

MAT 303 — Calculus IV with Applications, Summer 10
Instructor: Marcelo Disconzi

1. Useful information

course webpage:

<http://www.math.sunysb.edu/~disconzi/Teaching/MAT303-Summer-10/MAT303-Summer-10.html>

instructor's e-mail: disconzi@math.sunysb.edu

instructor's office: 2-114 (second floor) of the Mathematics Building.

instructor's office hours: Mon 3:30pm-5:30pm at the MLC and Thu 3:30-5:30pm at my office. Recall, however, that the MLC is a place for helping students; hence, you may come to the MLC any time you want and certainly you will find a tutor there to help you. If this schedule does not work for you, send me an email to set up an appointment.

textbook: Differential Equations and Boundary Value Problems, Fourth Edition, by C. Henry Edwards and David E. Penney.

2. Course description

The course will develop the basic ideas of differential equations with an emphasis on applications. Although some of the most natural applications are in Physics and Engineering, students are encouraged to apply what they learn into their own field of interest. Suggestions in that regard are welcomed.

We will develop some computer based applications with the software Mathematica. Students can buy a licensed copy of Mathematica at Seawolves Marketplace by \$ 5.00 (you must have your student ID with you in order to buy it).

Classes are on Mon, Wed and Thu from 6:00pm to 9:05pm at Harriman Hall 116.

Relevant announcements will be posted on the webpage, so it is important that you visit it on a regular basis.

3. Grading policy

1. Homework (35%) — Each homework will be graded out of 100 points and the following policy will be followed. Among the assigned exercises some of the problems will be selected to be graded in full detail. These will account for 50 points. The remaining 50 points are a bonus for making a serious attempt at the remaining problems. It is left to the grader to decide what a "serious attempt" is, but simply writing the final answer will not count as such. After the due date of each assignment, the fully graded problems will be specified on the webpage. See the table below for a list of homework problems and their due date. The lowest homework grade will be dropped. Any change in homework assignment will be posted on the course webpage.

2. Quizzes (10%) — There will be a 10-15 minutes quiz every Monday. The lowest grade will be dropped.

3. Midterm (20%) — There will be a Midterm on Mon, Aug 2nd covering material from HW 1 to HW 4.

4. Final (35%) — The final will be on Thu, Aug 19th. It will be a cumulative final but with emphasis on the material covered after the Midterm (i.e., HW 5 to 9 according to the schedule below).

Important remarks — There will be no make up policies for homework and quizzes and late homework will not be accepted. However, you might take a make up Midterm or Final if you have a legitimate excuse. Class participation might improve your grade. Incidentally grades may be curved.

5. Homework assignment

These are the exercises from the textbook. You MUST check out the webpage in order to get the complete list of assignments. In the table below the first column indicates the homework number, the second one indicates the assigned exercises in the form **SEC**: Exercises, where exercises in a sequence are indicated by a hyphen, e.g., **1.6**: 2-7 means exercises 2,3,4,5,6 and 7 of section 1.6. The fully graded problems are indicated in red (if you do not know what I mean by this, see the grading policy above).

The course has a grader: Ki Song (kiwisquash@math.sunysb.edu).

HW	Due date	Sections
1	Mon, Jul 19	1.1 : 1-3, 7, 10, 20, 22, 25, 27, 28
2	Mon, Jul 26	1.1 : 29, 30, 32, 34, 36, 45 1.2 : 3, 6, 26 1.4 : 4, 10, 12, 22, 26, 27, 30, 36, 41, 52 1.5 : 1, 7, 18, 33, 34, 36, 38, 41 1.6 : 4, 12, 22, 28, 46, 48, 71, 72 2.1 : 10-13, 21,23, 35
3	Thu, Jul 29	2.2 : 2, 9, 11, 21 2.3 : 2, 4, 10, 21, 22, 24, 30 3.1 : 4, 8, 10, 14, 20, 25, 34, 40, 46
4	Mon, Aug 2nd	1.3 : 3, 11, 14, 18, 25, 26 2.4 : 4, 8, 13, 28 2.6 : 3, 5, 8 3.2 : 4, 5, 16, 23 3.3 : 5, 8, 10, 16, 24
5	Thu, Aug 5	3.4 : 2, 4, 10-12, 14, 19, 24, 27 3.5 : 3,6,10,14,20,38,55
6	Mon, Aug 9	3.6 : 4, 6, 8, 19-23, 30 3.7 : 1-3, 10, 14
7	Thu, Aug 12	4.1 : 2, 6, 12, 16, 24-27
8	Mon, Aug 16	4.2 : 6, 10, 21, 22, 38 5.1 : 3-5, 13, 18, 22, 31
9	Thu, Aug 19	5.2 : 4, 12, 30 5.4 : 2, 12, 18, 27 6.1 : 1-3, 14, 18 6.2 : 3-7, 13-16, 20, 33 6.3 : 1, 14 6.4 : 1, 18 6.5 : 1-4, 7.1 : 2, 4 7.2 : 4, 10, 12

6. Feedback

Students are encouraged to bring suggestions and to discuss with me any concerns they might have. But if you do not feel comfortable about seeing me to discuss something you think is not being properly handled in the course, there is an anonymous feedback system in the course webpage.

7. Students with Disabilities

If you have a physical, psychological, medical, or learning disability that may impact on your ability to carry out assigned course work, you are strongly urged to contact the staff in the Disabled Student Services (DSS). Disability Support Services is located in the Educational Computing Center (ECC) building, location D5 on the campus map; telephone and email: (631) 632-6748, dss@notes.cc.sunysb.edu. DSS will review your concerns and determine, with you, what accommodations are necessary and appropriate. All information and documentation of disability is confidential. Arrangements should be made early in the semester so that your needs can be accommodated.