

Time and Place: Tu-Th 3:30 PM – 4:45 PM in DuSable Hall 428

Course web-page: <http://www.math.niu.edu/courses/math336>

Course Objectives: To learn how derivatives commonly appear in equations that describe changes in physics, biology or engineering related quantities; to develop and improve problem solving skills and critical thinking; to master mathematical techniques and concepts used to analyze and understand differential equations; to learn to interpret real-world applications of mathematical results.

Text: C.H. Edwards, Jr. and D. E. Penney, Elementary Differential Equations, Sixth Edition, Pearson Prentice Hall 2008.

Prerequisite: MATH 230 (Calculus II).

Grading system: There will be a total of 600 points for the course assigned as follows:

Three In-Class Exams:	100 points each
Quizzes and Homework	100 points
Comprehensive Final Examination	200 points

Grading Scheme: **A:** 86–100%; **A-:** 82–85%; **B+:** 78–81%; **B:** 72–77%; **B-:** 66–71%; **C+:** 60–65%; **C:** 55–59%; **D:** 50–54%. For your final grade, I will take into account class attendance, regular and complete homework submission, participation in class and final exam grade.

The **departmental final exam** will be held on **Thurs. December 13, Noon–1:50 p.m.**

Tentative Schedule

WEEK	SECTIONS	WEEK	SECTIONS	WEEK	SECTIONS
1	1.1, 1.2, 1.4	6	6.1, 6.2	11	4.1, 4.2
2	1.4, 1.3, 1.5	7	2.1, 2.2	12	4.3, 4.4
3	1.5, 1.6	8	2.3, 2.5	13	4.5, Exam 3
4	1.6, 1.7	9	2.5, Exam 2	14	5.1, 5.2
5	1.7, 1.8, Exam 1	10	2.4, 2.6	15	Review

- The order in which the sections are covered, the weeks in which they are covered, and the dates of the in-class tests are all subject to change. Any such change will be announced in class.

Academic Conduct: Academic honesty and mutual respect (student with student and instructor with student) are expected in this course. Mutual respect means being on time for class and not leaving early, being prepared to give full attention to class work, not reading newspapers or other material in class, not using cell phones or laptops during class time, and not looking at another student's work during exams.

DRC Statement: If you have specific physical, psychiatric, or learning disabilities and require accommodations, please let your instructor know early in the semester so that your learning needs may be appropriately met. You will need to provide documentation of your disability to the DRC Office located in the Health Services Building, 4th floor.

Homework. The homework problems for each section are listed below. The homework problems are subject to change; any changes to the assigned problems will be announced in class. Homework will be collected once a week. The homework problems should be regarded as the minimum requirement and they should be attempted immediately after the corresponding material has been covered in class. **No late homework will be accepted.**

Quizzes. On the day the homework is due, a quiz over the homework will be given. **No make-up quizzes will be given for any reason.**

Calculators. Only a scientific calculator is allowed during exams.

HOMEWORK ASSIGNMENTS:

Section	Problems
1.1:	5, 8, 15, 19, 24, 35, 39, 42.
1.2:	2, 5, 9, 10, 25, 30, 33.
1.4:	9, 11, 15, 17, 23, 26, 27, 43, 65.
1.3:	13, 17, 18, 28.
1.5:	5, 9, 15, 17, 23, 25, 33, 36, 37.
1.6:	3, 9, 13, 18, 19, 23, 27, 33, 35, 36.
1.7:	6, 8, 21, 22.
1.8:	2, 3, 4, 9, 20.
6.1:	5, 6, 10.
6.2:	5, 6, 10.
2.1:	7, 11, 13, 20, 24, 29, 31, 32.
2.2:	2, 4, 9, 11, 15, 17, 22, 24.
2.3:	1, 4, 5, 9, 13, 22, 23, 25, 34.
2.5:	5, 9, 13, 21, 23, 24, 32, 34, 35, 38, 39, 49, 51, 55, 58, 62.
2.4:	2, 4, 15, 17, 18, 20.
2.6:	1, 6, 8, 11, 19, 24.
4.1:	2, 8, 9, 13, 16, 26, 28, 30, 32.
4.2:	3, 6, 8, 18, 20, 22.
4.3:	12, 14, 1, 3, 6, 8, 18, 27, 29, 38.
4.4:	1, 2, 3, 6, 8, 11.
4.5:	1, 3, 6, 12, 14, 20, 31, 35.
5.1:	1, 2, 14, 18.
5.2:	1, 2, 4, 6, 8, 11.