TEXT: *Fundamentals of Differential Equations and Boundary Value Problems* by Nagle, Saff Snider, 6th Ed.

DAILY WORK: The exercises suggested below represent a minimal assignment. Some students may have to work additional exercises from the text to attain sufficient mastery of the material.

PREREQUISITES: Math 106, 107, and 208. You are expected to know differentiation and integration techniques and to be familiar with vector fields and parameterized curves. It would be helpful if you have some familiarity with the basic facts of matrix theory and 2 dimensional linear systems, although this will be reviewed.

EXAMS: Examinations may, in part, test whether the student can apply concepts learned in the course to new situations; thus, problems appearing on the exams may not be exactly like exercises in the text. **You are not allowed to have on your person during exams any device that can access the internet or communicate in any way. Cellphones, Apple watches, etc. should be put away in backpacks/purses.**

FINAL EXAM: All Math 221 students are required to take a comprehensive final examination covering all the topics listed on this syllabus, barring a specific announcement to the contrary. For this section, the **final exam will be scheduled during the final exams week. Date, time, and room will be announced in advance.** You must arrange your personal and work schedules to allow you to take the exam at this scheduled time. Students with conflicting exam schedules may be permitted to take an alternate final exam AFTER the regularly scheduled exam.

APPEALS POLICY: The Department of Mathematics and Statistics does not tolerate discrimination or harassment on the basis of race, gender, religion, or sexual orientation. If you believe you have been subject to such discrimination or harassment, in this or any other math course, please contact the department. If, for this or any other reason, you believe your grade was assigned incorrectly or capriciously, appeals may be made to (in order) the instructor, the department chair, the departmental grading appeals committee, the college grading appeals committee, and the university grading appeals committee.

GRADING SCALE:

     Lab Assignments: 5 points each. Check the class web page for assignments and due dates.

     Quiz: Quiz on every lecture Friday, 10 points each.

     Project: One project, 20 points.

     Tests: 3 hour tests, 100 points each.

     Final Exam: 200 points.

     Attendance: Required, every 5 unexcused absences equal one half letter grade deduction.

     Course Grade: Standard scale conversion from your numerical grand percentage to letter grades.

WEEK	DATES	SECTIONS	SUGGESTED EXERCISES
1	Aug 24 - 28	1.1	p5: 1-10, 13, 15, 16
		1.2	p13: 1, 3, 5, 9, 11, 20, 23, 24, 25
		1.3	p21: 1, 3, 5
2	Aug 31 - Sep 4	1.4	p28: 1, 3, 7,
		2.1,2.2	p43: 2, 3, 4, 7, 9, 13, 16, 18, 23, 37, 38
		2.3	p51: 2, 4, 5, 10, 13, 17, 18, 22, 23, 35
	Friday, September 4, is the last day to withdraw from the course		
	and not have it appear on your transcript.		
	No Class on Labor Day, Monday, September 7		
3	Sep 8 - 11	2.4	p61: 1-17(odd), 21, 23, 25
		3.2	p99: 1, 3, 5, 7, 9, 14
4	Sep 14 - 18	3.3	p107: 1, 3, 5, 7, 8
		3.4	p114: 1, 2, 7, 8
		Review	
5	Sep 21 - 25	EXAM 1	
		4.1, 4.2	p157: 1, 3, 5; p165: 1-6, 13-16, 28-32
		4.3, 6.2	p173: 2, 3, 4, 5, 9, 13, 14, 23, 26; p331: 1-7, 13, 14
6	Sep 28 - 2	4.4	p182: 1-5, 9-15(odd), 27, 29
		4.5, 6.3	p187: 3, 5, 7, 13-19(odd), 33, 34, 36; p337: 1, 3, 7, 9, 32
		4.6	p193: 1-4, 7, 9, 12, 16
7	Oct. 5 - 9	4.7	p200: 9, 11, 13, 19, 36-39
		4.7(Reduction of Order), 4.9	p202: 45, 47, 48; p222: 3, 5, 7
		4.9,4.10	p230: 1, 3, 8, 9, 11
8	Oct. 12 - 16	Catch-up	
		9.1	p502: 1, 3, 4, 11, 12
		9.3	p515: 1, 3, 4, 21, 24, 25, 27, 29
	Fall Semester Break, No Class on Monday and Tuesday, October 19 & 20		
9	Oct. 21 - 23	9.5	p534: 1, 2, 3, 6, 7, 9, 11-14, 31, 33
		Review	
10	Oct 26 - 30	EXAM 2	
		9.5(Repeating Eigenvalues)	p535: 35, 36, 37, 38
		9.6	p541: 1-4, 13(a)
	Project Assigned		
11	Nov 2 - 6	12.2	p733: 1, 4, 5, 7, 10, 11, 13, 15
		12.2(Complex Root), 12.3	p733: 3, 8, 9
		12.3	p743: 1, 3, 4, 7, 13, 14, 15
12	Nov 9 - 13	Catch-up	
		7.2	p360: 3, 7, 8, 9, 12, 13, 15, 17, 19
		7.3	p365: 3, 5, 7, 9, 13, 25
	Friday, November 13, last day to withdraw from one or more courses for the term.		
13	Nov 16 - 22	7.4	p374: 1-10, 21, 23, 25, 27, 30
		7.5	p382: 1-9(odd), 10, 11, 13, 17, 19
		7.6	p393: 1-7(odd), 8, 9, 13-19(odd), 20
	Project Due		
14	Nov 23 - 29	7.8	p410: 1-9(odd), 13, 15, 21, 23, 29
	Thanksgiving Holiday, No Class on Wednesday - Friday, November 25 - 27		
15	Nov 30 - Dec 4	7.9	p413: 1, 5, 9, 11, 12
		Review	
		EXAM 3	
16	Dec 7 - Dec 11	Catch-up & Review	
		Review	
		Review	