

COURSE SYLLABUS  
**MATH 3260 Differential Equations**  
Fall 2012

**Days & Time:** MW 05:30 pm - 06:45 pm

**Room:** General Classroom Building 503

**CRN:** 80632

**Instructor:** Dr. Andrey Shilnikov

**Office:** Petite Science Center 810

**Office Hours:** MW 3:00-4:00 pm, other times by appointment

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**Text:** A First Course in Differential Equations with Modeling Applications, 9<sup>th</sup> edition by Dennis G.Zill, Brooks/Cole.

**Description:** First-order equations, linear differential equations with special emphasis on constant coefficients and Euler equations, systems of equations, applications.

**Prerequisites:** Grade of C or higher in Math 2215.

**Tentative Course Outline:**

Sections

- Introduction to Ordinary Differential Equations 1.1-1.3
- 1st order ODEs 2.1-2.5
- Modeling with 1st order ODEs 3.2-3.3
- Higher-order ODEs 4.1-4.7
- Modeling with higher-order ODEs 5.1-5.2
- Systems of linear firsts order ODEs 8.1-8.2
- Numerical Methods 2.6, 9.1-9.3

**Note:** During the first two weeks of the semester the Department of Mathematics and Statistics checks the computer records to determine whether or not each student has met the prerequisites for this course. If you do not have the prerequisites, please inform me and change to another course right away. If our computer search finds that you do not have the prerequisite, you must drop this course or you will be dropped automatically.

If you do not attend class during the first two weeks you will be administratively dropped.

**Withdrawal Policy:** If you withdraw from this class on or before W-Day (**Monday, October 9**) you will receive a W regardless of your performance. If you hardship withdraw after this date (a regular withdrawal at this point gives you an automatic WF) you will receive a W **ONLY** if you are passing (70 average or better); otherwise you will receive a WF (which averages into your GPA just like an F).

**Procedures:** Class meets twice a week. Taking good notes during the class is of significant importance. Homework will be assigned in each class. After the class, read the book, read your notes and do as many of the homework problems as you can prior to the next class. Try to get the

remaining problems explained in the next class. You are responsible for all material covered in class, whether or not you attended this class.

**Quizzes:** There will be 4 short quizzes during the semester. The purpose of these quizzes is to keep you up-to-date in the course. **Make-up quizzes will not be given, unless special circumstances.**

**Examinations:** There will be 3 hourly exams and the final exam (two hours). All hourly exams will be taken during the regular class time and in the regular classroom. *There will be no make-up exams except in an extreme verifiable emergency.* Absence from the final exam will result in a grade of F for the course unless arrangements are made *prior* to its administration.

**Exam dates** (subject to change) Tests I, II and III: October 1, November 5 and December 3  
Final Examination: **Monday, December 10 at 16:15 till 18:45.**

**Note** Sep. 3 (Labor Day) and Nov. 19-24 (Thanksgiving break) no classes.

Please check the test dates in your other courses and let me know as soon as possible if there are conflicts. The usual solution in such cases is to give the exam early or late on the scheduled day.

**Grading:** There will be a total of 210 points possible for this course. The points are distributed as follows

Three exams  $40 \times 3 = 120$

Final exam 60

Four Quizzes  $5 \times 4 = 20$

Extra Credit 10

Your total accumulated points will determine your grade

A 180-210

B+ 173-179

B 160-172

C+ 153-159

C 140-152

D 120-139

F 0-119

**Academic Dishonesty:** Plagiarism and cheating are serious offenses and may be punished by failure on the exam. Repeated cheating will result in a grade F for the course.

**Assignments:** We will follow the attached schedule. I will assume that you have read the lesson prior to arriving in class.