

**TEXT:** *Differential Equations, Computing and Modeling*, by Edwards and Penney, Fourth Edition.

**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.

**NOTES:** The pace of the course, order of topics, number of exams, projects, quizzes, and number of assignments may be varied at the discretion of your instructor. Your grade in the course will be determined by your instructor, who will describe his/her grading policy in detail.

**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.

**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.

#### GRADING SCALE:

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

Quizzes: Quiz every Friday, 10 points each.

Project: One project, 20 points.

Tests: 3 hour tests, 100 points each.

Final Exam: 200 points.

Attendance: Required, every 3 unexcused absences equal one half letter grade deduction.

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

**Class Web Page:** <http://www.math.unl.edu/~bdeng1/Teaching/teaching.html>

WEEK	DATES	SECTIONS	EXERCISES
1	Jan. 9-13	1.1, 1.2, 1.3	p.8: 1, 2, 5, 7, 15, 16, 20, 32 p.17: 1, 4, 7, 15, 19, 24 p.27: 1, 2, 5, 11, 12, 14, 15, 19
Monday, January 16–Martin Luther King Day (No class)			
2	Jan. 17-20	1.4	p.43: 1, 4, 7, 10, 13, 15, 19 p.43: 3, 12, 16, 19, 21, 26, 40, 49, 50
3	Jan. 23-27	1.5, 1.6	p.56: 3, 6, 16, 17, 19, 20, 22 p.56: 27, 29, 33, 36 p.74: 1, 3, 6, 9, 13, 31-37, 43, 44
4	Jan. 30-Feb. 3	2.1, 2.2, 2.3	p.87: 1, 3, 9, 11, 15 p.98: 1, 3, 6, 7, 9, 19 p.108: 1, 2, 10, 21
5	Feb. 6-10	2.4 REVIEW/CATCH UP EXAM 1	p.121: 1, 3, 5, 6
6	Feb. 13-17	3.1, 3.2 Reduction of order	p.158: 1, 5, 10, 11, 13, 17, 19-26, 29, 30 p.159: 33-41, 43, 44 p.170: 1-5, 7, 9, 10, 12, 15, 17, 21, 23, 38, 40, 41, 44
7	Feb. 20-24	3.3, 3.5	p.183: 1, 2, 7, 10, 13, 17, 21, 25, 27, 29, 35, 52, 53 p.210: 1, 5, 7, 9, 12, 20, 22, 23, 29
8	Feb. 27-Mar. 2	3.5, 5.1, 5.2	p.210: 31, 34, 39, 53, 54, 58, 59, 61, 62 p.301: 1, 11, 12, 13, 21, 23, 25, 27, 28, 31, 33, 36 p.316: 1, 3, 5, 8
Mar.2–Last day to change a course registration to or from “Pass/No Pass”			
9	Mar. 5-9	5.2, 5.4  REVIEW/CATCH UP	p.316: 17, 18, 26 p.345: 1, 2, 6, 7, 8
10	Mar. 12-16	Exam 2 7.1	p.450: 3, 5, 6, 11, 13, 16, 19 p.450: 23, 26, 29, 30
Mar. 18-25: Spring Break			
11	Mar. 26-30	7.2, 7.3	p.462: 1, 3, 4, 6, 9, 11, 12, 17, 19, 20 p.472: 1-4, 5-10, 11, 13, 14, 15, 16, 19, 21 p.472: 27, 29, 31, 37, 38
12	Apr. 2-6	7.4, 7.5	p.481: 1, 3, 5, 7, 9, 13, 15, 17, 19, 22, 23, 26, 29, 32, 33, 36, 37 p.491: 1, 3, 4, 5, 7, 9, 12, 17, 20, 21 p.491: 31-35
April 6 – Last day to drop with a “W”.			
13	Apr. 9-13	7.6, 6.2, 6.3 Supplement S2.2, S2.3	p.502: 1, 3, 5, 6, 7, 8 (S2.2)p.24: 1(i), 2(i), 5, p395: 1, 2, 11, 21, 22 (S2.3)p.32: 1, 2(ii, iii), 3, p409: 4, 5, 7
14	Apr. 16-20	S2.6, 4.1 REVIEW/CATCH UP EXAM 3	(S2.6)p56: 2, 3, 4, 6*
16	Apr. 23-27	REVIEW/CATCH UP	
17	Apr. 30-May 4	Final Exam Week	

Department Grading 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.