Kennesaw State University
Math 3260
Linear Algebra I
Dr. Dillon
Updated 1/7/2018
Spring 2018

Prerequisite: C or better in Math 1190

Section 52: MWF 10:00-10:50 am, D116
Section 53: MWF 11:00-11:50 am, D116

Old Tests
Test 1 Blank | Test 1 Key
Test 2 Blank | Test 2 Key
Test 3 Blank | Test 3 Key

Tests from another version of the course: 1, 2, 3, 4

Classroom decorum: No screens and no headsets. If you have medical reasons for
being unable to go 50 minutes without use of an electronic gadget, please supply a
note from a medical professional. Otherwise, leave your electronics OFF and/or
AWAY during the class meetings.

Links

Link to slides/notes from an earlier version of the text
Extra Slides for Section 1.9
Algorithm for row reduction

Gil Strang’s paper, requires KSU login: The Fundamental Theorem of Linear Algebra

INSTRUCTOR: Dr. M. Dillon
OFFICE: D246
OFFICE HOURS: MWF 12:00-12:50 pm; also by appointment
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SI-LEADER: Patrick Glenn
EMAIL: pglenn@students.kennesaw.edu

COMMUNICATIONS: For both Dr Dillon and Patrick, email is best.
COURSE DESCRIPTION: This is a first course in linear algebra. Topics include matrices, systems of linear equations, linear combinations, span, independence, vector spaces, and linear transformations. While this is not a proof-based course, students will learn some of the basic theory of vector spaces and transformations.


The plan is to cover 1.1-1.9, 2.1-2.3, 3.1, 3.2, 4.1-4.6, 5.1-5.4 in the text. The plan is subject to revision at any time.

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 small (3-by-3) or special (triangular) matrices by hand.** For more involved calculations (problems marked M in the text), use whatever technology you have at hand.

GOALS: Upon completing this course students should be able to:

1. Understand the concepts and vocabulary associated to vector spaces and subspaces.
2. Perform matrix and vector operations and use them in applications.
3. Identify and understand the subspaces associated to any matrix.
4. Find and use eigenvalues and eigenvectors.

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.

SI SESSIONS: Please attend SI sessions as your schedule permits. They are funded and scheduled entirely for your benefit. Take advantage of the opportunity they afford.

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.**

Grading is on a 10 point scale: 90-100=A, 80-89=B, 70-79=C, 60-69=D, below 60=F

TESTS: Tests are scheduled for **Friday, February 9; Monday, March 12; Friday, April 13.** 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 out of approximately 13 quizzes will count towards your grade, so approximately 3 quiz grades will be dropped, thus, there are **NO MAKE-UP QUIZZES.**
FINAL EXAM: The final is COMPREHENSIVE and compulsory. Exam times and dates are as follows.

Section 52: Monday, May 7, 10:30-12:30
Section 53: Wednesday, May 2, 10:30-12:30

Finals will be administered in D116, our usual classroom.

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

WITHDRAW DATE: Wednesday, February 28 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

Subject to change!

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. The way you learn the material in this course is by doing homework daily.

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.

Problems marked M in the text are meant to be done with a calculator or software.
1) 1/8: FIRST DAY OF CLASS
2) 1/10: Section 1.1, p. 10: 1-33 odd, 34
3) 1/12: Section 1.2, p. 21: 1-33 odd
4) 1/15: MLK Jr. DAY, NO CLASS
5) 1/17: Section 1.3, p. 32: 1-29 odd
6) 1/19: Section 1.4, p. 40: 1-41 odd
7) 1/22: Section 1.5, p. 47: 1-23 odd, 27-35 odd
8) 1/24: Catch up
9) 1/26: Section 1.6, p. 54: 7, 9, 13, 15
10) 1/29: Section 1.7, p. 60: 1-37 odd, 41
11) 1/31: Section 1.8, p. 68: 1-21 odd, 25-29 odd, 33-39 odd
12) 2/2: Section 1.9, p. 79: 1-29 odd, 26, 28, 30
13) 2/5: Section 1.9, p. 79: 31, 32, 35, 36, 37, 39
14) 2/7: REVIEW DAY; have questions ready
15) 2/9 TEST 1 through Section 1.8
16) 2/12 Have questions ready about the test. Read 2.1.
17) 2/14 Section 2.1, p. 100: 1-17 odd, 27, 40 (by hand!)
18) 2/16 Section 2.2, p. 109: 1-13 odd, 29-37 odd
19) 2/19 Section 2.3, p. 114: 1-13 odd
20) 2/21 Section 2.3, p. 114: 15-23 odd, 29, 33
21) 2/23 Section 2.3, p. 114: 15-23 odd, 29, 33
22) 2/26 Section 2.3, p. 175: 1-39 odd
23) 2/28 Section 2.4, p. 198: 1-13 odd
24) LAST DAY TO WITHDRAW WITH A W
25) 3/2 Section 4.1, p. 198: 15-23 odd, 35
26) 3/5 Section 4.2, p. 204: 1-23 odd
27) 3/7 Section 4.2, p. 204: 25-27 odd, 31-39 odd
28) 3/9 REVIEW DAY; have questions ready
29) 3/12 TEST 2 on 1.9, 2.1-2.3, 3.1-3.2, 4.1-4.2
30) 3/14 Have questions ready about the test. Read 4.3.
31) 3/16 Section 4.3, p. 213: 1-11 odd
32) 3/19 Section 4.3, p. 213: 13-21 odd
33) 3/21 Section 4.3, p. 213: 23-27 odd, 33, 37
34) 3/23 Section 4.4, p. 222: 1-13 odd
35) 3/26 Section 4.4, p. 222: 15-17 odd, 27-37 odd
36) 3/28 Section 4.5, p. 229: 1-23 odd
37) 3/30 Section 4.6, p. 236: 1-11 odd
38) 4/1-4/7 Spring Break
39) 4/9 Section 4.6, p. 236: 13-27 odd
40) 4/11 REVIEW DAY; have questions ready
41) 4/13 TEST 3: 4.3-4.6
42) 4/16 Section 5.1, p. 271: 1-27 odd, 31, 37
43) 4/18 Section 5.2, p. 279: 1-13 odd
44) 4/20 Section 5.2, p. 279: 15-21 odd, 24
45) 4/23 Section 5.3, p. 286: 1-25 odd
46) 4/25 Section 5.4, p. 293: 1-25 odd
44) 4/27 Review: have questions ready about the course.
45) 4/30: LAST DAY OF CLASS; Review: have questions ready about the course.

5/2: 10:30-12:30: Final Exam for Section 53
5/7: 10:30-12:30: Final Exam for Section 52

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