Math 261–01  Spring, 2010
Linear Algebra
CRN: 20295
MWF 1:00pm to 1:50pm
Kennedy 207

Instructor: Dr. Christopher Seaton
Office: 320 Ohlendorf Hall
Office Hours: MWF: 12:00 to 1:00pm
TR: 2:00 to 3:30pm or by appointment
Phone: x3721
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Web: http://faculty.rhodes.edu/seaton/

Course Description:
This course deals with systems of linear equations, matrix algebra, determinants, real and complex vector spaces, linear transformations, eigenvalues and eigenvectors, and diagonalization. I intend to cover Chapters 1 through 6 in the text and explore further topics as time permits. Some of these topics may have been introduced to you in Math 223; however, we will be exploring them more rigorously and in a more general context, and I will not assume that you have taken Math 223. Due to the nature of this material, there will be an emphasis on reading and writing proofs.

Course Prerequisites:
This course requires Math 122 (Calculus II) or the equivalent.

Office Hours:
Students are strongly encouraged to take advantage of my office hours and to make appointments when my office hours are not convenient. My schedule is posted online at http://faculty.rhodes.edu/seaton/schedule.htm and on the door of my office. Please consult this schedule before suggesting an appointment time (particularly via e-mail).

Web Page:
This syllabus is available on my web-page (URL above). I will post a summary of homework assignments there as well. While you will not be submitting homework on Moodle, I will occasionally use Moodle to post files that will be useful to you. I will announce anything I post in class, but students are encouraged to consult my web page and the course Moodle page periodically, particularly if they have missed a class.

The homework summary is for your reference when studying for an exam. It is subject to change until the assignments have been given in class.

Attendance Policy:
I will take attendance. You are permitted three unexcused absences throughout the semester; if you are absent three or fewer times, you will be allowed to skip one
problem on the final for which you will receive full credit (one tenth of the test). An excused absence must be discussed with me in advance if possible, and the proper documentation must be made available where appropriate. If I decide that excessive absences are jeopardizing your ability to pass the course, I will take action as outlined on page 68 of the catalogue. It is your responsibility to obtain notes and assignments when you are absent.

**Grading:**

Your letter grade for the course will be based on the following scale:

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Numerical Range</th>
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<tbody>
<tr>
<td>A</td>
<td>[93, 100]</td>
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<tr>
<td>A-</td>
<td>(90, 93)</td>
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<tr>
<td>B+</td>
<td>[87, 90)</td>
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<tr>
<td>B</td>
<td>[83, 87)</td>
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<tr>
<td>B-</td>
<td>[80, 83)</td>
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<tr>
<td>C+</td>
<td>[77, 80)</td>
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<tr>
<td>C</td>
<td>[73, 77)</td>
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<tr>
<td>C-</td>
<td>[70, 73)</td>
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<td>D+</td>
<td>(67, 70)</td>
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<td>D</td>
<td>[63, 67)</td>
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<tr>
<td>D-</td>
<td>[60, 63)</td>
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<td>F</td>
<td>[0, 60)</td>
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</tbody>
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This scale is “worst case scenario”; I may choose to uniformly reduce the numerical requirements for a grade, but will not increase them.

The total percentage will be computed as follows:

- Homework: 20%
- Writing Projects: 15%
- Exams: 2 × 20%
- Final Exam: 25%

**Homework:**

At the end of each lecture, I will assign both practice problems for you to test your comprehension and homework problems to be handed in. The homework from one week is due the following Wednesday (or the second lecture day of the week in case of holiday). The homework you hand in must be your own work; you may work on the problems with other students, but they may not aide in the write-up. I reserve the right to give in-class quizzes or group assignments that will count as homework assignments.

**Written Projects:**

There will be two or three group writing projects that consist of longer, more involved applications of the material. These projects must be typed and will be graded both on content and exposition.

**LATE HOMEWORK WILL NOT BE ACCEPTED.**

**Exams:**

There will be two mid-term exams. The exams will be given in FJC from 7:00pm to 8:30pm on Wed. Feb. 24th and Wed., Apr. 14th.

If you have to be absent for an exam, you must make arrangements with me as early as possible before the day of the exam, and you will be expected to document your absence. Otherwise, you will not be allowed to make up the test. In most circumstances, I will not make arrangements for you to make up an exam unless I have been notified one week before the day of the exam.
Final Exam:
The final exam is scheduled for Saturday, May 8th at 1:00pm. It will be a closed-book, closed-notes, cumulative exam with a slight emphasis on material covered after the second mid-term.

Calculators:
Calculators will not be allowed on the tests. You may use calculators or software packages on your homework, but you must still show sufficient work for me to follow your steps in order to receive full credit.

Honor Code:
All students are expected to conduct themselves within the guidelines of the College’s Honor Code. Please ask me if you have any questions about what is allowed. I reserve the right to reduce a student’s grade in the event of plagiarism whose intent cannot be verified.

Students With Disabilities:
If you have or think you may have a documented disability, please contact me and the Office of Student Disability Services as early in the semester as possible.