SYLLABUS

MATH 4378 / MATH 6309 ADVANCED LINEAR ALGEBRA II SPRING 2020

Instructor: Alexander Mamonov

Office: PGH 690

Office hours: TuTh 4:00PM - 5:30PM

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Class web page: https://www.math.uh.edu/~mamonov/MATH4378-S2020/index.html

Classroom: SEC 105

Class hours: TuTh 10:00AM - 11:30AM

Class numbers: 12498 (for 4378), 13850 (for 6309)

The information contained in this class syllabus is subject to change without notice. Students are expected to be aware of any additional course policies presented by the instructor during the course including those posted on Blackboard, communicated via e-mail, etc.

All class policies, announcements, reviews, homework assignments, solutions and grades are posted on Blackboard: http://elearning.uh.edu/webapps/portal/frameset.jsp

Prerequisite: MATH 4377 or MATH 6308.

Textbook: S.H. Friedberg, A.J. Insel, L.E. Spence, *Linear Algebra*, 4th Edition, Prentice Hall.

Objectives: Upon completion of this course, the students are expected to gain the understanding of

the fundamental concepts of linear algebra including eigenvalues, eigenvectors and diagonalizability, inner products and orthogonalization, linear operator adjoints, unitary operators and orthogonal projections, Singular Value Decomposition and pseudoinverse,

bilinear and quadratic forms, and the Jordan Canonical Form.

Topics: For the course content visit the Math Department's MATH 4377-4378 web page:

http://www.uh.edu/nsm/math/undergraduate/courses/math4377-4378/

Grading: Weekly homework, two in-class midterm exams and a final exam will be given. There

are no make-ups for the exams. The course grade is determined by the homework,

midterm exams and the final exam with each having the following weights:

Homework 1/5 Midterm 1 1/5 Midterm 2 1/5 Final Exam 2/5

Remote Instruction

In response to the City of Houston and Harris County emergency health declarations, the University of Houston ceases all face-to-face instructional activities (e.g., lectures and office hours) and delivers all of the classes remotely using online and/or virtual learning platforms, at least until April 4, 2020. The complete list of Policies and Procedures on remote instruction is posted on Blackboard and will be updated as the situation develops.

Counseling and Psychological Services (CAPS) Statement

Counseling and Psychological Services (CAPS) can help students who are having difficulties managing stress, adjusting to college, or feeling sad and hopeless. You can reach CAPS (www.uh.edu/caps) by calling 713-743-5454 during and after business hours for routine appointments or if you or someone you know is in crisis. No appointment is necessary for the "Let's Talk" program, a drop-in consultation service at convenient locations and hours around campus.

http://www.uh.edu/caps/outreach/lets_talk.html