Math 2410Q — Elementary Differential Equations (Spring 2022)

Course Coordinator (Storrs): Anthony Rizzie

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. Laplace transform and its application to differential equations.

Prerequisites:

MATH 1132, 1152, or 2142. Recommended preparation: A grade of C- or better in MATH 1132; MATH 2110 or 2130. Cannot be taken after MATH 2144, 2420, 2720, 3146, 3150, 3410, 3412, 3510, 3170. Repeat restrictions apply; see advising.uconn.edu/repeat-policy.

Textbook:

The textbook for the course is "A First Course in Differential Equations with Modeling Applications" by Dennis G. Zill, 11th edition. The textbook can be purchased at the UConn Bookstore. Please see the document below for purchasing options and prices.

Math 2410Q Book Options.pdf

Helpful Links:

Paul's Online Notes for Differential Equations: http://tutorial.math.lamar.edu/Classes/DE/DE.aspx

Khan Academy Videos for Differential Equations: https://www.khanacademy.org/math/differential-equations

MathDoctorBob on Youtube: https://www.youtube.com/watch?v=PgIpzQ3Xm4s&list=PLA7FDE7518E52863A

PatrickJMT Videos for Differential Equations: http://patrickjmt.com/#differential-equations

Slope Field Generator: https://www.desmos.com/calculator/p7vd3cdmei

Euler's Method Calculator (courtesy of David Nichols): http://davidmathlogic.com/euler/

The Quantative Learning (Q) Center:

The Q Center is a place on campus where there are knowledgeable people hanging around waiting for you to come by and ask for help with problems you are having with Q courses. Some students find it helpful to use up a couple of their tries at a problem on WebAssign homework and then visit the Q center for help with the problem, before going back to their homework. Tutoring is provided in the Q Center located in Homer Babbidge Library. Please visit the website for more details and hours.

There is also free tutoring at the Engineering Tutoring Center: http://undergrad.engr.uconn.edu/advising/tutoring/tutoring-program-overview

Integrity:

"A fundamental tenet of all education institutions is academic honesty. Academic work depends upon respect for and acknowledgment of the research and ideas of others. Misrepresenting someone else's work as one's own is a serious offense in any academic setting and it will not be condoned." A student who knowingly assists another student in committing an act of misconduct shall be equally accountable for the violation, and both shall be subject to the sanctions and other remedies. See the UConn Student Code, Appendix A.

Student Support Services:

- **Dean of Students** 486-3426
  The office serves as an advocate for students and as a centralized resource for connecting students with appropriate university and community programs, offices and individuals. The office supports students in resolving educational, personal and other university concerns
  that affect the quality of their academic or community life and personal goals.

- **Center for Students with Disabilities** 486-2020 (voice), 486-2077 (TDD)
  The Center for Students with Disabilities (CSD) at UConn provides accommodations and services for qualified students with disabilities. If you have a documented disability for which
  you wish to request academic accommodations and have not contacted the CSD, please do so as soon as possible.

- **Counseling and Mental Health Services** 486-4705 (after hours, use 486-3427)

- **Alcohol and Other Drug Services** 486-9431

- **Career Services** 486-3013