

Biology 121, Section 3, Fall 2005

MWF 11:30-12:20 SCI-106 WALL 317

<http://kingfish.coastal.edu/biology/bio121hill/>

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Office hours: MWF 1-3 and T 9-11 by appointment. Drop by any time; my door is usually open. If you can't catch me in person, leave a note, drop me an e-mail or call and we'll find a time we can meet.

Text: Campbell, N.A. and J.B. Reece (2005) *Biology, 7th ed.*

The nature of this course, and course goals: Biology 121 is the first part of a two semester introductory series, designed for science majors. We'll cover cells, genetics, biochemistry, and a bit about how science works.

Exams, makeup exams, and the comprehensive final: There will be four hour exams, worth 100 points each, and a semicomprehensive final, also worth 100 points. You get to drop your lowest hour exam grade, but you do not get to drop the final.

Quizzes: Quizzes will be given, unannounced, about once a week. Quiz scores all together, will count as much as one exam (100 pts.). Quiz questions will be drawn from the same pool as test questions. These quizzes serve two purposes – they encourage you to keep abreast of the material, and they give you a preview of the type of questions you will see on tests. There are extra points built in to the quizzes – if you are here for all the quizzes, you have a chance at 115 points or so. There are no makeups on quizzes. If I hand out a quiz at the start of class, and you are late, you do not get to take the quiz.

Attendance Policy: Test material will be drawn from both lectures and readings, but *mostly from lectures*. Consistent attendance is important to your doing well in the course, and you should strive to miss no classes during the semester. If you are absent on the day of an quiz, or when a worksheet is due, you get no credit for it (see above under quizzes). If you are going to be absent on the day of an exam for a documented, university-recognized reason (see the course catalog), let me know promptly, well in advance if possible, and I will arrange a makeup. Absences from exams for other than university-recognized reasons, or without documentation, will result in a zero for that exam.

<u>Grading Scale:</u>		77-80%.....C+
<u>Percentage</u>	<u>Grade</u>	70-77%.....C
>90%.....A		67-70%.....D+
87-90%.....B+		60-67%.....D
80-87%.....B		59% or below.....F

Note that biology majors need to earn a C or better to get credit for bio 121.

SEQUENCE OF TOPICS	CHAPTER IN TEXT
Introduction to the course. Scientific method. Darwin.	1
Life = Chemistry! Yup, chemistry.	2
Water	3
Carbon Chemistry	4
Biological Macromolecules, in part	5
Friday, September 9: EXAMINATION #1	
Biological Macromolecules, continued	5
All living things are constructed of cells. What's in a cell?	6
Membranes organize and control cell functions.	7
Life is Energy, and Enzymes make everything work	8
Wednesday, September 28: EXAMINATION #2	
Generating and managing energy in cells – cellular respiration; the Krebs cycle	9
We all run on solar energy, and we owe it all to plants	10
Cell growth and division	12
Sexual reproduction at the cellular level	13
Monday, October 24: Examination #3	
Living things pass information to their offspring. Peas.	13
More Mendelian Genetics, and Beyond Mendel	14
How chromosomes are inherited (and what does that have to do with genes?)	15
The universal language of living things: DNA contains the message	16
Passing it on – how DNA is copied	16
From Gene to Protein	17
Wednesday, November 16: Examination #4	
Birds do it, bees do it, even bacteria and fleas do it. But what happens then?	18,19
Basics of DNA technology : Cloning your own (not!)	20
Friday, 12/9, 11a.m. Semi-cumulative FINAL EXAM (same room as class)	