

Math 105 CALCULUS for the Biological Sciences section 2 Fall 2008

**Instructor:** Patrick 'Guy' Adams

**Office:** BSS 410d                      **Office phone:** 826-3742

**Office hours:** Tues, Thurs: 1:00-1:50 and by appointment

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**Class meets:** Tues, Thurs 2:00-3:20 in NR 101

**MATH 105.** Calculus for the Biological Sciences & Natural Resources (3) FS. Differential and integral calculus. Applications in biological sciences, including exponential growth and decay. *Prereq: MATH 115; or math code 50*

**Area B General Education Learner Outcomes:**

**Lower Division Math & Quantitative Reasoning GE Outcomes**

- 1) Students will be able to demonstrate their understanding of basic concepts in math and quantitative reasoning.
- 2) Students will be able to apply mathematical concepts and quantitative reasoning in scientific contexts

**REQUIRED TEXT:** Calculus for the Life Sciences, Greenwell, et.al.

**Text website:** [www.mathxl.com](http://www.mathxl.com)      **Also check out:** [www.mymathlab.com](http://www.mymathlab.com)

**Calculators:** A graphing calculator is required. I will be using the TI-83 in class, however, you may want to get a recommendation from your major department. The Math department recommends the TI-89 for those who will be taking Math 110.

**Calculator help:** [www.aw.com/greenwell](http://www.aw.com/greenwell)

**Dr Bile's calculator help:** <http://www.humboldt.edu/~cmb2/technology/tisuite.html>

**GRADES**

Grades will be assigned based on the overall quality of work submitted in the form of homework, quizzes, lab activities, and exams. Generally, a student with 90-100% will earn an A, 80-89% a B, 70-79% a C, 60-69% a D, and less than 60% an F.

**Grade Breakdown:**

Sum of tests and quizzes = 70%

Sum of HW = 30%

**Homework:** An assignment from the text will be collected daily and each assignment will have a value of 5 points. Late assignments will receive a maximum of 3 points and sloppy or otherwise unsatisfactory papers will be returned un-graded.

*Hints to maximize your homework scores:*

- Write with pencil only and fully erase errors.
- Write your name, the course name, and the section number of the assignment in the upper right corner of the first page.
- Show all work neatly and completely.

- Work problems vertically, with spaces between problems.
- Staple all pages together in the upper left corner.

/ Staple in / upper left corner	Your Name Math 110 HW Section #
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The homework assignments are listed on Blackboard (if you lose your printed copy.) You may ask questions about the homework in class, but you need to get in the habit of seeking help outside of class.

The problem sets are graded on three areas: completeness, general correctness, and presentation. Each of the three areas needs to be covered to earn the 5 points. Note: homework is done in pencil and mistakes are erased.

	Completeness	Correctness (based on sample)	Presentation
<b>5 points</b>	All complete. Each part of every problem is included and addressed.	Perfect, or nearly so. Demonstrates excellent understanding of ideas in the assignment. Displays critical thinking.	Excellent! Clear, easy to read and to follow. Communicates clearly.
<b>4 points</b>	nearly all complete (over 80%)	Very well done, but unclear and/or some obvious errors. Demonstrates solid understanding.	Very good. Generally presented well.
<b>3 points</b>	more than half complete	Many errors or may be unclear, contain many vague items, appear unoriginal or offer relatively little that is new.	OK. Can follow, but not easy to read, or somewhat disorganized
<b>2 points</b>	less than half complete	Roughly half or so is incorrect. Demonstrates little understanding.	Confusing. Difficult to follow and understand what is being presented
<b>1 point</b>	more than nothing but significantly less than half	Less than half is correct. Does not demonstrate understanding of ideas in assignment. Shows minimal comprehension of assignment or minimal lack of effort.	Extremely difficult to follow or understand.
<b>0 points</b>	nothing done	None correct	Incomprehensible

**Quizzes:** Quizzes will be given on material covered in class and in the text. If you have a valid excuse for missing a quiz, you will have one week to schedule a make-up. After this week, no make-ups will be offered. No calculators will be allowed.

**Exams:** There are four major parts to this course. The first three parts will be tested with hour exams and will be valued at 100 points each. The third part will be tested within the comprehensive final exam, valued at 200 points. All exams will be closed book/notes and each will have a ‘no calculator’ portion. Bring paper, pencils, a ruler and your calculator to each exam. Makeup exams will be given only to those who notify me in advance with a valid excuse. These must be made up within one week of the scheduled exam date.

**Final Exam:** The final exam is a required part of the course and is scheduled for **Thursday Dec 18 at 3:00-4:50**. It will be given only at the officially scheduled time--no exceptions--please don't even ask and make your winter break plans accordingly.

**Attendance:** I expect you to attend class every day and to be on time. If you miss a day, it is your responsibility to find out what you missed. Out of courtesy, I expect that you will remain seated until excused. If you must leave early, I would appreciate being notified before class.

**Getting Help:**

*Office hours:* You are encouraged to come to my office hours for assistance with homework or clarification of course material. If my office hours are not convenient for you, please make an appointment to see me at a mutually convenient time.

*e-mail:* I check my e-mail frequently. This is a good medium for contacting me.

*Homework groups:* I strongly encourage you to form groups to discuss and compare homework problems. Explaining/discussing a solution to a classmate is an excellent way to improve your own understanding.

*Math 99:* Basically translates to free drop-in tutoring. You enroll in it like any other class, but there are no requirements on your part aside from an easily satisfied attendance policy. For more info, try:

[http://www.humboldt.edu/~math/math99\\_info.html](http://www.humboldt.edu/~math/math99_info.html)

**Student Responsibilities:**

- You should work independently, and seek help from classmates, tutors, or me when desired.
- All electronics (other than calculators) are to be turned off during class time.
- All work submitted is to be neat, with quality presentation.

**This information is subject to change. Any changes will be announced in class and posted here.**