

# Differential Equations 2280

Spring Semester 2009. Edwards-Penney 4/E

Midterm 1 [8:30 Feb 25]  $AV = \square$ , Scores \_\_\_\_\_

Midterm 2 [8:30 Mar 25]  $AV = \square$ , Scores \_\_\_\_\_

Midterm 3 [8:30 Apr 24]  $AV = \square$ , Scores \_\_\_\_\_

Final Exam [7:30 May 6]  $AV = \square$ , Scores \_\_\_\_\_

Average of Midterms and Final:  $AV_1 = \square$

Average of dailies:  $AV_2 = \square$

Final Grade:  $\frac{70}{100}AV_1 + \frac{30}{100}AV_2 = \square$

## Spring 2009 Daily Schedule

Questions: 581-6879, Email: ggustaf@math.utah.edu, Office: 113 JWB.

**Boldface items** with empty box will be examined by a grader for correctness. Each score is 100, making 15800 total. Maple labs are dailies. Other items are *not graded* but make up the **study guide** for the 3 midterm exams and final. Solution keys to study guide items are published on the web as a group effort of the class, volunteer participation expected.

### Lectures Week 1, Jan 12-16

Read: Sections 1.2, 1.3, 1.4, 1.5.

1.1: 8  12  16  29

35  39

1.2: 5  10  17  30

37

### Lectures Week 2, Jan 19-23

Read: Sections 1.6, 2.1, 2.2, 2.3.

19 Jan, Holiday Monday.

1.3: 4  33

1.4: 3  11  19  36

54  58

1.5: 9  15  33  39

### Lectures Week 3, Jan 26-30

Read: Sections 2.4, 2.5, 2.6, 3.1, 3.2.

1.6: 5  18  34  63

2.1: 7  13  30

2.2: 9  21  23

2.3: 2  11  21  24

### Lectures Week 4, Feb 2-6

Read: Sections 3.3, 3.4, some of 3.5

MapleLab1 L1.1  L1.2

L1.3  L1.4

2.4: 4  16  L3.1  L4.1

2.5: 4  16

Parts 2,3,4 of Maple Labs 3-4 due after Spring Break

2.6: 4  16

3.1: 5  9  12  25  38

46

**Lectures Week 5, Feb 9-13**

Read: Sections 7.1, 7.2, 7.3

3.2: 4  10  15  23   
27

3.3: 9  10  15  24   
28  35  40  46

3.4: 3  10  13  18   
35  36  37  38

**Lectures Week 6, Feb 16-20**

Read: Sections 7.4, 7.5, 7.6.

16 Feb, Holiday Monday.

7.1: 2  4  15  25  29

33  35  36  39  41

7.2: 3  14  19  24  29

33  35

7.3: 3  7  10  13  19

30  39

MapleLab2: L2.1  L2.2

L2.3  L2.4

**Lectures Week 7, Feb 23-27**

Read: Sections 3.5, 3.6, 3.7

25 Feb, Midterm Exam 1

7.4: 3  11  14  17

20  23  26  31  36

7.5: 5  14  25  33

**Lectures Week 8, Mar 2-6**

Read: Sections 4.1, 4.2, 4.3, 5.1.

7.6: 3  10  15  17

21

3.5: 1  3  5  7  9

18  34  37  41  45

53  60

3.6: 4  10  17  23

28

3.7: 2  3  8  14  19

**Lectures Week 9, Mar 9-13**

Read: Sections 5.2, 5.3, 5.4, 5.5.

Spring break Mar 16-21.

4.1: 2  17  24  26  27

4.2: 8  15  34

4.3: 6  10  17

5.1: 32  38

MapleLab6: L6.1  L6.2

L6.3

**Lectures Week 10, Mar 23-27**

Read: Sections 5.6, 6.1, 6.2, 6.3.

25 Mar, Midterm Exam 2

5.2: 9  19  30  32  36

29

5.3: 3  9  14  16  19

MapleLab3: L3.2  L3.3

L3.4

**Lectures Week 11, Mar 30,31  
and Apr 1,3**

Read: Sections 6.3, 6.4, 6.5.

5.4: 5  12  22  25

35

5.5: 3  7  15  23  27

5.6: 5  16  22  31

MapleLab4: L4.2  L4.3

L4.4

**Lectures Week 12, Apr 6-10**

Read: Sections 9.1, 9.2, 9.3.

6.1:  11  20  24  
 6.2:  8  15  27  33  
 37   
 6.3:  3  5  8  9  10   
 13  17  21  
 6.4:  4  12   
 6.5: nothing due  
 MapleLab7: L7.1  L7.2   
 L7.3  L7.4  L7.5

**Lectures Week 13, Apr 13-17**

Read: Sections 9.4, 9.5, 9.6.

9.1:  15  23  27   
 9.2:  13  17  24a   
 9.3:  4  9  11  20  22

**Lectures Week 14, Apr 20-24**

Read: Section 9.6, 9.7, Final Review.

20 Apr, Final Exam Review.

24 Apr, Midterm Exam 3

9.4:  3  8  15  18   
 9.5:  3  10  14  15   
 17  18  19

**Lectures Week 15, Apr 27-29**

Read: Final Exam review. Lectures end Apr 29. Reading day Apr 30.

9.6:  3  6  11  13   
 14  15  16  17   
 19   
 9.7:  5  9  11

**Lectures Week 16, May 1-8**

Read: Final exam period.

6 May, Final Exam, 7:30-10:00am, regular classroom.

**Policy on Dailies:** The highest 150 dailies will be counted. The lowest 8 of the 158 dailies will be dropped. Any record with less than 70 daily scores earns a grade of **E**, regardless of midterm and final exam scores. Deadlines set at web site [www.math.utah.edu/~gustafso/](http://www.math.utah.edu/~gustafso/). Work not in the stack sent to the assistant is late and it earns a grade of zero. Zeros can be erased by doing extra credit problems.

**Policy on Exams:** The final exam is doubled before determining the exam average, to count like two midterms.

**Grading Scale:**

A = 95-100, A- = 92-94, B+ = 88-91, B = 84-87, B- = 80-83, C+ = 75-79, C = 65-74, C- = 60-64.

**Average of Midterms and Final**  $(100+100+100+200)/5$ :  $AV_1 = \square$

**Average of dailies** (150 items, 100 each):  $AV_2 = \square$

**Final Grade:**  $\frac{70}{100}AV_1 + \frac{30}{100}AV_2 = \square$

## 2280 Tentative Due Dates for Submitted Work

Differential Equations 2280  
Spring Semester 2009  
Edwards-Penney, DE and BVP, 4/E  
Graded Problems

Week 1, Jan 12-16  
Sections 1.2, 1.3, 1.4, 1.5.

14 Jan, 1.1: 8, 12, 35, 39,  
16 Jan, 1.2: 5, 10, 17, 37,

Week 2, Jan 19-23  
Sections 1.6, 2.1, 2.2, 2.3.

19 Jan, Holiday Monday.  
20 Jan, 1.3: 33,  
21 Jan, 1.4: 3, 11, 19, 54,  
23 Jan, 1.5: 9, 15, 39,

Week 3, Jan 26-30  
Sections 2.4, 2.5, 2.6, 3.1, 3.2.

26 Jan, 1.6: 18, 63,  
27 Jan, 2.1: 7, 30,  
28 Jan, 2.2: 9, 21, 23,  
30 Jan, 2.3: 2, 24,

Week 4, Feb 2-6  
Sections 3.3, 3.4, some of 3.5

03 Feb, Maple Lab1:L1.1, L2.2, L1.3, L1.4  
04 Feb, 2.4,2.5,2.6: Maple L3.1, L4.1  
Parts 2,3,4 of Maple Labs 3,4 due after Spring Break  
06 Feb, 3.1: 5, 25, 46,

Week 5, Feb 9-13 Sections 7.1, 7.2, 7.3

10 Feb, 3.2: 4, 15, 23,  
11 Feb, 3.3: 10, 15, 28, 40, 46,  
13 Feb, 3.4: 10, 13, 35, 36, 37, 38,

Week 6, Feb 16-20 Sections 7.4, 7.5, 7.6.

16 Feb, Holiday Monday.  
17 Feb, 7.1: 4, 15, 25, 33, 35, 36, 41,

18 Feb, 7.2: 19, 24, 35,  
20 Feb, 7.3: 3, 7, 13,  
20 Feb, Maple Lab2: L2.1, L2.2, L2.3, L2.4,

Week 7, Feb 23-27 Sections 3.5, 3.6, 3.7

24 Feb, 7.4: 3, 14, 17, 23, 26,  
25 Feb, Midterm Exam 1  
27 Feb, 7.5: 5, 14, 33,

Week 8, Mar 2-6

Sections 4.1, 4.2, 4.3, 5.1.

03 Mar, 7.6: 15, 17, 21,  
04 Mar, 3.5: 1, 5, 7, 9, 34, 37, 41, 45,  
06 Mar, 3.6: 4, 17, 23,  
06 Mar, 3.7: 8, 14,

Week 9, Mar 9-13 Sections 5.2, 5.3, 5.4, 5.5.

10 Mar, 4.1: 2, 27,  
11 Mar, 4.2: 8, 34,  
13 Mar, 4.3: 10, 17,  
13 Mar, 5.1: Nothing due  
13 Mar, MapleLab6: L6.1, L6.2, L6.3,

Spring break Mar 16-21.

Week 10, Mar 23-27

Sections 5.6, 6.1, 6.2, 6.3.

24 Mar, 5.2: 32, 36,  
25 Mar, Midterm Exam 2  
27 Mar, 5.3: 3, 16, 19,  
27 Mar, MapleLab3: L3.2, L3.3, L3.4,

Week 11, Mar 30,31 and Apr 1,3

Sections 6.3, 6.4, 6.5.

30 Mar, 5.4: 12, 25, 35,  
31 Mar, 5.5: 3, 15, 23,  
01 Apr, 5.6: 16, 31,  
03 Mar, MapleLab4: L4.2, L4.3, L4.4,

Week 12, Apr 6-10

Sections 9.1, 9.2, 9.3.

07 Apr, 6.1: 20,  
08 Apr, 6.2: 15, 27, 37,  
10 Apr, 6.3: 5, 8, 9, 10, 13, 17,  
10 Apr, 6.4: 12,  
10 Apr, 6.5: nothing due  
10 Apr, MapleLab7: L7.1 to L7.5

Week 13, Apr 13-17 Sections 9.4, 9.5, 9.6.

14 Apr, 9.1: 23, 27,  
15 Apr, 9.2: 17,  
17 Apr, 9.3: 4, 9, 20,

Week 14, Apr 20-24  
Section 9.6, 9.7, Final Review.

20 Apr, Final Exam Review.  
21 Apr, 9.4: 8, 15, 18,  
22 Apr, 9.5: 3, 14, 17, 19,  
24 Apr, Midterm Exam 3

Week 15, Apr 27-29  
Final Exam review. Lectures end Apr  
29. Reading day Apr 30.}

27 Apr, 9.6: 3, 6, 11, 13, 14, 15, 16, 17, 19,  
28 Apr, 9.7: 5, 9, 11,  
29 Apr, Final Exam Review

Week 16, May 1-8  
Final exam period.

6 May, Final Exam, 7:30-10:00am, regular classroom.

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Final Grade:  $0.7(\text{exam ave}) + 0.3(\text{dailies ave})$