Mathematics 3350 - 101
Higher Mathematics for Engineers & Scientists I

Instructor: Anthony Gruber
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Office Hours: MWF 12-1 or by appointment
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Text: <u>Advanced Engineering Mathematics</u>, 5th Revised Edition by Dennis G. Zill and Michael R. Cullen, published by Jones & Bartlett

ABOUT THE COURSE: This course covers topics in ordinary differential equations. Topics to be covered include: first-order differential equations, modeling with first-order differential equations, higher-order differential equations, modeling with higher-order differential equations, Laplace transforms, series solutions of linear equations.

STUDENT LEARNING OUTCOMES:
Math 3350 students will study topics of ordinary differential equations, their solutions, and applications to physical sciences and engineering. In particular the students will learn:
- to recognize a differential equation and its solution
- to compute solutions of first order differential equations
- to compute solutions of higher order differential equations
- to use Laplace transforms
- the fundamental properties of power series, and how to use them to solve linear differential equations

ASSESSMENT OF LEARNING OUTCOMES:
The expected learning outcomes for the course will be assessed through:
exams, homework, in-class quizzes, and class discussion

There will be no make-up exams. If you do not miss any exams and you have three or fewer class absences, your one lowest exam grade will be replaced by the final exam grade, provided the final exam score is higher.

Grading:

Homework & Quizzes:	30%
Tests (2):	20% each
Final Exam:	30%

Scale:

A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	Below 60%

Note about grading scale: Grading is done based on the performance of the class. The cutoffs may be lowered, but will never be made stricter than what is found above.

Homework: Homework problems will be assigned on WeBWorK at http://webwork.math. ttu.edu/webwork2/spr18agruberm3350s101. (Your initial username is your eRaider name, and your initial password is your R-number, including the capital R.) Each assignment will be due at 11:59 PM on the specified date.

Rough Schedule	
Week 1 — 4	First-Order Differential Equations
Week 5 — 9	Higher-Order Differential Equations
Week 10 — 14	Laplace Transforms
Week 15 — 16	Series Solutions of Linear Equations

ABSENCE FOR OBSERVANCE OF RELIGIOUS HOLY DAY:
A student who intends to observe a religious holy day should make that intention known to the instructor prior to the absence. A student who is absent from classes for the observance of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence.

ADA NOTIFICATION:
Any student who, because of a disability, may require some special arrangements in order to meet course requirements should contact the instructor as soon as possible to request necessary accommodations. Students should present appropriate verification from Student Disability Services (AccessTECH). No requirement exists that accommodations be made prior to completion of this approved process.

ACADEMIC HONESTY:
It is the aim of the faculty of Texas Tech University to foster a spirit of complete honesty and high standards of integrity. "Scholastic dishonesty" includes but is not limited to cheating, plagiarism, collusion, falsifying academic records, misrepresenting facts, and any act designed to give unfair academic advantage to the student.

CIVILITY:
Students are expected to assist in maintaining a classroom environment conducive to learning. In order to assure that all students have an opportunity to gain from time spent in class, troublesome behavior will not be tolerated. At a minimum, this includes using cellular phones, making offensive remarks, reading newspapers, leaving class early, arriving to class late, sleeping or engaging in any other form of distraction.

IMPORTANT DATES:
February 2nd — Last Day to Drop a Class Without Penalty
March 10-18 – Spring Break
March 28th — Last Day to Drop a Class (counts against drop limit)

February 28 Exam 1
April 11 Exam 2
May 11th, 1:30 PM-4:00 PM   Final Exam

CAMPUS RESOURCES:
+ TTU Math & Stats Tutoring & Study Center   free tutorial service in MATH 106
+ Tutoring List   http://www.math.ttu.edu/Undergraduate/Resources/TSC/
privatetutors.shtml