Syllabus
Math 335 – Ordinary Differential Equations – Fall 2012
Department of Mathematics, New Mexico Tech

Class: TR 8:00–9:15 AM, Weir 102 (Section 1)
TR 11:00–12:15 AM, WC 109 (Section 3)

Instructor: Dr. Rakhim Aitbayev, Weir 236, (575) 835-5463, aitbayev@nmt.edu
Office hours: TR 9:15–10:40 AM, F - 1:30–3:00 PM

Course catalog description:
3 cr, 3 cl hrs. Prerequisite: MATH 132 passed with grade C− or better. Ordinary differential equations, serious solutions, transform calculus.


Course content: Chapters 1, 2, 3, 5, and 6

Course webpage: http://www.nmt.edu/~aitbayev/math335
Announcements, homework assignments, and quiz and test solution keys will be posted on the course webpage.

Graded assignments: The final exam, tests, homeworks, and quizzes.

• The two lowest homework scores will not be counted in the final score.
• Announced quizzes will be given about once a week. The lowest quiz score will not be counted in the final score.
• There will be 4 tests during the semester.
• There is no final exam.

Course grade composition:

<table>
<thead>
<tr>
<th></th>
<th>Test 1</th>
<th>Test 2</th>
<th>Test 3</th>
<th>Test 4</th>
<th>Homeworks</th>
<th>Quizzes</th>
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</thead>
<tbody>
<tr>
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<td>20%</td>
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<td>20%</td>
<td>10%</td>
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Course grade scale:

<table>
<thead>
<tr>
<th>Course score (%)</th>
<th>0–60</th>
<th>60–66</th>
<th>66–69</th>
<th>69–72</th>
<th>72–76</th>
<th>76–79</th>
<th>79–82</th>
<th>82–86</th>
<th>86–89</th>
<th>89–92</th>
<th>92–100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Letter grade</td>
<td>F</td>
<td>D</td>
<td>D+</td>
<td>C−</td>
<td>C</td>
<td>C+</td>
<td>B−</td>
<td>B</td>
<td>B+</td>
<td>A−</td>
<td>A</td>
</tr>
<tr>
<td>Grade points</td>
<td>0.00</td>
<td>3.00</td>
<td>3.99</td>
<td>5.01</td>
<td>6.00</td>
<td>6.99</td>
<td>8.01</td>
<td>9.00</td>
<td>9.99</td>
<td>11.01</td>
<td>12.00</td>
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Auditing: Auditing students should report their auditing status to the instructor immediately. Attendance of 90% of class meetings is required for obtaining the SA grade.

The Course Policy

• Students must follow the Academic Honesty policy (see NMT Course Catalog).
• Individual work is required for all graded assignments.

• Homeworks must be submitted at the beginning of class. Late homeworks are not accepted.

• A make-up test or a quiz could be given only in an exceptional situation with documented evidence of excused absence.

• Quizzes and tests are closed book.

• Your homework and quiz papers are graded by a grader. If you have any questions regarding grading of your work you need to address the instructor immediately. By comparing with the solution keys posted on the course webpage, you should make sure that your quizzes are graded correctly.

The Course Objectives

Upon completion of this course, students should be able to:

• Understand the concepts of ordinary differential equations, initial value problems, existence and uniqueness of solutions, stability, and singular points of ODEs;

• Model with first and second order ODEs;

• Solve first and second order linear equations; solve nonlinear separable and exact ODEs;

• Apply methods of integrating factor, undetermined coefficients, variation of parameters, power series, and the Laplace transform to solve ODEs

Recommendations for Success

• Do not skip classes;

• Be active in class, which means:
  – Follow the instructor;
  – Take notes;
  – Ask questions;

• Do your homework, which means:
  – Complete the homework assignment;
  – Review lecture notes and read the corresponding sections in the textbook;
  – Review graded papers;
  – Write down questions for the instructor.

• Keep a list of all important formulas and definitions, and try to memorize it.