

Differential Eq/Linear Algebra

MATH2250 401

Course Description

Ordinary differential equations with applications to mechanics, electrical circuits, and populations; qualitative analysis; intro. to numerical methods; Laplace transforms; linear algebra applied to solution spaces, systems of DEs. It is recommended that students take MATH 2210 with Departmental Approval in the same semester as this course.

Pre-Requisite: Within the last year, MATH 1220 w/C grade or better.

Semester: All

Course Prerequisites

Completion of Calculus II (Math 1220) with a grade of at least C, preferably better, completed within the last year.

Communication Plan

Example language:

I will respond to email within 24 hours.

I will offer feedback on exams within 1 week and homework assignments within 2 weeks.

The best way to contact me is via the Canvas Inbox, as I will prioritize this email over other modes of communication.

Required Text or Materials

Title: Differential Equations and Linear Algebra

Authors: Farlow, et al.

Edition: 2nd Edition

For more information on textbook accessibility, contact Accessibility & Disability Services at ads@slcc.edu.

Brief Description of Assignments/Exams

HOMEWORK: Your instructor will post a list of practice exercises from the text. Working these exercises is considered a minimum for you to demonstrate the learning objectives of the course and sufficient mastery of the course's concepts/techniques, etc. You are encouraged to work more exercises than those assigned from the text or online. Regular practice is essential in learning mathematics. You should be prepared to spend at least two hours studying outside of the class for each hour you spend in class. However, many, many students find that much more time is required in order to perform as well as they desire on exams; know yourself and learn how to assess your own learning.

Each assignment will be graded out of 10 points and is due on the day of the corresponding exam. Late assignments will receive a 1-point penalty if one class late, and a 2-point penalty beyond that. All written assignments must be completed neatly and legibly via paper and pencil/pen. All steps in solving problems must be included to receive credit for written homework assignments. Also, please make sure your assignments are labeled, and your name clearly appears on the front/cover page. Practice is crucial for the mastery of calculus. Please keep up with assignments and be prepared to ask questions on homework in class.

REGULAR EXAMS: There will be three regular exams during the semester, which will be timed exams taken during class. Full credit will be awarded on test problems only if your work can be readily followed and solutions are precisely and clearly indicated. Your lowest test score will be replaced by the score on your final (if higher).

FINAL EXAM: The final exam will follow the same format as regular exams, although it will be cumulative. As mentioned above, the score on your final will also replace your lowest test score (if higher).

- Homework - 15%
- Regular Exams - 60% (20% each)
- Final Exam - 25%

Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
	Exam 1	Assignment	100
	Exam 1 Review Materials	Assignment	
	Exam 2	Assignment	100
	Exam 2 Review Materials	Assignment	
	Exam 3	Assignment	100
	Exam 3 Review Materials	Assignment	
	Final Exam	Assignment	100
	Final Review Materials	Assignment	
	Homework 2	Assignment	10
	Homework 3	Assignment	10
	Internet Cafe	Discussion	0
	Questions?	Discussion	0
9/24	Homework 1	Assignment	10

Grading Scale

A 93 – 100 %	C 73 – 76 %
A- 90 – 92 %	C- 70 – 72 %
B+ 87 – 89 %	D+ 67 – 69 %
B 83 – 86 %	D 63 – 66 %
B- 80 – 82 %	D- 60 – 62 %
C+ 77 – 79 %	E 0 – 59 %

How to Navigate to Canvas

Institutional Policies

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements. By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

You can access the document by clicking on the following link:

<https://slcc.instructure.com/courses/530981/pages/institutional-syllabus>

Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, please visit the Institutional Syllabus under the Tutoring and Learning Support tab:

<https://slcc.instructure.com/courses/530981/pages/institutional-syllabus>. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, please visit the Institutional Syllabus under the Advising and Counseling Support Services tab: <https://slcc.instructure.com/courses/530981/pages/institutional-syllabus>. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

[SLCC Student Academic Calendar](#)