BIOL 1442: Structure and Function of Organisms Laboratory

GTA: **Email Address:**
Office Number: **Office Hours:**

Time and Place of Class Meetings

- Labs will be held in LS 226 and 229
- Check MyMav for the exact room number, time, and day of your section
- Labs begin on Monday, January 27th, 2013

Lab Coordinator: Rachel Wostl
Email: rlwostl@uta.edu
Office: LS236

Laboratory Instructors

Instructor	**e-mail**
Jangam, Diwash	diwash.jangam@mavs.uta.edu
Laws, Cori	claws@uta.edu
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Description of Course Content

The second of a three-part introductory biology sequence, this course covers the study of structure and function of plants and animals. Topics to be covered include structure at the level of the cell, tissue, organ and individual growth, transport/circulation/gas exchange, nutrition, reproduction, development, endocrinology, and animal neural regulation. The laboratory will examine plant and animal structure and function with observational and experimental approaches. Prerequisite: BIOL 1441.

Note: Modern Biology is an integrative discipline, incorporating elements of mathematics, chemistry, computer science, and writing. We expect that you have at least a basic understanding of each of these elements since you will be drawing on each for your experimental designs and report writing.

Student Learning Outcomes

- Gain hands-on knowledge of structural and functional aspects of biology through demonstration and experimentation
- Learn the scientific process by designing and conducting experiments
- Become proficient at collecting, analyzing, and presenting data, in both written and oral formats
- Develop critical thinking skills through development and design of experiments, and analysis of scientific results
- Learn essential laboratory procedures and protocols

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 of GTAs, 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. 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.
3. Be attentive to the information and instructions that your GTA provides.
4. Abide by all rules and regulations regarding safety conduct in the lab. This includes wearing proper attire (long pants, 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. Place all belongings such as bags, coats, and electronic devices in the coat area upon arrival to lab.
6. 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 GTA to get help prior to submitting the assignment.
7. Your education is your responsibility. The best way to get the grades that you desire and to achieve success in the course is to learn as much as you can. Work hard, study, and dedicate time to learning the material and developing strong scientific writing skills.

Required Textbook and Other Course Materials

TEXTBOOK

Biology 1442 Structure and Function of Organisms Laboratory Manual
This manual is available for purchase ONLY THROUGH A REPRESENTATIVE OF PHI SIGMA (Locations and times TBA). This manual cannot be purchased through the bookstore or online.

MATERIALS

Goggles. Goggles may be purchased from a Phi Sigma representative. Chemistry or microbiology goggles are acceptable. Wearing eyeglasses in place of goggles is not allowed.
Basic calculator. Graphing calculators and cell phone calculators are not permitted.
Laptops [***recommended***]. Students will benefit from having a laptop with Microsoft Excel and internet access for labs that require data analysis.

SUPPLEMENTARY COURSE MATERIALS

Additional materials can be accessed through blackboard. It is your responsibility to check Blackboard regularly for materials. Your GTA will use Blackboard to communicate information related to the course. You are required to utilize Blackboard for this course.

Grading Policy

1442 is a four-credit class that includes a lecture and a laboratory. For grading purposes, the lecture comprises 2/3 of your grade while other 1/3 is your lab grade. Therefore, you can multiply your final lecture grade by 0.66 and your lab grade by 0.33 and add them together to get your complete course grade.

- 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 GTA feels confident that you did not participate in a group assignment, you will receive a reduced grade or a grade of 0.
- Course policy prohibits extra credit in any form.

Your laboratory grade will be determined as follows:

25% Lab Report *To be completed individually*
25% Final Exam
15% Individual Assignments (results, lab report evaluation)
15% Group Assignments (group proposals and worksheets)
10% Assessments (quizzes, prelabs, participation)
10% Group Presentation

See the schedule for due dates. Your Instructor will provide section specific dates.

Assignments	Number
Quizzes	4
Prelabs	2
Participation days	2
Group Assignments	4
Individual Assignments	4
Lab Report	1
Group Poster	1
Final Exam	1

Important Dates

- First Day of Labs: January 27th
- Census Date: January 29th. Drops/withdrawals after this must be completed by an academic advisor
- Last day to drop a class with a "W": March 28th
- Last day of labs: April 24th

Attendance Policy

1. Attendance is mandatory. You will be required to sign in at the beginning of class.
2. Prelabs are to be completed prior to the start of lab.
3. Quizzes will be given at the start of lab. If you arrive late to lab 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. Students who are more than 10 minutes late to class will be considered absent.
5. On days when safety gear is required, students not wearing 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 or submit a prelab if they are given/collected that day.
6. *There will be no make-up assignments to take the place of lab exercises*. You must be present to conduct the experiment and gather data. If you are absent on the day that an assignment is completed in class, you will receive a grade of 0. Associated assignments will be subject to a 10% grade reduction. For example, if you are absent for the group experiment, your lab report grade will be reduced by 10%.
7. 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 (such as a medical excuse in the form of a physician's note, 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. Extreme circumstances will be considered on a case-by-case basis and will be subject to review by the Lab Coordinator.
8. If you are unable to contact your GTA prior to missing class, you must notify him/her of the cause of the absence within 24 hours of the missed lab. Absences brought to the attention of the GTA after this time window has lapsed will not be considered excused regardless of reason or documentation.
9. Should you receive permission to attend a different lab section, all assignments are still due by the original date/time indicated by your instructor. For example, if your section meets on Tuesday at 9am, and you are given permission to attend a section 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*. A make-up quiz must be taken within 1 week of the excused absence.
10. 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 the Lab Coordinator. There is no make-up for missed participation points regardless of excuse.
11. Documentation of an excused absence MUST be provided to your GTA by the following week's lab. If you do not provide documentation, you will not be given credit for any make up work you were allowed to do.
12. If you do not receive approval from your GTA or the Lab Coordinator to miss a lab, you will not be given the opportunity to make-up quizzes or assignments and will receive a grade reduction on other lab-associated assignments (see #6).

Assignment Submission Policies

1. You must follow submission guidelines in order to receive full credit.
2. Late assignments will be accepted up to 3 days (72 hours) past the due date/time. A grade reduction of 10% will be applied for each day that an assignment is late. Assignments will not be accepted once the 3 day grace period has expired. There is no grace period for prelabs, assignments due in class, or for your presentation.
3. Assignments submitted after the grace period, or those incorrectly submitted, will not be accepted and will receive a grade of 0.
4. Do not submit a PDF to Safe Assign, it will not be graded and you will receive a 0.
5. It is your responsibility to submit all assignments correctly and on time. Except in the case of documented campus technical difficulties, you will not be given extra time to submit electronic assignments in the case of computer-related issues. In other words, don't wait until the last minute to submit assignments! Plan to submit all electronic assignments the day *before* they are due.
6. It is recommended that you take a screen shot of successful electronic submissions. Complaints of missing electronically submitted assignments will not be considered without documentation.
7. Do not turn in work that has been completed and submitted for a different class, you will be reported to student conduct.
8. Do not submit assignments via email. They will not be accepted.

Scientific Writing 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 25% 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 (lab reports, conclusions/results follow up assignments) must be submitted through Safe Assign. An assignment that is not submitted through Safe Assign will not be accepted and will receive a grade of zero.
2. You will be required to submit highlighted sources/references with your lab report. Failure to do so will result in a reduced grade or a grade of 0.
3. You must follow your GTA's submission instructions for reports and supporting documents in order to receive full credit.
4. Plagiarized papers and assignments will receive a reduced grade or a grade of 0, and will be reported to the Office of Student Conduct.

Quizzes

Quizzes will be given at the start of lab. Material covered will include information for the current lab through its prelab, as well as all material covered in previous labs (prelabs, protocols, follow-up questions). Question format will be short answer, fill-ins, and definitions. You should plan to spend time studying for these quizzes.

Prelabs and Follow-up Questions

Prelab assignments and the Follow-up Questions that appear in the laboratory exercises are meant to help you learn the material. It is very important that you complete these assignments. Prelabs should always be completed individually and may be collected at the start of the lab.

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.

E-mail Communication Policy

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

<u>Before sending an email, ask yourself the following questions:</u>

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 GTA. 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 GTA. GTAs 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 GTA during office hours.
5. *Do I need help with an assignment?* Email is NOT intended to take the place of meeting with your GTA during office hours. If you need help with an assignment, attend office hours or make an appointment with your GTA.

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. Jorge Rodriguez. 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.

Grade Grievance Policy

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.

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. Contact the Financial Aid Office for more information.

Americans with Disabilities Act

The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the *Americans with Disabilities Act (ADA)*. All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability.

Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. In order to receive accommodation, students must present this letter to their GTA or the Laboratory Coordinator ***by the end of the second week of labs, and prior to any assignments, quizzes or activities that require accommodation.*** Students wishing to take a test in the Adaptive Resource Center must provide their instructor with the required paperwork at least one week prior to the test date. Requests made a few in advance cannot be accommodated.

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.

Student Support Services Available

The University of Texas at 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. These resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals to resources for any reason, students may contact the Maverick Resource Hotline at 817-272-6107 or visit www.uta.edu/resources for more information.

Electronic Communication Policy

The University of Texas at Arlington has adopted the University "MavMail" address as the sole official means of communication with students. MavMail is used to remind students of important deadlines, advertise events and activities, and permit the University to conduct official transactions exclusively by electronic means. For example, important information concerning registration, financial aid, payment of bills, and graduation are now sent to students through the MavMail system. All students are assigned a MavMail account. ***Students are responsible for checking their MavMail regularly.*** Information about activating and using MavMail is available at http://www.uta.edu/oit/email/. There is no additional charge to students for using this account, and it remains active even after they graduate from UT Arlington.

Student Feedback Survey

At the end of each term, students enrolled in classes categorized as "lecture," "seminar," or "laboratory" shall be directed to complete an online 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.

Final Review Week

A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week *unless specified in the class syllabus*. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

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 handicapped individuals.

Lab Safety Information

The following safety rules will be enforced at all times. Failure to follow safety regulations or instructions regarding safety attire (goggles, long pants, etc.) or procedures (waste disposal), may result in dismissal from lab or grade reduction.

1. There is absolutely no food, drink, gum, cosmetics permitted in the lab at any time.
2. You must wear appropriate safety attire as instructed. This may include goggles, gloves, closed-toe shoes, long pants.
3. 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.
4. 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 GTA prior to the start of lab that you need to have your phone.

Mandatory University Online Safety Training

1. Go to http://www.uta.edu/training.
2. Log on using your network log-on ID and password (what you use to access email). If you do not know your NetID or need to reset your password, visit https://webapps.uta.edu/oit/selfservice/.
3. The available courses for completion will be listed under "Training I'm Enrolled In". Complete the course entitled 'Student Lab Safety Training – General.' ***NOTE: If you completed Wet, Dry or Biology Lab Safety Training course last semester for another class, that training is still applicable until the end of this academic year. Please follow instructions in #4 to print the certification page for your GTA.
4. Go to 'Training I've Completed' and print the displayed page for your GTA. Verify that it shows clearly your name, and that 'General, Wet, Dry or Biology' training is completed/passed and the date when the training was completed. If you have just completed the training but it is not updated on the 'Training I've Completed' page, please log out of the system and log back in. If the training still does not show up on this page, call the Helpline at 817-272-5100.
5. If you were enrolled in a course with a lab last semester and did not complete the training or if you do not see training for this academic year listed, email compliance@uta.edu providing your name, a contact phone number, NetID and course (e.g. BIOL 1442-005) and request the appropriate training for your course.
6. You MUST complete this training. **Students who have not completed the training by the third week of lab may be dropped from the lab (and consequently the lecture)**.
7. Lab Safety Training is required to be completed once every academic year. Training completed in the Fall semester is valid for the Fall, Spring and Summer sessions. It is your responsibility to print your training certification page and turn it in each semester to your GTA for each course with a lab you are enrolled in.

For training specific questions, contact the Environmental Health and Safety office at 817-272-2185. For technical assistance with the training, please contact the Office of Institutional Compliance at 817-272-5100 or email compliance@uta.edu

BIOL 1442 Spring 2014 - Lab Schedule

Week	Date	Activity	Assignment(s) Due*	Safety?
1	27-Jan	Lab 1: Reflexes and Reactions	Group Proposal 1	
2	3-Feb	Lab 2: Group Experiments Reflexes & Reactions Scientific Writing	Group Paraphrasing Assignment	
3	10-Feb	Lab 3: Plant Responses to the Env. – Part 1 Collaborative Scientific Writing Workshop	Draft Report Group Proposal 2	
4	17-Feb	Lab 4: Experiments with the Human Cardiovascular System Plant Reponses Experiment Implementation	Lab Report Report Eval. WS	
5	24-Feb	Lab 5: Metabolism	CVS Results	
6	3-Mar	Lab 6: The Effects of Alcohol and Caffeine on the Cardiovascular System	Group Metabolism Results	
7	10-Mar	Spring Break – No Labs!		
8	17-Mar	Lab 7: The ELISA Assay: Using Antibodies to Identify Disease	Cardiovascular Results	
9	24-Mar	Lab 8: Kermit to Kermette?		
10	31-Mar	Lab 9: Animal Behavior		
11	7-Apr	Lab 10: Plant Responses Data Collection Poster Intro	Behavior Results	
12	14-Apr	Group Poster	Poster	
13	21-Apr	Final Exams		

*Your instructor will provide section specific due dates.

Goggles indicate that you must wear long pants and closed-toe shoes to participate in lab that day.

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