## Differential Equations and Linear Algebra

Grade Sheet with Due Dates and Lectures Fall 2010 2250-2 7:30am in WEB 103

<b>Midterm 1</b> [23 Sep, 30 Sep		Av1=	
$\mathbf{Midterm} \ 2 \ [28 \ \mathrm{Oct}, \ 4 \ \mathrm{Nov}]$		Av2=	
$\mathbf{Midterm} \ 3 \ [18 \ \mathrm{Nov}, \ \mathrm{Dec} \ 2]$		Av3=	
Final Exam [Dec 15]		AvFin=	
Average of dailies including maple labs:		AvDaily=	
Final Grade:	$\frac{70}{100} \left( \frac{\text{Av1} + \text{Av2} + \text{Av3} + \text{AvFin} + \text{AvFin}}{5} \right)$	$+\frac{30}{100}$ AvDaily=	_

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## Policies on Dailies and Exams

**Policy on Dailies**: The highest 146 dailies will be counted. The lowest 6 of the 152 dailies will be dropped. Any record with less than 60 dailies earns a grade of  $\mathbf{E}$ , regardless of midterm and final exam scores. Deadlines set at web site www.math.utah.edu/~gustafso/. Work not in the stack sent to the assistant earns a grade of zero. Extra credit exercises can correct these zeros.

**Policy on Exams**: The final exam is doubled before determining the exam average, to count like two midterms. The effect can be imagined as five midterm scores, averaged to obtain the semester exam score average.

**Policy on Rank-in-Class**: The class ranking is determined only by the exams. Rank 1 is the best, determined by sorting on the exam average (mid1+mid2+mid3+final+final)/5. There is no influence on class standing from dailies.

Dailies and Letter Grade: The dailies affect only the final letter grade assigned. A grade of E is assigned for less than 60 dailies. Otherwise, dailies contribute 30% towards the letter grade. In extreme cases, the influence is  $\pm$  one letter grade, e.g., B- on exams changes from C- to A-.

**Grading Scale**: The internally-used scale is uses GPA increments, which step 1/3 from 0.0 = E to 4.0 = A. Briefly, A = 95, B = 82, C = 67, D = 52. In detail:

A = 
$$95-100$$
, A- =  $90-94$ , B+ =  $85-89$ , B =  $80-84$ , B- =  $75-79$ , C+ =  $70-74$ , C =  $65-69$ , C- =  $60-64$ , D+ =  $55-59$ , D =  $50-54$ , D- =  $45-49$ , E =  $0-44$ .

## Tentative Due Dates and Lectures 2250-2 7:30am Fall 2010

	02 Sep, LCB115: Time TBA, First maple intro.
Week 1, Aug 23 to 27	02 Sep, Thu lab: Quadratics, partial derivative,
Lecture 1.1, 1.2, 1.3, 1.4.	Jacobian, maple lab 1.
	Exam 1 review. Drill, Q&A ch1.
23 Aug, Intro, GB Gustafson, nothing due.	03 Sep, Page 26, 1.3: 8 , 14
24 Aug, Nothing due.	
25 Aug, Submit Page 16, 1.2-2 for quick review.	03 Sep, Page 41, 1.4: 6 , 12 ,
26 Aug, Intro, Thu. teaching assistant, Laura	18, 22, 26
Czarnecki. Discuss maple lab1.	03 Sep, LCB115: Time TBA, Repeat maple intro.
27 Aug, Page 16, 1.2: 2, 4, 6, 10	
	Week 3, Sep 6 to 10
Week 2, Aug 30,31, Sep 1 to 3	Lecture 2.4, 2.5, 2.6.

30 Aug to 01 Sep, Nothing due.

Lecture 1.5, 2.1, 2.2, 2.3.

06 Sep, Labor Day holiday, no classes.

07 Sep, LCB115: Time TBA. Repeat maple intro. 07 to 08 Sep, Nothing due.	08 Oct, Page 233, 4.1: 16, 20, 32
09 Sep, Thu lab: Discuss maple lab L2.1. Exam 1 review. Drill, Q&A ch1.	08 Oct, Page 240, 4.2: 4 , 18 ,
10 Sep, Page 54, 1.5: 8 , 18 , , , , , , , , , , , , , , , ,	28
10 Sep, Page 86, 2.1: 8 , 16	FALL BREAK, Oct 11 to 16
10 Sep, Page 96, 2.2: 10, 14	Happy holiday!
Week 4, Sep 13 to 17 Lecture 3.1, 3.2, 3.3.	Week 8, Oct 18 to 22 Lecture 5.1, 5.2, 5.3, 5.4.
<ul><li>13 to 15 Sep, Nothing due.</li><li>16 Sep, Thu lab: Exam 1 review. Discuss maple</li></ul>	18 to 19 Oct, Nothing due. 20 Oct, Submit maple lab 2:
lab2.	L2.1, L2.2, L2.3, L2.4 21 Oct, Thu lab: Exam 2 review.
17 Sep, Page 106, 2.3: 10, 20 17 Sep, Submit Exam Review problems ER-1,	Discuss maple lab3 and lab4.
ER-2	22 Oct, Page 248, 4.3: 18 , 24
17 Sep, Submit Maple lab 1:	22 Oct, Page 255, 4.4: 6, 24 22 Oct, Page 263, 4.5:
L1.1, L1.2, L1.3, L1.4	6 , 24 , 28 .
Week 5, Sep 20 to 24	Week 9, Oct 25 to 29
Lecture 3.4, 3.5, 3.6.	Lecture 10.1, 10.2, 10.3, 10.4
20 to 21 Sep, Nothing due.	25 to 26 Oct, Nothing due.
22 Sep, Submit maple L2.1 copy for quick review. 23 Sep, Thu lab: Midterm 1, problems 1,2,3.	27 Oct, Page 271, 4.6: 2
24 Sep, Page 152, 3.1: 6, 16,	27 Oct, Page 278, 4.7: 10, 20,
26	26 28 Oct. Thu leb: Midterm 2, problems 1,2,2;
24 Sep, Page 162, 3.2: 10, 14,	28 Oct, Thu lab: Midterm 2, problems 1,2,3: ch3,4,5.1-5.3
24	29 Oct, Page 294, 5.1:
24 Sep, Page 170, 3.3: 10, 20	34 , 36 , 38 , 40 ,
Week 6, Sep 27 to 30, Oct 1	42, 46, 48 29 Oct, Page 306, 5.2: 18, 22
Lecture 4.1, 4.2, 4.3, 4.4.	29 Oct, Page 319, 5.3: 8 , 10 ,
27 to 29 Sep, Nothing due.	16 , 32 , i.e. c , i.e. , i.e. ,
30 Sep, Thu lab: Discuss maple lab 2. Midterm 1,	
problems 4,5	Week 10, Nov 1 to 5
01 Oct, Page 182, 3.4: 20, 30,	Lecture 10.5, EPbvp7.6, 5.5
34, 40 01 Oct, Page 194, 3.5: 16, 26,	01 Nov, Nothing due.
44	02 Nov, Page 331, 5.4: 20, 34 03 Nov, Nothing due.
	04 Nov, Thu lab: Discuss maple lab5. Midterm 2,
Week 7, Oct 4 to 8	problems 4,5: ch3,4,5.1-5.3
Lecture 4.4, 4.5, 4.6, 4.7.	05 Nov, Page 576, 10.1: 18 , 28 , 05 Nov, Page 588, 10.2: 10 , 16 ,
04 to 06 Oct, Nothing due. 06 Oct, Traveling? Submit this weeks work on Wed	24
or Thu. 07 Oct, Thu lab: Exam 2 Review. Drill, Q&A Ch3.	Week 11, Nov 8 to 12 Lecture 5.6, EPbvp3.7, 6.1, 6.2
Discuss maple L3.	08 Nov, Nothing due.
08 Oct, Page 212, 3.6: 6, 20,	09 Nov, Submit maple lab3:
32, 40, 60	L3.1, L3.2, L3.3

09 Nov, Submit maple lab4 :	02 Dec, Midterm 3, problems 4,5: ch5,10,6
141 149 149	03 Dec, Page 400, 7.1: 8, 20
L4.1, L4.2, L4.3 10 Nov, Nothing due.	03 Dec, Page 413, 7.2: 12, 14
11 Nov, Thu lab: Exam 3 review. Discuss maple	03 Dec, Page 425, 7.3: 8 , 20 , 30
lab6 and lab7.	03 Dec, Page 438, 7.4: 6 , 24
12 Nov, Page 597, 10.3: 6 , 18	00 200, 1 age 100, 1111 0, 21
12 Nov, Page 606, 10.4: 22	Week 15, Dec 6 to 10 Lecture 9.4, Final Review.
Week 12, Nov 15 to 19	'
Lecture 7.1, 7.2, 7.3, 7.4.	06 to 07 Dec, Nothing due.
	08 Dec, 8.1: 4 , 12 , 38
15 to 16 Nov, Nothing due.	08 Dec, 8.2: 4 , 19
17 Nov, Page 616, 10.5: 4, 22, 28	09 Dec, Thu lab: Final exam review.
17 Nov, Page 510 in EPbvp 7.6: 8 , 22	10 Dec, 9.1: 4 , 8 , 18
18 Nov, Thu lab: Midterm 3, problems 1,2,3:	10 Dec, 9.2: 2 , 12 , 22
ch5,10,6	
19 Nov, Page 346, 5.5: 54, 58,	10 Dec, 9.3: 8, 9, 10
6, 12, 22	10 Dec, Office hours and lectures finished.
19 Nov, Page 357, 5.6: 4 , 8 , 18	13 Dec, Semester Extra Credit 9.4: 4 , 8
19 Nov, Page 227 in EPbvp 3.7: 4, 12	13 Dec, Semester Extra credit Ch9, Ch10X and maple 8,9,10 due.
Week 13, Nov 22 to 26	Deliver under the door 113jwb by 6pm.
Lecture 7.4, 7.5 /w Laplace, 8.1, 8.2.	11 Dec, Saturday: Special Final Exam review, 2pm,
, , , , ,	LCB 219
22 Nov, Nothing due.	15 Dec, Final Exam.
23 Nov, Submit maple lab5:	
L5.1, L5.2, L5.3	See the online final exam study guide.
24 Nov, Page 370, 6.1: 12, 20,	Exam Period, Dec 15 and 17
32, $36$	Final exam for the 7:30am class is Wed, Dec 15, 2010
24 Nov, Page 379, 6.2: 6 , 18 , 28	from 8:00am to 10am [WEB 103] .
25-26 Nov, Thanksgiving Holiday, no classes.	Final exam for the 12:25pm class is Fri Dec 17, 2010, 10:30am to 12:30pm [JWB 335].
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Week 14, Nov 29,30 and Dec 1,2,3	Extra Credit: Under the door 113jwb Dec 13. Ch9 Extra Credit. About 10 problems.
Lecture 9.1, 9.2, 9.3.	Ch10X Extra Credit. About 10 problems.  Ch10X Extra Credit. About 10 Laplace problems.
	Maple Optional Lab 8: Earthquake [500]
29 Nov, Submit maple lab6:	Maple Optional Lab 9: Tacoma Narrows [200]
L6.1, L6.2, L6.3	Maple Optional Lab 10: Brine and Glucose [400]
30 Nov, Submit maple lab7:	Extra credit records locked at 6pm on 13 Dec. Ch9,
L7.1, L7.2, L7.3, 7.4	Ch10X and maple 8,9,10 credits apply to the
01 Dec, Nothing due.	semester dailies total.