

22M:016
Calculus for the Biological Sciences
Spring Semester 2000

Lecturer and Course Director: Frederick M. Goodman

Office Hours:

M and W at 3:30-4:30, held *in the Math Lab, 314 MLH*.

F at 4:30-5:30, in 325 G Maclean Hall

Contacting Professor Goodman:

Students are requested to contact Professor Goodman by email at:

math16@math.uiowa.edu

rather than phoning his office.

Office: 325 G Maclean Hall, phone 335-0791

Course web page:

<http://www.math.uiowa.edu/~goodman/math16>.

Up-to-date information about the course will be published on the web page.

Course Topics: This course presents calculus as a tool to study biological models. We will cover chapters 1-5 in the following text, possibly with some additional material presented in lectures.

Text: *Modeling the Dynamics of Life*, University of Iowa Edition, by F. R. Adler, Brooks/Cole, 1998.

Homework: There will be weekly homework, which is not to be submitted, but which is to be discussed, and sometimes presented by students, in discussion sections. There will be weekly quizzes on the homework, see below.

Examinations: There will be two exams of two hours duration, held in the evening, and a comprehensive final examination. The evening exams will take place from 7 to 9 PM on the days specified below, and attendance is mandatory, the only exception being a certified medical emergency. Exams will include some multiple choice questions and some exercises in which you are to show all of your work in an organized and coherent fashion.

Quizzes: There will be short quizzes every week, in your discussion section, consisting of problems very similar to those assigned as homework. Quizzes will also be a mixture of multiple choice questions and questions in which your work is to be written out. You will be allowed to drop the three worst quiz grades (including those which you may miss); there will be NO MAKE-UPS for quizzes.

Grading: Each exam is worth 225 points, the final is worth 325 points and the average of your quizzes will account for 225 points, making 1000 the highest point score possible. Letter grades will be computed from your total point score.

Students with special needs: If you have any type of disability that requires special arrangements, you must contact the Office of Student Disability Services, 3100 Burge Hall (335-1462). All interviews with Professor Goodman regarding these matters must be by appointment only; please, no after class discussion of this topic.

Attendance and absences: Regular attendance will be expected. However, if you must miss class, you will still be responsible for the material discussed in class; this includes discussion sections as well as lectures – new material may be presented in discussion sections at any time. You are responsible for announcements made in class, which may concern changes in the assignments, syllabus, exams, etc.

Grievance Procedures: if you have concerns or complaints about any aspect of the course, you are welcome to discuss these with Professor Goodman. If you feel that you have not received satisfaction from Professor Goodman, you may make an appointment with a representative of the Department of Mathematics by calling 335-0714. If the matter is still not resolved at that level, you may pursue complaint procedures at the Collegiate level.

Math. Lab: The Mathematics Tutorial Lab, at 314 MLH, is a great resource for you and is always prepared to assist you, during its hours of operation, with mathematical questions regarding this course. Your TA will hold one office hour per week at the Math Lab and will announce the specific time during the first week of classes. Professor Goodman will hold 2 office hours per week in the Math Lab, as noted above.

Other Recommended Resources: a graphing calculator or access to computing facilities. Graphing calculators are permitted on exams, but calculators with symbolic capabilities (i.e. the ability to compute integrals and derivatives) are not permitted.

Exam dates:

First evening exam: Thursday, March 2, 7-9 pm

Second evening exam: Thursday, April 13, 7-9 pm

Final exam: As published in the Schedule of Classes.