

Syllabus
Ordinary Differential Equations
MATH 3303-001
Spring 2017

Instructor: Dr. N. S. Hoang

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Office: Boyd 324

Office phone: 678-839-5336.

Office hours: MWF: 8:45 am – 9:50 am; 12:55 pm – 1:30 pm.

Class meeting time: MWF: 12:05 pm – 12:55 pm

Class room: Boyd 305.

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.

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 Feb 5, Mar 5, and Apr 9. Final exam is scheduled on Monday, May 7, 11:00 am-1:00 pm and is a comprehensive exam.

Homework: A list of homework assignments will be provided. 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: Feb 28. 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	Wed	Jan 10	1.1-1.3
	Fri	Jan 12	1.1-1.3
2	Mon	Jan 15	NO CLASS
	Wed	Jan 17	2.1-2.2
	Fri	Jan 19	2.3
3	Mon	Jan 22	2.4
	Wed	Jan 24	2.5
	Fri	Jan 26	2.6
4	Mon	Jan 29	3.1
	Wed	Jan 31	3.2
	Fri	Feb 2	REVIEW
5	Mon	Feb 5	TEST 1
	Wed	Feb 7	4.1
	Fri	Feb 9	4.2
6	Mon	Feb 12	4.3
	Wed	Feb 14	4.4
	Fri	Feb 16	4.5
7	Mon	Feb 19	4.6
	Wed	Feb 21	4.7
	Fri	Feb 23	4.9
8	Mon	Feb 26	5.1
	Wed	Feb 28	5.1
	Fri	Mar 2	REVIEW
9	Mon	Mar 5	TEST 2
	Wed	Mar 7	5.2
	Fri	Mar 9	5.3
10	Mon	Mar 12	6.1
	Wed	Mar 14	6.2
	Fri	Mar 16	6.3
11	Mon	Mar 19	SPRING BREAK-NO CLASS
	Wed	Mar 21	SPRING BREAK-NO CLASS
	Fri	Mar 23	SPRING BREAK-NO CLASS
12	Mon	Mar 26	7.1
	Wed	Mar 28	7.2
	Fri	Mar 30	7.3
13	Mon	Apr 2	7.4
	Wed	Apr 4	7.5
	Fri	Apr 6	REVIEW
14	Mon	Apr 9	TEST 3
	Wed	Apr 11	7.6
	Fri	Apr 13	8.1
15	Mon	Apr 16	8.2
	Wed	Apr 18	8.3
	Fri	Apr 20	8.4
16	Mon	Apr 23	REVIEW
	Wed	Apr 25	REVIEW
	Fri	Apr 27	REVIEW
17	Mon	April 30	
	Wed	May 2	
	Fri	May 4	
18	Mon	May 7	FINAL: 11:00 am-1:00 pm