

# Biology 1442-003 – Structure & Function Fall 2010

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TTh 5:30-6:50, LS 100

<http://www.natureboy.com>



## **Prerequisites:**

BIOL 1441 also, you should note that this is a course for biology majors.

## **Description of course content:**

**Lecture:** The study of structure and function in 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.

## **Student Learning Outcomes:**

The specific learning goals for Structure & Function is to understand the major anatomical structures and physiological mechanisms that allow plants and animals to function.

## **Required texts:**

Biology, 6th, 7th or 8th ed. by Campbell and Reece

## **Lecture Topics:**

(There is a class calendar available on [www.natureboy.com](http://www.natureboy.com))

<b><u>Topic</u></b>	<b><u>Chapter (may vary with edition)</u></b>	<b><u>target week</u></b>
Syllabus / Plant Structure and Growth	35	aug 31
Transport in Plants	36	sep 14
Plant Nutrition	37	sep 21
Plant Reproduction / Plant Responses to signals	38-39	sep 28
<b><u>FIRST EXAMINATION</u></b>	<b><u>35-39</u></b>	<b><u>sep 30</u></b>
Introduction: Animal Structure and Function	40	oct 5
Regulating the Internal Environment	44	oct 12
Circulation and Gas Exchange	42	oct 19
Animal Nutrition	41	oct 26
<b><u>SECOND EXAMINATION</u></b>	<b><u>40, 41, 42, 44</u></b>	<b><u>oct 28</u></b>
The Body's Defenses (immune system)	43	nov 2
Animal Reproduction	46	nov 9
Chemical Signals in Animals	45	nov 16
<b><u>THIRD EXAMINATION</u></b>	<b><u>43, 45, 46</u></b>	<b><u>nov 23</u></b>
Nervous Systems	48	nov 30
Sensory and Motor Mechanisms	49	May 4
<b><u>Final EXAM</u></b>	<b><u>comprehensive</u></b>	<b><u>dec 14, 5:30</u></b>

## **Grading policy:**

Your grade will be determined as follows

- Three lecture examinations Average 50% of grade
- Final exam 20% of the grade
- Laboratory grade 30% of grade
- Grades: A = 90-100; B = 80-89; C = 70-79; D = 60-69; F = below 60

**THERE WILL BE NO EXTRA CREDIT, SO DON'T ASK.**

### **Exams:**

**You will need to study for these.** The best way to prepare for the exams is to attend class and take good notes. Study the book and the notes. Keep in mind you will need to use your brain during the test. Also, there will be a mixture of multiple choice and short answer, so you will have to know more than 5 of the letters in the alphabet. You will need all of them. (well, maybe not "x". oh, unless you use the word "xeric"... never mind.)

### **Make-up Examination Policy:**

**Students are required to attend all examinations. Only valid, documented, excuses will be accepted for missing an examination.** Without a valid excuse for missing an examination, a student will be assigned a grade of 0% for that examination. A test that was missed for a legitimate reason will be replaced with the grade on the final exam. **SEE ME WITHIN ONE WEEK OF MISSING THE TEST TO QUALIFY!**

### **Attendance Policies:**

Attendance is required at each lecture and excessive absences can potentially affect your course grade. If you miss class it is strongly suggested that you get the notes from a classmate. I might post notes on the web, but don't ask me to do so. Also, don't ask me when they will be posted. If they are posted it is done as a courtesy, not an entitlement.

### **STUDENT RESPONSIBILITIES**

- A. Familiarize yourself with the course syllabus
- B. Attend class regularly. I will not take attendance, but if you do not show up for class, I will have no sympathy when you fail the tests.
- C. Assume responsibility for your own learning
- D. Adhere strictly to standards of academic honesty
- E. Show respect for instructor and fellow students at all times

### **Important University Policies:**

**Drop policy:** If you choose to drop the course, you have to do so by November 5. However, I am not expecting you to drop. I am not going to remind you. 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. 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.

**Academic Integrity:** 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 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."

**Student Support Services Available:** The University of Texas at Arlington has established a variety of programs to help students meet the challenges of college life. Support to students includes advising, counseling, mentoring, tutoring, supplemental instruction, and writing assistance. For a complete list of academic support services, visit the Academic Assistance resource page of the Office of Student Success Programs, [www.uta.edu/uac/studentsuccess/academic-assistance](http://www.uta.edu/uac/studentsuccess/academic-assistance). To help students address personal, academic and career concerns, individual counseling is also available. For more information, students are encouraged to contact Counseling Services [www.counseling.uta.edu](http://www.counseling.uta.edu) at (817) 272-3671 or visit a counselor in 216 Davis Hall.

**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.