**Biology 2457 Human Anatomy and Physiology I**

**Lab Syllabus Spring 2016**

**Classroom**: Life Science (LS) Room 435

**Textbook**: *Laboratory Manual for Anatomy and Physiology*, 5th edition by C. Allen and V. Harper and *Principles of Anatomy and Physiology* 14th edition by G. J. Tortora and B. Derrickson **are both required**.

*Dr. Ghaffari* is the Lab Coordinator for all 2457 Labs. All questions and concerns about labs that cannot or **are not addressed by your GTA** should be directed to him via email or by appointment during office hours.

*Email:Ghaffari@uta.edu*

*Office: LS 448*

**Instructor information:**

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| --- | --- | --- | --- |
| Instructor | Section | Email | Office |
| Andrew Corbin | 16, 21 | Corbin@uta.edu | LS 470 |
| Audra Andrew | 05, 08 | [Aandrew@uta.edu](mailto:Aandrew@uta.edu) | ERB 452 |
| Catherin Rogers | 03, 15 | Cmrogers@uta.edu | ERB 450 |
| Elijah Wostl | 02, 12 | Ewostl@uta.edu | LS 459 |
| Matt Moseley | 07, 20 | Mmoseley@uta.edu | LS 130 |
| Nicholas Long | 09, 23 | [Nlong@uta.edu](mailto:Nlong@uta.edu) | ERB 448 |
| Nicole Hales | 06, 18 | Nicole.Hales@uta.edu | ERB 474 |
| Pankaj B.C | 13, 22 | [Pankaj@uta.edu](mailto:Pankaj@uta.edu) | LS 452 |
| Richard Adams | 14, 19 | Radams@uta.edu | ERB 452 |
| Utpal Smart | 04, 17 | Usmart@uta.edu | LS 452 |

**Student Learning Outcomes:**

Laboratory goals are to introduce the student to human form and function and focuses on human structural anatomy. Laboratory instruction will emphasize the anatomy and basic physiology of the cell, tissues, integumentary system, skeletal system, muscular system and nervous system. Students will participate in dissections activity in addition to handling human models, tissue slides and various physiological instruments to achieve these goals.

**Required Materials:**

**Supplies:** Dissection kit loaned out during the semester or purchased separately. White long sleeved lab coat or scrub top. A lock if you intend to store the lab supplies in a laboratory drawer (recommended). If a lock is used to store lab supplies, the combination must be provided to your GTA in the event that you are not present for lab.

All grades and announcements throughout the semester will be posted on Blackboard. You should be checking Blackboard on a daily basis. The link to login to Blackboard is provided: <https://elearn.uta.edu/webapps/login/>

**Laboratory Schedule:**

This is a tentative schedule and may be changed at the discretion of the instructor, particularly in the case of unforeseen circumstances such as weather, power outages, etc. Ideally, email notices will be sent with 24 hours notice (if possible) to your MavMail account. Notices will also be placed on the classroom door.

|  |  |  |
| --- | --- | --- |
| **A** | **DATE** | **EXERCISE** |
| **1** | Feb. 1st thru Sept. 5th | 1: Anatomical Language  2: Organ Systems and Body Cavities  4: Cell Structure and Cell Cycle (Cell Structure Only) |
| **2** | Feb. 8th thru 12th | 3: Compound Light Microscope  6: Tissues  7: The Integumentary System Structure and Function |
| **3** | Feb. 15th thru 19th | 8: Bone Structure and Function  9: Axial Skeleton |
| **4** | Feb. 22nd thru 26th | 10: Appendicular Skeleton  11: Joints and Synovial Joint Movements |
| **5** | Feb. 29th thru March. 2nd | **PRACTICAL I** |
| **6** | March. 7th thru 11th | 12: Skeletal Muscle Structure  13: Contraction of Skeletal Muscle  14: Skeletal Muscles and Their Actions |
| **7** | March. 14th thru 18th | **No Lab (Spring vacation)** |
| **8** | March. 21th thru 25rd | 16: Nervous Tissue  17: Spinal Cord Structure and Function  20: Brain Structure and Function  21: Cranial Nerves |
| **9** | March. 28th thru April. 8th | 19: Somatic Reflexes  22: Autonomic Nervous System Structure and Function  23: General Senses  24: Special Senses |
| **10** | April. 11th thru 15th | **Presentations & *Research papers due!!!*** |
| **11** | **April. 18th thru 22th** | **PRACTICAL II** |

**Grading:** The Laboratory is worth **35%** of the total course grade. The lecture professor will be given both a percentage and a point total for each student.

* You are not permitted to drop either the lecture OR laboratory. Drops and withdrawals will be applied to both.
* Group work does not mean that one person does the assignment and everyone gets the grade. If your instructor feels confident that you did not participate in a group assignment, you will receive a reduced grade or a grade of 0.
* Evidence of collusion on individual assignments will result in a grade of 0 for both parties.
* Students have ***one week*** from the time a grade is posted on Blackboard to dispute the grade. Grades cannot be contested after this deadline has passed.
* Course policy prohibits extra credit in any form.

**Assignments Value**

Quizzes 60

Practical I 125

Practical II 125

Individual Assignment 20

Group Presentation 20\_\_\_

**­­­­­**­Total 350

\*6 quizzes/ 10 pts each/

**\*Students are expected to keep track of their performance throughout the semester and seek guidance from available sources (including the instructor) if their performance drops below satisfactory levels.**

**Grading scale:**

Lab points Letter Grade

315-350 A (90-100%)

280-314 B (80-89%)

245-279 C (70-79%)

210-244 D (60-69%)

< 209 F (0-59%)

**Notable Dates:**

January 19th First Day of Classes

February 1st First day of the Labs

February 3rd  Census Date

April 1st Last Day to Drop Classes

May 6th Last Day of Classes

**Expectations:**

Attend every lab and participate in experiments and exercises. Show up prepared by reading the upcoming laboratory exercise, completing the prelab where applicable, and reviewing the previous lab. Turn in all assignments on time in the required manner and format. Failure to do so will result in a reduced course grade.

In addition, it is expected that all students will:

1. Be respectful your lab instructor, undergraduate TAs, and peers at all times. Behavior that is rude, aggressive, or inappropriate will be reported immediately to the Laboratory Coordinator and may be referred to the Associate Chair of Biology. Your instructor reserves the right to ask you to leave class and such behavior may affect your grade.
2. Turn off and put away all electronic devices during class. Cell phones will NOT be permitted in class at any time. Your instructor reserves the right to dismiss you from class for having a cell phone out. Missed assignments/quizzes cannot be made up.
3. Be attentive to the information and instructions that your instructor provides.
4. Abide by all rules and regulations regarding safety conduct in the lab. This includes wearing proper attire (**long pants**, long shirts, **closed-toe shoes**) and safety equipment (goggles, gloves) as instructed. Failure to do so will result in dismissal from lab for the day and may affect your grade.
5. By enrolling as a student at UTA, you have agreed to abide by the University’s Honor code. Ultimately, it is your responsibility to ensure that you abide by this promise and uphold the integrity of UTA. If you are unsure if your assignment contains plagiarism, it is your responsibility to meet with your instructor to get help prior to submitting the assignment.
6. Your education is your responsibility. The best way to get the grades that you desire and to achieve success in the course is to work hard, study, and dedicate time to learning the material and developing strong scientific writing skills.

**LABORATORY POLICIES**

**1. Attendance:**

At The University of Texas at Arlington, taking attendance is not required. Rather, each faculty member is free to develop his or her own methods of evaluating students’ academic performance, which includes establishing course-specific policies on attendance. In regards to the BIOL 2457 lab, in which you are enrolled:

1. Attendance is mandatory. You will be required to sign in at the beginning of class.
2. You MUST attend the section that you are enrolled in. You will not be given credit for work completed in a section you did not receive approval to attend.
3. Students who are more than 10 minutes late to class will be considered absent.
4. Safety gear is required entire semester. Thus, students without the appropriate apparel will be required to leave class and will be counted as absent. You will not be allowed to first take a quiz if they are given/collected that day.
5. *There will be no make-up labs or assignments to take the place of missed lab exercises*. You must be present to understand the materials.
6. If you must miss a lab, contact your instructor **prior to** the absence. You will be permitted to attend a different lab section ONE time per semester/session with a legitimate, **documented** excuse (e.g., medical, death in the immediate family, illness of a family member for which you are the primary care provider). **No absence will be considered excused without appropriate documentation regardless of cause.** Conflicts with work will not be considered excused. Absences due to a planned trip will not be excused. Extreme circumstances will be considered on a case-by-case basis and will be subject to review by **the Lab Coordinator**.
7. If you are **unable** to contact your instructor prior to missing class (due to sickness, accident, etc.), you must notify him/her of the cause of the absence within 24 hours of the missed lab. Absences brought to attention after this time will not be considered excused regardless of reason or documentation.
8. Should you receive permission to attend a different lab section, all assignments are still due by the original date/time stated by your instructor/listed in the manual. For example, if your section meets on Tuesday at 9am, and you are given permission to attend a section meeting on Thursday at 11, an assignment due the following week is still due Tuesday at 9am *unless otherwise indicated by your instructor or the Lab Coordinator, as determined on a case-by-case basis*.
9. If you missed a lab with an **excused** absence and are unable to attend a different lab that week, make-up assignments are due by the original due date or the date established by your instructor or Lab Coordinator. Contact your instructor for information on missed assessments and instructions on turning in assignments. Group work from exercises missed with an excused absence must be made up individually.
10. Documentation of an excused absence MUST be provided to your instructor by the following week’s lab.

**2. Lab Practicals:**

There will be two lab practicals, each worth 125 points. **There are no make-up practicals.** Students who have an acceptable, documented excuse and prior approval of Dr. Ghaffari and the lab instructor may allow to take the practical on the other days during the practical week. A picture ID (student ID or Driver’s License) is required for entrance to all practicals. Students coming late will forfeit the time they have missed and may not be admitted to the practical.Practicals will consist of 50 short answer questions set up at 25 stations (2 questions per station). Students will have 1.5 minutes total to answer the questions at each station. Question will be chosen from Lab Manual, Power point slides and models that will see in the labs.

**3. Quizzes**

Quizzes will be given at the start of lab. Material covered will include information for the current lab as well as all material covered in previous labs. Question format will be short answer, fill-ins, and definitions. You should plan to spend time studying for these quizzes. Sine quizzes will be given at the start of lab, if you arrive late (i.e., after the quiz has been handed out), you will not be allowed to take the quiz. Make-up quizzes will not be given in the case of unexcused absence or tardiness.

**4. Research paper:**

The ability to convey scientific information in a concise and understandable way is incredibly important in most professions. There will be a short research paper, 4-5 pages, on a disease, disorder, clinical manifestation, or new treatment in one of the systems of this course: cell, tissues, integumentary system, skeletal system, muscular system, nervous system. These will require the student to collect information from peer reviewed journals and synthesize this information using critical thinking in order to communicate what was learned. These will be submitted through **SafeAssign** on Blackboard.

***Scientific Writing and Results Assignments*:**

Scientific writing is a vital component of this laboratory course. You will spend considerable time learning about the process of scientific writing. The laboratory report alone is worth 20 pts of your grade. As such, you should plan to dedicate significant time to developing your writing skills over the course of the semester/ session.

1. All assignments must be submitted through SafeAssign. An assignment that is not submitted through SafeAssign will not be accepted and will receive a grade of zero.
2. You must follow your instructor’s submission instructions to receive credit for your assignment.
3. Plagiarized papers and assignments will receive a reduced grade or a grade of 0, and will be reported to the Office of Student Conduct.
4. Individual Assignments MUST be completed individually. Evidence of collaboration with other students will be treated as cheating.

**5. Group presentation:**

Presenting scientific and medical findings to an audience is an important skill. Working with others is also very important. To facilitate these skills, students will be required to participate in a group presentation of a research topic of the groups choosing a disease, disorder, clinical manifestation, or new treatment in one of the systems of this course: cell, tissues, integumentary system, skeletal system, muscular system, nervous system. These topics cannot be used for the research paper. Students will present their findings to the class. These will be submitted through **SafeAssign** on Blackboard.

**Assignment Submission Policies:**

1. You must follow submission guidelines in order to receive full credit.
2. Late assignments will not be accepted.
3. Assignments submitted after the due date/grace period, or those incorrectly submitted, will not be accepted and will receive a grade of 0.
4. Assignments submitted to Blackboard must be as a Microsoft Word document (.doc or .docx). Other file type submissions will not be graded and will receive a 0.
5. Do not submit a PDF to SafeAssign, it will not be graded and you will receive a 0.
6. It is your responsibility to submit all assignments correctly and on time. Except in the case of documented technical difficulties, **you will not be given extra time to submit electronic assignments in the case of computer-related issues**. Assignment submissions with documented technical difficulties must still be submitted before the end of the grace period. Don’t wait until the last minute to submit assignments! Plan to submit all electronic assignments *at least a day* ***before*** they are due.
7. If you experience technical difficulty submitting an assignment to Blackboard, it is your responsibility to contact your lab instructor and provide verification of the difficulty and your completed assignment BEFORE the assignment is due. Your instructor will not make any allowances for technical difficulties if they are notified after the deadline.
8. It is recommended that you take a screen shot of successful electronic submissions. Complaints of missing submitted assignments will not be considered without documentation. This requirement also applies to failed submission attempts due to technological difficulties. Documentation is required.
9. Do not turn in work that has been completed and submitted for a different class or assignment, you will be reported to student conduct.
10. Do not submit assignments via email. They will not be accepted.
11. Submissions through Blackboard are considered final. Requests to clear submission attempts will not be considered, except in cases where technological difficulties can be proved.

**6. Academic Integrity:**

It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely unacceptable and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University. According to the UT System Regents’ Rule 50101, §2.2

Scholastic dishonesty includes but is 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.

**CHEATING IN ANY FORM WILL NOT BE TOLERATED. IF YOU ARE CAUGHT, YOU WILL NOT RECEIVE CREDIT FOR THAT ASSIGNMENT AND MAY BE DISMISSED FROM LAB. ALL CASES OF PLAGIARISM WILL BE REFERRED TO THE OFFICE OF STUDENT CONDUCT WITHOUT EXCEPTION.**

**7. E-mail Communication Policy**

Your instructor will make every effort to respond to your inquiry within a reasonable time, no longer than 24 hours. Do not email your instructor at the last minute expecting help with an assignment. Plan ahead!

Before sending an email, ask yourself the following questions:

1. *Is this email professional, polite, and detailed?* If you would not speak those words to the President of the University, do not send them in an email to your instructor. Rude or aggressive emails will be reported to the Laboratory Coordinator and possibly to the Associate Chair of the department. Threatening emails will be reported to campus police.
2. *Can I find this information in my syllabus or on Blackboard?* Check available resources BEFORE emailing your instructor. Your instructor will not respond to emails regarding policies or dates that are set forth in the syllabus or on Blackboard.
3. *Was this information made available during a lab I missed?* If so, it is your responsibility to ask a classmate.
4. *Do I need to discuss my grades?* University policy prohibits discussion of grades over email. Make an appointment or see your instructor during office hours.
5. *Do I need help with an assignment?* Email is NOT intended to take the place of meeting with your instructor during office hours. If you need help with an assignment, attend office hours or make an appointment with your instructor.

**8. Safety:**

The following safety rules will be enforced at all times.

1. Safety attire consists of **long pants that cover the ankle, shirts that come to the pant line, shoes that cover the toes and the top of the foot**, and safety goggles.
2. Failure to wear safety attire on each class (goggles, long pants or shirt, and/or close toed shoes) WILL result in dismissal from lab. Failure to comply with or follow safety procedures (e.g., proper waste disposal) may result in dismissal from class.
3. **There is absolutely no food, drink, gum, cosmetics permitted in the lab at any time.**
4. All personal materials, other than your lab manual and a pen/pencil (or other materials required for that day’s lab) must be stowed in the designated area. This includes all bags, coats, electronic devices, and other personal belongings.
5. Electronic devices are prohibited during lab and must be turned off and stowed with your belongings. Using electronic devices during lab may result in your dismissal from lab that day and will affect your grade. If you have an extenuating circumstance during lab one day (e.g., sick child) notify your instructor prior to the start of lab that you need to have your phone.

**Mandatory University Online Safety Training :**

Students registered for this course must complete all required lab safety training prior to entering the lab and undertaking any activities. Once completed, Lab Safety Training is valid for the remainder of the same academic year (i.e., through the following August) and must be completed a new in subsequent years. There are no exceptions to this University policy. Failure to complete the required training will preclude participation in any lab activities, including those for which a grade is assigned.

Completion of the Laboratory Safety Training is required BEFORE you begin your coursework. Training must be completed one business day before your scheduled lab meeting to ensure that the instructor has up-to-date completion records.

Lab Safety Training Course Instructions:

1. Use Mozilla Firefox 3.0 as your web browser: https://www.mozilla.org/en-US/firefox/new/
2. Login to Blackboard at https://elearn.uta.edu with your NetID and password
3. Under My Blackboard tab, click Lab Safety Training
4. Note: Tab will be present if training is required
5. Click Welcome from the left pane to start and follow the instructions

You MUST complete this training. **Students who have not completed the training by the second week of lab will be unable to attend lab and may be dropped from the lab (and consequently the lecture)**.

*General questions about the Lab Safety Training, including content should be directed to the Office of Environmental Health and Safety at (817) 272-2185 or ehsafety@uta.edu*

**9. Other Policies:**

All persons are to be shown respect. Any offending student will be dismissed from lab and may return only after a conference with the instructor and Dr. Laura Mydlarz of the Department of Biology.

**10. Conflict Resolution**

If you are experiencing an issue in lab, you should **first** arrange a meeting with your instructor. After you have met with your instructor and if the issue remains unresolved, you may then consult the Laboratory Coordinator. If the issue still requires attention, you may then consult the Associate Chair of the Department of Biology, Dr. Laura Mydlarz. None of the listed personnel will discuss the issue with you until you have first consulted all of those preceding him/her. The associate chair has final authority regarding any issue short of a filing a formal complaint with the University.

**11. The taking of pictures of models, etc. is strictly forbidden**.

Models, slides, etc. are available for use in the Science Education and Career Center (LS 106). The student MyMav email account is an official avenue for University communication.

***Science Education and Career Center (located in LS 106):***

This center offers similar models and slides. Hours of operation are:

Monday – Thursday 8:00 am – 8:00 pm

Friday 8:00 am – 5:00 pm

Saturday 12:00 pm – 5:00 pm

Sunday Closed

**12. Drop Policy:**

Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for non-attendance**. Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (<http://wweb.uta.edu/ses/fao>).

**13. Electronic Communication:**

UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All *students are* assigned a MavMail account and are *responsible for checking the inbox regularly*. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at <http://www.uta.edu/oit/cs/email/mavmail.php>.

Students are required to check this email on a regular basis. The instructors for this lab may make necessary communications through MyMav and students are solely responsible for being aware of such communications. Cell phones should be off during the lab lecture. If you need to receive a call, you may take the call outside the lab in the hallway.

**14. Student Feedback Survey:**

At the end of each term, students enrolled in classes categorized as lecture, seminar, or laboratory shall be directed to complete a Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student’s feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington’s effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit <http://www.uta.edu/sfs>.

**15. Americans with Disabilities Act:**

The University of Texas at Arlington is on record as being committed to both the spirit and letter of the federal equal opportunity legislation: reference Public Law 93112 – The Rehabilitation Act of 1973 as amended. With the passage of new federal legislation entitled Americans with Disabilities Act (ADA), pursuant to section 504 of the Rehabilitation Act, there is renewed focus on providing this population with the same opportunities enjoyed by all citizens. Lab instructors are required by law to provide “reasonable accommodation” to students with disabilities, so as not to discriminate on the basis of disability. Student responsibility primarily consists of informing instructors or the Laboratory Coordinator ***by the end of the second week of labs, and prior to any assignments, quizzes or activities that require accommodation*** and providing authorized documentation through designated administrative channels concerning any disabilities.

Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability or by calling the Office for Students with Disabilities at (817) 272-3364.

**16. Academic Dishonesty:**

It is the philosophy of the University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will receive a zero for that assignment and will be referred to the University disciplinary body. Discipline may include suspension or expulsion from the University.

“Scholastic Dishonesty includes but is not limited to cheating, plagiarism, collusion, and the submission for credit of any work or materials that are attributable in whole or in part to another person, any act designed to give unfair advantage to a student or the attempt to commit such acts.” (Regents’ Rules and Regulation, Part One, Chapter VI, Section 3, subsection 3.2, Subdivision 3.22).

**17. Title IX**

The University of Texas at Arlington is committed to upholding U.S. Federal Law “Title IX” such that no member of the UT Arlington community shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity. For more information, visit [www.uta.edu/titleIX](http://www.uta.edu/titleIX).

**18. Student Support Services Available**

UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at www.uta.edu/resources.

**19. Emergency Exit Procedures**

Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit, which can be found by exiting the classroom and turning left (rooms 207 and 205) or turning right (rooms 200 or 201) and exiting the building via the stairs. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist individuals with disabilities.