

# STRUCTURE & FUNCTION OF ORGANISMS

## Syllabus

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**Office Hours:** TUE, WED 13:30-1500 hrs, (or by appointment)

**Course Number, Section Number, and Course Title:** Biology 1442, section 003, Structure and Function of Organisms

**Time and Place of Class Meetings:** LS (Life Science Building) Room 100; TUE, THU; 11:00–12:20 am

**Description of Course Content:** Biology 1442, Structure and Function of Organisms, is the second course in a three-semester sequence of introductory courses for students majoring in the life sciences. The course covers the study of structure and function in plants and animals and includes: 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. This course strives to provide a basic understanding of the fundamental biological principles that frame our view of the structure and function of living organisms.

**Student Learning Outcomes:** To understand the major physiological mechanisms that allows plants and animals to function.

**Requirements:** Biology 1441.

### Required Textbooks and Other Course Materials:

Lecture: Biology: 7th Ed. by Campbell & Reece. (Study Guide recommended)

Laboratory: Symbiosis: Custom Laboratory for the Biological Sciences, UTA. By D. Formanowicz

### Descriptions of major assignments and examinations with due dates:

Tentative Schedule:

#### LECTURE TOPIC SEQUENCE

- A. Plant Structure, Growth and Development
- B. Transport in Vascular Plants
- C. Plant Nutrition
  - Review 1 Presentations
  - \* TEST 1 \*
- D. Angiosperm Reproduction and Biotechnology
- E. Plant Responses to Internal and External Signals
- F. Basic Principles of Animal Form and Function
- G. Animal Nutrition
  - Review 2 Presentations
  - \* TEST 2 \*
- H. Circulation and Gas Exchange
- I. The Immune System
- J. Osmoregulation and Excretion
- K. Hormones and the Endocrine System
  - Review 3 Presentations
  - \* TEST 3 \*
- L. Animal Reproduction
- M. Animal Development
- N. Nervous Systems
  - Review 4 Presentations
  - \* FINAL – COMPREHENSIVE \*

#### TEXT READINGS

- Ch. 35, pp. 712 - 737
- Ch. 36, pp. 738 – 755
- Ch. 37, pp. 757 – 770
- January 31<sup>st</sup>
- February 5<sup>th</sup>
- Ch. 38, pp.771 – 787
- Ch. 39, pp. 788 – 817
- Ch. 40, pp. 820 – 843
- Ch. 41, pp. 844 – 866
- February 28<sup>th</sup>
- March 4<sup>th</sup>
- Ch. 42, pp. 867 – 897
- Ch. 43, pp. 989 – 921
- Ch. 44, pp. 922 - 942
- Ch. 45, pp. 943 – 963
- April 3<sup>rd</sup>
- April 8<sup>th</sup>
- Ch. 46, pp. 964 - 986
- Ch. 47, pp. 987 -1010
- Ch. 48, pp. 1011-1044
- May 1<sup>st</sup>
- Tuesday May 6 from 11:00 a.m. - 1:30 p.m.

**Important Dates:**

January 14 ..... First Day of Classes  
January 14 – 21.....Late Registration  
January 21 .....Martin Luther King Jr. Day Holiday  
January 30 ..... Census Date  
March 17 – 21..... Spring Break  
March 28 ..... Last day to drop class  
May 2..... Last Day of Classes  
May 6..... Final Exam (11 a.m. - 1:30 p.m.)  
Final Grades will be available online

**Grading Policy:** Grading will evaluate comprehension of the material covered through the course (textbook reading assignments, lectures and presentations).

- Three lecture examinations (27% of total grade)
- Class presentation (7% of total grade, to be assigned and explained in class, 15 minutes per student, PowerPoint Review)
- Final Examination-Comprehensive (33% of total grade)
- Laboratory grade (33% of total grade)
- Grades: A = 90-100%; B = 80-89%; C = 70-79%; D = 60-69%; F = below 60%.

**Attendance Policy:** No points will be given for attendance but because academic performance is strongly correlated with class attendance students should make an effort to be present for every lecture.

**Drop Policy:** Refer university drop policy.

**Important University Policies:**

**Americans With Disabilities Act:** The University of Texas at Arlington is on record as being committed to both the spirit and letter of federal equal opportunity legislation; reference Public Law 92-112 - The Rehabilitation Act of 1973 as amended. With the passage of 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.

As a faculty member, I am required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with informing faculty of their need for accommodation and in providing authorized documentation through designated administrative channels. Information regarding specific diagnostic criteria and policies for obtaining academic accommodations can be found at [www.uta.edu/disability](http://www.uta.edu/disability). Also, you may visit the Office for Students with Disabilities in room 102 of University Hall or call them 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.

"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." (Regents' Rules and Regulations, Series 50101, Section 2.2)

**Student Support Services Available:** The University of Texas at Arlington supports a variety of student success programs to help you connect with the University and achieve academic success. These programs include learning assistance, developmental education, advising and mentoring, admission and transition, and federally funded programs. Students requiring assistance academically, personally, or socially should contact the Office of Student Success Programs at 817-272-6107 for more information and appropriate referrals.

**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 syllabi. 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. Classes are held as scheduled during this week and lectures and presentations may be given.

**Drop for non-payment of tuition:** Payment must be received by the term due date of January 9, 2008 or your registration will be cancelled. If your registration is cancelled for non-payment, you may reregister for classes but only if seats are available.

**Bomb Threats:** If anyone is tempted to call in a bomb threat, be aware that UTA will attempt to trace the phone call and prosecute all responsible parties. Every effort will be made to avoid cancellation of presentations/tests caused by bomb threats. Unannounced alternate sites will be available for these classes. Your instructor will make you aware of alternate class sites in the event that your classroom is not available.

The University of Texas at Arlington has adopted the University email address as an official means of communication with students. Through the use of email, UT-Arlington is able to provide students with relevant and timely information, designed to facilitate student success. In particular, important information concerning registration, financial aid, payment of bills, and graduation may be sent to students through email.

### **After Hours Safety Escort**

The Sam Mav Escort service provides a service to assist students, faculty, staff and campus visitors to reach their destinations after regular business hours. The hours of service are 7:00 p.m. to 1:00 a.m., Sunday through Saturday. 817-272-3381

### **MavMail:**

All students are assigned an email account and information about activating and using it is available at [www.uta.edu/email](http://www.uta.edu/email). New students (first semester at UTA) are able to activate their email account 24 hours after registering for courses. There is no additional charge to students for using this account, and it remains active as long as a student is enrolled at UT-Arlington. Students are responsible for checking their email regularly.

**Make-up Exam Policy:** There will be no make-up exams. With a valid and documented excuse for missing a lecture examination and by contacting the instructor in advance it will be possible to substitute one lecture examination grade with that of the final examination (comprehensive).

**Grade Grievance Policy:** Refer to student catalog.