COURSE SYLLABUS MATH 3260 Differential Equations Fall 2013

Days & Time: MW 05:30 pm - 06:45 pm Room: Langdale Hall 401 CRN: 80587 Instructor: Dr. Andrey Shilnikov Office: Petite Science Center 810 Office Hours: MW 12:00-13:00 pm, other times by appointment Office phone: 404 413 6423 E-mail: ashilnikov@gsu.edu Web: http://www2.gsu.edu/~matals

Text: A First Course in Differential Equations with Modeling Applications, 9th 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 ODEes 2.1-2.5
- Modeling with 1st order ODEes 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 ODEes 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.

Attendance policy: A student is considered present only if he/she has arrived on time and remains until the class is dismissed. Coming to class late or leaving early is disruptive and thus discouraged. The instructor may drop a student from the roll for exceeding four class absences. Students are responsible for all material covered in the book and in class. Those who have excellent attendance but are on a grade borderline will get extra consideration at the end of the class.

Withdrawal Policy: If you withdraw from this class on or before W-Day (**Monday, October 15**) 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 2, November 4 and December 2 Final Examination: **Monday, December 16 at 16:15 through 18:45.**

Note Sep. 2 (Labor Day) and Nov. 25-30 (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: Grades will be determined on the basis of 3 tests, and a final exam. The final grade will be awarded as follows.

97%-100% of the maximum = A+ 90%-96% = A 87%-89% = B+ 80%-86% = B 77%-79% = C+ 70%-76% = C 60%-69% = D 0%-59% = F

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.

Homework: Working on the homework assignments is an essential part of the course. It is critical for your success on the exams.

This course syllabus provides a general plan for the course; deviations may be necessary