SYLLABUS FOR MATH 308
DIFFERENTIAL EQUATIONS
Fall 2007
Section 506
MWF 1:50–2:40pm BLOC 131

Instructor: Mariya Vorobets
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Office hours: Monday, Wednesday, Friday 10:30–11:30am or by appointment.

COURSE TITLE & DESCRIPTION: Differential Equations (3 Credit Hours) - This course is an introduction to the ordinary differential equations. It focuses on some types of the first and higher order differential equations. You will learn how to find, analyze, and approximate solutions of such equations. You will see that equations we study arise as mathematical models for important natural phenomena (mechanical motion, mechanical and electrical oscillations, population dynamics, etc.). The course also includes Laplace transforms method for solving differential equations, and matrix methods for solving systems of differential equations. Prerequisite: MATH 251/253/221 or equivalent.

TEXT: *Fundamentals of Differential equations and Boundary Value Problems*, Custom edition for TAMU, by Nagle, Saff, and Snider

Suggested lab manual: *Solving Differential Equations with Maple V*

Course web page: http://calclab.math.tamu.edu/docs/math308

HOMEWORK: Homework problems will be assigned every week and usually are due on Friday in the lecture. The homework problems and the due date will be posted on my web page. You are expected to do all the assigned homework problems. Late homework will not be accepted. If for some reason you can not be in class and turn in your HW in due day, you may drop it off before the class on due day in my mailbox in Milner 130 (please, do not slide them under the door of my office). Collaboration on homework is allowed, but you have to write your ENTIRE solution by yourself. Similarly written homeworks will receive no credit. When you turn in your homework do not forget to put your name on it, section number, homework number and staple all the sheets. All work must be shown. No credit would be given for the answer that is not supported by any work.

It is very important for your success in class that you do your homework regularly, completing all of the suggested problems and practicing working with Maple. Visit me to discuss these problems and seek my help if needed.

EXAMINATIONS: The grading scale is usual 60-70-80-90% (you get an A if your score is 90% or more; etc).

Tentative exams dates are: Exam I- October 5, Exam II - November 16.

Final exam: December 11, 3:30-5:30 pm. in the classroom.

No collaboration on the midterms and on the final is allowed. The use of books, cell phones, calculators or notes of any sort during exams is not permitted.

GRADING POLICY: Grades will be assigned on the basis of 450 points, distributed as follows:

EXAM I = 100 pts, EXAM II = 100 pts, HW = 100 pts, FINAL EXAM = 150 pts, TOTAL = 450 pts (100%) All homework assignments are mandatory, although, only 10 the best scores would count in the final grade (i.e. a few worst grades will be dropped at the end). However, at least one homework that includes computer assignment should be count in the final grade and can not be dropped.

ATTENDANCE, ABSENCES and MAKE-UP POLICY: The material covered in the course is fairly difficult. So your presence during each class is strongly encouraged. If you miss class for some reason, please do read the relevant material from the book before you come to the class the next day.

Make-ups for missed exams will only be allowed for a university approved absence in writing (see http://student-rules.tamu.edu/rule7.htm for details).

LATE WORK POLICY: No late work will be accepted unless there is a university approved excuse in writing.

GETTING HELP. If you need help with the course, talk to me as soon as possible, and come to my office hours regularly. You do not need an appointment to come to regular office hours.

SPECIAL SERVICES: The American with Disabilities ACT (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, the legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring special accommodations, please contact the Department of Student Life, Services for Students with Disabilities (Cain Hall, Room B118, or call 845-1637).

SCHOLASTIC DISHONESTY: Copying work done by others, either in class or out of class, looking on other students papers during exams, having possession of unapproved information in your calculator/computer, and/or having someone else do your work for you are all acts of scholastic dishonesty. These acts, and other acts that can be classified as scholastic dishonesty, will be prosecuted to the full extent allowed by University policy. In this class, collaboration on assignments, either in class or out of class, is forbidden unless permission to do so is granted by the instructor. For more information on university policy regarding scholastic dishonesty, see University Student Rules at http://student-rules.tamu.edu/. **An Aggie does not lie, cheat, steal, or tolerate those who do.** Visit http://www.tamu.edu/aggiehonor and follow the rules of an Aggie Honor Code.

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Have an enjoyable and successful semester!