

Schedule for first half of Bio 205: Cell & Developmental Biology

Readings are from Essential Cell Biology, 3rd edition, by Alberts et al.

Summer Session I, 2010

Instructor: Dr. Jan Jones

Date	Topic	Reading Assignment
5/11 T	Lecture 1: Introduction to Cell Biology Chemical Components of Cells	Chapter 1 Chapter 2
5/12 W	Lecture 2: Enzymes and Metabolism Protein Structure and Function	Chapter 3 Chapter 4
5/13 R	Lecture 3: DNA and Chromosomes From DNA to Protein	Chapter 5 Chapter 7
5/14 F	Lecture 4: Membrane Transport	Chapter 12
5/17 M	Lecture 5: Energy	Chapter 13,14
5/18 T	Lecture 6: Intracellular Transport Exam Review	Chapter 15
5/19 W	Exam I (cover May 11 to May 18)	
5/20 R	Lecture 7: Cell communication	Chapter 16
5/21 F	Lecture 8: Cytoskeleton Cell Cycle	Chapter 17 Chapter 18
5/24 M	Lecture 9: Mitosis and Meiosis	Chapter 19
5/25 T	Lecture 10: Drug and Disease Day Exam Review	liri and Bourne
5/26 W	Exam II (cover May 11-25)	

PURPOSE: Biology 205 (Part I: Cell Biology) provides a comprehensive introduction to the biology of cells of eukaryotic organisms. This part of the course introduces the

four major macromolecules of cells and how they function in metabolism, gene regulation, cell communication, cell structure and cell division. This course will also introduce students to the scientific methods used to study cellular activities and to primary scientific literature.

TEXTBOOK: Essential Cell Biology 3rd Edition Alberts et. al (Required)

GRADING (These parts will total ½ of your final grade; the other ½ comes from the Developmental part of the course):

Exam 1:	35%
Exam 2:	35%
Presentation:	10%
Problem sets:	10%
Class participation/Quizzes:	10%

HOW TO FIND ME: Don't hesitate to contact me if you have any questions about the class. My office is in GMRB (120 Mason Farm Rd) Rm 3010. You can set up an appointment by email (biochemnerd2000@hotmail.com) or phone (919.475.3802).

EXAMS: will be a mix of multiple choice, short answer and longer answers that mainly cover material from class. You will be expected to integrate information from class to answer questions about material that you haven't seen before. You will greatly benefit from reading the textbook. The ECB textbook is an excellent resource, so don't neglect it. Makeup exams are only offered under very few circumstances. You are advised to pre-clear your reason for missing an exam with me before the exam time. Makeup exams may be oral.

PRESENTATIONS: In recitation section Friday 5/21 and in class Tuesday 5/25 about a drug or disease of your choice. More details forthcoming in a separate document.

QUIZZES: will be almost daily. They should be fairly straight forward if you have reviewed and understood your notes from class from the day before.

RECITATION/PROBLEM SETS: You will be assigned at least two problem sets during the cell biology portion of the course. It is important that you put a lot of effort into these problem sets and don't just rely on the TA or classmates to carry you through. The problem sets and quizzes will give you a feel for the style of questions I will ask on tests. If you do well on problem sets and quizzes, you are likely to do well on tests. Recitation meets twice a week. Mostly it will be to go over problem sets and

answer your questions (except for the Friday 5/21 section, which will be for presentations).

TIPS FOR SUCCESS: This class moves fast, especially during the summer, so it is essential that you come to class prepared and plan to dedicate a few hours to this class each day. The best way to prepare is to (1) read the assigned reading before each lecture and (2) download, print, and read the powerpoint slides (or other information) from Blackboard before each lecture (3) attend class, pay attention, participate. After class each day, read through your notes from the lecture and make sure it all makes sense. In other words, keep up! Feel free to contact me with any questions you come up with or address your questions at the recitation section. The quizzes are designed to help encourage you to keep up and to come to class. Again, if you do well on quizzes and problem sets, then you will likely do well on tests. If you do not do well on quizzes and problem sets, then you need to put in more effort and/or change your approach.

I hope everyone enjoys this class and learns a lot. Doing well in cell biology will give you a solid foundation for other biology classes you take later on. Once you understand basic principles of cell biology, it is fairly straightforward to apply these concepts to other topics (neurobiology, immunology, etc.).

**Note that I do not expect any of the items in this syllabus to change, but I reserve the right to make changes. Exam dates will not change under any circumstances.