

Sierra College
Math 33
Differential Equations/Linear Algebra
Fall Semester
2018

Instructor:

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Office Hours:

MW: 11:45-12:15,
TTh: 9:30-12:30.
Office hours will be held in the Math
Lab, V329.

Materials:

Text: **Differential Equations and Linear Algebra**, 4th edition, by Goode and Annin; Pearson/Prentice Hall.

Calculator: A scientific calculator is sometimes allowed. In addition, a graphing calculator is recommended. Either a graphing calculator or a computer algebra system will be used periodically in the classroom for demonstration purposes. The graphing utility device is an excellent tool for acquiring the understanding of many of the concepts of this course due to its ability to rapidly investigate both the numerical and graphical aspects of these concepts. However, there will not be any opportunity to use graphing calculators, cell phones, or any other online devices on the quizzes and exams. A scientific calculator is allowed on some exams and quizzes.

Workload:

The material is treated with a scope and intensity that requires the student to study independently outside of class. This course requires a minimum of two hours of work outside the classroom for every one hour in class.

Course Identification:

Math 33, Differential Equations/
Linear Algebra
Course Code #86457
V324, MTWTh 8:00-9:20 am
6 units

Math Lab:

The Math Lab is located in V329.
This is free, walk in tutoring.
Hours: TBA

Prerequisites:

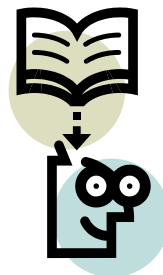
Math 31, Calculus II. But Math 32, Calculus III, is strongly recommended.

Withdraw Date:

September 3, without a W
October 30, with a W

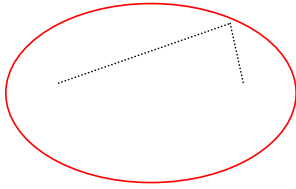
Holidays:

September 3, Labor Day,
November 12, Veterans Day
November 22, Thanksgiving Day



Attendance:

Attendance is not incorporated in The final course grade. Nevertheless, a solid attendance record is necessary to succeed in a course that is both rigorous and fast paced.



Homework:

Homework will be assigned daily, but will not be collected. Instead, a quiz will be given each Thursday (except those days on which we have an exam) covering the material from the previous homework.

Exams:

There will be four 100 point exams and a 150 point comprehensive final exam. The lowest of the four regular exam scores or the quiz total will be dropped in the computation of the final course grade. The exam dates are given below:

Exam I: September 13

Exam II: October 4

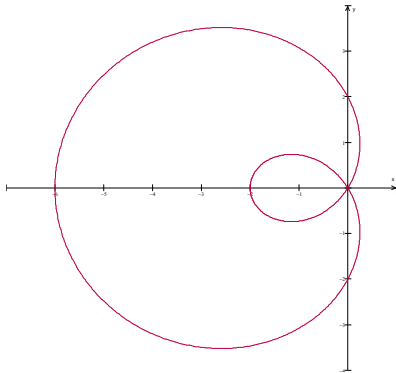
Exam III: October 25

Exam IV: November 15

Final Exam: TBA

Drop/Refunds:

A student must drop him/herself in order to be eligible for a refund. Instructor drops do not generate refunds.



Student Outcomes:

Through homework assignments, quizzes, exams, projects & classroom

Grading:

Quizzes: 100 pts

Exams: 400 pts

Final Exam: 150 pts

Quizzes:

There will be more than 10 quizzes, worth 10 points each. The top 10 scores will be used in the computation of your final course grade.

Group Work:

Working with other students outside of class is strongly encouraged. The Math Lab is an ideal location for working with your peers. Weekly Review sessions are strongly encouraged.

Honesty Policy:

Cheating is of course forbidden. College policy on cheating, as outlined in the student conduct code, will be strictly enforced.

Topical Outline:

- I. First Order Differential Equations
- II. Elements of Linear Algebra
- III. Linear Transformations and Linear Differential Operators
- IV. Linear Differential Equation
- V. Equations with Constant Coefficients
- VI. Laplace Transformations
- VII. Series Solutions
- VIII. Matrices and Systems of Linear Equations

Other Services:

The college tutor lab, in which one-on-one tutoring

discussions, the student will be able to:

1. Solve first and higher order ordinary and linear differential equations; using Laplace transformations, numerical, and series methods.
2. Utilize theorems from linear algebra and use matrices to solve systems of equations, including differential equations.
3. Utilize theorems from linear algebra to classify sets and mappings.
4. Logically present clear, complete, accurate, and sufficiently detailed solutions to communicate reasoning and demonstrate the method of solving problems.

arrangements can be made, is located in the LRC 402. The proctoring center is located in LRC 441. A student ID must accompany the student if services here are accessed.

Miscellaneous:

1. No work will be graded if it is on paper from a ringed binder with frayed ends left attached.
2. You are responsible for keeping tabs on your grade. I will not be available for questions involving: "What is my grade"

If You Want Your Work to Be Accepted and Graded, Then the Following Must Be Followed:

- Remove any fringe from paper torn out of spiral notebook.
- Do not use graph paper unless it is used solely for graphing.
- All work must be clear and organized.
- A full name must be included.
- Any take home work must be turned in at the very beginning of class on the next class meeting. No late materials will be accepted.
- All paper turned in must be on paper that is approximately 8½ X 11.

Harassment and Discrimination:

Sierra College is committed to providing a safe learning environment, free of harassment and discrimination as described in District policies found on our website. It is my goal that you feel you can share information related to your life experiences in classroom discussions, in your written work, and in our one-on-one meetings and I will seek to keep information you share private to the greatest extent possible; however, I am required to report information about incidents of gender based discrimination, violence and harassment to the College's Title IX Coordinator.