Syllabus Math 2318: Linear Algebra

Course and Contact Details:

Course Number: 2318-01 (14698)

Term: Fall 2022

Course Name: Linear Algebra Instructor: Dr. Loic Cappanera Email: lmcappan@central.uh.edu

Office: PGH 602

Lecture times: Monday and Wednesday 1:00-2:30pm in room CBB 118.

Online Materials: Some materials (lecture notes, syllabus, assignments, exams sample) will be shared with students via email or an online drive (Microsoft Teams). Please do not try to contact the instructor via Blackboard or MS Teams. Only email communications will be answered.

Office hours: Tuesday and Thursday 1:00-2:00pm and by appointment. Office hours will be held online via the application Zoom. Please contact me via email (one hour in advance) so I can send you the zoom meeting link.

Tutoring session: TBA.

TA: TBA

MS Teams link: TBA

Required Textbook:

David C. Lay, Linear Algebra and Its Applications (5th Edition).

Learing Objectives and Lectures Topics: The following topics will be covered in class:

- Linear Equations in Linear Algebra (sections 1.1 to 1.5 and 1.7 to 1.9)
- Matrix Algebra (sections 2.1 to 2.4 and 2.8, 2.9)
- Determinants (sections 3.1 to 3.3)
- Vector Spaces (sections 4.1 to 4.3 and 4.5-4.6)
- Eigenvalues and Eigenvectors (sections 5.1 to 5.3)

• Orthogonality and Symmetric Matrices (sections 6.1, 6.3, 6.4, 6.5)

Prerequesites: Credit for or concurrent enrollment in MATH 2414.

Assessment: Your final grade will be based on:

- (25) 25 points for homeworks. A random selection of homework problems will be graded from among those assigned.
- (50) 25 points for each of two midterms.
- (25) 25 points for a final exam scheduled during last lecture on Wednesday 30th November from 1:00pm to 2:30pm.

The final exam is comprehensive and replaces the lowest exam grade (if it is lower).

COVID-19 Information: Students are encouraged to visit the University's COVID-19 website for important information including diagnosis and symptom protocols, on-campus testing, and vaccine information. Please check the website throughout the semester for updates

If you are experiencing any COVID-19 symptoms that are not clearly related to a pre-existing medical condition, do not come to class. Please see Student Protocols for what to do if you experience symptoms and Potential Exposure to Coronavirus for what to do if you have potentially been exposed to COVID-19. Consult the (select: Undergraduate Excused Absence Policy or Graduate Excused Absence Policy) for information regarding excused absences due to medical reasons.

Vaccinations: Data suggests that vaccination remains the best intervention for reliable protection against COVID-19. Students are asked to familiarize themselves with pertinent vaccine information and to consult with their health care provider. The University strongly encourages all students, faculty and staff to be vaccinated.

Reasonable Academic Adjustments/Auxiliary Aid: The University of Houston complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, pertaining to the provision of reasonable academic adjustments/auxiliary aids for disabled students. In accordance with Section 504 and ADA guidelines, UH strives to provide reasonable academic adjustments/auxiliary aids to students who request and require them. If you believe that you have a disability requiring an academic adjustments/auxiliary aid, please contact the Justin

Dart Jr. Student Accessibility Center (formerly the Justin Dart, Jr. Center for Students with DisABILITIES).

Excused Absence Policy: Regular class attendance, participation, and engagement in coursework are important contributors to student success. Absences may be excused as provided in the University of Houston Undergraduate Excused Absence Policy and Graduate Excused Absence Policy for reasons including: medical illness of student or close relative, death of a close family member, legal or government proceeding that a student is obligated to attend, recognized professional and educational activities where the student is presenting, and University-sponsored activity or athletic competition. Under these policies, students with excused absences will be provided with an opportunity to make up any quiz, exam or other work that contributes to the course grade or a satisfactory alternative. Please read the full policy for details regarding reasons for excused absences, the approval process, and extended absences. Additional policies address absences related to military service, religious holy days, pregnancy and related conditions, and disability.

Recording of Class: Students may not record all or part of class, livestream all or part of class, or make/distribute screen captures, without advanced written consent of the instructor. If you have or think you may have a disability such that you need to record class-related activities, please contact the Justin Dart, Jr. Student Accessibility Center. If you have an accommodation to record class-related activities, those recordings may not be shared with any other student, whether in this course or not, or with any other person or on any other platform. Classes may be recorded by the instructor. Students may use instructor's recordings for their own studying and note-taking. Instructor's recordings are not authorized to be shared with anyone without the prior written approval of the instructor. Failure to comply with requirements regarding recordings will result in a disciplinary referral to the Dean of Students Office and may result in disciplinary action.

Syllabus Changes: Due to the changing nature of the COVID-19 pandemic, please note that the instructor may need to make modifications to the course syllabus and may do so at any time. Notice of such changes will be announced as quickly as possible through (specify how students will be notified of changes).

UH Email: Please check and use your Cougarnet email for communications related to this course. To access this email, login to your Microsoft 365 account with your Cougarnet credentials.

Academic Honesty Policy: High ethical standards are critical to the integrity of any institution, and bear directly on the ultimate value of conferred degrees. All UH community members are expected to contribute to an atmosphere of the highest possible ethical standards. Maintaining such an atmosphere requires that any instances of academic dishonesty be recognized and addressed. The UH Academic Honesty Policy is designed to handle those instances with fairness to all parties involved: the students, the instructors, and the University itself. All students and faculty of the University of Houston are responsible for being familiar with this policy.

Security Escorts and Cougar Ride: UHPD continually works with the University community to make the campus a safe place to learn, work, and live. Our Security escort service is designed for the community members who have safety concerns and would like to have a Security Officer walk with them, for their safety, as they make their way across campus. Based on availability either a UHPD Security Officer or Police Officer will escort students, faculty, and staff to locations beginning and ending on campus. If you feel that you need a Security Officer to walk with you for your safety please call 713-743-3333. Arrangements may be made for special needs. Parking and Transportation Services also offers a late-night, on-demand shuttle service called Cougar Ride that provides rides to and from all on-campus shuttle stops, as well as the MD Anderson Library, Cougar Village/Moody Towers and the UH Technology Bridge. Rides can be requested through the UH Go app. Days and hours of operation can be found at https://uh.edu/af-university-services/parking/cougar-ride/.