Kennesaw State University
Math 3260/52
Linear Algebra I
Dr. Dillon
Updated 12/5/15
Fall 2015

Prerequisite: C or better in Calculus I

MWF 12:00-12:50 pm, D112
Test 1 Blank | Test 1 Key
Test 2 Blank | Test 2 Key
Test 3 Blank | Test 3 Key

FINAL EXAM: Monday, December 14, 2015, 1:00-3:00 pm

Tests from a related but slightly dissimilar course: 1, 2, 3, 4

Classroom etiquette: Please respect the personal nature of learning in a small, interactive class by refraining from use of cell phones and other gadgets.

INSTRUCTOR: Dr. M. Dillon
OFFICE: D246
OFFICE HOURS: MWF 11:00 -11:30 am, 1:00-1:30 pm; also by appointment
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COURSE DESCRIPTION: A first course in linear algebra. Topics include matrices, systems of linear equations, linear combinations, span, independence, vector spaces, linear transformations.


The plan is to cover 1.1-1.10 (with selected applications), 2.1-2.3, 3.1, 3.2, 4.1-4.6, 5.1-5.4, 6.1-6.5 in the text.

TECHNOLOGY: Nothing specific is required for homework and no technology is permitted on quizzes and tests. You must be able to multiply matrices, invert matrices, and calculate determinants of low dimension matrices by hand. For more interesting problems, use whatever you have. (I use a TI-89 calculator, for instance.)

GOALS: Upon completing this course students should be able to:
1. Use the vocabulary of linear algebra correctly.
2. Perform matrix and vector operations in and use them in applications.
3. Identify and construct examples of elementary vector space ideas in Euclidean n-space as well as in general vector spaces.
4. Find and use eigenvalues and eigenvectors.

We have a concrete final goal in this course, one that ties together all that comes before. It is an explanation for the method of least squares approximation, an extremely important application.

ATTENDANCE POLICY: Class attendance is required for this course. Students are solely responsible for managing their enrollment status in a class; nonattendance does not constitute a withdrawal.

GRADING: Your course grade will be calculated based on the following components.

1. Two out of three in-class tests count towards 40% of your final grade.
2. The final exam will count towards 40% of your final grade.
3. Ten out of approximately 13 quizzes will count towards 20% of your final grade.

TESTS: Tests are scheduled for Friday, September 18; Wednesday, October 21; Monday, November 30. The lowest test grade is dropped so there are NO MAKE-UP TESTS.

QUIZZES: Quizzes will be given with or without warning approximately once a week. Quizzes will be based on the assigned homework problems and you will have an opportunity at every class meeting to ask about the homework. Only the best 10 quizzes will count towards your grade, so approximately 3-5 quiz grades will be dropped, thus, there are NO MAKE-UP QUIZZES.

FINAL EXAM: The final is COMPREHENSIVE. It is scheduled for Monday, December 14, 1-3 pm.

MAKE-UPS? NO, NONE, NEVER— There are NO MAKE-UPS in this class!

WITHDRAW DATE: Wednesday, October 7 is the last day to withdraw with a grade of “W.” (For current policy on the number of withdrawals permitted, see http://catalog.kennesaw.edu/content.php?catoid=24&navoid=2171#withdrawalfromclasses.)

RECORDING DEVICES: The use of any and all electronic recording devices during class meetings of this course is expressly forbidden. Electronic recording devices include, but are not limited to, cell phones, tape recorders, and video cameras. Under certain circumstances, students with special needs may request permission of the instructor to record classes. Permission granted under these circumstances will be strictly limited and all details will be in writing.

Accommodations: Any student with a documented disability or medical condition needing academic accommodations of class-related activities or schedules must contact the instructor immediately. Written verification from the KSU Student Disability Services (http://www.kennesaw.edu/stu_dev/dsss/welcome.html) is required. No requirements exist that
accommodations be made prior to completion of this approved University documentation. All discussions will remain confidential.

**Academic Dishonesty**: There is a zero tolerance policy on cheating in this course. The use of any electronic devices, including phones, is expressly forbidden during tests and quizzes. Every KSU student is responsible for upholding the provisions of the Student code of Conduct, as published in the Undergraduate and Graduate catalogs. The Student Code of Conduct addresses the University’s policy on academic honesty, including provisions regarding plagiarism and cheating, unauthorized access to University materials, misrepresentation/falsification of University records or academic malicious/intentional misuses of computer facilities and/or services, and misuse of student identification cards. Incidents of alleged academic misconduct will be handled through the established procedures of the Student Conduct and Academic Integrity department, which includes either an “Informal” resolution by a faculty member, resulting in a grade adjustment, or a formal hearing procedure, which may subject a student to the Code of Conduct’s minimum one semester suspension requirement.

**Course Schedule with Homework Problems**

Due dates are noted to the left of each set. Please note that we have 45 meetings and every single one counts. We do not have time to waste. **Please come to class every day with your work prepared.**

There may be more than you can do here. Try to finish, but don’t become overwhelmed. You should spend 1-2 hrs per day on homework. If you work problems every day, your endurance will improve. It is most important to keep working.

1) **8/17:** FIRST DAY OF CLASS  
2) **8/19:** Section 1.1, p. 10: 1-33 odd, 34  
3) **8/21:** Section 1.2, p. 21: 1-33 odd  
4) **8/24:** Section 1.3, p. 32: 1-29 odd  
5) **8/26:** Section 1.4, p. 40: 1-41 odd  
6) **8/28:** Section 1.5, p. 47: 1-23 odd, 27-35 odd  
7) **8/31:** Get caught up.  
8) **9/2:** Section 1.6, p. 54: 7, 9, 13, 15  
9) **9/4:** Section 1.7, p. 60: 1-37 odd, 41  
**9/7: LABOR DAY, NO CLASS**  
10) **9/9** Section 1.8, p. 68: 1-21 odd, 25-29 odd, 33-39 odd  
11) **9/11:** Section 1.9, p. 68: 1-29 odd, 35-39 odd  
12) **9/14:** Get caught up.  
13) **9/16:** REVIEW DAY; have questions ready  
14) **9/18 TEST 1 through Section 1.8**  
15) **9/21** Have questions ready about the test. Read 1.9, 2.1.  
16) **9/23** Section 2.1, p. 100: 1-17 odd, 27, 40 (by hand!)  
17) **9/25** Section 2.2, p. 109: 1-13 odd, 29-37 odd  
18) **9/28** Section 2.3, p. 114: 1-23 odd, 29, 33  
19) **9/30** Section 3.1, p. 167:1-41 odd  
20) **10/2** Section 3.2, p. 175: 1-39 odd  
21) **10/5** Get caught up  
22) **10/7** Section 4.1, p. 198: 1-23 odd, 35  
23) **10/9** Section 4.2, p. 204: 1-27 odd, 31-39 odd
24) 10/12 Section 4.3, p. 213: 1-27 odd, 33, 37
25) 10/14 Section 4.4, p. 222: 1-17 odd, 27-37 odd
26) 10/16 Section 4.5, p. 229: 1-23 odd
27) 10/19 REVIEW DAY; have questions ready
28) **10/21 TEST 2 on 1.9, 2.1-2.3, 3.1-3.2, 4.1-4.3**
29) 10/23 Have questions ready about the test. Read 4.6.
30) 10/26 Section 4.6, p. 236: 1-17 odd, 27
31) 10/28 Section 5.1, p. 271: 1-27 odd, 31, 37
32) 10/30 Section 5.2, p. 279: 1-21 odd
33) 11/2 Section 5.3, p. 286: 1-25 odd
34) 11/4 Section 5.4, p. 293: 1-25 odd Do this after test 3
35) 11/6 Get caught up.
36) 11/9 Get caught up
37) 11/11 Get caught up
38) 11/13 Get caught up
39) 11/16 Get caught up
40) 11/18 Get caught up
41) 11/20 REVIEW DAY; have questions ready
42) **11/23-11/27 Thanksgiving Break**
43) 11/30 TEST 3 on 4.4-4.6, 5.1-5.3
44) 12/2 Section 5.4, p. 293: 1-25 odd
45) 12/4 Review: have questions ready about the course.
46) 12/7 LAST DAY OF CLASS; Review: have questions ready about the course.

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