BIOL 109 - Foundations of Anatomy (and Physiology) - Fall 2022

MWF @ 10:30 AM – Magruder Hall 1094 Credit: 3 credit hours.

Instructor

An-Di Yim

Office 2111 Pershing Building Email andiyim@truman.edu

Office Hours MWF 11:30 AM – 12:30 PM

MWF 13:30 PM - 14:30 PM Additional time by appointment

Required Texts

Biga, L. M., et al. (2020). *Anatomy & Physiology*. OpenStax & Oregon State University. Available for free and as a PDF online at: https://open.oregonstate.education/aandp/.

Course Description

The goal of this course is for you to understand and appreciate the anatomical landscape and physiological processes that govern the human body. We will examine the structure and functions of major organ systems, including skeletal, muscular, nervous, endocrine, cardiovascular, among others. This course focuses on structural relationships and physiological processes within these systems. Students will develop a basic understanding of the human body by the end of this course.

Course Objectives

Upon completion of the course, students will know and be able to:

- 1. Identify (macroscopic and microscopic) anatomical structures associated with the body systems under study using appropriate terminology.
- 2. Describe physiological processes associated with the body systems under study and indicate how these systems function to maintain homeostasis in the human body.
- 3. Explain functions and relationships within the body systems.
- 4. Relate basic anatomical and physiological knowledge to clinical issues.

Credit Hour Justification:

The minimum investment of time by the average Truman student necessary to achieve the learning goals in this course are not less than one hour (50 minutes) of classroom instruction and a minimum of two hours of out of class student work each week per credit hour awarded or at least the equivalent of three hours (2:50) of laboratory work, internships, practica, and other academic work each week per credit hour awarded. This average time per week for an average student may have weekly variations. For this course, students should expect to spend an additional 2 hours outside of class in order to be successful.

Course Evaluation

Quizzes 1 – 7	25 pts each x 7	175	
Discussion posts 1 – 6	15 pts each x 6	90	
Course project		200	
Attendance		25	
2 online lectures	5 pts each x 2	10	
Total points		500	

Quizzes

There will be 7 quizzes throughout the semester (roughly one every 2 weeks). All quizzes are administrated online through Blackboard, they will be open at midnight on the day that they are due and will stay open for 24 hours. You are required to complete each quiz within this time frame. If you have not completed it by the time it closes, you will earn a zero for that quiz. All guizzes are open book.

Discussion posts

Throughout the semester we'll discuss some ethical issues related to anatomy, physiology, and the study of human body on Blackboard. These discussions are meant for you to think more broadly about some topics we covered in class, and there is no single, clear-cut answer. We will conduct discussions in groups, and you will get participation credit for contributing 1 initial response post to the question and 2 replies to the post made by a classmate. The discussion forums are a ripe place to engage with one another as you wrestle with the content covered.

Course project

In lieu of a final exam, you will undertake a final group project designing an educational, outreach multimedia display to communicate anatomical and physiological facts relevant to common health issues to a general audience. The multimedia display can take any form (e.g., a podcast, a poster/infographic, a short YouTube video, a TikTok...etc.). You will be present a draft of your multimedia project in-class during the last week of class and post the multimedia display during finals week. More information is available in the "Final Project Guide and Rubric" document.

<u>Attendance</u>

Because this is a small class, attendance is <u>mandatory</u>. However, I understand life happens, so you are allowed two absences, no questions asked. If possible, please let me know ahead of time if you will not be in class. Any additional absences will have an effect on your final grade unless they are accompanied by an acceptable excuse as defined by the university. A list of sanctioned absences can be found in the General Catalog at http://catalog.truman.edu/. The professor reserves the right to deem additional absences as unsanctioned once a student has missed 6.67% of class time for sanctioned absences.

Online lectures

Due to academic conferences, I will be away on two occasions throughout the semester. As a result, there will be 2 online asynchronous lectures in my absence. Each lecture will take about an hour and there will be after lecture quizzes that are worth 5 points. They will be available at 00:00 am on the day of the scheduled lecture. You are required to complete them before the next time I see you.

Grading policy

Grading Scale

 $A \ge 90\%$ B = 80% to 89% C = 70% to 79% D = 60% to 69% F \le 59%

Late work: <u>There is a zero-tolerance policy for late work</u>. There will be no extensions or exceptions. Late work receives a zero.

What you can expect from me

Communication: I will do my best to respond to emails as soon as possible <u>between 8:00 am and 5:00 pm Monday through Friday</u>. If it is something urgent, you are always welcome to stop by my office as I am usually there. I will have office hours in which you can ask questions or review materials. I will not respond to emails late the night before the exam. It is my goal to have time to give consideration to all of your questions, and to meet with all of you when you need to meet.

Feedback: Exams or assignments will be graded within a week from the day they are due.

What I expect from you

Independence: You are responsible for making sure you understand the material. You will not walk out of class knowing everything. In fact, you are likely to walk out of class knowing little of the material. Every day after class, you need to study. This may mean studying your notes, but it may also mean conferring with other sources, such as your atlas or revisiting the readings. My job is to make the material more accessible for you, but I cannot learn the material for you.

Communication: You are responsible for telling me if you miss something during class.

Someone else likely needs to hear it again, too. Likewise, it will not help to tell me later that I went too fast. I cannot accommodate your questions unless you ask them. You are also responsible for contacting me if you have questions. I will answer emails and have office hours in which you may ask questions or review material.

Discretion: That said, make sure your emails are appropriate. Is the answer to your question on the syllabus? Have you taken responsibility (e.g., have you looked for an answer or thought about why there is a problem that you would like to contact me about?) I can answer specific questions about the material. I may not be able to answer vague, broad questions, especially not late the night before the exam. It is my goal to have time to give consideration to all of your questions, to meet with all of you when you need to meet, and to give you quick feedback on exams.

BIOL 109 Foundations of Anatomy (and Physiology) Schedule – Fall 2022

Week			Lecture topic(s)	Suggested readings,
_		00/00		assignments, and quizzes
1	M	08/22	Introduction, terminology, chemistry	Chapter 1 and 2
	W	08/24	Cells and metabolism	Chapter 3
	F	08/26	Tissues	Chapter 4
				Discussion post 1 DUE
2	M	08/29	Ethics of anatomy and physiology	Response to discussion 1 DUE
	W	08/31	Embryogenesis	Chapter 28
	F	09/02	The integumentary system	Chapter 5
3	М	09/05	NO CLASS	
	W	09/07	The skeletal system	Chapter 6
	• •	00/01	The excitation system	Quiz 1 DUE
	F	09/09	The axial skeleton pt. 1	Chapter 7
			·	Discussion post 2 DUE
4	М	09/12	The axial skeleton pt. 2	Chapter 7
			(online asynchronous)	Response to discussion 2
				DUE
	W	09/14	The appendicular skeleton pt. 1	Chapter 8
			(online asynchronous)	
	F	09/16	The appendicular skeleton pt. 2	Chapter 8
5	М	09/19	Joints	Chapter 9
				Quiz 2 DUE
	W	09/21	The muscular system pt. 1	Chapter 10 and 11
	F	09/23	The muscular system pt. 2	Chapter 10 and 11
				Discussion post 3 DUE
6	M	09/26	The muscular system pt. 3	Chapter 10 and 11
				Response to discussion 3
				DUE
	W	09/28	The nervous system	Chapter 12
	F	09/30	The peripheral nervous system pt. 1	Chapter 13
7	M	10/03	The peripheral nervous system pt. 2	Chapter 13
				Quiz 3 DUE
	W	10/05	The central nervous system pt. 1	Chapter 14
	F	10/07	The central nervous system pt. 2	Chapter 14
				Discussion post 4 DUE
8	M	10/10	The autonomic nervous system	Chapter 16
				Response to discussion 4 DUE
	W	10/12	Special senses	Chapter 15
	F	10/14	NO CLASS	
9	M	10/17	The endocrine system pt. 1	Chapter 17
		10,11	The strate and experiment	Quiz 4 DUE

	W	10/19	The endocrine system pt. 2	Chapter 17
	F	10/21	The cardiovascular system: blood	Chapter 18
			•	Discussion post 5 DUE
10	М	10/24	The cardiovascular system: heart pt. 1	Chapter 19
				Response to discussion 5
				DUE
	W	10/26	The cardiovascular system: heart pt. 2	Chapter 19
	F	10/28	The cardiovascular system: blood	Chapter 20
			vessels and circulation	
11	М	10/31	The lymphatic system	Chapter 21
				Quiz 5 DUE
	W	11/02	The immune system	Chapter 21
	F	11/04	The respiratory system pt. 1	Chapter 22
				Discussion post 6 DUE
12	M	11/07	The respiratory system pt. 2	Chapter 22
				Response to discussion 6
				DUE
	W	11/09	Digestive system and nutrition pt. 1	Chapter 23
	F	11/11	Digestive system and nutrition pt. 2	Chapter 23
13	M	11/14	Digestive system and nutrition pt. 3	Chapter 24
				Quiz 6 DUE
	W	11/16	The urinary system	Chapter 25
	F	11/18	NO CLASS	
14	M	11/21	NO CLASS	
	W	11/23	NO CLASS	
	F	11/25	NO CLASS	
15	М	11/28	Homeostasis	Chapter 26
	W	11/30	The reproductive system	Chapter 27
	F	12/02	Course wrap-up	
16	М	12/05	STUDENT PRESENTATION – 1	Quiz 7 DUE
	W	12/07	STUDENT PRESENTATION – 2	
	F	12/09	STUDENT PRESENTATION – 3	

Miscellaneous Course Policies

Substantive Interaction:

Truman policy and federal regulations require that students demonstrate that they are academically engaged in the courses they take. You must meet this requirement within the first calendar week of the semester, beginning at 12:00 am on Monday (8/22/2022) and ending 11:59 pm Saturday (8/27/2022). Failure to do so, or to provide an explanation of an extenuating circumstance by that date and time will result in your removal from the course. Under certain circumstances, removal could impact your scholarship eligibility or financial aid. For the purposes of this class, establishing academic engagement requires, at a minimum, completing Discussion Post 1 assignment on Blackboard before 00:00 AM on 8/27/2022.

Academic Dishonesty:

The General Catalog states:

Students are expected to do their own academic work, this includes cite your sources and not plagiarize. Any student involved in cheating on a paper, an examination or in any other form of academic dishonesty is subject to disciplinary action, including suspension or expulsion from the class, the student's academic program, or the University.

More information can be found in the General Catalog at http://catalog.truman.edu/ and the Student Conduct Code Section 8.050.1 at https://www.truman.edu/wp-content/uploads/2018/08/CHAPTER-8-REVISED-August-4-2018.pdf.

FERPA:

Education records are protected by the Family Education Right to Privacy Act (FERPA). More information can be found at: http://www.truman.edu/registrar/ferpa/. Course grades, assignments, advising records, etc. cannot be released to third parties without your permission. There are, however, several exceptions about which you should be aware. For example, education records can be disclosed to employees or offices at Truman who have an "educational need to know". These employees and offices may include your academic advisor, the Institutional Compliance Officer, the Registrar's Office, or Student Affairs depending on the type of information.

Disruptive behavior:

"Behavior that persistently or flagrantly interferes with classroom activities is considered disruptive behavior and may be subject to disciplinary action. Such behavior inhibits other students' ability to learn and an instructor's ability to teach. A student responsible for disruptive behavior may be asked to leave class pending discussion and resolution of the problem" and may be reported to the Office of Citizenship and Community Standards. (Quotation from Washington State University).

University-Wide Resources and Procedures

Disability Services:

To obtain disability-related academic accommodations students with documented disabilities must contact the course instructor and the Office of Student Access and Disability Services (OSA) as soon as possible. Truman complies with ADA requirements. For additional information, refer to the Office of Student Access and Disability Services website at https://disabilityservices.truman.edu/ You may also contact OSA by phone at (660) 785-4478 or studentaccess@truman.edu.

Emergency Procedures:

In each classroom on campus, there is a poster of emergency procedures explaining best practices in the event of an active shooter/hostile intruder, fire, severe weather, bomb threat, power outage, and medical emergency. This poster is also available as a PDF at this link:

http://police.truman.edu/files/2015/12/Emergency-Procedures.pdf. Students should be aware of the classroom environment and note the exits for the room and building. For more detailed information about emergency procedures, please consult the Emergency Guide for Academic Buildings, available at following link: http://police.truman.edu/emergency-procedures/academic-buildings/

This six-minute video provides some basic information on how to react in the event there is an active shooter in your location: http://police.truman.edu/emergency-procedures/active-shooter/active-shooter-preparedness-video/.

Truman students, faculty, and staff can sign up for the TruAlert emergency text messaging service via TruView. TruAlert sends a text message to all enrolled cell phones in the event of an emergency at the University. To register, sign in to TruView and click on the "Truman" tab. Click on the registration link in the lower right of the page under the "Update and View My Personal Information" channel on the "Update Emergency Text Messaging Information" link. During a campus emergency, information will also be posted on the TruAlert website http://trualert.truman.edu/.

Discrimination and Title IX:

Truman State University, in compliance with applicable laws and recognizing its deeper commitment to equity, diversity and inclusion, which enhances accessibility and promotes excellence in all aspects of the Truman Experience, does not discriminate on the basis of age, color, disability, national origin, race, religion, retaliation, sex (including pregnancy), sexual orientation, or protected veteran status in its programs and activities, including employment, admissions, and educational programs and activities. Faculty and staff are considered "mandated reporters" and therefore are required to report potential violations of the University's Anti-Discrimination Policies to the Institutional Compliance Officer.

Title IX prohibits sex harassment, sexual assault, intimate partner violence, stalking and retaliation. Truman State University encourages individuals who believe they may have been impacted by sexual or gender-based discrimination to consult with the Title IX Coordinator who is available to speak in depth about the resources and options. Faculty and staff are considered "mandated reporters" and therefore are required to report potential incidents of sexual misconduct that they become aware of to the Title IX Coordinator.

For more information on discrimination or Title IX, or to file a complaint contact:

Ryan Nely, Institutional Compliance Officer, Title IX and Section 504 Coordinator

Office of Institutional Compliance

Violette Hall, Room 1308

100 E. Normal Ave

Kirksville, MO 63501

Phone: (660) 785-4354

titleix@truman.edu

The institution's complaint procedure can be viewed at: http://titleix.truman.edu/files/2015/08/University-Complaint-Reporting-Resolution-Procedure.pdf and the complaint form is accessible at http://titleix.truman.edu/make-a-report/