# MATH 2410Q: Elementary Differential Equations

## Course Syllabus

Spring 2019

## **Contact Information**

**Instructor:** Lisa Naples

Email Address: lisa.naples@uconn.edu

Office: MONT 422

Office Hours: Tuesday 2:00-3:30, Friday 10:15-11:45, and by appointment

## Course Information

Class Schedule: Tuesdays and Thursdays 11:00-12:15

Class Location: MONT 110

Class Textbooks: A First Course in Differential Equations with Modeling Applications, 11th

edition, Dennis G. Zill

#### Course Overview

The following is the math department's official course description: Qualitative, analytical and numerical methods for first and second-order single ordinary equations as well as first-order constant coefficient linear systems and some special nonlinear systems. The Laplace transform and its application to differential equations.

Due to time constraints, class periods will primarily be spent covering theoretical and computational aspects of the subject. However, students are invited to discuss applications with the instructor outside of class.

# **Grading Policy**

Grades for this course will be calculated using the following distributions:

Assignment Category	Percentage of Grade (Method 1)	Percentage of Grade (Method 2)
WebAssign Homework	10%	0%
Written Homework	20%	5%
Quizzes	10%	5%
Linear Algebra Review Packet	5%	5%
Midterm Exam 1	15%	25%
Midterm Exam 2	15%	25%
Final Exam	25%	35%

Course grades will be assigned based on the higher of Method 1 and Method 2 averages and the following letter distribution:

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A: [93,100], A-: [90,93) B+: [87,90), B: [83,87), B-: [80,83), C+: [77,80), C: [73,77), C-: [70,73), D+: [67,70), D: [63,67), D-: [60,63), F: [0,60)
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## Important Dates

WebAssign Homework: Wednesdays at 11:59 pm

Written Homework: Thursdays at the start of class as posted on the course calendar.

Quizzes: Every other Thursday as posted on the course calendar

Linear Alegbra Review Packet: February 14th

Midterm Exam I: February 28th Midterm Exam II: April 18th

Final Exam: Date determines by registrar

In case of cancellation due to inclement weather midterm exams will be rescheduled to the next class period. Similarly homework due dates will be rescheduled to the next class period. Quizzes may be rescheduled to the next class period or given as take-home assessments; specific details will be provided via email on the morning of cancellation.

## Assignment Descriptions

## WebAssign Homework

There will be a WebAssign homework assignment corresponding to each section covered in the textbook. WebAssign homework is intended to provide computation practice with immediate feedback. You will be given five attempts for each open-ended question. Use at least two of these attempt to try to solve the problem on your own. If you do not get the correct answer after two or three attempts, discuss the problem with a classmate or the instructor.

#### Written Homework

Written homework will be assigned on a regular basis. Written homework is intended to provide an opportunity for you practice communicating your mathematical thoughts (since you will be expected to explain your work clearly on exams.) exercise will be graded for accuracy on the following 0-4 scale:

- 4 points: Your solution is correct and presented in a neat manner which is easy to follow.
- 3 points: Your work is correct but the presentation is messy or the explanation hard to follow. Or, your work is neat and mostly correct but a mistake is present.
- 2 points: Multiple mistakes are present but you made significant progress towards a complete solution by demonstrating the techniques and ideas needed.
- 1 point: You have demonstrated that you have an idea of what is needed to be done but can not make significant progress towards a solution.
- 0 points: You did not attempt the problem or can not demonstrate an understanding of what is needed to find a complete solution.

Please note that if you are asked to explain your work, you should use complete sentences in your explanation.

You are encouraged to work with your classmates on homework assignments, and you may also seek help from the instructor. However, you should write up your final solutions independently.

## Quizzes

A short timed quiz (10-15 minute) will be given at the start of class every other Thursday as indicated on the course calendar. Details on quiz format will be provided prior to each quiz.

#### Midterm Exams

While midterm exams will emphasize the most recent material, this course is by nature cumulative, so ideas discussed earlier in the semester may appear. More details regarding the format of the exams will be provided later in the semester.

#### Final Exam

The final exam is cumulative.

# Class Preparation and Attendance

While attendance does not contribute to the overall course grade, the instructor's expectation is that students attend class on a regular basis. If a student chooses not to attend class for an undocumented reason, it is the student's responsibility learn the material from the missed class period. Before the instructor answers questions or review material from the date of absence the student will be require to demonstrate that he or she has made significant progress in trying to learn the material on his or her own by, for example, obtaining notes from a classmate or reading the appropriate sections in the textbook.

# Make-up Policy

No extensions will be given during the course of the semester. One quiz grade and one homework grade will be dropped at the end of the semester to account for emergency absences. If a midterm exam is missed for an officially acceptable reason (for example, a university sanctioned event that cannot be rescheduled or a documented medical event) the weight of the midterm will be redistributed to the final exam (unless alternate arrangements have been made with the instructor). Students who are sick on the day of a midterm are encouraged to see a

doctor to obtain necessary documentation. Students who miss an exam for an unexcused reason (for example, sleeping through an alarm) will receive a zero on the exam.

## CSD Accommodations

The University of Connecticut has issued the following policy regarding Academic Honesty: The University of Connecticut is committed to protecting the rights of individuals with disabilities and assuring that the learning environment is accessible. If you anticipate or experience physical or academic barriers based on disability or pregnancy, please let me know immediately so that we can discuss options. Students who require accommodations should contact the Center for Students with Disabilities, Wilbur Cross Building Room 204, (860) 486-2020, or http://csd.uconn.edu/

Please note that accommodations cannot be provided until appropriate verification has been provided by CSD.

# **Academic Honesty**

The University of Connecticut has issued the following policy regarding Academic Honesty: This course expects all students to act in accordance with the Guidelines for Academic Integrity at the University of Connecticut. Because questions of intellectual property are important to the field of this course, we will discuss academic honesty as a topic and not just a policy. If you have questions about academic integrity or intellectual property, you should consult with your instructor. Additionally, consult UConn's guidelines for academic integrity.

Cheating or plagiarizing on an assignment may result in a zero for that assignment and/or failure in the course. If you have any questions regarding a particular assignment, please see the instructor before the deadline.

# Extra Help

#### Office Hours

Students are welcomed to attend office hours as needed. Since MATH 2410Q does not have a corresponding discussion section, students are encouraged to use office hours as problem solving sessions. Students may come in groups and work on homework together, or bring more specific questions. MATH 2410Q is cumulative by nature so it is essential that students address any confusion as soon as possible.

## Q Center

Students seeking additional help beyond office hours may consider visiting UConn's Quantitative Learning Center. The Q Center offers free tutoring Sunday through Friday. However, a tutor for MATH 2410Q may not be staffed at all times. Please remember to plan in advanced.

### Piazza

Piazza is educational platform that will be used in this course. Any questions related to course material should be posted on Piazza (anonymously if preferred) rather than emailed to the instructor. The instructor will check Piazza regularly and respond to questions, but students may answer classmates' questions as well.

## Disclaimer

The instructor reserves the right to make changes to the syllabus at any point during the semester. Any changes made to the syllabus will be announced in class, and an updated syllabus will be posted the course HuskyCT page. Students can obtain a printed copy of the updated syllabus from the instructor.