

**Instructor:** Fred Kuczmariski

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**Hours:** 9:30-10:20 M-F and by appointment.

**Texts:** *Fundamentals of Differential Equations, Seventh Edition*, Nagle, Saff, and Snider

**Prerequisites:** Math 163 (2.0 or above) or equivalent

**Course Description:** Math 207 focuses on linear and non-linear differential equations and systems of ODEs. Qualitative, graphical, numerical and symbolic techniques will be discussed. We will also investigate applications that can be modeled with differential equations. We will be discussing the following topics in the following sections:

Chapter 1 Introduction (1.1-1.4)

Chapter 2 First Order Differential Equations (2.1-2.6)

Chapter 3 Mathematical Models (3.1-3.4)

Chapter 4 Linear Second Order Equations (4.1-4.9)

Chapter 5 Introduction to Systems and Phase Plane Analysis (5.1-5.6)

**Quizzes:** A twenty minute quiz will be given each Tuesday, except in the event of a test. No makeups will be given. There will be seven quizzes. Your six highest scores will count toward your grade.

**Tests:** There will be two tests - April 28th and May 27th. These dates are subject to change. Makeups will be given only in the event of illness or emergency, provided you contact the instructor **BEFORE** the exam. No notes will be permitted.

**Final:** The final is on Wednesday, June 10, 8:00am - 10:00am. It will be comprehensive. No notes will be permitted. This date is set by the college and cannot be changed for any reason. Please plan to attend.

**Problem of the Week:** One problem will be collected each Thursday. These problems will be more difficult than those found in the text and I encourage you to work with your classmates in solving these problems. However, it is not permissible to copy the work of another student. Should this occur, all students involved will receive a 0 for that problem. If you use the ideas of other students, be sure to give them credit. You will be graded on the clarity of your work as well as its mathematical accuracy.

#### **Writing Requirements for Homework:**

State the entire problem at the top of the page.

Include brief but sufficiently clear explanatory sentences throughout the solution.

Define all variables you introduce with units.

Be sure your work is legible and organized and proceeds vertically down the page.

End with a concluding sentence that answers the question.

Use standard-size paper without tears or fringes.

Staple any work that is more than one page.

Write neatly in pencil. Do not cross out errors. If you find yourself erasing extensively, stop and start again on a fresh page.

Use a straight edge for coordinate axes. Label axes with variables and units.

The problems are due at 3:00pm. Late solutions turned in by 11:30am the following day will receive a deduction of 5 points. Later solutions will not be accepted.

**Homework:** Homework from the text will be assigned weekly, but will not be collected. To do well in this class it is essential that you do the homework daily.

**P/NC Option Grading:** Those students choosing this option must do so by May 1, by submitting a Pass-Option Card (signed by the instructor) to the registration desk, otherwise a decimal grade will appear on your transcript. No exceptions will be made to this policy. If an emergency situation occurs after this date that affects your ability to attend class and perform class work, you can fill out a formal request for a Z grade.

**Withdrawals:** The last day to withdraw from the class is May 11.

**General Comments:** To master the material, it is essential that you set aside time **each day** to think about the homework problems and the concepts introduced in class. You should plan on spending an average of twelve to fifteen hours per week outside of class. If you do not have this much time to spend studying, I recommend taking the class another quarter when you have more free time.

**Cheating and Plagiarism:** Any student caught cheating on a quiz or a test will get a 0.0 for the course.

**Emergencies:** If school is closed for any reason, we will start where we left off when class resumes. If we were scheduled to have an exam the day school is canceled, the exam will take place the first day back at school.

**Electronic Devices** All electronic communication devices such as cell phones and pagers must be turned off during class.

**Special Services** Students with disabilities have the right to request and receive reasonable accommodations to ensure access to programs and facilities at Shoreline Community College. To receive reasonable accommodations, students are responsible for requesting accommodations and documenting the nature and extent of their disability in a timely manner. Students should direct their requests for reasonable accommodation to the Services for Students with Disabilities office. Contact Shoreline's coordinator of Services for Students with Disabilities at 546-5832 or 546-4520 (TTY) in the Foss Building, Room 2133J for more information or for an assessment of your individual needs.

**Grading:** The grade will be based on the following. The point distribution shown below is approximate and is subject to change.

Quizzes	6 @ 25 points each for 150 points
Problem of the Week	9 @ 20 points each for 180 points
Tests	2 @ 40 points each for 80 points
Final	1 @ 80 points

The grading scale is linear and will be approximately as follows:

95%: 4.0      80%: 3.0      65%: 2.0

The information in this syllabus is subject to change at the discretion of the instructor. Students will be notified promptly of any such changes. It is the responsibility of the students to keep informed of such changes.