MATH 1170 • Calculus for Biologists I
Fall 2007 • University of Utah

Lecture: William Stewart (ST) 205, 9:40-10:30am MWF
Lab: Leroy Cowles (LCB) 115, 9:40-10:30am, or 10:45-11:35am, or 12:45-1:35pm Tuesday

Instructor: Zachary Kilpatrick (call me Zack)
Email: kilpatri@math.utah.edu
Office: Leroy Cowles (LCB) 311
Office Hours: Monday 11am-12pm, Thursday 3-4pm, or by appointment
Course Website: http://www.math.utah.edu/~kilpatri/math1170/fall07.html

Lab Assistant: Sean Laverty (call him Sean)
Email: laverty@math.utah.edu
Office: Biology (SB) 321-B
Office Hours: Tuesday 11:45am-12:45pm and 9:30am-10:30am in LCB 115

Textbook: Modeling the Dynamics of Life by Frederick R. Adler (Second Edition) 2005
ISBN: 97805344404864

Prerequisites: It is recommended that you must have received a grade of C or better
in MATH 1050 (College Algebra) or MATH 1060 (Trigonometry) or equivalent.

Course: The goal is to teach you some introductory calculus – such as discrete-time
dynamical systems, limits, derivatives, min/maximization, and integration – and even
some differential equations, while always tethering the math to examples in biological
systems. The course covers chapters 1-4, and you are expected to read each section
that we cover.

Exams: Four exams are given, and a comprehensive final. The dates for the exams are
Fri, 9/14; Wed, 10/3; Fri, 10/26; Fri, 11/30. Your lowest exam grade (excluding the final) is
dropped, but it is highly advisable that you take all exams. Since an exam is dropped,
no make-up exams are given, save for extraordinary circumstances. You must
provide verifiable and convincing evidence of that which prevents you from
attending. Also, advanced warning of such an absence should be given if possible.
Recitation sessions are given a night or two prior to the exam for questions and
discussion about exam material.

Labs: The computer lab affords an excellent opportunity to practice concepts
essential in the course material. Information pertaining to the lab and lab write-ups is
given during the lab sections. Your lowest lab grade is dropped, but it is
recommended you complete all labs. There are no labs during the week of an exam.

Problem Sets: A few problems are assigned from each section. To sufficiently
understand the material, it is recommended one should complete additional
problems. You can confer with your fellow classmates about problems, but the written
work you hand in should be your own. Problem sets are due every Monday, unless
otherwise stated. Assignments should be turned in during class whenever possible, but as long as they are in my office (LCB 311) by 4pm, they are considered on time. Late assignments receive a 10% reduction for every day they are late. Any assignment more than one week late will not be accepted. Your lowest two grades on problem sets are dropped, but I recommend you do every assignment.

**Final Exam:** The final exam is comprehensive. It will take place Tuesday, December 11, 2007 from 8:00-10:00am.

**Grading:** Your final grade is based on the following:
- 3 Exams: 45% total (15% each) (4 exams will be given and the lowest dropped.)
- Final Exam: 25%
- Labs: 15%
- Problem Sets: 15%

*Final grade will be calculated using this weighted averaging and then letter grades will be assigned according to the following scale:*  

**Cheating:** Students suspected of cheating during exams may be asked to change seats during the exam. Students caught cheating receive a zero for the assignment, and further action may be taken, in accordance with the student handbook.

**ADA Statement:** The Americans with Disabilities Act requires that reasonable accommodations be provided to students with physical, cognitive, systematic learning, and psychiatric disabilities. Students must contact the instructor at the beginning of the semester to discuss any such accommodations that may be required for this course.

**Withdrawals:** The last day to withdraw from this class is Friday, October 19.

**Tutoring:** The Rushing Math Center offers free drop-in tutoring, a computer lab, and study areas for undergraduates. The Rushing Math Center is adjacent to the LCB and JWB (on the first floor of each). If you would like additional tutoring, the ASUU Tutoring Center, 330 SSB, offers inexpensive private tutoring ($6 an hour). A list of private tutors is also available from the math department office or the desk in the tutoring center.

**Class Philosophy:** *In my experience, math is best learned through rigorous practice.* If you have any trouble with any of the concepts or problems encountered in the course, do not hesitate to come talk to me, the lab TA, or the tutoring center. Since ideas will build on each other throughout the semester, it is best to seek help as soon as possible. I will do my best to help you learn and enjoy the material. The more effort you put into the class, the more you will learn, and the more you will enjoy it.