Math 2310: Linear Algebra with Applications  
Fall 2014  
Lec 001 (MWF 12:20 PM - 1:10 PM): 406 Malott Hall  
Lec 002 (MWF 1:25 PM - 2:15 PM): 406 Malott Hall  

Instructor:  
Bruce Fontaine  
Email: bfontain@math.cornell.edu  
Office: 432 Malott Hall  
Office Hours: 10:00 AM - 11:00 AM Monday & Wednesday 3:45 PM to 4:30 PM Monday  

Textbook:  
The material covered in this course will come from the following text:  


We will cover all the material from chapters 1 through 4 and selected sections from 5 through 8. Note that all applications are contained in chapter 8.  

Content:  
This course will serve as an introduction to linear algebra, covering topics such as solving systems of linear equations, vectors, matrices, matrix operations & elimination, vector spaces & subspaces, orthogonality & projections, determinants, eigenvalues and various applications.  

Course Website:  
Announcements, this document, homework and others will be available at [http://www.math.cornell.edu/~bfontain/courses/MATH2310/](http://www.math.cornell.edu/~bfontain/courses/MATH2310/). Check the announcements regularly for information as things may get updated.  

Grading Scheme:  
You will need at least 60% to guaranteed a D-, 70% for a C-, 80% for a B- and 90% for an A-.  

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<thead>
<tr>
<th>Percentage</th>
<th>Category</th>
</tr>
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<tbody>
<tr>
<td>15%</td>
<td>homework</td>
</tr>
<tr>
<td>5%</td>
<td>quizzes</td>
</tr>
<tr>
<td>25%</td>
<td>prelim 1</td>
</tr>
<tr>
<td>25%</td>
<td>prelim 2</td>
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<tr>
<td>30%</td>
<td>final exam</td>
</tr>
</tbody>
</table>

Each student is expected to abide by the Cornell University Code for academic integrity. [http://www.theuniversityfaculty.cornell.edu/AcadInteg/code.html](http://www.theuniversityfaculty.cornell.edu/AcadInteg/code.html)  

Homework:  
Homework will be assigned once a week on Wednesday and due the following Wednesday in lecture section. No late homework will be accepted. Your name and the page number must appear at the top of each sheet of paper handed in unless the assignment is stapled. Stapling is strongly encouraged.  

Collaboration is encouraged but the final write up of the problems must be your own. Direct copying of any source, be it a classmate, website or textbook is a violation of the academic integrity code.  

1
Homework will be graded on two bases: the number of problems attempted and for select problems, the accuracy of the solution. The two lowest homework grades will be dropped. Solutions to each assignment will be posted shortly after it is due.

Quizzes:
There will also be a short quizzes during some lectures consisting of a single question from the most recently handed in homework. These will occur every second week, skipping the weeks of the prelims. There will be no make up quizzes.

Prelim and Final Exams:
Currently we hope to schedule the prelims on Sept 30th and Nov 4th from 7:30 PM - 9:00 PM.

The final exam will be cumulative and will take place at a time, date, and location to be announced.

If a student’s midterm exam average is greater than their homework/quiz average then the exam average replaces the corresponding average, provided they have submitted all homework and taken all quizzes. If a student earns a 83% or better (73% or better, 63% or better) on the final exam, they earn a B- or better (respectively a C- or better, D- or better) in the course, provided they have taken all exams, quizzes, and submitted all homework sets. Either of these requirements may be waived at the instructor’s discretion.

Calculators:
You will not need a calculator for this course during exams or quizzes if you are properly prepared for the course. Unless instructed otherwise, you should not give decimal approximations for your answers (e.g. leave answers in terms of \( \pi, e, \sqrt{2}, \) etc.). The only calculators allowed for use on tests and quizzes in this course are those which have the capability of storing at most one number and with no algebraic or graphical capabilities. Simple calculators can be purchased very cheaply from a wide variety of sources. You may not use a calculator which is part of a cellphone, PDA, or similar device. No exceptions.

Makeup work:
Generally a student will only be allowed to makeup work when it is required by university policy. See the instructor if you need to make up work to make arrangements.

Add/Drop Information
The add deadline this year is September 9th and the drop deadline is October 10th. All add/drop inquires should be directed toward Heather Peterson (hko1@cornell.edu).