

SYLLABUS

Math 307 Linear Algebra and Diff. Eq.

Lecture: MWF 10:30am–11:55am

SUMMER 2022

Keller 404

Instructor: Pierre-Olivier Parisé (email: parisepo@hawaii.edu)

Office: Physical Science Building (PSB) 302

Office hours: W 1:00pm–2:30pm

COURSE DESCRIPTION

This course is intended to introduce the student to the fundamentals of linear algebra with an eye toward application of eigenvalue techniques to the solution of differential equations. The content to be covered includes matrices and Gaussian elimination, vector spaces, orthogonality, determinants, eigenvalues and eigenvectors, and differential equations.

IMPORTANT DATES

Refer to the schedule on the course website for a detailed schedule.

- Exams:
 - Midterm 1 (in-class): Friday, July 1st, 10:30am–12:00am.
 - Midterm 2 (in-class): Friday, July 22nd 10:30am–12:00am.
 - Final (in-class): Friday, August 12th, 10:30am–12:00am.
- Non-instructional day(s):
 - King Kamehameha Day: Friday, June 10th.

REQUIRED COURSE MATERIAL

Textbook: *Linear Algebra and Differential Equations*, by Gary L. Peterson and James S. Sochacki.

Course website: <https://mathopo.ca/courses-website/MATH-307/MATH-307.html>.
Schedule, solutions to homework, and lecture notes are posted on the course website.

GRADING COMPONENTS

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

- (1) **Homework (40%):** There will be homework each week assigned on each Mondays (starting on June 6th) and due for the next Monday, before midnight. The problems will be posted on Laulima under the assignment tab and the solutions will be posted in the Homework webpage of the course website. You may hand out your solutions during the Monday's lectures, send them to me by email, or put it in the envelop on my office door.
- (2) **Midterm exams (40%):** There will be two, closed notes, closed book, in-class midterms. Each exam will have a duration of 90min.
- (3) **Final exam (20%):** There will be a closed notes, closed book, in-class final.

LECTURES

There will be lectures each Mondays, Wednesdays, and Fridays, 10:30am–11:55am taking place at Keller Hall 404. All students are expected to attend and participate in each lecture and take their own personal notes.

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. It is your responsibility to stay up-to-date.

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 the two weeks prior to the midterm targeted** when possible. Late requests will either be denied or will result in an automatic deduction from the exam score. An absence due to a positive COVID-19 test result must be notified to the instructor prior to the exam date and is not subject to the previous 2 weeks rule.

For those students with an excused absence for a midterm, there will be a make-up exam which must be taken within two working days of the scheduled exam time (before or after). **The final exam cannot be taken after the scheduled time for any reason.**

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.

Policies for homework: Late homework won't be accepted and will result of a mark of zero(0). If the guideline for a homework is not followed, at most 5% will be retrieve from this homework total points. The guideline is available in the Homework webpage of the course website.

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, 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