

MATHEMATICS & STATISTICS DEPARTMENT
MAT 335-003 Linear Algebra and Matrices
SPRING 2014(Draft)

Instructor: Dr. XIN LU

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Office Hours: 9:00AM-11:00 AM Tuesday and Thursday or by appointment.
Students are always welcome to drop by my office.

Room: BR 219 on Tuesday and BR 164 on Thursday

Class Time: 2:00PM-3:15 PM, T/TH

COURSE INFORMATION

Course Catalog Description: MAT 335. Linear Algebra and Matrices (3)

Prerequisite: MAT 162. Systems of linear equations, vector spaces, algebra of matrices and linear transformations, determinants, eigenvalues and eigenvectors, applications.

Course Student Learning Objectives

1. Read, write, and speak accurately about mathematical ideas and use correct mathematical notation.
2. Read and write mathematical proofs.
3. Use computer technology to perform matrix computations, explore mathematical concepts, and verify work.
4. Perform matrix computations, solve linear systems of equations and determine the bases of related vector spaces, and eigenvalues and eigenvectors, and diagonalize matrices when applicable.
5. Apply the mathematics of linear algebra to models of real-world problems.

TEXT: Linear Algebra, 4th edition by David C. Lay

TOPICS: The topics covered and the approximate time spent on each is:

- Chapter 1 Linear Equations in Linear Algebra
 - Chapter 2 Matrix Algebra
 - Chapter 3 Determinants
 - Chapter 4 Vector Spaces
 - Chapter 5 Eigenvalues and Eigenvectors
 - Chapter 6 Orthogonality and Least Squares
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TESTS AND GRADING

Major Test Days: TEST 1: February 25, Tuesday;
TEST 2: April 22, Tuesday;

Final Exam: May 8, Thursday, 3:00PM – 6:00PM,

GRADED WORK:

Tests	200 points(100 for each test)
Quizzes/Homework	100 points
Project	50 points
Comprehensive Final Exam	200 points
Total: 550 points	

GRADING SCALE:

$90\% \leq \mathbf{A-} < 92\%$; $92\% \leq \mathbf{A} \leq 100\%$;
 $80\% \leq \mathbf{B-} < 82\%$; $82\% \leq \mathbf{B} < 87\%$; $87\% \leq \mathbf{B+} < 90\%$;
 $70\% \leq \mathbf{C} < 77\%$; $77\% \leq \mathbf{C+} < 80\%$;
 $60\% \leq \mathbf{D} < 67\%$; $67\% \leq \mathbf{D+} < 70\%$; **F:** under 60%.

POLICIES

1. **Make-up Policy:**

- No make-up quiz! No late homework papers for grading. Will allow for 3 missed homework/quizzes, excused or unexcused, but it's better for you to turn them in.
- No make-up test will be given unless illness or emergency. Instructor must be notified in advance or on the test day. Make-up test will be given on the earliest available date.

2. **Attendance Policy:** Attendance is expected unless extreme circumstances. A student who has two or less absents may have chances for some extra credits.

3. **Academic Honor Code and Seahawk Respect Compact:** Please refer to Section V in your student handbook and Dean of Students' website (<http://www.uncw.edu/stuaff/doso/>) about Academic Honor Code for the definition and procedures about academic dishonesty offenses. The Seahawk Respect Compact (<http://www.uncw.edu/diversity/src.html>) expresses the core values essential to an open, respectful learning and working environment.

4. **Disability:** UNCW Disability Services supplies information about disability law, documentation procedures and accommodations that can be found at <http://www.uncw.edu/stuaff/disability/>. To obtain accommodations the student should first contact Disability Services and present their documentation to the coordinator for review and verification.

5. **Religious Observance Policy**

In accordance with NC SL 2010-211, you are entitled to two excused absences for religious observances **per academic year**. You must inform me in writing the first week of class if you will be missing any classes due to religious observance and using one of the two permissible absences for the academic year. In addition, please inform the Registrar the first week of class who will then confirm your intentions to miss class with the impacted course instructors. Any absence for religious purposes will be considered unexcused unless you submit the request in writing the first week to either me or the Registrar.

6. The UNCW Statement on Diversity in the University Community

As an institution of higher learning, the University of North Carolina Wilmington represents a rich diversity of human beings among its faculty, staff, and students and is committed to maintaining a campus environment that values that diversity. Accordingly, the university supports policies, curricula, and co-curricular activities that encourage understanding of and appreciation for all members of its community and will not tolerate any harassment or disrespect for persons because of race, gender, age, color, national origin, ethnicity, creed, religion, disability, sexual orientation, political affiliation, marital status, or relationship to other university constituents.

7. Zero Tolerance Policy

UNCW practices a zero tolerance policy for violence and harassment of any kind. For emergencies contact UNCW CARE at 962-2273; Campus Police at 962-3184; or Wilmington Police at 911. For University or community resources visit: <http://www.uncw.edu/safe-relate/campusResources.htm>. Violence prevention information and resources available at <http://www.uncw.edu/safe%2Drelate/>. We will focus several class discussions on the importance of reducing violence and increasing tolerance in schools and at UNCW.

8. Cell Phones, PDAs, Laptops

Please silence your cell phone and do not make calls, access applications or text during class. If you have a personal, urgent matter for which you need to be on call, please let me know in advance. In addition, please do not have active any PDAs or laptops/netbooks/iPads open and active unless the activity warrants. We will use these devices in selected activities and they are permissible then.

EMERGENCY HOTLINE: If the university is officially closed, the hours of closing will be announced on the emergency hotline (910-962-3991 or toll-free 888-657-5751) and published on @UNCW.

IMPORTANT DATES

January 13, Monday	Classes begin
January 20, Monday	Martin Luther King, Jr. state holiday; no classes
January 21, Tuesday	Last day for registration/Last day to drop (without a grade)
February 25, Tuesday	Test 1
February 28, Friday	Last day to withdraw with W
March 1-9, Saturday-Sunday	Spring Break; no classes
April 17, Thursday	No classes
April 18, Friday	Good Friday state holiday; no classes
April 22, Tuesday	Test 2
May 8, Thursday	Final Exam 3:00pm – 6:00 p.m.

THE UNIVERSITY LEARNING CENTER

Location: DePaolo Hall, first floor, Office #1056

Phone: 910.962.7857

Web: <http://www.uncw.edu/ulc/>

The Math Lab

<http://www.uncw.edu/ulc/math/lab.html>

<http://www.uncw.edu/ulc/appointmentinstructions.html>

The Math Lab's hours are shorter at the beginning of the semester, during exams, and during the summer, but typically the lab is open:

Sunday 2pm – 9pm

Monday – Thursday 9am – 9pm

Friday 9am – 2pm

Please keep this syllabus for future reference.