

**Instructor:** Vasu Tewari (vvtewari@math.hawaii.edu)

Office: Physical Science Building (PSB) 304

Office Hours: TBA (via Zoom)

### 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. We will cover chapters 1, 2, 5, and 6 of the textbook.

### Important Dates

Holidays and Breaks

- March 14 – 18: No classes (Spring Recess)

Exam Dates

- Midterm Exam I (in-class): Tuesday, February 15, 9:00 - 10:15 am.
- Midterm Exam II (in-class): Thursday, March 31, 9:00 - 10:15 am.
- Final Exam: Thursday, May 12, 9:45 - 11:45 am.

### Required Resources

- **Course Webpage:** [http://www.math.hawaii.edu/~vvtewari/teaching/307\\_Spring\\_2022/2022\\_S\\_307.html](http://www.math.hawaii.edu/~vvtewari/teaching/307_Spring_2022/2022_S_307.html)
- **Textbook:** *Linear Algebra and Differential Equations*, by Gary L. Peterson and James S. Sochacki. Access to the textbook is required as some homework questions will be assigned out of it. I recommend forming study groups and sharing a textbook. When I assign HW questions out of the text, I will also take photos of the relevant pages and share. Furthermore I will be posting lecture notes as we go along.

### Homework Assignments

There will be a homework assignment due every Friday 11:59PM (with occasional exceptions). Homework assignments will be posted on the course webpage. Students are required to turn in homework via Gradescope: <https://www.gradescope.com> after creating an account using the Entry Code X3PB3P. Your assignments will be graded directly on Gradescope.

### Graded Components

- **Homeworks** – 30%
- **2 Midterm Exams** – 40%  
There will be two closed book midterm exams.
- **Final Exam** – 30%  
There will be one closed book cumulative final exam as scheduled by the university on Thursday, May 12, 9:45 - 11:45 am.

### Disability Support Services

Any student who feels he or she may need an accommodation based on the impact of a disability is invited to contact me privately. I would be happy to work with you and the KOKUA Program (Office for Students with Disabilities) to ensure reasonable accommodations

in my course. 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.

**Academic Integrity**

Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty are required to report any suspected instance of academic dishonesty to the Academic Judiciary.

**Counseling**

The Counseling and Student Development Center (CSDC) provides support to UH Manoa students to assist with personal, academic and career concerns.

See <http://manoa.hawaii.edu/counseling/> for more information.