MA 238-103  Applied Differential Equations I  Fall 2011

Schedule:  MWF 11:15–12:05 p.m. in ILB 345

Instructor: Dr. Dan Silver • Office: ILB 303 • Phone: 460-6264 ext. 6757
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Office hours: MW 1:30 – 3 p.m., or by appointment

Course description: This is a first course in the theory and application of ordinary differential equations. Topics include first-order differential equations, modeling, numerical methods, linear differential equations of higher order and Laplace transform methods. Prerequisite: Students should have completed MA 227 or be taking it concurrently.

Objectives: Students will gain an understanding of ordinary differential equations and ways in which they arise in the sciences. They will learn basic algebraic, graphical and numerical techniques for obtaining solutions, and how to interpret those solutions. The course will develop general skills in mathematical reasoning and problem-solving.


Attendance: Attendance will be taken. It is your responsibility to sign in. Three or more unexcused absences will lower your final grade by a letter.

Homework: Homework will be assigned but not collected.

Quizzes: There will be at least eight 20-point quizzes. The score for any missed quiz is zero. There will be no make-up quizzes. Instead, your two lowest quiz grades will be dropped.

Exams: There will be two in-class exams, tentatively scheduled for September 23 and November 4. The final exam is on Wednesday, December 14, 10:30 a.m. – 12:30 p.m. If you are unable to attend an exam you should contact me promptly: before the exam if possible, and otherwise, before the next class. A compelling reason for absence will entitle you to a make-up exam.

Calculators: Calculators and computers are not allowed on any test or quiz unless otherwise stated.

Final Grade: Your grade will be based upon the following.

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<tr>
<th>Component</th>
<th>Points</th>
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<tbody>
<tr>
<td>Quizzes</td>
<td>120</td>
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<tr>
<td>In-class exams</td>
<td>200</td>
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<tr>
<td>Final exam</td>
<td>180</td>
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<tr>
<td>Total</td>
<td>500</td>
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If you score 90% or higher, you will earn an A; between 80% and 90%, at least a B, etc. Final grade distribution is determined by attendance and participation as well as overall class performance.

Changes: The above dates and requirements may be modified as circumstances dictate, with adequate written notification to the students.

JagSuccess Program: JagSuccess is a program intended to help students be successful in 100-200 level courses. If you are not doing well, you will receive an email instructing you to see your professor along with instructions to access an online tutorial intended to help with common problems affecting academic performance. Watch for this email during week 7 of this semester.

Tutoring lab: The department offers a tutoring lab to all students taking mathematics and statistics classes. There is no lab fee. Please check the bulletin board outside ILB 325 for details.

Academic Conduct and Disruption Policies: The University of South Alabamas policies regarding academic conduct and disruption are published annually in The Lowdown.

Disabilities: If you have a specific disability that qualifies you for academic accommodations, please notify the instructor/professor and provide certification from the Office of Special Student Services. The Office of Special Student Services is located in Room 270 of the Student Center (460-7212).