Fall 2015. MATH3350. Section 016. (CRN 26815)

Higher Mathematics for Engineers and Scientists I

Instructor: Luan Thach Hoang
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Office hours: T Th 2:30 pm - 4:00 pm

Classroom and Time: MA 016, T Th 12:30 pm - 1:50 pm.

Course website: *http://www.math.ttu.edu/~lhoang/2015Fall-M3350/*
Updates about the course and other related announcements will be posted on this webpage.

Prerequisite: MATH 2350 or MATH 2450.

Text: *Advanced Engineering Mathematics*, by Dennis G. Zill and Warren S. Wright, 5th Revised Edition, published by Jones & Bartlett (2013)

Course Description: 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 transform; Series Solutions of Linear Equations.

Course Outline:

- Chapter 1 - Introduction: Sections 1.1, 1.2
- Chapter 2 - First-Order Differential Equations: Sections 2.1-2.8
- Chapter 3 - Higher-Order Differential Equations: Sections 3.1-3.6 and 3.8
- Chapter 4 - Laplace Transforms: Sections 4.1-4.5
- Chapter 5 - Series Solutions of Linear Equations: Sections 5.1, 5.3
- Chapter 6 (Selected Topics) - Numerical Solutions of Ordinary Differential Equations: Sections 6.1-6.4

Grading Policy: Homework will be assigned weekly and will count for 25% of the grade. The lowest homework score will be dropped. There will be three midterm exams in class, each will count for 15% of the grade. The final exam will count for 30% of the grade. All in-class exams are closed-book. No make-up exams are given unless legitimate documents for excuses are presented to the instructor at least a week in advance.
Grading Scale: A: 90%-100%, B: 80%-89%, C: 70%-79%, D: 60%-69%, F: below 60%

Homework Assignments: Online homework will be assigned though Webwork. Students will receive the instructor's message for login information. Due dates are indicated on each assignment. Students should spend very first week to get familiar with the system.

Webwork Link: http://webwork.math.ttu.edu/webwork2/f15lhoangm3350s016

Attendance Policy: Students must go to lectures and attendance will be taken. If you miss no more than four lectures, a bonus of three points will be added to your final grade.

Calculators: Only scientific calculators are allowed in exams. These calculators can calculate the values of the standard algebraic, trigonometric, exponential and logarithmic functions. Graphing calculators and calculators that can do symbolic manipulations are not allowed.

Examination Schedule:

- Midterm 1: Thursday, September 17
- Midterm 2: Thursday, October 15
- Midterm 3: Thursday, November 19
- FINAL EXAM: Friday, December 4, 10:30 a.m. - 1:00 p.m., Room MA 016.

Critical Dates:

- August 24, Tuesday: Classes begin.
- September 7, Monday: Labor Day. University holiday.
- September 9, Wednesday: Last day for student-initiated drop on MyTech without academic penalty .
- October 26, Monday: Last day for student-initiated drop on MyTech with academic penalty
- November 23 - December 2, Monday – Wednesday: No examinations.
- November 25 – 29, Wednesday – Sunday: Thanksgiving holiday.
- December 2, Wednesday: Last day of classes.

TTU OPs:

ADA accommodations (TTU Operating Policy 34.22). 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 make any necessary arrangements. Students should present appropriate verification from Student Disability Services, during the instructor's office hours. Please note instructors are not allowed to provide classroom accommodations to student until appropriate verification from Student Disability Services has been provided. For additional information, you may contact the Student Disability Services office at 335 West Hall or 8067422405.

Absence for observance of a religious holy day (TTU Operating Policy 34.19). 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 11.20. 2. 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. 3. A student who is excused under Section 2 may not be penalized for the absence; however, the instructor may respond appropriately if the student fails to complete the assignment satisfactorily.

Academic Honesty (TTU Operating Policy 34.12). It is the aim of the faculty of Texas Tech University to foster a spirit of complete honesty and high standard of integrity. The attempt of students to present as their own any work not honestly performed is regarded by the faculty and administration as a most serious offense and renders the offenders liable to serious consequences, possibly suspension. “Scholastic dishonesty” includes, but it not limited to, cheating, plagiarism, collusion, falsifying academic records, misrepresenting facts, and any act designed to give unfair academic advantage to the student (such as, but not limited to,

submission of essentially the same written assignment for two courses without the prior permission of the instructor) or the attempt to commit such an act.

Advice: Come to class regularly, work on homework problems. Ask questions in class and get help from the instructor during the office hours. Master the material quickly and *do not* wait too late until the midterms or the final exam. Students are encouraged to give feedbacks to the instructor during the semester.

NOTE: When needed, the instructor will communicate with the students using their TTU email addresses. At the beginning of the semester, the instructor will send out two special email messages. One is to confirm the students' email addresses, the other one is about Webwork. If a student does not receive those messages by the time of the second class (Thursday, Aug. 27), he/she must contact the instructor immediately.