Course Description:

**MATH 1251** is the first semester of the two semester Calculus, Differential Equations and Linear Algebra Sequence for Biology Majors. The course will cover the first four or five chapters of the “text” roughly (and I do mean roughly) as a (re)introduction to Differential Calculus, in order to get quickly into the Differential Equations commonly used by biologists, which form the main body of the course. This is a totally innovative “Mathematics for Biologists” course, which explains the use of quotes around the word text. There just is no book yet doing what we want to do at the level we need. Goldstein *et al* is mainly there as a security blanket.

Prerequisites:

YOU MUST KNOW HIGH SCHOOL ALGEBRA COLD! If you are weak in this area you'll be better off in **MATH 1120**. If you have had no calculus at all and feel unsure about your math skills you'll be better off in **MATH 1241**.

Grading:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Quizzes</td>
<td>~ 50%</td>
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<tr>
<td>Final</td>
<td>~ 50%</td>
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<tr>
<td>Class Participation, Homework, Neatness, Brownie Points etc.</td>
<td>~ 10%</td>
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Homework: You're old enough to do this without my collecting it and checking up on you. You are responsible for having done the problems at the end of the section discussed in last class, even if I don't specifically assign them. Discussion of the homework will form the first part of the class.

Class participation: Encouraged but not required.

Don't feel bad about coming in late, just try not to disrupt the class. If for some reason you must leave early see me before class, no other early departures will be tolerated with the exception of severe (= life-threatening) medical problems.

All **cell-phones** must be turned **off**. Points will be deducted for each time your phone rings in class. Laptops will be permitted on a limited basis. There will be periodic checks. Those who are not following the class will lose their right to use their laptops.

The university thoughtfully provides wastebaskets in the classroom for you to use **before** and **after** class, **not during**. You are encouraged to locate the nearest little boys' or girls' room and avail yourself of its facilities before class.

If you have a concern about the course or the instructor that is not or cannot be resolved by speaking with the instructor, the next step is to speak with the course coordinator. If the course coordinator does not settle the matter, contact Professor David Massey 529NI, x5527.
**Quizzes**: There will be no make-ups. Excuses only for documented, severe (see definition above) medical problems. There will be no make-ups. Quizzes will be every other week or so and will be on one sheet of paper. (A typical sheet of paper has two sides: the “front” and the “back” and four edges: “top”, “bottom”, “left” and “right”. You are responsible for checking whether there are questions on the back - there will be no questions on the edges). In case I forgot to mention it, there will be no make-ups.

**Tutoring**

Free tutoring will be available in room 540B Nightingale. All tutoring is done on a first come first served basis. Students should make appointments online [http://neumath.mywconline.com](http://neumath.mywconline.com). The center is open: Monday-Wednesday 10 am-8pm, Thursday 10 am – 6 pm and Friday 10-1.

**Calculators**

A “sin” calculator (that is one with a button marked \( \sin \)) is required. A graphing calculator is useful but not required. You are expected to show me all work (other than evaluation of basic functions at specific points). **The correct answer without the correct work receives no credit.** No work = no credit. You can double-check answers on calculators, but be warned that this takes time. I’m aware that some calculators can store notes but I don’t view that as cheating; I view it as pathetic, if you have to resort to that, you’re going to fail anyway.

**Closing remarks**: Don’t fall behind. If you do, you’re roadkill.