Math 260: Differential Equations Spring 2009 Syllabus

Instructor: Dr. Irina Gheorghiciuc

Office: Wean Hall 7124

Website: www.math.cmu.edu/ \sim gheorghi/math260.html Office Hours: M 1:30 – 2:30 PM, W 2:00 – 3:00 PM

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Schedule of lectures: Section 1: MWF 10:30 – 11:20 AM, Porter Hall 100

Section 2: MWF 12:30-1:20 PM, Wean Hall 7500

Schedule of recitations: Section A (Almost): Th 8:30 – 9:20 AM, Doherty Hall 1209

Section B (Almost): Th 9:30 – 10:20 AM, Porter Hall A20

Section C (Canepa): Th 9:30-10:20 AM, Doherty Hall 1211

Section D (Dogrul): Th 3:30 - 4:20 PM, Porter Hall A21

Section E (Almost): Th $8{:}30$ – $9{:}20$ AM, Doherty Hall 1209

Section F (Ahmad): Th 9:30 – 10:20 AM, Baker Hall 235B

Section G (Canepa): Th 11:30 - 12:20 PM, Wean Hall 6423

Section H (Ahmad): Th 12:30 - 1:20 PM, Baker Hall 235A

Section I (Dogrul): Th $4{:}30-5{:}20$ PM, Porter Hall A21

Teaching Assistants: Chris Almost

Office: Wean Hall 7211

Office Hours: M 2:00-4:00 PM Email: calmost@andrew.cmu.edu

Elena Canepa

Office: Wean Hall 6203

Office Hours: W 3:30 - 5:30 PM Email: ecanepa@andrew.cmu.edu

Tankut Dogrul

Office: Wean Hall 6203

Office Hours: Th 1:00 - 3:00 PM Email: tdogrul@andrew.cmu.edu

Raja Ahmad

Office: Wean Hall 7215

Office Hours: Tu 3:00 - 5:00 PM Email: rhafiz@andrew.cmu.edu

Textbook:

William E. Boyce and Richard C. DiPrima

Elementary Differential Equations with Boundary Value Problems (with WileyPlus)

Ninth Edition, John Wiley & Sons, Inc.

Intended Lecture Content

Chapter	Title	Approx.
		Duration
1	Introduction to Differential Equations	2 hrs
2	First Order Differential Equations	6 hrs
7	Systems of First Order Linear Differential Equations	8 hrs
3	Second Order Linear Differential Equations	7 hrs
9	The Phase Plane: Linear Systems (Section 9.1 only)	2 hrs
6	The Laplace Transform	6 hrs
10	Partial Differential Equations	9 hrs

Important Registration Dates

Remember that the last day to add/drop or audit a course without your Dean's permission is Friday, January 23. The deadline for registering for the pass/fail option is Monday, March 30. You may drop the course at any time before the last day of class; however, if you do so after March 30, you will be given a W grade for withdrawing.

Exams

There will be three non-comprehensive 50 minute midterms, all in class. The tentative days of the midterms are February 11 (Wednesday), March 18 (Wednesday), and April 22 (Wednesday). The last class is on May 1 (Friday).

There will be a comprehensive three-hour Final Exam at the end of the semester. The Final Exam will be scheduled by the Registrar. Calculators will not be allowed during the exams.

If you want to dispute your midterm grade, you should return the graded exam to your teaching assistant during the recitation in which you received it. Then, within the next week, you should meet with me during my office hours to discuss the midterm.

There will be no make-up midterms except when a student documents an illness or emergency at the earliest possible time. Students eligible for additional time or other accommodations must contact the instructor at least five days prior to the exam to make arrangements.

Homework and WileyPlus

The course uses an online tool called WileyPlus. You will need to either buy a textbook with a WileyPlus code, or buy the code alone at www.wileyplus.com. Once you have the code, you will need to register at http://edugen.wiley.com/edugen/class/cls91333/. The code will give you access to an online copy of the textbook and student solutions manual online, as well as many other useful resources.

The homework will be posted on WileyPlus each Friday (unless there is a midterm the next week). The homework will be due at 11 p.m. the following Thursday. Late homework will not be accepted. Each student will be given several attempts for each homework problem. Your score will appear after each submission. After the due date you will be able to see the complete solutions to your homework problems.

There will be 10 homework assignments this semester. The two lowest homework grades will be dropped. Each of the remaining eight assignments will be worth 1% of your course grade. It is very important that you do ALL the homework assignments because problems similar to the homework problems will appear in quizzes and exams.

You might find it useful to do the practice problems posted every week on http://www.math.cmu.edu/~gheorghi/prac260.html.

Quizzes

Every week, except the first week of classes and the midterm exam weeks, you will be given a quiz during your recitations, 10 quizzes in total. Each quiz will have one or two problems, similar to the problems done in class or the homework problems. Two of your lowest quiz scores will be dropped. Each of the remaining eight quizzes will be worth 1% of your course grade. There will be no make-up quizzes. An absence will result in a zero score on that particular quiz (it can be dropped later as one of the two lowest quiz grades).

If you want to dispute your quiz grade, you should see your teaching assistant during his/her office hours within one week of the day the graded quiz was returned to your section.

Recitation Participation

Each student can get 1% extra-credit by presenting correctly the solution of one non-trivial problem during his/her recitation. The problem should be proposed by the teaching assistant. The extra-credit cannot exceed 1%.

Grade

Here is the breakdown of the final grade:

Assessment Type	Value
Homework	8%
Quizzes	8%
3 Midterms	54%
Final Exam	30%
Extra credit	1%
	101%

The tentative scheme for your grade is (the cutoffs may be lowered slightly, but will not be increased):

Percent	Letter
89.5-100	A
79.5 - 89.5	В
69.5 - 79.5	\mathbf{C}
59.5-69.5	D