Math 2210Q Syllabus
Fall 2019

Instructor: Jeffrey Connors

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Office hours: Monday/Wednesday 3:15-4:15 PM and Tuesday 2:00-3:00 PM, but you can always drop in to see if I am available, or e-mail to set up an appointment.

Class time and room: T/Th 12:30 PM - 1:45 PM in ACD 311

Text: *Linear Algebra and its Applications* by Lay, Lay and McDonald, Fifth Edition.

Homework: Homework will be assigned for each section and collected according to the schedule shown below. Late homework is penalized at a rate of 10% once late, with an **additional** 10% deduction for each full week that passes after the due date. Example 1: you turn it in the class after it is due, then there is a 10% deduction for lateness. Example 2: you turn it in the following Thursday, 1 week after it was due. The total deduction is still 10%. Example 3: you turn it more than 7 days late, less than two weeks late. Then there is a total 20% deduction for lateness.

Quizzes: No quizzes.

Calculators: The use of calculators will not be permitted on exams. Calculators may be used on homework.

Grading policy: The course grade is 30% homework, 20% exam 1, 20% exam 2 and 30% for the final exam.

Make-up exams: These will only be available with permission granted prior to the start of the exam. There must be extenuating circumstances to receive permission for a make-up exam.

Final exam: I will update this when I receive the information. **The exam is cumulative.**

Dates	Book Sections	Topics
Aug. 27, 29	1.1, 1.2	Systems of linear equations, row reduction, echelon forms
Sept. 3, 5	1.3, 1.4	Vector equations, matrix form
Sept. 10, 12	1.5, 1.7	Solution sets, linear independence
Sept. 17, 19	1.8, 1.9	Transformations
Sept. 24, 26	1.10, Exam 1 review	Linear models, matrix operations, review 1.1-1.9
Oct. 1	—	**Exam 1**
Oct. 3	2.1	Matrix operations
Oct. 8, 10	2.2, 2.3	Matrix operations, inverse matrices
Oct. 15, 17	4.1, 4.2	Vector spaces and connections to linear transformations
Oct. 22, 24	4.3, 4.4	Linear independence, bases, coordinate systems
Oct. 29, 31	4.5, Exam 2 review	Dimension, review 1.10-4.4
Nov. 5	—	**Exam 2**
Nov. 7	4.6	Rank
Nov. 12, 14	5.1, 5.2	Eigenvectors, eigenvalues, characteristic equation
Nov. 19, 21	5.3, 6.1	Diagonalization, inner products, orthogonality
Nov. 26, 28		**Thanksgiving break - no class**
Dec. 3, 5	6.2, 6.4, final review	Orthogonal sets, Gram-Schmidt process
Dec. ???	—	**Final Exam**

HOMEWORK:

Book Section	Problems	Due date
1.1	1, 3, 10, 13, 22, 24	Sept. 5
1.2	1, 3, 7, 8, 19, 21, 22	Sept. 5
1.3	1, 6, 9, 12, 14, 21, 26	Sept. 12
1.4	6, 7, 9, 12, 22, 24, 25, 40	Sept. 12
1.5	2, 6, 12, 23	Sept. 19
1.7	1, 6, 8, 9, 15, 20, 22, 33, 34	Sept. 19
1.8	2, 4, 7, 11, 16, 19, 20	Sept. 26
1.9	1, 2, 3, 6, 8, 19, 27	Sept. 26
1.10	2, 3, 9, 11	Oct. 3
2.1	1, 4, 7, 9, 12, 16, 21, 22, 27	Oct. 10
2.2	3, 4, 6, 10, 26, 31, 32	Oct. 17
2.3	2, 4, 8, 12, 15	Oct. 17
4.1	2, 3, 8, 10, 12, 14, 16, 18	Oct. 24
4.2	1, 3, 5, 16, 18, 22, 24, 26	Oct. 24
4.3	2, 4, 6, 8, 10, 14, 19, 22	Oct. 31
4.4	3, 7, 8, 12, 14	Oct. 31
4.5	4, 6, 8, 14, 16, 20	Nov. 7
4.6	1, 4, 6, 8, 12, 15, 16, 18	Nov. 14
5.1	3, 4, 8, 9, 13, 14, 18	Nov. 21
5.2	2, 4, 14, 16	Nov. 21
5.3	2, 4, 6, 8, 10, 12	Dec. 3
6.1	2, 4, 8, 10, 16, 18, 22	Dec. 3
6.2	2, 6, 10, 14	Dec. 5