CELL BIOLOGY (BIO s320)
SUMMER 2011

LECTURE		M, T, W, TH, F	10:00 - 11:30 AM	(RLM 7.104)
	Unique #			
DISCUSSION	90380	M, W	1:00 - 2:00 PM	(WEL 3.260)
	90385	M, W	2:00 - 3:00 PM	(WEL 3.260)

Instructor: **Dr. Inder M. Saxena**
Office: BIO 12F
Office hours: M, W 11:30 AM – 1:00 PM (or by appointment)
E-mail: ims1030@mail.utexas.edu

Text Book
Molecular Biology of the Cell (Fifth Edition, 2008) B. Alberts, A. Johnson, J. Lewis, M. Raff, K. Roberts, and P. Walter. Garland Science.

Problems and Solutions
Molecular Biology of the Cell Fifth Edition
The Problems Book (2008) J. Wilson and T. Hunt. Garland Science.

Course web site
http://www.pai.utexas.edu/faculty/isaxena/BIO320

PREREQUISITE: BIO 325 or BIO 325H WITH A GRADE OF AT LEAST C.

Course objectives
The objective of this course is to provide an overview of cell structure and function at the molecular level and discuss specific cellular processes including cell communication, cell cycle, programmed cell death, and cancer. The course will focus on developing an understanding of the nature and function of a large number of proteins and methods used for their analyses.

Course organization
The course is divided into 3 parts, and upon completion of each part there will be an exam.

Discussion meetings
Every student is expected to attend and participate in the discussion sessions. Students should bring questions from the lecture, or any relevant material that they may have come across in their readings, to these meetings and use these for discussion with other students. Apart from student questions, a work sheet will be posted on Blackboard for every discussion session and students will work on the questions provided in the work sheet in groups of 3-4 students each.

Answers to these questions should come from a discussion within the group and where necessary the TA will help in guiding the students to the correct answer. It is expected that in these meetings students will learn to analyze problems before attempting to work on them. In many cases these skills are best acquired by watching other students work on the given problems. Discussion meetings will also be used for discussion of assigned research articles. Attendance in the discussion meetings will account for 6.25% of the final grade (25 points).

Attendance

No attendance will be taken during the lecture meetings. Attendance will be taken for the discussion meetings and will count for a maximum of 25 points (of a total of 400 points at the end of the semester).

Examinations

Three exams and 3 quizzes will be conducted during the lecture period this semester. The maximum time given will be 1 hour, 15 minutes for the exams and 20 minutes for the quizzes. All the exams and quizzes will be used in determining the final grade. There will be no final exam during the final exam period.

Each exam will cover only the material that has been covered in class before the exam date as listed in the syllabus. Material covered in an exam will not be included in the subsequent exam(s). Quizzes will include only the material covered in the previous two lectures. Exams and quizzes will have short-answer questions, problems, multiple choice questions, fill-in-the blanks, mix-and-match, and figures. A sample exam will be posted on Blackboard.

Make-up examination will be given only if a student is unable to take any one of the first two exams, and is able to provide a valid reason and documentation for absence from the exam. The make-up examination will include material from the first two exams and it will be given before the last class day. No make-up will be given for a missed quiz.

Breakdown of points	**Total points 400**	**percent of total points**
Exam 1	100 points	25%
Exam 2	100 points	25%
Exam 3	100 points	25%
3 quizzes (25 points each)	75 points	18.75%
Discussion attendance	25 points	6.25%

Grading system

The Plus/Minus grading system will be followed based on the number of points scored out of 400.

Grade	Percent
A	93% and above
A-	90% to <93%
B+	86% to <90%

B	83% to < 86%
B-	80% to < 83%
C+	76% to < 80%
C	73% to < 76%
C-	70% to < 73%
D+	66% to < 70%
D	63% to < 66%
D-	60% to < 63%
F	less than 60%

Lecture, exam, and quiz schedule

Dates	Lecture topics, exams, and quizzes	Chapter(s)
July 11 – July 20	Introduction	
	Birth of the first cell to variety of cells	1
	Structural and functional features of cells	1
	Proteins – structure and function; techniques	3, 6, 8
	Tools for study of cells	9
	Biological membranes – structure	10
July 15 (Fri)	**Quiz 1**	
July 21 (Thu)	**Exam 1**	
July 22 – Aug 2	Membrane transport	11
	Cell compartments – protein targeting and vesicular transport	12, 13
	Cell signaling	15
	Cytoskeleton	16
July 27 (Wed)	**Quiz 2**	
Aug 3 (Wed)	**Exam 2**	
Aug 4 – Aug 11	Cell cycle	17
	Cell death	18
	Extracellular matrix	19
	Cancer	20
Aug 8 (Mon)	**Quiz 3**	
Aug 12 (Fri)	**Exam 3**	

The University of Texas Honor Code
The core values of The University of Texas at Austin are learning, discovery, freedom, leadership, individual opportunity, and responsibility. Each member of the university is expected to uphold these values through integrity, honesty, trust, fairness, and respect toward peers and community.

Documented Disability Statement
The University of Texas at Austin provides upon request appropriate academic accommodations for qualified students with disabilities. For more information, contact Services for Students with Disabilities at 471-6259 (voice) or 232-2937 (video phone) or **http://www.utexas.edu/diversity/ddce/ssd**

A few words about the lecture and discussion meetings
A lecture class or a discussion session is a group activity and to make the most of this activity, consider the following points:
Every student has the right to learn as well as the responsibility not to deprive others of their right to learn. Every student is accountable for his or her actions.

In order for you to get the most out of this course, please consider the following:

a. Attend all scheduled classes and discussion sessions and arrive on time.
b. Please do not schedule other engagements during the class or discussion time.
c. If you have trouble hearing the lecture or media presentation because of distractions around you, quietly ask those responsible for the distraction to stop.
d. Please let me know immediately if you have any problem which is preventing you from performing satisfactorily in this class.

Feedback
Feedback is an important part of any learning. During this course I will be asking you to give me feedback on your learning in informal as well as formal ways such as assignments or exams. Please let me know when something we discuss is not clear. It will enable me to provide additional information when needed or to explain a concept in different terms.