San Francisco State University
Mathematics Department
Fall 2018
Math 376: Differential Equations
Class meetings: Tu-Th 2:00-3:15pm in TH210

Instructor
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Office Hours: Tu-Th 12:00-1:30 pm and by appointment

Textbook

Course Objectives
The class will cover:
Chapter 2: First Order Equations;
Chapter 3: Second Order Linear Equations;
Chapter 5: Some of Series Solutions;
Chapter 7: Systems of First Order Linear Equations;
Chapter 9: Some of Nonlinear Systems and Stability.
The students will learn to:
1) Solve linear, separable and exact first order equations;
2) Solve second order equations with constant coefficients;
3) Apply the methods of undetermined coefficients and variation of parameters;
4) Construct series solutions of linear equations;
5) Solve first order linear systems using matrix exponentials;
6) Discuss the phase portrait and the stability of nonlinear systems;
7) Model growth, decay and vibrations;
8) Understand existence and uniqueness theorems.

Tests and Grading
Class time will be devoted to a mix of lectures and lab sessions.
Homework will be assigned regularly, collected and graded;
There will be four quizzes (2-3 questions, about 30 min each);
There will be one midterm exam (5-6 questions, 75 min) and one final exam (120 min);
Grade will be based on 20% HW, 30% quizzes, 20% midterm, and 30% Final. No make-ups will be given except for compelling and well documented reasons.

Instructor Policy

Undivided attention to the class is expected from all students during class-time. Using cellphones, tablets (except for handwritten note-taking) or laptops, taking a nap or having lunch are not authorized and will be considered disruptive. However, going to the restroom or drinking fluids is perfectly Ok.

Students are encouraged to participate and ask questions. Lecture attendance is mandatory and instructor will take roll. All interactions should be courteous. Student complaints, if any, must be made privately and outside class. Late students may be turned away. The instructor may reseat students during tests.

Students are allowed personal notes (1 page for quizzes, 2 pages for midterm and 3 pages for final) during tests. No calculators are allowed during tests. No recording of classes (taping, filming or picture-taking) is allowed without prior permission from the instructor.

Disruptive students will be asked to leave immediately. The following is straight from the SFSU website: [https://conduct.sfsu.edu/dealing-disruptive-students](https://conduct.sfsu.edu/dealing-disruptive-students)

What is disruptive behavior?

Depending on the size and nature of your class what is considered "disruptive" may vary. In general, disruption and obstruction include behavior that interferes with, disrupts, or prevents normal classroom functions or activities. Disruptive behaviors can range from mildly distracting to clearly disorderly, violent, or dangerous. Depending on course rules set by the instructor, disruption in the classroom may include:

- side conversations, ringing cell phones or using a cell phone to talk or send text messages
- interrupting the instructor or other students
- monopolizing class discussion and refusing to defer to instructor, or listen to others; persisting when the instructor has indicated that the student’s remarks are off topic and it is time to move on
- entering late/leaving early, moving about the classroom
- filming, photographing, or taping the class
- yelling, arguing, swearing or other intimidating behavior
- reading, sleeping, eating, drinking, or not paying attention
- showing up to class under the influence of alcohol/drugs

University Policy

1. Disability access

Students with disabilities who need reasonable accommodations are encouraged to contact the instructor. The [Disability Programs and Resource Center (DPRC)](https://conduct.sfsu.edu/dealing-disruptive-students) is available to facilitate the reasonable accommodations process. The [DPRC] is located in the [Student Service Building](https://conduct.sfsu.edu/dealing-disruptive-students).
and can be reached by telephone (voice/TTY 415-338-2472) or by email (dprc@sfsu.edu).?
(http://www.sfsu.edu/~dprc)

2. **Student disclosures of sexual violence.**
SF State fosters a campus free of sexual violence including sexual harassment, domestic
violence, dating violence, stalking, and/or any form of sex or gender discrimination. If you
disclose a personal experience as an SF State student, the course instructor is required to notify
the Dean of Students. To disclose any such violence confidentially, contact:
[The SAFE Place - (415) 338-2208; http://www.sfsu.edu/~safe_plc/]
[Counseling and Psychological Services Center - (415) 338-2208; http://psyservs.sfsu.edu/]