3
	Ch. 14 Autonomic nervous system I Autonomic nervous system II	Lab 4 Ear
Week 5	Lecture quiz 4 Eye and vision	Lab Midterm (Labs 1-4)
	Ch. 15 Chemical senses Hearing and balance	
Week 6	Lecture Midterm Exam Blood and plasma, WBC	Lab 5 Blood typing
	Ch. 17 RBC Platelets and clotting	
Week 7	Lecture quiz 5 Heart anatomy	Lab quiz 4
	Ch. 18 Electrophysiology Cardiac cycle and CO	Lab 6 Heart
Week 8	Lecture quiz 6 Arteries	Lab quiz 5
	Ch. 19 Microcirculation Veins	Lab 7 Vessels of upper body
Week 9	Lecture quiz 7 Endocrine overview	Lab quiz 6
	Ch. 16 Hypothalamus Pituitary gland	Lab 8 Vessels of lower body
Week 10	Lecture quiz 8 Adrenal gland	Lab Final Exam (Labs 5-8)
	Ch. 16 Thyroid gland and parathyroid gland Pancreas	
Finals week	Lecture Final Exam	

For all quizzes and exams, please use **plugin (not wireless) connection**. The preferred browser is **Google Chrome**. You should always use the most current version of your browser; it will notify you if there is a new version available.