Матн 311

Lecture Section 01: MWF 10:30–11:20am Classroom: Keller 402

Instructor: Pierre-Olivier Parisé (email: parisepo@hawaii.edu) Office: Physical Science Building (PSB) 302 Office hours: TBA

Course description

Algebra of matrices, linear equations, real vector spaces and transformations. There is an emphasis on concepts and abstraction and instruction of careful writing. Students may receive credit for only one of MATH-307 and MATH-311.

Course and program objectives

Linear algebra is one of the basic and foundational topics in mathematics that every mathematics major needs to understand, and upon successful completion of MATH-311, students will understand and be able to apply at least the basic concepts from linear algebra. The emphasis is on concepts, theorems, and proofs, which are often made concrete through examples and counterexamples.

Prerequisites: MATH-242 or MATH-252A or consent.

REQUIRED COURSE MATERIAL

Book: Linear Algebra with Applications, 2021A Edition, by W. Keith Nicholson (https:// collection.bccampus.ca/textbooks/linear-algebra-with-applications-2021a-lyryx-232/). Course website: https://mathopo.ca/courses-website/MATH-311/MATH-311.html. All the information about the course (like the schedule, important dates, lecture notes) is posted on the course website. All announcements are posted on the Laulima website.

IMPORTANT DATES

• Midterms:

- Midterm 1 on February 5th.
- Midterm 2 on March 11th.
- Midterm 3 on April 8th.
- Final:
 - May, 10th, 9:45–11:45am (classroom unknown yet).
- Non-instructional day(s):
 - Martin Luther King, Jr. Day, January 15th.
 - President's Day, February 19th.
 - Spring Recess, March 18th-22th.
 - Good Friday, March 29th.

GRADING COMPONENTS

Your final grade will be calculated based on a weighted average of the following components.

- (1) **Homework (25%):** There will be homework each week assigned on each Mondays (starting on January 8th) and due for the next Monday at 11:55pm. The problems will be posted on Laulima under the Assignments tab. Your best 10 homework scores will be considered to compute your average.
- (2) Midterm Exams (50%): There will be 3, closed notes, closed book, non-cummulative midterms of 50min each. The best 2 scores will be considered to compute the average.
- (3) Final exam (25%): There will be a final comprehensive exam.

LECTURES

If you miss a lecture, you are responsible for any assignments and/or announcements made. Unavoidable absences should be explained to the instructor. Office hours will not be utilized to re-teach material presented in a class missed. Also the lectures won't be recorded, but the notes taken in class will be posted on the course website.

MISSED ASSIGNMENT POLICIES

Policies for exams: Attendance on the exams is compulsory; otherwise, a grade of zero will be recorded. Any student who has an excused, documented conflict with a test time must inform their instructor **within two week prior to the exam targeted** when possible. Late requests will be denied.

For those students with an excused absence for an exam, there will be a make-up exam. For any reason, the final exam cannot be taken ahead of the scheduled time.

Conflicts arising from work or social obligations, or from personal travel plans **do not** qualify as excused absences. By registering for this course, you are agreeing to take all exams at the scheduled times.

Academic integrity: All students are expected to abide by the university's Conduct Code. Academic sanctions for dishonesty may include receiving an F in the assignment or receiving an F in the class. There may be additional administrative sanctions.

CLASSROOM POLICIES

Tablets can be used for note-taking only. During lectures, to respect the lecturer and your classmates, refrain from using electronic items, cell phones, music players, tablets, and laptops for any other purposes than note-taking.

Please arrive, be seated and ready to start each class on time. If you have a valid reason to leave early, please advise me before the class and try to sit near the exit to minimize disruption.

Sources of help

KOKUA: I am happy to work with you and the KOKUA Program (Office for Students with Disabilities), if you need course accommodations due to a disability. KOKUA can be reached at (808) 956-7511 or (808) 956-7612 (voice/text) in room 013 of the Queen Lili'uokalani Center for Student Services. All course modifications must be arranged through KOKUA. You are encouraged to start this process as early as possible.

Concerns

If at any time during the semester you have any questions or concerns about the class, please contact me during regularly scheduled office hours or via email to make an appointment. You may also contact the following people:

Director of Undergraduate Studies

Mirjana Jovovic Email: undergrad-dir@math.hawaii.edu

Associate Chair Bjørn Kjos-Hanssen Email: assoc-chair@math.hawaii.edu