University of Connecticut
Department of Mathematics

MATH 2210Q- Section 13

Applied Linear Algebra - Fall 2016

# Course Outline

**Instructor**: Charles Paquette

**Office**: Mont 402

**Email**: charles.paquette@UConn.edu

**Office Hours**: Tuesday 2:00-3:00, Wednesday 2:00-3:00 and Thursday 8:30-9:20.

**Classes**: TuTh 9:30 AM – 10:45 AM in Mont321

**Textbook**: *Linear Algebra and its Applications*, 4th Edition, by David C. Lay.

**Prerequisites**: MATH 1132, 1152, or 2142. Recommended Preparation: a grade of C- or better in MATH 1132. Not open for credit to students who have passed MATH 3210.

**Webpage**: http://www.math.uconn.edu/∼paquette/math2210f16

## Syllabus:

- Chapter 1 (Linear equations): sections 1.1 to 1.5 and sections 1.7 to 1.9.
- Chapter 2 (Matrix algebra): sections 2.1 to 2.3 and 2.5.
- Chapter 3 (Determinants): sections 3.1 and 3.2.
- Chapter 4 (Vector spaces): sections 4.1 to 4.7.
- Chapter 5 (Eigenvalues and eigenvectors): sections 5.1 to 5.4.
- Chapter 6 (Orthogonality and least squares): sections 6.1 to 6.4.

## Examinations and grades:

- First Midterm Exam (22.5%): Thursday the 29th of September, in class (tentative date).
- Second Midterm Exam (22.5%): Thursday the 3rd of November, in class (tentative date).
- Written Assignments (20%): Most weeks, you will be given a written assignment. You will have a week to complete it. Written assignments have to be turned in during Thursday's class. Once submitted, I will randomly pick one (or two) question and grade it. The solution will be made available online, on the course website, just right after Thursday's class.
- Final exam (35%): Date to be determined in the "Finals Week". The final exam is cumulative.

**Makeup/extension Policy**: Baring exceptional circumstances, missed exams cannot be made up. If you know that you will miss an exam for a valid reason, please contact me as soon as possible so that we can find an arrangement. Late written assignments cannot be turned in for credit once the solution is made available online (which usually happens just right after Thursday's class). If you know that you will miss a class where a written assignment has to be turned in, please let me know before the solution is made available.

**Grading Scheme**:

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|---|---|---|---|---|---|
| $A:$ | $[92.0, 100.0]$ | $C+:$ | $[78.0, 80.0)$ | $D-:$ | $[60.0, 62.0)$ |
| $A-:$ | $[90.0, 92.0)$ | $C:$ | $[72.0, 78.0)$ | $F:$ | $[0.0, 60.0)$ |
| $B+:$ | $[88.0, 90.0)$ | $C-:$ | $[70.0, 72.0)$ | | |
| $B:$ | $[82.0, 88.0)$ | $D+:$ | $[68.0, 70.0)$ | | |
| $B-:$ | $[80.0, 82.0)$ | $D:$ | $[62.0, 68.0)$ | | |

**In Class**:

- Personal media devices (such as cell phones, ipods) are not to be used in class. Computers or tablets must be disconnected from the Internet and used only as a learning tool. Failure to follow these rules may result in class expulsion.
- If you cannot attend a class, you should ask me (or a classmate) to get the material covered and the announcements made during that class.

**In Exams**:

- Only basic scientific calculators are allowed in exams. Calculators that can perform symbolic operations (such as the HP 28 or 48, or TI-92 or 89) are not allowed.
- No electronic device is allowed in exam, except a calculator; see the above remark. If there is no clock in the classroom, I will write the time on the board.

**Q-Center**: The Q-center offers free tutoring. In addition to drop-in free tutoring, the Q-center also has a list of private tutors. Check the website (www.qcenter.uconn.edu) for hours and locations.

**How to succeed**:

- You have to **spend time**! Do the homeworks and suggested problems, read ahead in your textbook and read your notes.
- Don't miss classes (even if you feel you already know the material).
- If you are stuck on a problem or if you don't understand something, **do not wait to ask for help**. You can talk to a classmate or talk to me by email or by coming to my office during my office hours. If you cannot come during my office hours, we can schedule an appointment: let me know by email. You can also consider going to the Q-center.

**Integrity**:

"A fundamental tenet of all educational institutions is academic honesty. Academic work depends upon respect for and acknowledgement of the research and ideas of others. Misrepresenting someone else's work as one's own is a serious offense in any academic setting and it will not be condoned." A student who knowingly assists another student in committing an act of academic misconduct shall be equally accountable for the violation, and both shall be subject to the sanctions and other remedies. See the Uconn Student Code, Appendix A.

**Students with Disabilities**:

The Center for Students with Disabilities (CSD) at UConn provides accommodations and services for qualified students with disabilities. If you have a documented disability for which you wish to request academic accommodations and have not contacted the CSD, please do so as soon as possible. The CSD is located in Wilbur Cross, Room 204 and can be reached at (860) 486-2020 or at csd@uconn.edu. Detailed information regarding the accommodations process is also available on their website at www.csd.uconn.edu

**Additional information**:

http://provost.uconn.edu/syllabi-references/