Matrix Theory & Linear Algebra
MA 211 Summer 2015
8:00 – 9:30 AM
MTWR WS 2901

Professor: Dr. Linda Lawton
Office: Jamrich 2206
Email: llawton@nmu.edu
Office Hours: 9:30 – 10:30 MTWR or by appointment


Course description: We will cover chapters 1 - 8 of the text. Students will become familiar with systems of linear equations, matrix algebra, determinants, vector spaces, linear transformations, eigenvalues & eigenvectors, inner products, and orthogonality.

Prerequisite: Satisfactory (C- or better) completion of MA161 or equivalent.

“Homework”: Homework problems from the text will be assigned but not collected daily - instead we will have daily/weekly quizzes and in-class grades (group worksheets) worth a total of 1750 daily points. I will “forgive” 250 points - i.e. if at the end of the semester you have accumulated 1500 points, you will receive 100% for your homework average. In light of this, there will not be “make-up” quizzes/worksheets — the “forgiven” 150 points accounts for necessary absences.

Exams: There will be two in-class exams spaced roughly 3½ weeks apart. Just a word of warning — make-up exams tend to be more difficult than the original. (Once a test has been given, its content tends to become widely known very rapidly — not to mention I may have already used my best (read nice) problems.)

Breakdown: 

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<th>Grade scale:</th>
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<tbody>
<tr>
<td>Homework: 15%</td>
<td>91 – 100% = A</td>
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<tr>
<td>Exam 1: 25%</td>
<td>81 – 89% = B</td>
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<tr>
<td>Exam 2: 25%</td>
<td>71 – 79% = C</td>
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<tr>
<td>Final: 35% (comprehensive)</td>
<td>61 – 69% = D</td>
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<tr>
<td></td>
<td>&lt; 60% = F</td>
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Learning Outcomes (primary focus of examinations) Students will . . .

- Solve linear systems of equations
- Perform matrix operations, including evaluating determinant of a square matrix.
- Define linear independence, vector space, and linear transformation between vector spaces.
- Compute eigenvalues and eigenvectors.
About me:

Normally I am a rather informal, laid back person—i.e. easy to deal with. (Even my husband agrees with this.) But there are a few things which tend to make me grumpy—i.e. difficult to deal with. Here’s a short list (keep in mind this was developed while teaching “Math for People Who Hate Math But Have to Have One to Graduate”):

1. bad attitudes
(Please don’t just sit in the back glaring at me—pretend you are enjoying yourself!!)

2. homework (or other) questions right before class starts
(I want to provide you with clear, understandable lectures, but I am easily distracted. I need that time to focus before I start class.)

3. repeatedly skipping class and expecting me to “lecture” during office hours
(I don’t mind covering the material with you in my office, but there is only so much we can cover in one sitting.)

4. point grubbing
(When I grade quizzes and tests I go through all the papers twice to ensure that equivalent credit is given to equivalent work. If you feel I have made an error, please submit a written request for me to review the matter.)

5. cheating, etc.
Cheating will result in failure of not only the exam / assignment, but also the course.

If you have a need for disability-related accommodations or services, please inform the Coordinator of Disability Services in the Dean of Students Office at 2001 C. B. Hedgcock Building (227-1700). Reasonable and effective accommodations and services will be provided to students if requests are made in a timely manner, with appropriate documentation, in accordance with federal, state, and University guidelines.

This syllabus is subject to change with notice.