

# Math 3113: Introduction to Ordinary Differential Equations

University of Oklahoma

Fall 2024

---

Instructor: Jiamin Li	E-mail:
Office Hours: Friday 15:00 - 16:00	Class MWF 13:00 - 13:50 (3113-03) 14:00 - 14:50 (3113-05)
Office: PHSC 1024	Class Room: PHSC 0114 (3113-03) PHSC 0115 (3113-05)

---

NOTE: Syllabus is subject to change at the instructor's discretion

## Prerequisites

MATH 2423 or MATH 2924. This course duplicates two hours of MATH 3413 (Physical Math I).

## Course Description

First order ordinary differential equations, linear differential equations with constant coefficients, two-by-two linear systems, Laplace transformations, phase planes and stability.

## Textbook(s)

Differential Equations and Boundary Value Problems (5th ed), by C. Henry Edwards, David E. Penney, and David T. Calvis, Pearson, 2015, ISBN 0-321-79698-5

## Grade Breakdown

Your final grade will be based on quizzes, written homework assignments, in-class quizzes, three in-class exams (50 minutes) and a cumulative final exam (2 hours), weighted as follows:

Written Homework	15%(lowest one dropped)
Quizzes	10%(lowest two dropped)
In-class Exams	40% (20% each, lowest one dropped)
Final Exam	35%

The tentative final letter grade for the course will adhere to following :

A	B	C	D	F
100-87	86-72	71-60	59-45	44-0

Your grades will be posted regularly on Canvas (<http://canvas.ou.edu>). It is your responsibility to monitor your own grades for accuracy.

## Attendance/Participation

Your attendance to our class is an integral part of learning and your willingness to participate is integral to your success. You are responsible for keeping up with class material in the lecture.

## Homework and Quizzes

Written homework problems will be assigned regularly. You are expected to write detailed and comprehensive solutions for these sets, and the homework will be graded upon exposition as well as correctness. You are encouraged to work with each other on homework assignments. However, do not simply copy answers from each other as this will be a time to improve your exposition. The gradescope link will be provided on Canvas for each assignment.

The length of each quiz is 20 mins. The quizzes will be held in-person during class time. These are meant to assess your continual progress from week to week.

## Exams

There will be three in-class Exams spread throughout the semester. Please check the canvas page for exact dates.

## Policy on W/I grades:

Please review the University's grading regulations regarding the grades Withdrawl (W) and Incomplete (I): <https://www.ou.edu/registrar/transcripts-and-records/grading-policies>. Deadlines to add or drop course for the spring semester can be found at the university's academic calendar.

## Academic misconduct

All cases of suspected academic misconduct will be reported to the Office of Academic Integrity Programs as possible violations of University's Academic Integrity Code. If the violation is confirmed by the Academic Integrity Program's Office, the penalties can be quite severe, so the best advice is *Don't do it!* For more details on the University's policies concerning academic misconduct consult the URL

<https://www.ou.edu/integrity/students>

This link also has information about admonitions (essentially warnings about potential misconduct for fairly minor infractions) and your rights to appeal charges of academic misconduct. Students are also bound by the provisions of the *OU Student Code*, which can be found at

<https://www.ou.edu/studentconduct/students-rights-and-responsibilities>

## Students with disabilities:

The University of Oklahoma is committed to providing reasonable accommodation for all students with disabilities. Students with disabilities who require accommodations in this course are requested to speak with the instructor as early in the semester as possible. Students with disabilities must be registered with the Accessibility and Disability Resource Center (ADRC) prior to receiving accommodations in this course. The Accessibility and Disability Resource Center (ADRC) is at 730 College Avenue, Norman, OK 73019: email [adrc@ou.edu](mailto:adrc@ou.edu), (405) 325-3852 (Voice), (405) 217-3494 (VP), (405) 325-4491 (Fax). For more information, see

<https://www.ou.edu/adrc>

## Mental Health Support Services:

If you are experiencing any mental health issues that are impacting your academic performance, counseling is available at the University Counseling Center (UCC). The Center is located on the second floor of the Goddard Health Center, at 620 Elm Rm. 201, Norman, OK 73019. To schedule an appointment call (405) 325-2911. For more information, see <https://www.ou.edu/ucc>

## Religious Holidays:

It is the policy of the University to excuse absences of students that result from religious observances and to provide without penalty for the rescheduling of examinations and additional required class work that may fall on religious holidays.

## Title IX Resources and Reporting Requirement:

For any concerns regarding gender-based discrimination, sexual harassment, sexual misconduct, stalking, or intimate partner violence, the University offers a variety of resources, including advocates on-call 24/7, counseling services, mutual no contact orders, scheduling adjustments and disciplinary sanctions against the perpetrator. Please contact the Sexual Misconduct Office 405-325-2215 (8-5, M-F) or OU Advocates 405-615-0013 (24/7) to learn more or to report an incident. For more information, please contact the Institutional Equity Office (405) 325-2215 or [ieo@ou.edu](mailto:ieo@ou.edu)

<https://www.ou.edu/eoo/about/title-ix>

<https://www.ou.edu/eoo/about/sexual-misconduct-policies>

## Adjustments for Pregnancy/Childbirth Related Issues:

Should you need modifications or adjustments to your course requirements because of documented pregnancy-related or childbirth-related issues, please contact me as soon as possible to discuss. Generally, modifications will be made where medically necessary and similar in scope to accommodations based on temporary disability. For commonly asked questions, please see

<https://www.ou.edu/eoo/faqs/pregnancy-faqs>

## Emergency Protocol:

During an emergency, there are official university procedures that will maximize your safety.

<https://www.ou.edu/campusafety/emergency-management-department/procedures>

## Severe Weather:

If you receive an OU Alert to seek refuge or hear a tornado siren that signals severe weather,

1. LOOK for severe weather refuge location maps located inside most OU buildings near the entrances
2. SEEK refuge inside a building. Do not leave one building to seek shelter in another building that you deem safer. If outside, get into the nearest building.
3. GO to the buildings severe weather refuge location. If you do not know where that is, go to the lowest level possible and seek refuge in an innermost room. Avoid outside doors and windows.
4. GET IN, GET DOWN, COVER UP.
5. WAIT for official notice to resume normal activities.

## Armed Subject/Campus Intruder:

If you receive an OU Alert to shelter-in-place due to an active shooter or armed intruder situation or you hear what you perceive to be gunshots:

1. Avoid: If you believe you can get out of the area WITHOUT encountering the armed individual, move quickly towards the nearest building exit, move away from the building, and call 911.
2. Deny: If you cannot flee, move to an area that can be locked or barricaded, turn off lights, silence devices, spread out, and formulate a plan of attack if the shooter enters the room.
3. Defend: As a last resort fight to defend yourself.