

Math 247, Calculus for Biological Sciences II, Winter 2006

Class Time: MTuWF 11-11:50a.m. in 301 Deady Hall
Instructor: Dr. Marcin Bownik
E-Mail: mownik@uoregon.edu
Homepage: <http://www.uoregon.edu/~mownik>
Office: 334 Fenton
Office Phone: 346-5622
Office Hours: 9:30-10:30a.m. Mon. and Fri., 12-1p.m. Wed., or by appointment
Textbook: *Calculus for Biology and Medicine*,
by C. Neuhauser, 2nd ed., Pearson Education, Inc.

- 1. Background and Goals.** This course introduces students to integral calculus from the applied point of view, how calculus works and how to use it, with emphasis on applications in the biological sciences. The course starts with the review of derivatives and antiderivatives. This is followed by definite integral, Fundamental Theorem of Calculus, and applications of integration. Then, integration techniques such as substitution rule, integration by parts, and numerical integration are studied. The final topics include differential equations and their applications in biological modeling. The course covers most of the chapters 6–8 of the textbook.
- 2. Exams.** There will be one midterm in-class exam on Wed. 2/15, and a final exam on Thu. 3/23, 10:15–12:15.
- 3. Discussions.** In addition to 3 weekly lectures on MWF, there is a discussion class on Tuesday.
- 4. Homework.** Homework problems will be assigned regularly and be due in class on Wednesday on the material of the previous week. No late homework will be accepted. Group work on homework is encouraged, but each student must individually write and turn in her/his own assignment.
- 5. Quizzes.** There will be a quiz each Wednesday (except the midterm exam week). Quizzes are meant to test understanding of the material from the last few classes including the content of the lecture on the day of the quiz. Therefore, active participation in the class is essential. There will be no make-up quizzes, since the lowest quiz grade will be dropped.
- 6. Grading.** The grading distribution will be as follows:

Homework:	20%
Quizzes:	20%
Midterm Exam:	20%
Final Exam:	40%