MATH 2410Q - Syllabus - Fall 2019

August 25, 2019

Baisc Information

- Instructor: Junqing Qian • Office: Mont120 • Email: junqing.qian@uconn.edu
- Course Website: https://jennqq.com/teaching/fall-2019-math-2410q/ • Classroom: Mont 110
- Textbook: "A First Course in Differential Equations with Modeling Applications(11E)" by Dennis G. Zill.

Grading Components

Quiz	20%
Exam 1	25%
Exam 2	25%
Final Exam	30%
Total	100%

Course Structure / Important Infomation

1. WebAssign access is not required. If you have WebAssign access, feel free to use it as extra excercises. However, completing it or not does not affect your grade.

2. Excercise Sheets:

- There will be weekly excercise sheets to practice. The weekly excercise sheets will be simultaneously posted on the course website and HuskyCT on each Monday, the solution will be posted on every Friday.
- The excercise sheets will NOT be collected, it does not take any part of the final grade.
- In order to encourage students to study, questions on the quizzes will be selected directly from the excercise sheet.
- Problems will be discussed in Friday class if time allows.

3. Quiz:

- There will be a quiz on every Monday.
- Normally, it will take 10-15 min for students to finish, and there are two questions on each quiz.
- Questions on the quiz will be materials we learnt from the previous week, and directly selected from the excercise sheet.
- NO MAKE-UP QUIZ in general.
- At least one lowest quiz will be dropped at the end of this semester.

4. Exam 1 and Exam 2:

- Exam 1 is scheduled on Sep. 27th in class.
- Exam 2 will be on Week 10 (the week of Oct. 28th).

5. Final Exam:

- Time: TBD.
- Fianl exam is CUMULATIVE.

Advice: Take Notes, Keep Up with class, Do Practice.

Policies

a. Policy Against Discrimination, Harassment and Related Interpersonal Violence

The University is committed to maintaining an environment free of discrimination or discriminatory harassment directed toward any person or group within its community – students, employees, or visitors. Academic and professional excellence can flourish only when each member of our community is assured an atmosphere of mutual respect. All members of the University community are responsible for the maintenance of an academic and work environment in which people are free to learn and work without fear of discrimination or discriminatory harassment. In addition, inappropriate amorous relationships can undermine the University's mission when those in positions of authority abuse or appear to abuse their authority. To that end, and in accordance with federal and state law, the University prohibits discrimination and discriminatory harassment, as well as inappropriate amorous relationships, and such behavior will be met with appropriate disciplinary action, up to and including dismissal from the University. Additionally, to protect the campus community, all non-confidential University employees (including faculty) are required to report sexual assaults, intimate partner violence, and/or stalking involving a student that they witness or are told about to the Office of Institutional Equity. The University takes all reports with the utmost seriousness. Please be aware that while the information you provide will remain private, it will not be confidential and will be shared with University officials who can help.

b. Academic Integrity Statement

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.

c. Students with Disabilities

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/.

d. Final Exam Policy

In accordance with UConn policy, students are required to be available for their final exam and/or complete any assessment during the time stated. If you have a conflict with this time you must obtain official permission to schedule a make-up exam with the Dean of Students. If permission is granted, the Dean of Students will notify the instructor. Please note that vacations, previously purchased tickets or reservations, graduations, social events, misreading the assessment schedule, and oversleeping are not viable reasons for rescheduling a final.

Table 1

		Tentative Schedule				
W1	8/26: 1.1 (1)	Intro (1): Definitions and Terminology				
	8/28: 1.1(2)+1.2	Intro (2), Initial-Value Problems				
	8/30: 1.4	Newton’s Law, Practice				
W2	9/2:	Labor Day				
	9/4: 2.1(1)	Solution Curve, Direction Field, Phase Portrait				
	9/6: 2.2	Separable Equation, Practice				
W3	9/9: 2.1(2)	Quiz, Autonomous Equation				
	9/11: 2.4(1)+2.3(1)	Exact Equation, Linear Equation(formula)				
	9/13:	Practice				
W4	9/16: 2.3(2)	Quiz, Linear Equation(theory)				
	9/18: 2.4(2)+2.5(1)	Make Nonexact DE Exact, Bernoulli DE				
	9/20: 2.5(2)	Homogeneous Equation, Reduction to Separation of Variables, Practice				
W5	9/23: 2.6+9.1	Quiz, Euler’s Method, Error Analysis				
	9/25: 7.1	Definition of Laplace Transform, Review				
	9/27:	EXAM 1				
W6	9/30: 7.2	Inverse Transforms and Transforms of Derivatives				
	10/2: 7.2*+7.3(1)	Partial Fraction Decomposition, Translation on the s-Axis				
	10/4: 7.3(2)	Translation on the t-Axis, Practice				
W7	10/7: 7.4(1)	Quiz, Derivative of a Transform				
	10/9: 7.4(2)+7.6	Transform of Integrals and Periodic Functions, System of DEs				
	10/11:	Practice				
W8	10/14: 3.1	Quiz, Linear Models				
	10/16: 3.2	Nonlinear Models				
	10/18: 3.3	Modeling with System, Practice				
W9	10/21: 4.1(1)	Quiz, Preliminary Theory of Higher Order Linear Equations				
	10/23: 4.1(1)+4.3(1)	Pre. Theo. of Higher Order Linear Eq’s, Complex Number Overview				
	10/25	Review				
W10	10/28:	EXAM 2				
	10/30: 4.3(2)	Homogeneous Linear Equation with Constant Coefficients				
	11/1: 4.2	Reduction of Order, Practice				
W11	11/4: 4.6(1)	Quiz, Variation of Parameter(formula)				
	11/6: 4.4	Undetermined Coefficients – Superposition Approach				
	11/8: 4.6(2)	Variation of Parameters(theory), Practice				
W12	11/11: 4.7	Quiz, Cauchy-Euler Equations				
	11/13: ch5+8.1(1)	Boundary Value Problem, Preliminary Theory of Linear System(1)				
	11/15: 8.1(2)	Preliminary Theory of Linear System(2), Practice				
W13	11/18: B	Quiz, Matrices				
	11/20: 8.2(1)	Homogeneous Linear System (1)				
	11/22: 8.2(2)	Homogeneous Linear System (2)				

		Tentative Schedule				
W14		Thanksgiving Recess				
W15	12/2: 8.2(3)	Homogeneous Linear System(3)				
	12/4	Quiz, Review				
	12/6	Review				
W16		Final Exam: Cumulative				