

Syllabus for Math 228

Brian Hall and David Nicholls

Fall, 2001

Tests: There will be three tests during the semester.

Tuesday, September 25

Tuesday, October 30

Tuesday, November 27

All will be at **8:00 a.m.** The room assignments are

Hall: all three in Hayes-Healy 117;

Nicholls: first two in O'Shaughnessy 204, third one in DeBartolo 141.

Homework: Homework will be handed in on Fridays in the lecture. Homework must be turned in to the instructor or in the instructor's mailbox, by the end of lecture on Friday. *Late homework will not be accepted* except for university-approved reasons. Homework will normally be returned in the tutorial on the following Thursday.

Final: The final exam is on **Friday, December 14**, from 1:45–3:45 p.m. You may reschedule your final only for reasons given in the university policy. (For example, p. 96 of duLac states, “No student shall be required to take three or more final examinations in one day or four or more final examinations in a 24-hour period.”)

Mathematica assignments: There will be four assignments using the computer-math program Mathematica. Dates will be announced in class.

Tutorial: Attendance in the tutorials is expected for all students. Some problem-solving techniques may be introduced only in the tutorial.

Texts: Elementary Linear Algebra with Applications (3rd Edition), by Richard Hill.

Elementary Differential Equations and Boundary Value Problems (7th Edition), by Boyce and DiPrima.

Grading: The course grades will be based on a total of 600 possible points, assigned as follows:

Tests 1, 2, 3 (100 points each) = 300 points

Homework and Mathematica = 100 points

Final exam = 200 points

Honor code: All of your work is bound by the provisions of the Notre Dame honor code.

Approximate schedule

From Hill, Elementary Linear Algebra:

Chapter 1: Sections 1.1, 1.2, 1.3, 1.4, 1.5 (5 lectures)

8/29, 8/31, 9/3, 9/5, 9/7

Chapter 2: Sections 2.1, 2.2, 2.4 (2 lectures)

9/10, 9/12

Chapter 3: Sections 3.1, 3.2, 3.3, 3.4 (4 lectures)

9/14, 9/17, 9/19, 9/21

Review: 9/24

Test 1: 9/25

Chapter 3: Sections 3.5, 3.6, 3.7, 3.8 (4 lectures)

9/26, 9/28, 10/1, 10/3

Chapter 4: Sections 4.1, 4.2, 4.3, 4.4, 4.5, 4.7 (6 lectures)

10/5, 10/8, 10/10, 10/12, 10/15, 10/17

Chapter 5: Section 5.1 (1 lecture)

10/19

Fall Break: 10/22–10/26

Review: 10/29

Test 2: 10/30

Chapter 5: Sections 5.2, 5.3 (2 lectures)

10/31, 11/2

From Boyce and DiPrima, Elementary Differential Equations:

Chapter 1: Sections 1.1, 1.2 (1 lecture)

11/5

Chapter 2: Sections 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8 (6 lectures)

11/7, 11/9, 11/12, 11/14, 11/16, 11/19

Chapter 3: Sections 3.1, 3.2 (1 lecture)

11/21

Thanksgiving Break: 11/22, 11/23

Review: 11/26

Test 3: 11/27

Chapter 3: Sections 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.8, 3.9 (7 lectures)

11/28, 11/30, 12/3, 12/5, 12/7, 12/10

Final exam: 12/14