

BIOLOGY 2102
ANATOMY AND PHYSIOLOGY 2 LABORATORY
COURSE SYLLABUS AND SCHEDULE

INSTRUCTOR: **Varies by lab section.**

A&P COORDINATOR: **Suzanne Pundt MS, MT(ASCP), Senior Lecturer in Biology and A&P Coordinator**
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REQUIRED TEXT:

***Human Anatomy and Physiology Laboratory Manual*, Main Version (12th Ed.), Elaine N. Marieb & Susan J. Mitchell with Modified Mastering A&P (includes eBook); ISBN-13: 9780134806358 **Must** include access to **PhysioEx** computer simulations via Mastering)**

NOTE: if you are also taking Biol 2101 A&P1 Lab, your CHEAPEST alternative is to buy a text bundle at UTT Bookstore:

ISBN: 9780135235416 Amerman hardbound Text + Amerman Modified Mastering Ebook + Marieb Lab Main + Modified Mastering Marieb Lab

ISBN: 9780135243824 Amerman ALC (3 hole punch) + Amerman Modified Mastering Ebook + Marieb Lab Main + Modified Mastering Marieb Lab

ISBN: 9780135242971 Amerman Modified Mastering standalone Ebook + Marieb Lab Main + Modified Mastering Marieb Lab

A student of this institution is not required under law to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

COURSE DESCRIPTION: The course provides an overview of the structure and function of the human body.

COURSE OBJECTIVES: **When you are finished with BIOL 2102, you should be able to**

1. **Critical Thinking:** Analyze data generated with a physiological computer simulation by applying anatomical and physiological principles
2. **Critical Thinking:** Differentiate anatomical structures on specimens, models and on illustrations and correlate their distinguishing characteristics with their specific functions
3. **Critical Thinking:** Compare and contrast the four basic tissue types microscopically, and relate specific tissue subtypes to their physiological roles in the human body
4. **Communication:** Demonstrate the ability to communicate scientific information and theory in writing, including proper citing of references in a formal lab report
5. **Communication:** Define and correctly apply anatomical and physiological terminology to answer short essay questions on weekly quizzes and practical examination
6. **Empirical & Quantitative Skills:** Interpret scientific graphs, tables, and charts
7. **Teamwork:** Collaborate as a team on the dissection of representative animal organs
8. Correctly and safely use the microscope and other basic laboratory equipment
9. Demonstrate the ability to use computerized methods to study science
10. Explain and apply the scientific method

GENERAL: Students should log onto **Canvas** ASAP, find the lab course and **read all announcements**. Canvas and Patriots email should be checked **DAILY**.

Questions are welcomed during office hours (or by appointment), before, during or after class, or if more convenient, they can be directed to me by either phone or e-mail. **Please do not hesitate to ask questions, because there is no such thing as a stupid CONTENT question!** It is VERY difficult to improve your course average after you fail the first exam in a course like A&P lab, so PLEASE contact me for help or studying tips early, before it is too late to make a difference. However, please be aware that questions about items covered on the syllabus /schedule or posted on Canvas, will **NOT be answered**. The response will direct you to the answer location **only**. So please look for the answer **before** contacting me.

GRADING POLICY: The final course grade will be determined as follows:

Exams: Four (4) Exams will each be worth **15%** of the total grade. Questions will consist of multiple choice, short answer and essay formats. Anatomical structures will be identified from models, posters or microscopic slides. **Any material (text or figures) in the laboratory manual, including physiological concepts, is fair game for exam questions unless I have specifically omitted it.**

Lab Report: A report on the designated **PhysioEx laboratory exercise** (Activities 1 (all four parts) and 3 only), will be turned in as specified in the lab schedule, and will be worth **20%** of the total grade. **Final written reports will only be accepted the day that they are due, during class.**

Students should work together on this assignment. This includes discussion of concepts and planning of the report. However, this does NOT include using any other student's writing or data in your report. The report must be entirely in your own words, reflecting your own work, except for those sentences (maximum of one per paragraph) that are quoted from a relevant, legitimate source.

Reports must be prepared with a word processor. **See specific instructions posted on Canvas.** Examples of lab reports can be viewed in the instructor's office and on Canvas. **Note the due dates for lab report components on the laboratory schedule.** Component (draft) grades (6 at 5 points each) will count as quiz grades (3) in the final course grade.

Lab reports must also be submitted on Canvas to “Turn It In” well before the due date so that you may check the Turn It In report and make corrections (for plagiarism) as necessary. You must make sure that all matching text in the Introduction and Discussion (only) is quoted (limit one per paragraph) and correctly referenced or paraphrased and correctly referenced, if it is something that requires referencing. The file that you submit for Turn It In must be in one of the following formats: zip, doc, docx, odt, txt, pdf, rtf, or html

Lab Quizzes: (ten points each) will make up the remaining **20%** of the course grade.

PRELAB Quizzes - will be available from **9am Tuesday until 6 pm Wednesday** and will cover that week's laboratory exercise(s), along with questions from the Lab Report instructions. **Questions will be taken from the text of the assigned exercises, and not from the figures or procedures.** Careful reading will be required for you to perform well on quizzes, because the intention is to make sure that the process of learning the material begins **BEFORE** class.

Students must take their weekly quiz **BEFORE their laboratory period begins.** One point will be deducted if the quiz is not completed on time. Each quiz will have a minimal **time limit of two minutes per question.** So a quiz consisting of **ten questions** will have a time limit of **twenty minutes.** Please note that Canvas will **STOP YOU** at the time limit.

Quizzes on Canvas should be taken on **RELIABLE internet connection.** If knocked offline while taking a quiz, I may have to add another attempt if too much time was lost. E-mail me immediately as needed. Be sure to check the quiz after submission to make sure that there is a score, or the icon that looks like an airplane. Contact me if there seems to be a problem.

POSTLAB quizzes - will be given at the end of each lab period, in class. Questions will be taken from the text and *figures* of the assigned exercises. **If you leave class early you will receive a grade of zero for the quiz.**

DISSECTION PROJECT – Ex 17 includes dissection of sheep hearts. The procedure specified in the lab manual will be performed by each lab team (3-4 students) as specified in the specific instructions posted in Canvas. Teams will receive quiz credit (up to 10 pts) based on the **team study photographs** submitted in Canvas. Individual student contribution to their team will also be assessed.

LETTER GRADES will be assigned according to the following scale:

A = 90-100 C = 70-79 F = below 60 B = 80-89 D = 60-69

All course grades will be in Canvas, so students will be able to view their current course average (“Total”) at any time.

Be aware that NO EXTRA CREDIT WILL BE GIVEN at the end of the semester. The average shown in Canvas will determine the final course grade, and **no additional work** is possible, **SO PLEASE DO NOT ASK.**

Important announcements will be made every week in class, and the assigned exercises are **essential** to making a good grade. Attendance is also critical to earning maximal points for the semester teamwork assessment. All scheduled exercises should be done by student team members working together. Also, at the end of the semester, grades will be calculated according to the percentages in the syllabus, and the **only adjustment** that will be made is if the final percentage is **WITHIN ONE POINT** of the next letter grade (without rounding), and the student has missed **NO LABS**. (Mitigating circumstances will

LABORATORY EXAM/ QUIZ MAKE-UP POLICY:

If a student is unable to take a **practical exam** as scheduled, a make-up will be arranged **ONLY** if the reason is legitimate and **DOCUMENTED**, and the instructor is notified **IN ADVANCE of the time the exam is scheduled**, either through the telephone or e-mail. Keep in mind that setting up a practical takes approximately an hour, and that lab time is limited, so make up practicals will **not** be given unless there is **no other alternative**. **If you fail to make appropriate arrangements you will most likely receive a grade of "0" for the exam missed.**

Prelab Quizzes may be **reposted** for technical issues or other problems at the discretion of the instructor. However, once the quiz opens in to the class (at **10am on Thursday** each week), reposting is **NO LONGER POSSIBLE**. **There will be no make-ups given for Postlab quizzes.**

ACADEMIC INTEGRITY IN A&P LAB:

EXAMINATIONS

- Are to be taken **INDIVIDUALLY**, without input or assistance from anyone else, including students that have taken the exam, quiz or course previously. This course contains material that you **MUST** know for future classes and for your profession. Therefore, using old exams, or asking other students about exam content will only hurt **YOU** in the long run. The grades you earn are **NOT** as important as what you actually **LEARN** in this course.
- The use of your **notes, text or any other reference material** during **EXAMS** is **PROHIBITED**.
- **Possession** of anything containing **course content** will be **considered cheating**, whether or not you actually refer to it during the exam.
- **TALKING during an EXAM to anyone other than the instructor or proctor will automatically be considered cheating**. It does **not** matter what you were talking about.
- **ANY** use of **cell phones** (even if they call **YOU**) or any other electronic device that could be used to **record or transmit test material** is prohibited. Phones must be **out of sight** in a pocket, purse or backpack, and turned **OFF** or on vibrate.
- **Watches** (all kinds) must be removed from the wrist and put away during exams
- **Hats** worn during exams must be **turned** or **removed** so that the face is not covered in any way.

WEEKLY QUIZZES

- Prelab quizzes **MAY** be taken with the assistance of the **lab manual**; however, because the quizzes are **timed**, you must **KNOW THE MATERIAL** in order to do well.
- Postlab quizzes may **NOT** be taken with **any** reference material.
- May **NOT** be taken with assistance from **other students**, or any other **reference material**, including Internet sources. Do **NOT** share the contents of a weekly quiz with other students.

LAB REPORTS

- Students should do the following **with their lab partners**:
 - Discuss the concepts examined in the PhysioEx lab activities
 - Discuss the Introduction content (outline)
 - Discuss the Discussion content (outline)
 - Proof read each others lab reports
- Students may **NOT** share data
- Students may **NOT** write any portion of the lab report for another student.
- **Students may NOT plagiarize** any part of their lab report (see below for more information regarding plagiarism)

Penalties for cheating in A&P include anything from a zero on the exam or quiz during which the cheating occurred, up to an F for the course in question, at the discretion of the instructor. Violators WILL be reported to the UT Tyler Judicial Officer for disciplinary proceedings.

WHAT IS PLAGIARISM AND HOW CAN IT BE AVOIDED IN A LAB REPORT?

Plagiarism may be defined as

- (1) Presenting work, ideas or phrasing of another, in whole or part, as one's own without giving credit and proper documentation of sources;
- (2) Copying material directly from sources (including electronic media) except when the material is enclosed in quotation marks and the source is clearly identified;
- (3) Paraphrasing too closely to the original, even when the source is identified; and
- (4) Claiming credit for work in any media (electronic, digital, artistic, etc.) where the student is not the original creator of said work.

Work that is plagiarized will receive an automatic grade of "F". If you are unsure about this subject, please take the time talk to your instructor and /or read this: www.wadsworth.com/english_d/special_features/plagiarism/definition.html

CORRUPTED FILE POLICY:

Any student that turns in a **corrupted file** will be given **24 hours** to turn in a file that can be opened successfully by the instructor. Failure to do so will earn a **grade of "0" (zero)** for the paper.

LABORATORY SAFETY AND DRESS CODE:

Food and drink may NOT be brought into the lab at **any time**. Also, students may NOT wear **OPEN-TOED SHOES** in the lab. Anyone wearing improper footwear will be required to wear biology department rubber boots during class. (Be forewarned that these boots are NOT clean inside.)

UT Tyler Resources for Students

- **Supplemental Instruction:** Group study sessions are offered several times per week, led by specially trained students. Students that participate in these sessions regularly score significantly higher (usually a whole letter grade) on exams, so attend whenever possible. Session schedules are posted on Canvas.
- **A&P Tutoring:** Individual tutoring is available in the [UT Tyler PASS Tutoring Center](#) located in **LIB 401**. Our Tutors would LOVE to help you! (903.565.5964), tutoring@uttyler.edu
- **Library Support:** The Robert R. Muntz Library strives to serve as a center of discovery, exchange, and advancement of ideas. <http://www.uttyler.edu/library/>
- [UT Tyler Writing Center](#) (903.565.5995), writingcenter@uttyler.edu
- [UT Tyler Counseling Center](#) (903.566.7254)

UNIVERSITY POLICIES:

Students Rights And Responsibilities At UT Tyler:

To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please follow this link: <http://www.uttyler.edu/wellness/rightsresponsibilities.php>

Campus Carry

We respect the right and privacy of students 21 and over who are duly licensed to carry concealed weapons in this class. License holders are expected to behave responsibly and keep a handgun secure and concealed. More information is available at <http://www.uttyler.edu/about/campus-carry/index.php>

UT Tyler a Tobacco-Free University:

All forms of tobacco will not be permitted on the UT Tyler main campus, branch campuses, and any property owned by UT Tyler. This applies to all members of the University community, including students, faculty, staff, University affiliates, contractors, and visitors. Forms of tobacco not permitted include cigarettes, cigars, pipes, water pipes (hookah), bidis, kreteks, electronic cigarettes, smokeless tobacco, snuff, chewing tobacco, and all other tobacco products. There are several cessation programs available to students looking to quit smoking, including counseling, quitlines, and group support. For more information on cessation programs please visit <http://www.uttyler.edu/tobacco-free>

Grade Replacement/Forgiveness and Census Date Policies:

Students repeating a course for grade forgiveness (grade replacement) must file a Grade Replacement Contract with the Enrollment Services Center (ADM 230) on or before the Census Date of the semester in which the course will be repeated. Grade Replacement Contracts are available in the Enrollment Services Center or at <http://www.uttyler.edu/registrar>. Each semester's Census Date can be found on the Contract itself, on the Academic Calendar, or in the information pamphlets published each semester by the Office of the Registrar.

Failure to file a Grade Replacement Contract will result in both the original and repeated grade being used to calculate your overall grade point average. Undergraduates are eligible to exercise grade replacement for only three course repeats during their career at UT Tyler; graduates are eligible for two grade replacements. Full policy details are printed on each Grade Replacement Contract.

The Census Date is the deadline for many forms and enrollment actions that students need to be aware of. These include:

- Submitting Grade Replacement Contracts, Transient Forms, requests to withhold directory information, approvals for taking courses as Audit, Pass/Fail or Credit/No Credit.
- Receiving 100% refunds for partial withdrawals. (There is no refund for these after the Census Date)
- Schedule adjustments (section changes, adding a new class, dropping without a "W" grade)
- Being reinstated or re-enrolled in classes after being dropped for non-payment
- Completing the process for tuition exemptions or waivers through Financial Aid

State-Mandated Course Drop Policy:

Texas law prohibits a student who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during their entire undergraduate career. This includes courses dropped at another 2-year or 4-year Texas public college or university. For purposes of this rule, a dropped course is any course that is dropped after the census date (See Academic Calendar for the specific date). Exceptions to the 6-drop rule may be found in the catalog. Petitions for exemptions must be submitted to the Enrollment Services Center and must be accompanied by documentation of the extenuating circumstance. Please contact the Enrollment Services Center if you have any questions.

Student Accessibility and Resources

In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA) the University offers accommodations to students with learning, physical and/or psychiatric disabilities. If you have a disability, including non-visible disabilities such as chronic diseases, learning disabilities, head injury, PTSD or ADHD, or you have a history of modifications or accommodations in a previous educational environment you are encouraged to contact the Student Accessibility and Resources (SAR) office and schedule an interview with the Accessibility Case Manager/ADA Coordinator, Cynthia Lowery Staples. If you are unsure if the above criteria applies to you, but have questions or concerns please contact the SAR office. For more information or to set up an appointment please visit the SAR office located in the University Center, Room 3150 or call 903.566.7079. You may also send an email to cstaples@uttyler.edu

Student Absence due to Religious Observance

Students who anticipate being absent from class due to a religious observance are requested to inform the instructor of such absences by the second class meeting of the semester.

Student Absence for University-Sponsored Events and Activities

If you intend to be absent for a university-sponsored event or activity, you (or the event sponsor) must notify the instructor at least two weeks prior to the date of the planned absence. At that time the instructor will set a date and time when make-up assignments will be completed.

Social Security and FERPA Statement:

It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number. The

electronic transmission of grades (e.g., via e-mail) risks violation of the Family Educational Rights and Privacy Act; grades will not be transmitted electronically.

Emergency Exits and Evacuation:

Everyone is required to exit the building when a fire alarm goes off. Follow your instructor's directions regarding the appropriate exit. If you require assistance during an evacuation, inform your instructor in the first week of class. Do not re-enter the building unless given permission by University Police, Fire department, or Fire Prevention Services.

Student Standards of Academic Conduct

Disciplinary proceedings may be initiated against any student who engages in scholastic dishonesty, including, but not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts.

- i. "Cheating" includes, but is not limited to:
 - copying from another student's test paper;
 - using, during a test, materials not authorized by the person giving the test;
 - failure to comply with instructions given by the person administering the test;
 - possession during a test of materials which are not authorized by the person giving the test, such as class notes or specifically designed "crib notes". The presence of textbooks constitutes a violation if they have been specifically prohibited by the person administering the test;
 - using, buying, stealing, transporting, or soliciting in whole or part the contents of an unadministered test, test key, homework solution, or computer program;
 - collaborating with or seeking aid from another student during a test or other assignment without authority;
 - discussing the contents of an examination with another student who will take the examination;
 - divulging the contents of an examination, for the purpose of preserving questions for use by another, when the instructors has designated that the examination is not to be removed from the examination room or not to be returned or to be kept by the student;
 - substituting for another person, or permitting another person to substitute for oneself to take a course, a test, or any course-related assignment;
 - paying or offering money or other valuable thing to, or coercing another person to obtain an unadministered test, test key, homework solution, or computer program
 - or information about an unadministered test, test key, home solution or computer program;
 - falsifying research data, laboratory reports, and/or other academic work offered for credit;
 - taking, keeping, misplacing, or damaging the property of The University of Texas at Tyler, or of another, if the student knows or reasonably should know that an unfair academic advantage would be gained by such conduct; and
 - misrepresenting facts, including providing false grades or resumes, for the purpose of obtaining an academic or financial benefit or injuring another student academically or financially.
- ii. "Plagiarism" includes, but is not limited to, the appropriation, buying, receiving as a gift, or obtaining by any means another's work and the submission of it as one's own academic work offered for credit.
- iii. "Collusion" includes, but is not limited to, the unauthorized collaboration with another person in preparing academic assignments offered for credit or collaboration with another person to commit a violation of any section of the rules on scholastic dishonesty.
- iii. All written work that is submitted will be subject to review by Turnitin, available on Canvas.

I RESERVE THE RIGHT TO MODIFY THIS SYLLABUS AT ANY TIME. THEREFORE, YOUR ATTENDANCE AND ATTENTION TO THE ANNOUNCEMENTS IN CANVAS ARE CRUCIAL BECAUSE IT WILL ASSIST YOU TO REMAIN CURRENT ON THE MATERIAL AND KNOW WHEN THE SYLLABUS MAY BE MODIFIED.

LABORATORY SCHEDULE

WEEK	EXERCISES	
1: JAN 13	Exercise 23 Exercise 24 Exercise 25 Exercise 26	Anatomy of the Visual System Visual Tests and Experiments Hearing and Equilibrium Olfaction and Taste
2: JAN 20	Exercise 27 <i>PEx 4</i>	Functional Anatomy of the Endocrine Glands <i>Endocrine System Physiology: COMPUTER SIMULATION</i>
3: JAN 27	EXAM 1	
4: FEB 3	<i>LAB REPORT INTRODUCTION OUTLINE DUE (5 pts of 10 pt quiz grade)</i>	
	Exercise 30 Exercise 31 PEx 6	Anatomy of the Heart with DISSECTION Conduction System of the Heart and Electrocardiography Cardiovascular Physiology: COMPUTER SIMULATION
5: FEB 10	<i>LAB REPORT INTRODUCTION DUE (5 pts of 10 pt quiz grade)</i>	
	Exercise 32 Exercise 33 PEx 5	Anatomy of Blood Vessels Cardiovascular Physiology: Blood Pressure and Pulse Cardiovascular Dynamics: COMPUTER SIMULATION
6: FEB 17	<i>LAB REPORT HYPOTHESES DUE (5 pts of 10 pt quiz grade)</i>	
	Exercise 29 PEx 11	The Blood: Wet Lab Blood Analysis: COMPUTER SIMULATION
7: FEB 24	EXAM 2	
8: MAR 2	<i>LAB REPORT M&M/RESULTS DUE (5 pts of 10 pt quiz grade)</i>	
	Exercise 35 PEx 12	Lymphatic System and Immune Response Serological Testing: COMPUTER SIMULATION
9: MAR 9	SPRING BREAK! (No labs this week)	
10: MAR 16	<i>LAB REPORT DISCUSSION OUTLINE DUE (5 pts of 10 pt quiz grade)</i>	
	Exercise 36 Exercise 37 PEx 7	Anatomy of the Respiratory System Respiratory System Physiology Respiratory System Mechanics: COMPUTER SIMULATION
11: MAR 23	Exercise 38 PEx 8	Anatomy of the Digestive System Chemical and Physical Processes of Digestion: COMPUTER SIMULATION
12: MAR 30	LAST DAY TO WITHDRAW EXAM 3	
13: APRIL 6	<i>LAB REPORT DISCUSSION DUE (5 pts of 10 pt quiz grade)</i>	
	Exercise 40 Exercise 41 PEx 9 PEx 10	Anatomy of the Urinary System with DISSECTION Urinalysis: Wet Lab Renal Physiology: The Function of the Nephron - COMPUTER SIMULATION Acid-Base Balance: COMPUTER SIMULATION
14: APRIL 13	<i>LAB REPORT DUE (WILL NOT BE ACCEPTED AFTER lab is OVER)</i>	
	Exercise 42 Exercise 43	Anatomy of the Reproductive System Physiology of Reproduction: Gametogenesis and the Female Cycles
15: APRIL 20	Exercise 44 Exercise 45	Survey of Embryonic Development Principles of Heredity
16: APRIL 27	EXAM 4	

PreLAB QUIZZES are AVAILABLE FROM TUES 9 AM UNTIL WEDS AT 6 PM; MUST BE TAKEN BEFORE LAB FOR FULL CREDIT.
THE LAB REPORT WILL BE WRITTEN ON EXERCISE 4 (ACTIVITIES 1 and 3 only)