MATH 3304 - Elementary Differential Equations  
Spring 2015  Course Syllabus

Instructor: Dr. Elvan Akin  
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Office Hours: MWF from 9AM to 9:50AM.  
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Prerequisite: Mathematics 22 (Calculus with Analytic Geometry III) with a grade of “C” or better.

Schaum’s Outline is very good for many worked examples. Also, the second edition (1994) of the Schaum’s outline will work just fine.

Topics to be covered:

Chapter 1  Introduction  
Chapter 2  First-Order Differential Equations  
Chapter 3  Second-Order Linear Equations  
Chapter 4  Higher-Order Linear Equations  
Section 5.4  Euler Equations  
Chapter 6  The Laplace Transform  
Chapter 7  Systems of First-Order Linear Equations

Attendance: If you miss a class, you are responsible for all material, announcements, and assignments that you missed. (Talk to others in the class, check the course schedule) I will take attendance each class, but this is for my own records only – I will not penalize you or drop you from the course for lack of attendance. It is your responsibility to learn the material; attending each class will normally help with this!

Grading: Grades will be determined based on demonstrated proficiency on homework and examinations. The final grade will be based on the following:

Homework  100 points  
Common Midterm Exams  300 points (three exams at 100 points each – at night, dates below)  
Common Final Exam  200 points (Monday, December 15th, 12:30 – 2:30 p.m., room to be announced)

Grading Scale: There are 600 total points. If you score at least 540 points, you are guaranteed to earn an A; 480 points guarantees a B; 420 points guarantees a C; and 360 points guarantees a D.

Midterm Exams: We will have three common hour exams worth 100 points each from 5:00 to 5:50 PM on three Thursdays this semester: February 26, April 2, and April 30. Please realize that these three Thursday evening examinations are regularly scheduled classes published in the 2015 spring semester class offerings at the Registrar’s Office website. It is the responsibility of each student to ensure that he or she is not enrolled in two or more regularly scheduled classes at the same time slot. In particular, student attendance is required at these three Thursday evening Math 3304 hour exams and no alternate exam times will be provided for students who
claim a conflict with another regularly scheduled S&T class. Note that no calculator is allowed in all Math 3304 exams. Samples of Math 3304 exams, with solutions, are posted online in the library’s electronic course reserve.

Exam Replacement: Your lowest hour exam score will be replaced by your percentage score on the final exam provided this improves your point total in the course.

Homework: You should make it a practice to do your homework promptly (i.e., daily) and you are expected to turn in homework regularly. Approximately 14 homework sets will be collected, graded, and returned during this course. Your top ten homework scores will determine your 100-point homework grade. Since approximately four homework scores will be dropped, no late homework will be accepted for any reason. Homework assignments will be due at the beginning of class on Friday of each week unless announced otherwise. This will allow you at least two days (usually more) to ask questions about homework problems. We will not take time to answer questions in class. For questions, come to my office hours, make an appointment to meet with me, go to the Mathematics Learning Center (see below), and go to LEAD sessions (information to come). Solutions to selected homework problems will be posted in the library’s electronic course reserve.

Grading details:
- In your future careers, the presentation of your work is important. Therefore, do not submit sloppy or illegible homework, and staple (or otherwise attach) multiple pages of homework together; expect to lose points otherwise.
- On all your papers (homework, midterm exams, and final exam), you are expected to show your work clearly and completely. You will be graded on your work as well as your answers. In particular, an answer that is unsupported by your work will not receive credit.

Mathematics Learning Center: The Mathematics and Statistics Department sponsors the (free) Mathematics Learning Center in room 105 of Centennial Hall. Some Mathematics and Statistics Department graduate teaching assistants who staff the learning center are current or former teachers of Math 3304 and are well-qualified to assist students with their homework problems in the subject. I will post the Mathematics Learning Center schedule of those GTAs who are equipped to handle your Math 3304 questions when I have it.

Disability Support Services: If you have a documented disability and anticipate needing accommodations in this course, you are strongly encouraged to meet with me early in the semester. You will need to request that the Disability Services staff send a letter to me verifying your disability and specifying the accommodation you will need before I can arrange your accommodation.

Academic Honesty: Page 29 of the 2014-2016 Missouri S&T Student Academic Regulations handbook describes the student standards of conduct relative to the University of Missouri System’s Collected Rules and Regulations section 200.010, and offers descriptions of academic dishonesty including cheating, plagiarism or sabotage. Also see the student council honor code and resources from the Office of Undergraduate Studies.

Question/Concern Resolution: If you ever have a question, problem, or concern about anything in this course, please come see me first. If this does not resolve the matter, you should next speak with the course co-coordinator, Dr. Yanzhi Zhang, in room 110 of the Rolla Building. If your concern still is unresolved, then see the Mathematics and Statistics Department Undergraduate Coordinator, Dr. Ilene Morgan, in room 212 of the Rolla Building. If you still have a concern, then see our Department Chair, Dr. Stephen Clark, in room 202 of the Rolla Building.