MATH 428 INTRODUCTION TO PDE - SPRING 2012

Where: Tuesday, Thursday, 8:40-9:55am in 224 Malott

Instructor: Tomas Johnson, 583 Malott, tomas.johnson@cornell.edu

Teaching Assistant: Siming Zhao, 218 Malott, sz298@cornell.edu

Office Hours: TJ: Monday 3:30-4:30pm, Thursday 2:30-3:30pm, SZ: Tuesday 2-4pm.


Prerequisites: Multivariable Calculus, Linear Algebra

Examination: Homework exercises, a written in-class mid-term on March 15, and a written final exam on May 17, 7:00-9:30pm. You will be given a sheet with formulae on the mid-term and the final, the same one as available on the course webpage.

Grading: The course grades will be computed as follows: 35 % Homework, 30 % Mid-term, 35 % Final.

Homework: There will be weekly homework sets (most weeks), assigned every Thursday and collected in class the following Thursday.

Preliminary plan for the lectures: The goal is to cover Chapters 1-5, 7-8, 9.(1-4), and possibly selected parts of Chapters 6 and 9 in the textbook. The plan below will most likely change several times.

<table>
<thead>
<tr>
<th>Week</th>
<th>Chapter</th>
<th>Homework</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/23</td>
<td>1</td>
<td>1.2a, 1.2b, 1.4a, 1.4b</td>
</tr>
<tr>
<td>1/30</td>
<td>2.1-2.5</td>
<td>2.2, 2.6, 2.10, 2.12</td>
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<td>2/6</td>
<td>2.7, 2.9</td>
<td>2.14, 2.16, 2.24, 2.26</td>
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<tr>
<td>2/13</td>
<td>2.9, 9.2, 3.1-3.2</td>
<td>2.22, 2.30, 9.2</td>
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<tr>
<td>2/20</td>
<td>3.3-3.5, 4.1-4.2</td>
<td>3.2, 3.4, 3.10, 3.12</td>
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<tr>
<td>2/27</td>
<td>4.2-4.5</td>
<td>4.4, 4.6, 4.14, 4.18</td>
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<tr>
<td>3/5</td>
<td>4.5, 9.4</td>
<td>Midterm - No homework</td>
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<tr>
<td>3/12</td>
<td>9.4</td>
<td>Spring Break - No Homework</td>
</tr>
<tr>
<td>3/26</td>
<td>5.1-5.2</td>
<td>5.6, 5.10, 5.12, 5.14</td>
</tr>
<tr>
<td>4/2</td>
<td>5.3-5.5, 7.7.2</td>
<td>5.4, 5.8, 5.18, 5.20</td>
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<tr>
<td>4/9</td>
<td>7.1-7.4, 7.6</td>
<td>5.16, 7.14, 7.18, 7.20</td>
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<tr>
<td>4/16</td>
<td>7.5, 7.8</td>
<td>7.2, 7.13, 7.16, 7.22</td>
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<tr>
<td>4/23</td>
<td>8.1-8.2</td>
<td>No Homework</td>
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<tr>
<td>4/30</td>
<td>6</td>
<td>Final - No homework</td>
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</table>

Updates: Updates to the lecture plan and the formula sheet will be posted on www.math.cornell.edu/~tjohnson.