

Ma132 Course Website

The General Syllabus

- The course presumes that a student has finished Ma 123 material.
- The text book shall be **Calculus for Biology** by Neuhauser.

The course tries to develop geometric intuition without getting into formal analytic proofs or complicated definitions. The students need to review Ma 123 ideas including formulas and problem solving techniques. The new ideas in the course will cover elementary differential equations, beginning probability and elementary matrix theory. Exponential functions will be covered, trigonometric functions may not be needed.

Here are the sections to be covered:

1. Review (fast) 1.1, 1.2, 1.3, 2.1.1, 2.3.1
2. Review with many problems 4.1, 4.2, 4.3, 4.4, 4.6, 4.7
3. Review of Basic ideas of Integrals (without proofs) 6.
4. Integration techniques. 7.1, 7.2, 7.3.1
5. Differential Equations. 8.1, 8.2, 8.3
6. If time permits:
Introduction to probability and Mendel's law p. 801.
Introduction to matrices to do Leslie Matrix p. 556

The instructor should be consulted for announcements specific to your section.

Watch this space
for additional announcement for the whole course.

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The course will cover materials as listed on the web page **Calculus for Biology** by Neuhauser.

Expect three midterm exams plus a final. The grade contribution by the exams is 100 each for the midterm exams plus 150 for the comprehensive final. Thus, the exams contribute 450 points to the combined grade.

The dates for the midterm exams will be announced by your instructor at the beginning of the semester, subject to revision based on the progress in class.

The instructor shall determine a class grade worth 50 points and is responsible to announce the requirements for earning these 50 points using class work.

The combined class grade will be based on the total of 500 points using the standard E-60-D-70-C-80-B-90-A scale.

General announcements for the class can be viewed on the web page during the semester.

<http://www.msc.uky.edu/sohum/ma132>

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