Math 235.9  Course Policy Summary  Spring 2020

Course Chair: Prof. Weimin Chen
Office: LGRT 1323K
Mailbox: LGRT 1623D
E-mail: wchen@math.umass.edu

Instructor: Angelica Simonetti
Office: LGRT 1235L
Hours: Tu Thu 10-11am or by appointment
E-mail: asimonetti@umass.edu

This document is just a summary. Full details appear at:
Course-wide web site: http://people.math.umass.edu/~wchen/m235s20.html
Section web site: http://people.math.umass.edu/~simonetti/spring2020math235.html

Math 235 is an introductory course on linear algebra, covering systems of linear equations, matrices, linear maps, determinants, vector spaces, eigenvalues and eigenvectors, and orthogonality.

Schedule: The schedule below gives the topics from the course text to be covered each week. (This is only a guideline, and may be modified as necessary).

<table>
<thead>
<tr>
<th>Class</th>
<th>When</th>
<th>Where</th>
</tr>
</thead>
<tbody>
<tr>
<td>46205</td>
<td>Mon Wed Fri 1:25-2:15 pm</td>
<td>Hasbrouck Lab - Add room 113</td>
</tr>
</tbody>
</table>

1/20–1/24: 1.1 Systems of linear equations; 1.2 Row reduction and echelon forms; 1.3 Vector equations.

1/27–1/31: 1.3 (continued); 1.4 The matrix equation Ax=b; 1.5 Solution sets of linear systems.

2/3–2/7: 1.7 Linear independence; 1.8 Introduction to linear transformations.

2/10–2/14: 1.9 The matrix of a linear transformation; 2.1 Matrix operations.

2/17–2/21: 2.2 The inverse of a matrix; 2.3 Characterizations of invertible matrices.

2/24–2/28: 3.1 Introduction to determinants; 3.2 Properties of determinants.

3/2–3/6: 3.2 (continued); 3.3 Cramer’s rule, volume, and linear transformations; 4.1 Vector spaces and subspaces.


3/23–3/27: 4.4 Coordinate systems; 4.5 The dimension of a vector space.

3/30–4/3: 4.6 Rank; 5.1 Eigenvectors and eigenvalues.

4/6–4/10: 5.1 (continued); 5.2 The characteristic equation.

4/13–4/17: 5.3 Diagonalization; 5.5 Complex eigenvalues.

4/20–4/24: 6.1 Inner product, Length, and Orthogonality; 6.2 Orthogonal sets, 6.3 Orthogonal projections.


Requirements and grading: The four course assessments are equally weighted (25% each): Midterm I, Midterm II, Final exam, Homework, quizzes and class participation.

The course letter-grade scale is:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>90-100</td>
</tr>
<tr>
<td>A−</td>
<td>87-89</td>
</tr>
<tr>
<td>B+</td>
<td>84-86</td>
</tr>
<tr>
<td>B</td>
<td>80-83</td>
</tr>
<tr>
<td>B−</td>
<td>77-79</td>
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<td>C+</td>
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<td>D+</td>
<td>64-66</td>
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<tr>
<td>D</td>
<td>57-63</td>
</tr>
<tr>
<td>F</td>
<td>&lt; 56</td>
</tr>
</tbody>
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**Required text:** The course text is *Linear Algebra and its Applications* (5th edition) by David Lay, Steven Lay & Judi McDonald.

**Required homework system:** *MyMathLab* Note: An electronic copy of the textbook is included in your purchase of MyMathLab. Go to [www.mymathlab.com](http://www.mymathlab.com) and use the Course ID for your learning section. On-line homework and quizzes will be assigned through MyMathLab.

**Overrides:** Students needing an override in order to enroll in the course should contact the course chair Weimin Chen wchen@math.umass.edu with the following information:

- sections of the course which conflict with other courses from your academic schedule, and
- preferred section of the course. (Unfortunately, in order to keep the sections balanced we cannot guarantee that you will be assigned to your preferred section.)

**Exams:**

- There will be two midterm exams and a final exam. Past exams are available at [http://people.math.umass.edu/~markman/math235_fall15_html/practice-exams.html](http://people.math.umass.edu/~markman/math235_fall15_html/practice-exams.html). You are allowed one 8.5” x 11” sheet of notes (both sides). Calculators and the textbook are not allowed on the exams. You should bring your student ID (UCard) to each exam.

- If you have a documented conflict for one of the exams, in order to take the make-up exam you must give the course chair Weimin Chen (wchen@math.umass.edu) at least one week written notice for a midterm exam and at least two weeks’ written notice for the final exam. Other make-up exams (for example due to medical emergencies) will be handled by me (the instructor). Make-up exams will not be given to accommodate travel plans.

- The first midterm will be held on Thursday 2/27/20, 7:00PM–9:00PM, at locations TBA. The syllabus for the first midterm is the following sections of the textbook: 1.1, 1.2, 1.3, 1.4, 1.5, 1.7, 1.8, 1.9, 2.1.

- The second midterm will be held on Thursday 4/9/20, 7:00PM–9:00PM, at locations TBA. The syllabus for the second midterm is the following sections of the textbook: 2.2, 2.3, 3.1, 3.2, 3.3, 4.1, 4.2, 4.3, 4.4, 4.5.

- The date, time and location of the final exam are TBA by the university. You can find them on Spire.

**Quizzes:** A short quiz is normally given every other week at the end of class, except in the first and last weeks of classes and except in weeks of mid-semester exams.

**The lowest quiz** will be dropped. This is to allow for *all* reasons for missing quizzes, including illness, emergencies, officially excused absence from campus, and absence for religious observance.

**Homework:** The *lowest 2 homework sets* will be dropped. This is to allow for *all* reasons that homework is not completed on time, including illness, emergencies, officially excused absence from campus, and absence for religious observance.

**Class etiquette:**

- If you arrive late to class, sit in the first seat you can find so as not to disturb others, and do *not* come up to the front of the room to pick up or hand in papers.

- Do *not* use cell phones/laptops during class.

**Religious observance:** If you will be absent from an exam or other class activity because of religious observance, you must notify me in writing, in advance of the absence, and *at the beginning of the semester*—within one full week of your enrollment in the course.

**Drops, Withdrawals, and Incompletes:** The last day to drop with no record is *February, 3rd*. If you intend to drop, please do so as soon as possible; others may be waiting to enroll in your section. The
last day to drop with a W is **March, 5th.** An **Incomplete** is possible only if: (1) you had a compelling personal reason, e.g., serious illness; (2) your work has clearly been passing; and (3) there’s a good chance you’ll complete the course with a passing grade within the allotted time. Thus, *failing work is no reason in itself for an Incomplete.*

**Accommodation Policy Statement:** UMass Amherst is committed to providing an equal educational opportunity for all students. A student with a documented physical, psychological, or learning disability on file with Disability Services may be eligible for academic accommodations to help them succeed in this course. If you have a documented disability that requires an accommodation, please notify me during the first two weeks of the semester so that we can make appropriate arrangements. It is also your responsibility to notify Disability Services (normally at least one week in advance) if you wish to take an exam there.

**Academic honesty Statement:** Since the integrity of the academic enterprise of any institution of higher education requires honesty in scholarship and research, academic honesty is required of all students at the University of Massachusetts Amherst. Academic dishonesty is prohibited in all programs of the University. Academic dishonesty includes but is not limited to: cheating, fabrication, plagiarism, and facilitating dishonesty. Appropriate sanctions may be imposed on any student who has committed an act of academic dishonesty. Instructors should take reasonable steps to address academic misconduct. Any person who has reason to believe that a student has committed academic dishonesty should bring such information to the attention of the appropriate course instructor as soon as possible. Instances of academic dishonesty not related to a specific course should be brought to the attention of the appropriate department Head or Chair. Since students are expected to be familiar with this policy and the commonly accepted standards of academic integrity, ignorance of such standards is not normally sufficient evidence of lack of intent ([http://www.umass.edu/dean_students/codeofconduct/acadhonesty/](http://www.umass.edu/dean_students/codeofconduct/acadhonesty/)).