Syllabus for Math 303, Calculus IV with Applications  
Fall 2009

Lecturer  
Brian Weber  
Office: Math Tower 3-121, Office phone: 632-8264  
Email: brweber@math.sunysb.edu  
Office hours: Monday 12:50-1:50p Wednesday 4:00-5:00p

TA  
Somnath Basu  
Office: Math Tower, 3-104  
Email: basu@math.sunysb.edu  
Office hours: Thursday 3-4p Thursday 5-6p (MLC) Friday 10-11a (MLC)

Course Text  
Differential Equations and Boundary Value Problems: Computing and Modelling (Fourth Edition) by Edwards and Penney

Prerequisites  
Official prerequisites are a C or higher in one of the following: MAT 127, MAT 132, MAT 142, or AMS 161, or else a level 9 or higher on the mathematics placement exam. Unofficially, you need a firm enough knowledge of derivatives and integrals to be able to simplify expressions like $\frac{d}{dx} \int_1^x \sqrt{t^2 + 1} \, dt$ and $\int xe^x \, dx$.

Exams  
Any necessary special formulas will be provided on the exam, and the problems will be designed so that calculators won’t be necessary. Thus all you’ll need is your brain and a pencil. No books, ‘cheatsheets,’ or calculators will be allowed.

Midterm 1: Oct 2, In-Class (20% of grade)  
Midterm 2: Nov 2, In-Class (20% of grade)  
Final: Dec 16, 5:15-7:45p (Room TBA) (40% of grade)

Homework (20% of grade)  
One problem set will be due each week, at the beginning of recitation. The problem sets consist of roughly 10-20 problems of varying difficulty. Exam questions will be modelled on homework questions, so doing and understanding the homework is the best way to prepare for the tests.

This is a 4 credit course, and as a fair warning, you will have to work hard to be successful. If you fall seriously behind on the homework, you will not be able to keep up in class and will not be prepared for the exams. You are encouraged to work in groups, but you must write up your own solutions.

You must always show your work. No credit will be given for correct answers without correct work, on either exams or homeworks. No exceptions.

Makeup policy  
All of your responsibilities for this class have been announced well ahead of time, namely in the first week of classes. Thus almost no requests for makeup homeworks or exams will be granted. The only exceptions, assuming evidence is provided, will be for serious illness, family emergency, or an unforeseeable catastrophe (flood, car wreck, etc).

Grading policy  
The grading will be curved. This means your letter grade will be influenced by your performance relative to the rest of the class. An approximate curve will be made after each exam. The final curve, by which your course grade will be determined, will be set using the same process used for the individual exams, so the individual exam grades should be a good measure of how well you are doing.