

Cell Physiology
Biology 3301-002, LEC 20511
SPRING 2008
Tues – Thurs 12:30-1:50 pm
Room SH 121

Instructor: Dr. Laura Mydlarz
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Office Hours: Tuesday and Thursday 2-3, or by appointment

Course Prerequisites: BIOL 1441, 1442. CHEM 2181 and BIOL 3315 are recommended.
Required Textbook: Molecular Cell Biology 6th Edition, Lodish, Berk, Kaiser, Krieger, Scott, Bretscher, Ploegh, Matsudaira

Student learning outcomes:

1. Identify the major parts of the cell and explain key functions of each part. Build Structure to Function relationships.
2. Understand the fundamental physiological mechanisms of cell function.
3. Know the scientific methods that are currently being used to explore cell physiology.

Attendance

Attendance at lectures is required for success in this course.

Reading Assignments

Students are expected to read the assigned chapters prior to coming to class. The exams will draw upon material discussed during lectures and in the assigned chapters.

Exams

Three semester exams, and a **comprehensive final** will determine your grade. All exams will be multiple choice. Exams will not be returned to students.

Exam 1 – 20%

Exam 2 – 20%

Exam 3 – 20%

Comprehensive Final – 40%

THERE IS NO MAKEUP FOR SEMESTER EXAMS. In a case of missed semester exam your grade will be based on a comprehensive final (your final will account for 100% of your grade). A makeup final exam will only be given for medical or emergency situations with a written proof.

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.

Withdrawal

The instructor follows the UTA policy. Students may withdraw from the course with a W until March 30th, 2007. You will receive a failing grade if you do not properly withdraw through the registrar.

Dropping a Course

If you decide to drop this course you must obtain a drop slip from the departmental undergraduate advisors office (for Biology, the advisor is Ms. Jane Pugh, Room 346 Life Science or you may go to the main office in the Biology Department 337 Life Science). Please fill it out, have the instructor of the course you wish to drop sign the slip and return it to the advisor's office or the Biology Office.

Incomplete grades

Incomplete grades may be assigned for a course if, in the opinion of the instructor, there are extenuating documented circumstances which prevent the student from completing the required work. The incomplete must be removed by the end of the final examination period of the following semester, excluding the summer session, for the student to receive credit for the course. If the incomplete is not removed during the allotted time it will revert automatically to an F.

MavMail

Arlington has adopted MavMail (e-mail) as an official means of communication with students. Students are required to check MavMail regularly. Further information regarding your student email account can be found at: <http://www.uta.edu/oit/email/>.

Tentative weekly schedule – Daily topics may change, exam dates will not change

Week	Topic	Chapter	Date	Notes
1	Introduction:Principles of living cells	parts of 1	Jan.15	
	Molecular structure and function	2,3	Jan.17	
2	Macromolecules and research strategies	1,9	Jan. 22	
	Biomembrane structure and function	10	Jan. 24	
3	Membrane transport - pumps and carriers	11	Jan. 29	
	Membrane transport - ion channels	11	Jan. 31	census date
4	Cellular Energetics/ Membrane Physiology	12	Feb. 5	
	Nerve Cells and Action Potentials	23	Feb. 7	
5	EXAM 1		Feb. 12	EXAM 1
	Protein transport	13.4-13.6	Feb. 14	
6	Protein Processes in ER and ER membrane	13.1-13.3	Feb. 19	
	Vesicular Traffic	14	Feb. 21	
7	Vesicular transport,Trans-golgi network,	14	Feb. 26	
	Protein degradation	3.5	Feb. 28	
8	EXAM 2		Mar. 4	EXAM 2
	Cell signaling	15	Mar. 6	Mar.7 mid-session
9	Cell Signaling 1: G-proteins	15	Mar. 11	
	Secondary Messengers	15	Mar. 13	
10	Spring break		Mar. 18	Spring break
	Spring break		Mar. 20	Spring break
11	Cell signaling 2: control of gene activity	16	Mar. 25	
	Cell Signaling Special Topics and Review	16	Mar. 27	Mar. 28 last day to drop
12	EXAM 3		Apr. 1	EXAM 3
	Cytoskeleton - microfilaments, muscle	17	Apr. 3	
13	Cytoskeleton - microtubules and IF	18	Apr. 8	
	Motor proteins and cell motility	18	Apr. 10	
14	Extracellular matrix	19	Apr. 15	
	Cell adhesion	19	Apr. 17	
15	Cell junctions, Connective tissue	19	Apr. 22	
	Cell Birth and Death	21	Apr. 24	
16	Review		Apr. 29	
	Review		May. 1	
Comprehensive FINAL EXAM THURSDAY MAY 8th 11-1:30				FINAL

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 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.

If you are a student who requires accommodations in compliance with the ADA, please consult with me at the beginning of the semester. As a faculty member, I am required by law to provide "reasonable accommodation" to students with disabilities, so as not to discriminate on the basis of that disability. Your responsibility is to inform me of the disability at the beginning of the semester and provide me with documentation authorizing the specific accommodation. Student services at UTA include the Office for Students with Disabilities (located in the lower level of the University Center), which is responsible for verifying and implementing accommodations to ensure equal opportunity in all programs and activities.

Student Support Services

The University supports a variety of student success programs to help you connect with the University and achieve academic success. They 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.

Academic Dishonesty

Academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form at The University of Texas at Arlington. 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.

"Academic 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, Part One, Chapter VI, Section 3, Subsection 3.2., Subdivision 3.22).

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.

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

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