

WBUonline SCHOOL OF MATHEMATICS & SCIENCES

WAYLAND MISSION STATEMENT:

Wayland Baptist University exists to educate students in an academically challenging, learning-focused and distinctively Christian environment for professional success and service to God and humankind.

COURSE NO. & TITLE:

BIOL2408Fall1st8wks2024VC01 Fundamentals of Human Anatomy & Physiology I

TERM:

Fall1 2024

INSTRUCTOR:

Dr. Tricia Ritschel-Trifilo

Phone or text: 325-518-1495. (email or text preferred; calling is OK)

Email Address: trifilot@wbu.edu

Office: online - I live in Colorado so I am Mountain time.

Office Hours: as needed. I am pretty flexible day or evening; I am happy to help explain concepts and

work in the lab.

CATALOG DESCRIPTION:

Designed for students preparing for application to nursing school or those allied health programs accepting lower-level anatomy and physiology as prerequisites. Topics covered in semester 1 of the two-semester sequence will include introductory concepts; structure and function of the human body and its major organs; anatomy and physiology of the skeletal, muscular, and neural systems; basic interrelationships involved in these organ systems as found in a normal human body; and representative disease processes affecting the normal function of these body systems.

Students who have successfully completed a higher-level human anatomy and physiology course may not take this course for credit toward their degree.

PREREQUISITES:

BIOL1300,1400 or CHEM 1300,1400 or instructor approval.

REQUIRED TEXTBOOK:

Visual Anatomy & Physiology with Mastering A&P Access Card (REQUIRED)

Martini, et.al.; 3rd ed.; Pearson; ISBN: 978-0134394695

When you enrolled in this course you were automatically charged for the eText and courseware for this course. You may opt out of the service and purchase the text separately (see below) – but you must do so by August 19th. This may opt you out of all Fall1 etextbooks so consult your bookstore emails. If you opt out of the electronic version of the text and courseware, then the following applies:

YOU ARE REQUIRED TO HAVE EITHER hardback or paperback versions of the text – AND
access to Pearson's Mastering A&P website. If you purchase a used copy of the text, you will have to contact the publisher (Pearson) and purchase access to Mastering A&P online separately.

PEARSON MASTERING A&P WEBSITE:

Chrome is the best browser to use to access this website. Firefox and newer Safari versions are OK too.

The book and mastering website are included in this course enrollment. You will click on the WBU etextbook access link.

You will need to "register" using your wbu email address to be dropped into my mastering classroom for lab access. Pearson will associate your login with their database from registration and confirm you. You can also read the textbook by clicking the textbook read link.

LAB REPORTS:

Once we get past the initial vocabulary and life concepts you will be doing PhysioEX labs. These are simulations where you do pre-lab questions, click to actively participate in an experiment, and answer post-lab questions. You must save your work and *complete the lab at one sitting* (unless Pearson has finally updated their saving process). Labs can take up to 2 hours to complete. At the end, you "save as a PDF" and can drop the PDF in your file system. You will upload these files into Blackboard in the assignment area for that week as your lab report. Labs should not be done on a phone. You may lose your work.

LAB Work Histology:

The most difficult part of Biol2408 is recognizing tissue on histology slides. This takes time, repetition, and a bit of study/recognition. We will have a couple of zoom sessions to assist you in learning the technique. Histology is a large part of lab exams for this particular course.

COURSE Black Board WEBSITE:

A course website has been established on WBU's Blackboard server. Each student is REQUIRED to establish an active account for this website and to log on to BB regularly (several times a week) for posted lecture notes, messages, assignments, handouts, and quizzes.

COURSE COMMUNICATION POLICY:

Wayland's email address is the official method of communication between instructors and students taking courses through Wayland Baptist University. Students are REQUIRED to establish and activate and use their Wayland email account. Instructors reserve the right to deny email from other sources

COURSE OUTCOME COMPETENCIES:

The students will be able to:

- 1. Explain the integrated function of the interdependent organ systems as well as the operation of these systems independently.
- 2. Use correct and useful, working vocabulary within the disciplines of anatomy and physiology.
- 3. Identify through integrated lectures and laboratory exercises, the basic structures mechanisms in homeostasis and to have a knowledge base of how disturbances in homeostatic mechanisms produce disease(s).

COURSE WORK AND ACTIVITIES:

Quizzes and Lecture exams will cover reading material and supplemental resource materials. Labs will be used to identify anatomical structures and explore the physiological concepts associated with the topic of the week.

Lecture Exams (every two weeks) will typically open on a Saturday and close 2 days later on Monday. Exact dates when exams open and close will be announced on Bb. Do not complete on phones!

Lab exams (every two weeks) will cover lab materials and activities. They will include histology slides, models, and cadaver figures from Mastering A&P. They typically open on a Saturday and close 2 days later on Monday, the same time as the lecture exams. Do not complete on phones!

Discussion boards are places for expanding concepts, exploring tangents of topics, and asking and answering questions.

Essentially each week of work will include readings from the text, viewing supplemental materials, doing in class activities, Mastering A&P lab activities and exercises (some with a report), and quizzes on text material.

Note: content is combined into system like units of two weeks. So a tentative work schedule to accomplish the deadlines is suggested in the attached schedule.

ATTENDANCE POLICY:

"The University expects students to make class attendance a priority." You should note that failure to attend class will affect your ability to perform well on exams. Students must have good class attendance to be successful in this course.

- The student is required to attend class online. This is a physical presence in the Blackboard classroom or Mastering classroom. This is recorded and date/time stamped in Blackboard. Discussions, quizzes, supplemental material review, and class activities all count towards attendance. You should be in the classroom a minimum of 4 hours for attendance purposes.
- 2. Students missing more than 25% of scheduled classes may be dropped from the course.
- 3. ALL absences (including for University sponsored events) must be discussed with the instructor BEFORE the absence or they will be unexcused.
- 4. Unexcused absences can NOT be made-up and a grade of 0% will be recorded for that activity.
- 5. No make-up <u>Lecture Exams</u> will be given. *One* missed lecture exam can be taken during week 8 to replace the zero but the grade will be calculated from an 80%.
- 6. Students are responsible for all material covered in class (lecture and laboratory), as well as all assigned work (textbook reading, study problems, homework exercises, etc...).

7. This is a lab course. Students who do not complete at least 50% of the lab assignments with a grade of 70 or better will automatically fail the course. Once you have read this send me an email, stating you understand, using your WBU email.

STATEMENT ON PLAGIARISM AND ACADEMIC DISHONESTY:

Wayland Baptist University observes a zero tolerance policy regarding academic dishonesty. Per university policy as described in the academic catalog, all cases of academic dishonesty will be reported and second offenses will result in suspension from the university.

DISABILITY STATEMENT:

In compliance with the Americans with Disabilities Act of 1990 (ADA), it is the policy of Wayland Baptist University that no otherwise qualified person with a disability may be excluded from participation in, be denied the benefits of, or be subject to discrimination under any educational program or activity in the university. The Coordinator of Counseling Services serves as the coordinator of students with a disability and should be contacted concerning accommodation requests at (806) 291-3765. Documentation of a disability must accompany any request for accommodations.

If you would like to see certain types of materials in the course such as videos, audio, or other images that are not currently available, please let me know. I will try to include these as requested

COURSE REQUIREMENTS AND GRADING CRITERIA:

Students shall have protection through orderly procedures against prejudices or capricious academic evaluation. A student who believes that he or she has not been held to realistic academic standards, just evaluation procedures, or appropriate grading, may appeal the final grade given in the course by using the student grade appeal process described in the Academic Catalog. Appeals may not be made for advanced placement examinations or course bypass examinations. Appeals are limited to the final course grade, which may be upheld, raised, or lowered at any stage of the appeal process. Any recommendation to lower a course grade must be submitted through the Executive Vice President/Provost to the Faculty Assembly Grade Appeals Committee for review and approval. The Faculty Assembly Grade Appeals Committee may instruct that the course grade be upheld, raised, or lowered to a more proper evaluation.

Students should allow a very minimum of 4-8 hours per week for reading, reviewing, studying, and homework exercising. Your course grade will be determined based on the number of points you earn on lecture exams, laboratory reports, laboratory exams, discussions and quizzes:

COURSE EVALUATION AND GRADING:

The final grade in the course will be derived as follows:

Quizzes -	8%
4 Lecture exams	36%
4 laboratory exams	24%
(~every two weeks/Final lec is proctored)	
Lab reports and class activities	24%
Discussion Boards	8%

University grading system:

A 90-100

B 80-89

C 70-79

D 60-69

F below 60

I incomplete

W withdrawal

IMPORTANT DATES:

Census is
Last day to drop with 'W'
Last day to drop with 'WP/WF'
Last date of session is
August 19th
September 13th
September 27th
October 5th

TENTATIVE COURSE SCHEDULE:

I detailed this to help you pace yourself through the work. Due dates are listed in the classroom in each weekly folder

Week	Date		Day	TOPIC	Assignments
1	Aug	12	Mon	Definitions, terms, organization, homeostasis	Read Chapters 1,2,3
1	Aug		Tue	Brief review of Biological Molecules	Mastering questions
1	Aug		Wed	Water and energy	review
1	Aug		Thurs	Brief review of Cells	review
1	Aug		Fri	organelles	Review functions
1	Aug		Sat	4 tissue types	Read Chap 4
1	Aug		Sun	Epithelium	Detail chapter pictures
2	Aug	19	Mon	Connective tissue	Detail chapter pictures
2	Aug		Tue	Muscle/nervous	PAL histology
2	Aug		Wed	Integumentary system	Mastering questions
2	Aug		Thurs	Accessory organs: hair/nails	Read Chap 5 Mastering Questions
2	Aug		Fri	System relationships	PAL histology, models
2	Aug	24	Sat	LECTURE EXAM 1 (1-5) OPENS/Lab practical	exam
2	Aug	25	Sun	exam	exam
3	Aug	26	Mon	Start 2-week Skeletal Unit	Read Chap 6
3	Aug		Tue	bone and cartilage structure	Mastering Questions
3	Aug		Wed	Common landmarks on bones	Bone models
3	Aug		Thurs	Microscopic structure	PAL histology
3	Aug		Fri	skull, axial, appendicular skeleton	Read Chap 7, 8

Week	Date		Day	TOPIC	Assignments
3	Aug	31	Sat	and articulations	Mastering Questions
3	Sep		Sun	Joints	Mastering Questions
4	Sep	2	Mon	skull, axial, appendicular skeleton	skeletal models
4	Sep		Tue	and articulations	wack a bone game
4	Sep		Wed	skull	PAL models
4	Sep		Thurs	Ribs and pelvis and shoulder	PAL models
4	Sep		Fri	limbs	PAL models
4	Sep	7	Sat	LECTURE EXAM 2 (6-8) OPENS/ lab practical	exam
4	Sep	8	Sun	exam	exam
5	Sep	9	Mon	Start 2-week Muscle Unit	Read Chap 9
5	Sep		Tue	Muscle tissue and physiology	Mastering questions
5	Sep		Wed	Muscle structure	Mastering physiology videos
5	Sep		Thurs	Sliding filament theory	muscle models
5	Sep		Fri	Muscle action and naming	Muscle histology
5	Sep		Sat	Axial Muscles	Read Chap 10
5	Sep		Sun	abdomen	models
6	Sep	16	Mon	back	models
6	Sep		Tue	Appendicular Muscles	Mastering Models
6	Sep		Wed	limbs	wack a muscle game
6	Sep		Thurs	Upper limb	Models and picture
6	Sep		Fri	Lower limb	Models and picture
6	Sep	21	Sat	LECTURE EXAM 3 (9,10) OPENS/lab practical	exam
6	Sep	22	Sun	exam	exam
7	Sep	23	Mon	Start 2 week Nervous System Unit	Read chap 11.1,2,3,4 and complete Mastering Questions
7	Sep		Tue	Nerve cells, support tissue, action potentials	Histology in PAL; Physio Ex on neural activity
7	Sep		Wed	Glial cells	Physio Ex
7	Sep		Thurs	Spinal Cord and reflexes	Read 12.1,2,3,5,9,10,11 and review Spinal Cord Models
7	Sep		Fri	Spinal reflex pathway	Basic reflex physiology EX.
7	Sep		Sat	Basic Brain organization	Read 12.1,2,3,5,9,10,11 and review Spinal Cord Models
7	Sep		Sun	cortex	models
8	Sep	30	Mon	Autonomic NS basics	Read 14.1,2,3 and complete Mastering Questions
8	Oct		Tue	Sympathetic/parasympathetic	ANS reactions

Week	Date		Day	TOPIC	Assignments
8	Oct		Wed	Special Senses	Read Chap 15
8	Oct		Thurs	Eye and ear	Histology of Special Senses
8	Oct	3	Thurs	LECTURE EXAM 4 ((11-15) opens/lab practical	exam
8	Oct	5	Sat	Exam closes EOD	exam