Math 3350 Section 6 Spring 2017

Room & Time:	MWF 11:00-11:50 AM, Math Room 015 (Basement)
Instructor:	Dr. David S. Gilliam
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Web Page:	http://www.math.ttu.edu/~gilliam/ttu/f17/m3350_f17_s6/m3350_f17_6.html
Office Hours:	7:00-8:50, MWF and by appointment
Text:	Advanced Engineering Mathematics, 5th Edition by Dennis G. Zill and Warren S. Wright

Calculators: Calculators will **NOT** be allowed on exams.

Expected Outcomes Math 3350

This course is intended to develop students skills in the following areas:

Course Outline Math 3350

Chap 1 *Introduction to Differential Equations* (A) Section 1.1, Definitions and Terminology (B) Section 1.2, Initial Value Problem

Chap 2 *First-Order Differential Equations* (A) Section 2.1, Solution Curves (B) Section 2.2, Separable Variables (C) Section 2.3, Linear Equations (D) Section 2.4 Exact Equations (E) Section 2.5 Solution by Substitution (F) Section 2.6 A Numerical Method (G) Section 2.7 Linear Models (H) Section 2.8 Nonlinear Models

Chap 3 *Higher-Order Differential Equations* (A) Section 3.1, Introduction, Homogeneous and Nonhomogeneous Equations. (B) Section 3.2, Reduction of Order (C) Section 3.3, Homogeneous Constant Coefficient Equations (2nd and higher order) (D) Section 3.4 Undetermined Coefficients (E) Section 3.5, Variation of Parameters (F) Section 3.6, Cauchy-Euler Equations (G) Section 3.8 Briefly discuss Spring/Mass system

Chap 4 *Laplace Transforms* (A) Section 4.1, Definition of Laplace Transform (B) Section 4.2, Inverse Laplace Transforms and Transforms of Derivatives (C) Section 4.3, The Shift Theorems and Heaviside function (D) Section 4.4, Convolutions and Integral Equations (E) Section 4.5, Dirac Delta Function

Chap 5 *Series Solutions of Linear Equatios* (A) Section 5.1, Power Series Solutions about Ordinary Points (B) Section 5.3, Special Functions (briefly)

Assessment of Learner Outcomes (Grading Policy): Assessment of learning outcomes will be based on exams and homework assignments. In more detail:

1. There will be 3 exams given in class. A sample exam will be posted on the class webpage and will be worked (in class) in advance of each exam. Each exam counts as 30% of your grade. A missed exam gives a score of 0, i.e., **There are NO makeup exams** except for the final exam as described below. Under extreme (and well documented) circumstances, arrangements might be made to take a test in advance.
2. There will be approximately 15 online homework assignments using WebWork. The two lowest homework scores will be dropped and the remaining scores will be averaged and count as 10% of your grade.

3. The final exam will consist of two parts that will be graded independently producing two scores. Each of these two scores can be used to replace a previous lower test score. Therefore the final exam provides the opportunity to make up or replace up to 2 previous test scores. This final is a comprehensive final.
4. After the final you will have 5 test scores (3 scores for the in-class exams and 2 scores from the final exam). Your final grade for the course will be determined by the average of your best 3 test scores (30% each) and 10% for your homework score.
   Grading scale: $\boxed{\text{90-100, A}}$; $\boxed{\text{80-89, B}}$; $\boxed{\text{70-79, C}}$; $\boxed{\text{55-69, D}}$; $\boxed{< 55, \text{F}}$

Important Dates:

(1) August 28, Monday, First day of class
(2) Labor day, Monday, September 4th.
(3) Exam 1 on Monday, September 25th.
(4) Exam 2 on Wednesday, October 25th.
(5) Monday, October 30th, Last day for student-initiated drop with penalty (counts on drop limit).
(6) Thanksgiving Wednesday, November 22 - Sunday November 26th.
(7) Exam 3 on Wednesday, November, 29th.
(8) November 30, Begin period of no exams.
(9) December 6th, Wednesday, Last day of classes.
(10) Final Exam 7:30 a.m. to 10:00 a.m., Saturday, December 9th, Regular Classroom.

Attendance: Attendance will be taken daily to provide evidence of absence. You are expected to attend class. In particular students are responsible for any and all information given in class, e.g., test dates, quizzes, assignments, and general course material. The primary reason for poor performance of students on tests and homework is repeated failure to attend class.

ADA Accommodations: Any student who, because of a disability, may require special arrangements in order to meet course requirements should contact me as soon as possible to make necessary arrangements. The instructor may request verification of need from the Dean of Students Office.

Religious Holy Day: 1. "Religious holy day" means a holy day observed by a religion whose places of worship are exempt from property taxation under Texas Tax Code ß11.20. 2. A student who intends to observe a religious holy day should make that intention known to the instructor prior to the absence. 3. Any a student who is to be absent from classes for the observance of a religious holy day should arrange with the instructor (in advance) to complete any work for that period.

Student Honesty and Classroom Policy: Cheating will not be tolerated and may result in severe academic sanctions. Disruptive behavior during class will not be tolerated. All cell phones are to be turned off upon entering the classroom – there are no exceptions.. Disruptive behavior includes talking out of turn, cell phones ringing during class, texting and repeatedly arriving late or leaving class early. Class starts promptly on the hour. Please try to arrive on time.