BSC 515 – Advanced Cell Biology (CRN: 22482)  
Spring 2013

Instructor
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eCompanion Site: eCollege @ MyLea
           Tue, and Thu 9.30 AM – 10.45 AM
Lectures
@EDS134
Office Hours
Tue, Thu, and Fri 4 PM – 5 PM
Or by appointment, include BSC 515 in subject line of E-mails.

COURSE OVERVIEW:
This course is designed for graduate students with a thorough background in biology and cell biology. Therefore, this course provides students with a greater understanding of molecular mechanisms of cellular function. Emphasis will be placed on internal organization and cooperative functions of cellular organelles. Understanding of basic methodologies used in cell biology will be sought.

STUDENT LEARNING OUTCOMES (SLO):
At the end of this course students will be able to:

1. Give a broad overview of the chemical basis of life and cellular mechanisms of protein functions regulation.

2. Understand the organization and protein and vesicular transport processes in cells.

3. Describe cytoskeleton and its role in cell migration and adhesion.

4. Describe cell cycle and various cellular death process including necrosis, apoptosis and autophagy

TEXTBOOKS:

While you may use this as a reference book, readings of additional materials such as journal articles (will be provided) are necessary for the successful completion of this course.

ATTENDANCE:
Attendance in all classes and active participation in online discussions are expected in this course. Because we will discuss materials outside of text book, it is important to come to class
and to take quizzes. You are responsible for all material and assignments covered in class whether you are present or not.

**Lecture Materials:**
Power Point slides that I use for delivering lectures will be available at eCompanion site for this course at eCollege. **Power Point slides are meant for me to deliver lectures and not be treated as lecture notes. You may use it as a reference to read the book but not as a study material.**

**Assignments:**
**Quizzes,** (100 points total): Throughout the term of this course, **8 UNANNOUNCED/POP QUIZZES and 2 ANNOUNCED QUIZZES will be conducted in the class.** These quizzes will consist of T/F, multiple choice, and/or matching questions. If you are absent on the day of these quizzes there won’t be any make up quizzes. Each quiz will be worth of 12.5 points (1.25% of total scores).

**Weekly Discussions (in eCollege), (75 points total):** I am hoping to have a lively constructive discussion for this class. Therefore I ask that each student post and discuss a topic that they learned about in that given week. It is said that the best way to retain the material that you leaned is to teach others. Therefore I want you to attempt to “teach” the rest of the class something that you learned. I also may post some hypothetical questions/scenarios for discussion. Everyone is required to participate and post in weekly discussions. Again this is mandatory and 75 points (7.5% of total score) are assigned towards this assignment.

**Problem Solving Assignments (75 points of total):** Throughout the duration of this course several problem solving questions will be assigned, which will be due in a week after they were assigned. It works for your advantage to solve these problems by yourself, which will increase your success in weekly quizzes and later in exams. Solving problems will augment concepts covered in lectures and help you retain them. Also, some of these questions may serve as the basis for multiple choices and for short answer questions of exams. It is mandatory to bring the solved problem set to the class on its due dates. Late submissions or problem sets submitted by any other means (E-mail or by eCollege) won’t be evaluated.

**Exams and Grades:** For this course there will be three exams including a cumulative final (250 points each, or 25% each) throughout the term.

The exam may consist of three parts, multiple choice (50% of total score), and short answer, correcting the statements or true or false etc. (50% of total score) Multiple choice questions will test critical thinking, analytical ability, and the understanding of subject matter.

**Grading Policy:**
- **3 exams including the final** = 750 points (60%)
- Quizzes = 100 points (10%)
- Weekly discussions (online) = 75 points (7.5%)
- Problem sets = 75 points (7.5%)
- **TOTAL** = 1000 points (100%)
Grading Scale:

A = 900 to 1000 points (>90%)
B = 800 to 899 points (80% to 89%)
C = 700 to 799 points (70% to 79%)
D = 600 to 699 points (60% to 69%)
F = 599 or fewer (<59%)

To calculate where you stand:
Add your 3 exam scores, scores in quizzes, and assignment, which will be your total score in 1000. Calculate the percentage. This will be your grade.

Course Calendar/Exam Schedule

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<td>Review of Cells and Organelles</td>
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<td>Unit 2</td>
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<td>Review of The Macromolecules of the Cell</td>
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<td>EXAM 1, Week of Feb 18</td>
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<td>Unit 5</td>
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<td>Chapter 13</td>
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<td>Unit 9</td>
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<td>Unit 11</td>
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Final Exam

* ALL DATES AND ASSIGNMENTS ARE TENTATIVE AND MAY SUBJECT TO CHANGE

Academic Integrity: A Texas A&M Commerce student does not lie, cheat, steal, and does not tolerate those who do. A violation of the Texas A&M honor code and academic integrity involves any of the following offenses: cheating, fabrication, falsification, multiple submissions, plagiarism, and complicity in any of these offenses. The first instance of cheating will result in “ZERO” on the exam and/or on the assignment. The second instance of cheating will result in “ZERO” on the course. Cheating involves copying information from another student, non-allowable materials or source and plagiarism. Once again, violations of academic integrity will not be tolerated. This class will be conducted in strict observance of the Honor Code. Refer to your Student Handbook for details.

Conduct Policy:
All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. (See Student’s Guide Handbook, Policies and Procedures, Conduct).

Cell Phones/Pagers/Laptop/Tablets:
Please turn your cell phone and/or pager (and other electronic devices) off during class. If you are on-call for your work, please place the cell phone or page on silent mode.
If you utilize a laptop to take class notes, please be aware of potentially distracting others around you and seat yourself accordingly. Additionally, you may be asked to leave the class if it is determined you are utilizing a computer to do outside work, surf the web inappropriately or communicate personal conversations.

Texting is prohibited and devices will be collected and kept until the end of class.

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment (See Students’ Guide Handbook, Policies and Procedures).

TAPES AND NOTES:

While recordings of this class may be made for personal use with prior permission, recordings may not be sold or distributed to others. While you may make copies of these notes for your personal use, no copy of these notes may be distributed to anyone other than persons who are currently enrolled in the class; nor may any copies be sold.

**STUDENTS WITH DISABILITIES/REASONABLE ACCOMMODATION:** The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact: Office of Student Disability Resources and Services
Texas A&M University-Commerce
Gee Library, Room 132
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
StudentDisabilityServices@tamu-commerce.edu

**Behavior:** All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment.” (See Student’s Guide Handbook, Policies and Procedures, Conduct).

**Plagiarism:** Plagiarism is a criminal activity. You must cite all sources of information. Unreferenced copying of material, whether parts of sentences, whole sentences, paragraphs, or entire articles can result in a score of zero for your assignment and may result in further disciplinary action. If you are copying material and citing references, you are expected to paraphrase and rewrite the sentences in your own words.

**Early Intervention for First Year Students:** Early intervention for freshmen is designed to communicate the University’s interest in their success and a willingness to participate fully to help students accomplish their academic objectives. The university through faculty advisors and mentors will assist students who may be experiencing difficulty to focus on improvement and course completion. This process will allow students to be knowledgeable about their academic progress early in the semester and will provide faculty and staff with useful data for assisting students and enhancing retention. Grade reports will be mailed by the end of the sixth week of the semester.