JEMT 3170 – Engineering Mathematics
Course Syllabus – Fall 2013

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Prerequisites: Math 2020, Introduction to Differential Equations

Course Content

- Ordinary Differential Equations
  - Power Series
  - Bessel’s Equation
- Laplace Transforms
- Linear Algebra
  - Vectors and Matrices
  - Eigenvalues and Eigenvectors
- Vector Calculus
  - Dot Product and Cross Product
  - Gradient
  - Divergence and Curl
- Fourier Analysis
  - Fourier Series
  - Fourier Transforms

Grading

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>10%</td>
</tr>
<tr>
<td>Midterm#1</td>
<td>27.5%</td>
</tr>
<tr>
<td>Midterm#2</td>
<td>27.5%</td>
</tr>
<tr>
<td>Final</td>
<td>35%</td>
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</tbody>
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Usual grades: A > 90%, 80% > B > 89%, 70% > C > 79%, 60% > D > 69%, 59% > F while boarder grades +/- cover the boarder line. These are just guidelines and the actual assign grades may vary by a few percent up/down, but not to exceed 5%.