**Biol 3442:** Animal Physiology

Spring 2015

**Instructor:** Judi Elliott, M.S. Human Biology/Neuroendocrinology

**Office Number:** LS466

**Office Telephone Number:** 817-272-5732

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**Faculty Profile:** <https://www.uta.edu/profiles/judi-elliott>.

**Office Hours:** Mo-Th, 2:00PM - 3:00PM or by appointment

**Section Information:** Biol 3442-OO1 lecture, TuTh 12:30PM - 1:50PM

Biol 3442-OO2 lab, Mo 2:00PM - 4:50PM

Biol 3442-OO3 lab, Tu 2:00PM - 4:50PM

Biol 3442-OO4 lab, We 2:00PM - 4:50PM

Biol 3442-OO5 lab, Th 2:00PM - 4:50PM

**Time and Place of Class Meetings:** LS 124, TuTh 12:30PM - 1:50PM, Jan 20, 2015-May 8, 2015

**Description of Course Content:** A comparative study of animal function. Examples will be presented from different groups of animals, particularly the vertebrates, to identify the general principles of physiological mechanisms operating at the cellular, tissue, organ, and organismal levels. Laboratory studies will complement lecture material and will stress experimental design, data analysis, and the understanding of critical research in physiology. Prerequisite: BIOL 1441, BIOL 1442. BIOL 3301 recommended.

This course schedule and the performance objectives were compiled to provide a guide to self-study for the student so that he/she comes to lectures prepared to obtain maximum benefit therefrom. The lectures are designed to give a basic framework for understanding animal physiology. They can, at best provide an overview of physiology and a clarification of the more difficult concepts under study. In the final analysis, the amount of knowledge gained from the lectures will be proportional to the commitment the student has made toward utilizing the limited amount of lecture time. Please come to lectures prepared!

The main purpose of the laboratory is to illustrate basic physiological principles. Much of the knowledge gained from these experiments is essential to both clinical and similar applied work. The physiological concepts demonstrated in the laboratory also serve to demonstrate some of the methods used by investigators to gain scientific knowledge. The success of the laboratory is largely dependent on the student’s commitment and participation. It would be advantageous to read the appropriate materials prior to each laboratory session. The laboratory staff, instructors, equipment and animals are there to help you gain a working knowledge of physiology.

**Student Learning Outcomes:** At the conclusion of this course, a successful student will be able to identify and describe common, fundamental animal physiological systems at the cellular, tissue, organ, organ system, and whole organism level. The successful student will be prepared for higher-level physiology courses and should be able to understand relevant, peer-reviewed scientific journal articles on many physiological topics.

**Required Textbooks and Other Course Materials:**

Animal Physiology: From Genes to Organisms, ISBN: 9780534554040

**Descriptions of major assignments and examinations:** Lab is worth 14O points of your grade. Exams 1, 2, 3 are worth 255 points of your grade. The final exam is worth 1O5 points of your grade.

14O pts Lab

85 pts Ex 1

85 pts Ex 2

85 pts Ex 3

1O5 pts comprehensive Final

5OO Course points

**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. As the instructor of this section, I believe attendance at class lectures enhances your learning experience. I will not cover material during office hours for students who miss lectures.

**Grading**: Lab is worth 14O points of your grade. Exams 1, 2, 3 are worth 255 points of your grade. The final exam is worth 1O5 points of your grade.

14O pts Lab

85 pts Ex 1

85 pts Ex 2

85 pts Ex 3

1O5 pts comprehensive Final

5OO Course points

**Point Distribution:**

447-500 pts = 89.5-100% = A  
396-446 pts = 79.5-89% = B  
346-395 pts = 69.5-79% = C  
296-345 pts = 59.5-69% = D  
0-295 pts = 0-59% = F

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; see “Student Support Services,” below.

**Make-up Exams**: Make-up exams are highly discouraged. Only written UTA-sanctioned excuses will allow you to substitute the Final Exam grade.

**Expectations for Out-of-Class Study** Beyond the time required to attend each class meeting, students enrolled in this course should expect to spend at least an additional 6 hours per week of their own time in course-related activities, including reading required materials, completing assignments, preparing for exams, etc.

**Grade Grievances**: In attempting to resolve any student grievances regarding grades, it is the student’s obligation first to make a serious effort to resolve the matter with the individual with whom the grievance originated. Individual course instructors retain primary responsibility for assigning grades. The instructor’s judgment is final unless compelling evidence shows discrimination, preferential treatment or procedural irregularities. If students wish to appeal, their request must be submitted in writing—on an appeal form available in departmental or program offices—to the department chair or program director. The student has one calendar year from the date the grade is assigned to initiate the grievance. The normal academic channels are department chair or program director and then academic dean. However, before considering a grievance, the department chair or program director will refer the issue to a departmental or program committee of faculty. If the student does not find the committee’s decision acceptable, the student may appeal to the academic dean. The decision of the dean is final. Information specific to the

procedures to be followed in each academic unit is available in the office of the academic dean.

**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/aao/fao/>).

**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. 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](http://www.uta.edu/disability) or by calling the Office for Students with Disabilities at (817) 272-3364.

**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).

**Academic Integrity:** Students enrolled all UT Arlington courses are expected to adhere to the UT Arlington Honor Code:

*I pledge, on my honor, to uphold UT Arlington’s tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.*

*I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.*

I will employ the Honor Code as I see fit, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System *Regents’ Rule* 50101, §2.2, suspected violations of university’s standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student’s suspension or expulsion from the University.

**Lab 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 anew 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.

**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>.

**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 is located directly in front of classroom doors. 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. UT Arlington Procedure 7-6: Emergency/Fire Evacuation Procedures (<https://www.uta.edu/policy/procedure/7-6)>.

**Student Support Services**: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](mailto:resources@uta.edu), or view the information at [www.uta.edu/resources](http://www.uta.edu/resources).

**Writing Center.** **:**The Writing Center, 411 Central Library, offers individual 40 minute sessions to review assignments, *Quick Hits* (5-10 minute quick answers to questions), and workshops on grammar and specific writing projects. Visit [https://uta.mywconline.com/](https://owa.uta.edu/owa/luket@exchange.uta.edu/redir.aspx?C=jqplelmmw0KcvkWv1pRv_rHS8ofUUtFIXl_CWZTLffEmCPyZf3x4ncUbBmD9p3gSPROCbhSJj7U.&URL=https%3a%2f%2futa.mywconline.com%2f) to register and make appointments. For hours, information about the writing workshops we offer, scheduling a classroom visit, and descriptions of the services we offer undergraduates, graduate students, and faculty members, please visit our website at [www.uta.edu/owl/](http://www.uta.edu/owl/).

**Emergency Phone Numbers**: In case of an on-campus emergency, call the UT Arlington Police Department at **817-272-3003** (non-campus phone), **2-3003** (campus phone). You may also dial 911. For non-emergencies, contact the UTA PD at 817-272-3381.

**Course Schedule**

“*As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course. –Judi Elliott.”*

**Date Material**

January 20, 2015 Syllabus & Rules for Animal Physiology

January 22-27, 2015 Homeostasis & Transportation

January 29-Feb 5, 2015 Membrane Physiology

February 10-12, 2015 Neuronal Physiology

February 17, 2015 **Exam I**

February 19-24, 2015 Nervous Systems

February 26-March 3-5, 2015 Sensory Systems

March 5, 2015 Endocrine Systems

March 9-14, 2015 **SPRING BREAK**

March 17, 2015 Endocrine Systems

March 19  **Exam II**

March 19-26, 2015 Muscle Physiology

March 31-April 2, 2015 Circulatory Systems

April 3, 2015 **Last Day to Drop a Class**

April 7-9, 2015 Respiratory Systems

April 14, 2015 **Exam III**

April 16-21, 2015 Excretory Systems

April 23, 2015 Fluid and Acid/Base Balance

April 28-30, 2015 Reproductive Systems

May 8, 2015  **Last Class Day**

May 14, 2015  **Final Exam - 11:00 – 1:30 pm**

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**UT Arlington Library**

Library Home Page <http://www.uta.edu/library>

Subject Guides <http://libguides.uta.edu>

Subject Librarians <http://www.uta.edu/library/help/subject-librarians.php>

Database List <http://www.uta.edu/library/databases/index.php>

Course Reserves <http://pulse.uta.edu/vwebv/enterCourseReserve.do>

Library Tutorials <http://www.uta.edu/library/help/tutorials.php>

Connecting from Off- Campus <http://libguides.uta.edu/offcampus>

Ask A Librarian [http://ask.uta.edu](http://ask.uta.edu/)

The following URL houses a page where we have gathered many commonly used resources needed by students in online courses: <http://www.uta.edu/library/services/distance.php>.