

Math 3305.002 - Ordinary Differential Equations, Spring 2023

TuTh 2:00 - 3:20 pm (Face-to-Face Format)

RBN 4027

Instructor: Dr. Maddie Dawsey
Office: RBN 4048
Office Hours: TuWeTh 8:30 - 9:30 am (or by appointment)
Email: mdawsey@uttyler.edu (I will not receive emails to mdawsey@patriots.uttyler.edu)
Website: All course materials will be posted on Canvas

Textbook

Differential Equations: From Calculus to Dynamical Systems, 2nd edition, by Virginia W. Noonburg.
ISBN: 978-1-4704-4400-6.

Course Description

A study of ordinary differential equations with emphasis on first order equations, linear equations, and solution by series.

Course Learning Objectives

By the end of this course, students should be able to do the following:

- Determine order, type, and linearity of differential equations
- Determine whether a particular function is a solution to a differential equation
- Find general solutions to first order differential equations
- Find general solutions to linear differential equations with constant coefficients
- Use the Laplace transform to solve differential equations
- Solve systems of differential equations
- Model a variety of physical situations using differential equations
- Accurately interpret solutions to differential equations in the context of physical applications

Important Dates

January 16th	Martin Luther King, Jr. Holiday
January 23rd	Census Date
March 13th - 17th	Spring Break
March 23rd	Withdrawal Deadline

Grading Scheme

Your final letter grade will be determined by the following grading scheme:

Homework	15%	A	90 - 100
Midterm Exams	60% (20% each)	B	80 - 89.99
Cumulative Final Exam	25%	C	70 - 79.99
		D	60 - 69.99
		F	0 - 59.99

Attendance (Face-to-Face Format)

Students are expected to attend every class and are responsible for any announcements made during class. There is no zoom or alternate online option for this class. If you must miss class, please get any notes you missed from a classmate and come to office hours to catch up.

Homework (15%)

Homework will be posted on Canvas after each class. Homework will be submitted weekly as a single pdf file on Canvas, by the beginning of class each Tuesday, and it will be graded for completion and correctness. At the end of the semester, your lowest two homework grades will be dropped.

No late homework will be accepted for any reason. If you know that you will have to miss class on a Tuesday, it is still your responsibility to submit your homework on Canvas before class time.

Exams (60% Midterm Exams, 25% Final Exam)

There will be three midterm exams during the semester and a cumulative final exam. Each midterm exam will be worth 20% of the final course grade, and the final exam will be worth 25%. Exams may include in-depth projects to be completed in advance and submitted at exam time. The *tentative* exam schedule and topics are the following:

Exam 1 (Chapters 1-2)	Thursday, February 9th
Exam 2 (Chapter 3)	Thursday, March 9th
Exam 3 (Chapter 4 and Sections 6.1-6.2)	Thursday, April 13th
Cumulative Final Exam (Chapters 1-4 & 6)	TBD (the assigned time during finals week)

Missed exams can only be made up in the case of an excused absence and if the professor is notified as soon as possible. No make-up exams will be given more than four days after the missed exam, and missed exams that are not made up within four days will earn a grade of zero.

Student Resources

The Mathematics Learning Center, RBN 4021, is an open access computer lab for math students. There are tutors on duty to assist students who are enrolled in early-career courses. More information, including a current schedule, can be found here: <https://www.uttyler.edu/math/math-learning-center>.

The PASS Tutoring Center, located in LIB 401, also offers free tutoring for early-career courses and has walk-in hours. More information, including a current schedule and instructions for making tutoring appointments, can be found here: <https://www.uttyler.edu/tutoring>.

Other resources that are readily available to you include:

- Your textbook
- Your professor (via office hours, or email Mo-Fr 8 am - 4 pm)
- Any other online resources you can find, such as youtube videos or free online tutorials

Accessibility

The Department of Mathematics at UT Tyler offers accommodations to students with learning, physical, and/or psychological disabilities. Any students needing special accommodations due to a disability are encouraged to visit <https://hood.accessiblelearning.com/UTTyler> and fill out the New Student application. The Student Accessibility and Resources (SAR) office will contact you. For more information, visit <http://www.uttyler.edu/disabilityservices>. Please contact the professor to discuss arrangements.

Covid-19 Information

Information about Covid-19 and UT Tyler safety policies can be found here: <https://www.uttyler.edu/reboot>. Students needing additional accommodations may contact the Office of Student Accessibility and Resources at University Center 3150, call (903) 566-7079, or email saroffice@uttyler.edu.

Honor Code

All members of the UT Tyler community join together to embrace: *Honor and integrity will not allow me to lie, cheat, or steal, nor to accept the actions of those who do.*