

Syllabus
Ordinary Differential Equations
MATH 3303-001
Fall 2016

Instructor: Dr. N. S. Hoang

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Office phone: 678-839-5336.

Office hours: T-Th 10:00 – 12:00 PM.

Class meeting time: T-Th 12:30 – 1:45 PM

Class room: Boyd 301.

Prerequisites: Grade of C or better in Calculus II.

Text: *Differential Equations with Boundary-Value Problems*, 8th Edition, Dennis G. Zill and Warren S. Wright, Brooks/Cole, ISBN: 978-1-111-82706-9. The text of this book is available online with your paid subscription to WebAssign.

Required Equipment: A Webassign software license is required for this course.

WebAssign class key: westga 0162 2874

Use of calculators: No calculator is allowed during exams.

Grading: Grades are based on a total of 700 pts given as follows

Total	Homework	Quizzes	Exam 1	Exam 2	Exam 3	Final Exam
700 pts	100 pts	100 pts	100 pts	100 pts	100 pts	200 pts

Exams: There are three midterm exams, given during the regular lecture time. The dates for midterm exams are September 6, October 4, and November 1. Final exam is scheduled on Thursday, Dec 8, 11:00–1:00 PM and is a comprehensive exam.

Homework: Homework will be completed online using WebAssign. Homework will be scaled to count one hundred points.

Quizzes: Quizzes will be given during class lectures.

Attendance: Students are expected to attend and fully participate in all classes. Attendance is recorded at random dates during the semester.

Common Language for Course Syllabi: Students, please carefully review the following information at the link <https://www.westga.edu/student-services/counseling/assets-counseling/docs/common-language-for-course-syllabi.pdf>. It contains important material pertaining to your rights and responsibilities in this class. Because these statements are updated as federal, state, university, and accreditation standards change, you should review the information each semester.

Withdrawal Policy: The deadline for an automatic W withdrawal is: September 30th. For more information about withdrawal policy, please read the information at the link

<https://www.westga.edu/student-services/registrar/drop-add-and-withdrawal.php>

Make-Up Work: There are NO make-up grades for ANY reason. Students having an absence for any reason on the day homework or a quiz is due must complete the assignment on time online. Students having an unexcused absence on the day of a graded assignment will receive a grade of zero for that assignment. Students having an excused absence on the day of a test will have their test average entered for the missed grade. Absences must be excused before they occur except in extraordinary cases, such as active military duty, jury duty, or hospitalization. Being sick, short of being hospitalized, is not an excuse. If you anticipate being absent from class for a religious holiday, it is your responsibility to notify me in advance.

Learning out comes

Students should be able to demonstrate

1. The ability to determine if a first order initial value problem (IVP) is guaranteed to have a unique solution.
2. The ability to solve first order IVPs by using techniques such as separation of variables, integrating factors, and realization of exactness.
3. The ability to solve higher order IVPs involving constant coefficients by using Laplace Transforms, undetermined coefficients, and variation of parameters.
4. The ability to find equilibrium solutions of differential equations and their stability using a phase plane analysis.
5. The ability to solve physical problems from sciences evolving first order IVPs.
6. The ability to solve systems of first order linear ordinary differential equations (ODEs) with constant coefficients using techniques from Linear Algebra in addition to Laplace Transforms.
7. The ability to do a phase plane stability analysis of equilibrium solutions to linear systems of ODEs.

TENTATIVE SCHEDULE

Week	Day	Date	Section
1	Thu	Aug 11	1.1
2	Tue	Aug 16	2.2-2.3
	Thu	Aug 18	2.3-2.4
3	Tue	Aug 23	2.5-2.6
	Thu	Aug 25	2.6-3.1
4	Tue	Aug 30	3.1-3.2
	Thu	Sep 1	REVIEW
5	Tue	Sep 6	TEST 1
	Thu	Sep 8	4.1-4.2
6	Tue	Sep 13	4.3-4.4
	Thu	Sep 15	4.4-4.5
7	Tue	Sep 20	4.6-4.7
	Thu	Sep 22	4.7-4.8
8	Tue	Sep 27	4.9-5.1
	Thu	Sep 29	5.1- REVIEW
9	Tue	Oct 4	TEST 2
	Thu	Oct 6	5.1-5.2
10	Tue	Oct 11	5.1-5.2
	Thu	Oct 13	6.1-6.2
11	Tue	Oct 18	6.2-6.3
	Thu	Oct 20	7.1 - 7.2
12	Tue	Oct 25	7.2-7.3
	Thu	Oct 27	REVIEW
13	Tue	Nov 1	TEST 3
	Thu	Nov 3	7.4-7.5
14	Tue	Nov 8	7.5-7.6
	Thu	Nov 10	7.6-8.1
15	Tue	Nov 15	8.2 - 8.3
	Thu	Nov 17	8.3 - 8.4
16	Tue	Nov 22	Thanksgiving
	Thu	Nov 24	Thanksgiving
17	Tue	Nov 29	10.2 - REVIEW
	Thu	Dec 01	REVIEW
	Thu	Dec 8	FINAL: 11:00-1:00 PM