

Vanderbilt University
MATH 5610 — Ordinary Differential Equations

1. GENERAL INFORMATION.

Instructor: Marcelo Disconzi. Office: Stevenson Center 1515. Office phone: 322-7147.

email: marcelo.disconzi@vanderbilt.edu.

Lecture time and location: TR, 9:35–10:50am, Stevenson Center 1117.

Course webpage:

<http://www.disconzi.net/Teaching/MAT2610-Spring-18/MAT2610-Spring-18.php>

Office hours: Thursdays, 1–4pm.

Math Office: Stevenson Center 1326.

2. COURSE INFORMATION.

2.1. **Textbook.** *Fundamentals of Differential Equations and Boundary Value Problems*, by Nagle, Saff, Snider, 7th edition (required). Student's Solutions Manual (optional).

2.2. **Description.** First- and second-order differential equations, applications. Matrix methods for linear systems; stability theory of autonomous systems; existence and uniqueness theory. Intended for mathematics and advanced science majors.

3. GRADING POLICY AND EXAMS DATES.

The course will have two exams, each constituting 20% of the grade, one final exam constituting 35% of the grade, homework assignments constituting 10% of the grade, and an individual project constituting 15% of the grade. You will be allowed to take a make-up test only in very special circumstances. If you miss an exam, contact the instructor as soon as possible.

Homework will be assigned on a regular basis and must be turned in on the date specified on the course webpage. Among all assigned problems, a small subset will be graded for accuracy, and that will count toward 50% of the homework score. The other 50% of the homework grade will be based on the remaining problems where students have to show a genuine attempt to find a solution, although these problems will not be checked for accuracy. Notice that you will not be told ahead of time which problems will be strictly graded, and, therefore, you ought to show detailed work in all homework questions.

Extra credit work may be assigned. Extra credit assignments will not carry a specific number of points towards your total grade, *unless otherwise specified*. The primary goal of such extra assignments is to help the course instructor decide on borderline cases. For example, suppose your final grade corresponds to a B+, but it is sufficiently close to the cutoff for an A-. In such a case, having done all or most of the extra credit problems may lead the instructor to decide that you deserve a little boost in your grade, giving you an A-.

If this policy is not clear, please talk to your instructor during his office hours.

Description	Date and Location	Points
Test 1	Tue, Feb 13, in class	20
Test 2	Thu, Mar 29, in class	20
Final Exam	Tue May 1 9am, location TBA	35
HW	to be posted on the webpage	10
Individual project	TBA	15
TOTAL		100

Important: There will be no alternate time for the Final Exam.

Some important dates:

Date	Description
Jan 22	Last day to drop a class with no entry on the record
Mar 16	Last day undergraduate students may withdraw from spring semester classes
Mar 16	Last day to change from pass/fail to graded status in a spring semester class

3.1. **Homework problems and schedule.** An up-to-date schedule that includes the due date of homework assignments will be maintained on the course webpage.

4. COURSE POLICIES.

4.1. **Calculators.** Calculators will not be used on the tests.

4.2. **Classroom Policy.** Students are not allowed to use electronic equipment such as cell phones, music players, or computers during class. Texting during class is not acceptable.

4.3. **Honor Code.** All work submitted for credit must be the students own and is subject to the provisions of the Vanderbilt Honor Code. Details can be found at the Honor Council web site:
<http://studentorgs.vanderbilt.edu/HonorCouncil>.

4.4. **Classroom recording policy.** The use of technologies for audio and video recording of lectures and other classroom activities is allowed only with the express permission of the instructor. In cases where recordings are allowed, such content is restricted to personal use only unless permission is expressly granted in writing by the instructor and by other classroom participants, including other students. Personal use is defined as use by an individual student for the purpose of studying or completing course assignments. When students have permission for personal use of recordings, they must still obtain written permission from the instructor to share recordings with others.

4.5. **Accommodation Procedure.** A student who needs course accommodations due to a disability, special arrangements in case the building must be evacuated, or has emergency medical information that needs to be shared with the instructor, should contact the instructor as soon as possible. Equal Opportunity, Affirmative Action, and Disability Services (<http://www.vanderbilt.edu/ead>) at Vanderbilt provides specific accommodations for students with physical or learning disabilities. Upon receiving appropriate documentation from the student, the EAD will make arrangements with the instructor for the accommodations.

4.6. **Attendance.** The student who misses a class meeting is responsible for any assignments and/or announcements made. Office hours will not be utilized to re-teach material presented in class. The stated attendance policy of the College of Arts and Science applies in this course: Students are expected to attend all scheduled meetings of classes in which they are enrolled; they have an obligation to contribute to the academic performance of all students by full participation in the work of each class. The faculty of the College of Arts and Science recognizes that occasions arise during the academic year that merit the excused absence of a student from a scheduled class or laboratory during which an examination, quiz, or other graded exercise is given. Examples include participation in sponsored university activities (e.g., debate team, varsity sports), observance of officially designated religious holidays, serious personal problems (e.g., serious illness, death of a member of the students family), and matters relating to the students academic training (e.g., graduate or professional school interviews). Conflicts arising from personal travel plans or social obligations do not qualify as excused absences.

4.7. Open enrollment. The Open Enrollment Period ends on Monday, January 15th. This is the deadline for students to add a course or to make other changes in YES. Between January 16th and 22nd, students may not add a math course nor switch (lecture) sections of a math course, and any withdrawals or adjustments in level or in grading status must be completed using the add/drop form. If only the "DROP" section of the form is filled out, the instructor may sign the form. If a student wishes to make any change that involves filling in the ADD section of a drop/add form (whether or not it also involves filling in the DROP section), then the student must see the Director of Undergraduate Studies (John Rafter) or the Assistant Director of Undergraduate Studies (Jakayla Robbins) in person. Per Math Department policy, the only change to a math course that will be approved is a change to the level of the course (e.g. switching from Math 1301 to Math 1300 or vice versa). Only the Director of Undergraduate Studies or the Assistant Director of Undergraduate Studies can approve the level switch by signing the change form.

4.8. Anonymous feedback. Students are encouraged to bring suggestions and to discuss with the course instructor any concerns they may have, including something they think is not being properly handled in the course. But if you do not feel comfortable about doing that, you have the opportunity to send some anonymous feedback on the course webpage.