BIOL 366: Human Anatomy & Physiology II
Spring 2023; MF 12:30–1:45pm, Newton 201

Course Objectives:
This course is designed to provide an introduction to the anatomy and physiology of the human body. It is specifically focused on preparing students for future study of these topics in health-related professional schools. As such, it is a challenging course, but when you successfully complete it you will have a definite advantage in your future training.

This course is two semesters long. The second semester encompasses the organ systems, immunology, and endocrinology. This course contains a lecture and a required laboratory, which will feature dissections as well as physiological experiments.

Learning Outcomes:
- Identify structural components of the human body
- Understand physiological processes and functions
- Integrate anatomical and physiological knowledge of organs and organ systems
- Use critical thinking to solve clinical cases using basic concepts of anatomy and physiology

Prerequisites:
BIOL 365: Anatomy & Physiology I

Instructors:
Dr. Tara Sweet, ISC 139C, tsweet@geneseo.edu
Mr. Joshua Baecker, ISC 351, baecker@geneseo.edu

Office Hours:
Sweet: Monday 11-12:30 PM and Wednesday 12:00–1:30 PM

Required Textbooks:
- Anatomy & Physiology: An Integrative Approach, 3rd Edition by McKinley, O'Loughlin, & Bidle (2018), **McGraw-Hill Connect Edition.** (see note below)
- A Photographic Atlas for Anatomy & Physiology by Hebert, Heisler, Krabbenhoft, Malakhova, & Chinn (2015), Pearson. ISBN 9780321869258
- Connect site for course: https://connect.mheducation.com/class/tsweet-spring-2023

Additional Supplies:
Some tool for drawing and coloring lab worksheets will be required. Colored pencils are recommended.

NOTE: You do not need to purchase an additional code for Connect for this semester if you purchased the code last semester. Simply navigate to the course page listed above and register for the spring semester course.

Lecture Notes and Lab Handouts:
PowerPoint slides from the lectures will aim to be placed on the course website 24 hours prior to class time. Handouts for labs will be placed on the course website at least 24 hours prior to the first lab day. You are responsible for printing out these handouts and bringing them to your lab section.

Assignments:
READINGS: The readings relating to each lecture are given in the schedule below. You should attempt to read through the sections given and study the figures and tables before each lecture. Optional, but highly recommended, reading assignments will be given through the Connect module and due the same day as the given lecture. They will not be graded for points, but if you complete all these reading assignments, you will earn 2 extra credit points on the relevant exam.

QUESTION OF THE DAY: During class you will be given a question to do in a small group or to answer via TopHat. If you participate in these questions (4 missing days permitted) you will receive an additional 10 extra credit points on your final number of points for the course. Attendance will primarily be marked via TopHat responses, but you may also be required to turn in an answer sheet for the main QOD. To receive credit for the question, everyone from your group who is present for the question must sign the answer sheet. Any group that submits a group-member's name that is not present at the time the question was done will lose all credit for that question. Additionally, any student who is found to be answering TopHat questions remotely (not in class) will not receive credit for attendance.

HOMEWORK: There will be 10 weekly homework assignments through the Connect system worth 4 points each. These are designed to give you a chance to review the material and practice with questions similar to ones you would get on the test. They will be due before class as noted on the lecture schedule below. Homeworks will be scored as follows: 100–76%=4 pts; 75–51%=3 pts; 50–24%=2 pts; 25–5%=1 pt

Quizzes:
There will be weekly quizzes assigned worth 10 points each. These are designed to give you a chance to review the material, make sure your studying is on-track and practice with questions similar to ones you will get on the test. There will be 10 quizzes given during the semester. Only 8 of these quizzes will count toward your grade, and 2 will be dropped.

Lecture Exams:
The first 4 exams are non-comprehensive and only cover material from lectures, readings, and assignments since the previous exam. The final exam will be comprehensive and will cover material from the entire semester. If you do better on the final exam than you do on one of the previous exams, the final exam score will be "double counted" and replace one of your previous exam scores. This is not a straight "drop" of an exam score, and you must still take all the exams and the final exam.

Lab Assignments & Exams:
The lab is considered to be part of your entire grade for this course and makes up about 30% of your total points. Lab grades are determined by 2 non-comprehensive practical exams, 2 lab reports based on physiology experiments in lab, and 8 lab worksheets. These lab worksheets include contain figures to label in class as well as questions to answer and submit on Canvas by the beginning of the next lab. Instructors will check lab worksheets for completion of drawing- and labeling-based activities.

Physiology-based labs will result in a lab report to be written up and turned in at the date given during the lab session. Details on how to write lab reports will be provided on Canvas. You may work with your group on the content of the lab report, but each student must submit a typed report written in their own words. Lab worksheets will be due the same week. Lab reports will be due

TWO WEEKS after experiments are performed. Assignments are due Sunday night at 11:59 before your assigned lab section. Late lab reports will be penalized by 5 points (one letter grade) for each day they are late.

Lecture:		
Exams (4)	100 pts each	400 pts
Final Exam	100 pts	100 pts
Quizzes (8/10)	10 pts each	80 pts
Homeworks (10)	4 pts each	40 pts
Lab:		
Practical Exams (2)	60 pts each	120 pts
Lab Reports (2)	50 pts each	100 pts
Lab Worksheets (8)	5 pts each	40 pts
Total Points		880 pts

The grading scale for this course is the following:

A:	93%–100%
A–:	90%–92%
B+:	87%–89%
B:	83%–86%
B–:	80%–82%
C+:	77%–79%
C:	73%–76%
C–:	70%–72%
D:	60%–69%
E:	<59%

Course Policies and Resources

Exam Excuse Policies

Make-up exams and quizzes will only be given in cases of extenuating circumstances (a direct and unavoidable conflict of an academic or professional nature). Vacations, weddings, and leaving early for holidays are not acceptable excuses for taking an exam early or late. If you can't make the scheduled exam date you must contact Dr. Sweet at least **ONE WEEK PRIOR** to the exam time. In cases of severe illness, family affairs, or quarantine restrictions, please contact Dr. Sweet as soon as you are able to schedule accommodations. Exam dates are final and will not be changed.

Attendance

Attendance is not a required part of your lecture grade. However, missing significant numbers of class days will impact your ability to gain the QOD extra credit. Attendance is required for lab worksheet grades. In general, the excuse policy for exams above also applies to absences for the purposes of QODs and lab. If in doubt, contact the relevant instructor.

Academic Dishonesty

Academic dishonesty includes cheating, knowingly providing false information, plagiarizing, and any other form of academic misrepresentation. In this course, consequences of a first offense are a zero (0) on the relevant assignment or exam. Consequences of a second offense are a failing grade (E) overall in the course. For the college's fully policy, see:
https://www.geneseo.edu/handbook/academic-dishonesty-policy

Technology is rapidly changing; in some ways online and artificial intelligence tools have outpaced the skills of students and professors. One such tool is ChatGPT. Students should be aware that using ChatGPT for assignments a gray area for the honor code, and the artificial intelligence (AI) used by ChaptGPT may make significant mistakes. It is possible that AI will eventually get to the point where those mistakes rarely happen; that day, however, is not today. As such, I do not recommend using ChatGPT for lecture or lab assignments, unless specifically asked to do so by the instructor. If you do choose to use ChatGPT or any other Al system for language and writing generation, please cite the program in your works cited. Failure to do so is definitely academic misrepresentation.

Academic & Personal Support Resources

Many students find A&P to be a very demanding class. In order to prepare you for your future professional schools, we will cover a lot of material in a short amount of time, and if you fall behind it can be difficult to catch up. This, combined with the stresses we are all still under related to the pandemic can mean you may find yourself overwhelmed at various points in the semester. We want you all to have the best chance of succeeding in this course and in your future anatomy courses, so if you feel like you are struggling, we urge you to seek assistance. Please see the Canvas page titled "Academic & Personal Support Resources" (linked on the front page) for a complete list of on and off-campus resources to help.

Accommodations:

SUNY Geneseo is dedicated to providing an equitable and inclusive educational experience for all students. The Office of Accessibility will coordinate reasonable accommodations for persons with physical, emotional, or cognitive disabilities to ensure equal access to academic programs, activities, and services at Geneseo. Students with letters of accommodation should submit a letter to each faculty member and discuss their needs at the beginning of each semester. Please contact the Office of Accessibility Services for questions related to access and accommodations. Office of Accessibility Services in Erwin Hall 22 or access@geneseo.edu or 585-245-5112.

Land Acknowledgment

Land acknowledgements are expressions of sorrow and remembrance to those whose historic territory one resides on. Geneseo resides on the homeland of the Seneca Nation of Indians and Tonawanda Seneca Nation. We encourage you to learn more about these original occupants and those indigenous to other places you have lived. You may consider using the Native Land app and/or websites such as sni.org to learn more about the community of more than 7,000 enrolled Indigenous Peoples.

Lecture Schedule

DATE			TOPIC	READING
Jan	27	F	1. Course Intro and blood glucose regulation	
	30	M	2. CV: Blood **[HW1][Q1]**	Sections 18.1–18.3b
Feb	3	F	3. CV: Hemostasis **[Syllabus quiz]**	Sections 18.3c -18.4
	6	M	4. CV: Heart Anatomy **[HW2][Q2]**	Sections 19.1–19.4
	10	F	5. CV: Cardiac Stimulation	Sections 19.5–19.7
	13	M	6. CV: Cardiac Output **[HW3][Q3]**	Sections 19.8–19.9
	17	F	**Lecture Exam 1**	
	20	M	7. CV: Circulatory Histology & Capillary Flow	Sections 20.1–20.3
	24	F	8. CV: Circulatory Physiology	Sections 20.4–20.11
	27	M	9. Respiratory Anatomy **[HW4][Q4]**	Sections 21.1–21.4
Mar	3	F	10. Respiratory Physiology	Sections 21.5
	6	M	11. Respiratory Physiology **[HW5][Q5]**	Sections 21.6-21.8
	10	F	**Lecture Exam 2**	
	13	M	No class – Spring Break	
	17	F	No class – Spring Break	
	20	M	12. Endocrine System	Sections 17.1–17.6
	24	F	13. Endocrine System	Sections 17.7–17.11
	27	M	14. Digestive System **[HW6][Q6]**	Sections 26.1–26.2
	31	F	15. Digestive System	Sections 26.3–26.4
Apr	3	M	16. Urinary System **[HW7][Q7]**	Sections 24.1–24.3
	7	F	17. Urinary System	Sections 24.4–24.6
	10	M	18. Urinary System **[HW8][Q8]**	Sections 24.7–24.8
	14	F	**Lecture Exam 3**	
	17	M	19. Fluids	Sections 25.1–25.4

Lecture Schedule

DATE			TOPIC	READING
	21	F	20. Fluids	Sections 25.5–25.6
	24	M	21. Lymphatics and Immune System **[HW9][Q9]**	Sections 21.1–21.4
	28	F	22. Lymphatics and Immune System	Sections 22.1–22.4
May	1	M	23. Lymphatics and Immune System **[HW10][Q10]**	Sections 22.5-22.8
	5	F	24. Reproductive System	Sections 28.1, 28.3-28.4
	8	M	**Lecture Exam 4**	
	15	M	**Final 12:00-2:30pm**	

Lab Schedule

DATES	LAB	TOPIC
Jan 31-Feb 2		Hematology Lab
Feb 7–9		Heart Anatomy
Feb 14–16		Cardiac Physiology
Feb 21–23		Circulatory Anatomy
Feb 28– Mar 2		NO LAB – BREAK
Mar 7–9		Respiratory Anatomy
Mar 14–16		NO LAB – BREAK
Mar 21–23		Respiratory Physiology
Mar 28–30		**LAB PRACTICAL #1**
April 4–6		Digestive System Anatomy and Physiology
April 11–13		Urinary Anatomy
April 18–20		Reproductive Anatomy
April 25–27		NO LAB – BREAK
May 2–4		**LAB PRACTICAL #2**