

MATHEMATICS 225

INTRODUCTION TO DIFFERENTIAL EQUATIONS

Winter

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TEXT:

Zill, A First Course in Differential Equations with Applications, 7th Edition, Brooks/Cole, 2000.

OUTLINE: SECTIONS

Chapter 1: Introduction to Differential Equations. 1.1 - 1.3

Chapter 2: First Order Differential Equations. 2.1 - 2.4

Chapter 3: Modeling with First Order Equations. 3.1 - 3.2

Chapter 4: Differential Equations of Higher Order. 4.1 - 4.9

Chapter 5: Modeling with Second Order Differential Equations. 5.1.1 - 5.1.3

Chapter 6: Series Solutions of Linear Equations. 6.1 - 6.4

Chapter 7: Laplace Transforms. 7.1 - 7.6

EVALUATION:

The final grades in the course will be determined from marks on the assignments, on Maple Labs, on the midterms, and on the final exam.

Assignments 20%

Maple Labs 10%

Midterm 20%

Final Exam 50%&

*The final can be counted as 100% if the final mark exceeds the term mark.

This, however, is only an option if all of the term work has been satisfactorily completed.

Grade scale:

F D C C + B- B B+ A - A A +

[0, 50) [50, 60) [60, 65) [65, 70) [70, 75) [75, 80) [80, 85) [85, 90) [90, 95) [95, 100]