Lecture

Recitation

TuTh | 12:40 - 2:00 pm | A334 Wells Hall M | 12:40 - 2:00 pm | A334 Wells Hall

Instructor: Brent Nelson (brent@math.msu.edu). Office hours in D215 Wells Hall Tuesdays 2:15 - 3:15 pm, Wednesdays 3:00 - 4:00 pm, and by appointment.

Undergraduate Learning Assistant (ULA): CiCi Mikat (mikatcec@msu.edu). Office hours in the Math Learning Center (2110 STEM Building) Wednesdays 12:30 - 1:30 pm and by appointment.

Course Webpage: https://www.math.msu.edu/~banelson/317H.html.

Textbook: Linear Algebra Done Wrong, by Sergei Treil (September 4, 2017 version).

Course Description: This course covers the basics of linear algebra: vector spaces, linear transformations, matrix algebras, systems of linear equations, determinants, eigenvalues and eigenvectors, and inner product spaces. This corresponds to Chapters 1-5 in the above textbook, but some additional topics may be covered as well.

A secondary goal of this course is to develop skills in reading mathematics and writing proofs. For most students, this will be their first time writing rigorous mathematical proofs (outside of elementary geometry proofs encountered in high school). It is therefore natural to find this challenging at first, and so you should be prepared to work hard to overcome this.

I very much want each of you to succeed in this course, and I will make every effort to help you do so. However, if you come to the realization that this class is not for you, then I encourage you to talk to me within the first few weeks of the semester so that you can be placed in a different class.

In-Class Tone: My aim is to foster an open and inclusive atmosphere in class. Therefore questions, participation, collaboration, and curiosity are strongly encouraged. Math can be hard, especially when we aren't honest with ourselves about whether or not we understand something. Confusion is not a sign of weakness, nor is asking for help. If you need help beyond class time and office hours, please do not hesitate to contact me so that we can work out additional times to meet.

Grading: Your course grade will be determined according to the following scheme:

Homework	50%
Quizzes	10%
Exams	40%

Details for the above components are provided below. A gradebook will be maintained in D2L, but you are also welcome to ask me for your current grade at any time.

Homework: There will be a total of 10 homework assignments. The lowest two homework scores will be automatically dropped, and the remaining eight will count equally toward your overall homework score. These will be posted on the course webpage, and will be collected at the beginning of lecture on Thursdays. No late homework will be accepted, but extensions may be granted on an individual basis. Collaboration is encouraged so long as your written work is clearly your own.

Quizzes: There will be a total of 10 quizzes. The lowest two quiz scores will be automatically dropped, and the remaining eight will count equally toward your overall quiz score. These will be administered in the first 10 minutes of Recitation on Mondays, and will typically be a review of the previous week's material. No make-up quizzes will be offered.

Exams: The course will have two in-class midterm examinations and a final exam. The lowest exam score will be automatically dropped, and the remaining two will count equally toward your overall exam score. Exam corrections will be offered for each midterm exam (but not the final exam):

- Choose one question from the exam and prepare a solution for it or any of its parts.
- Schedule a time to meet with the instructor and present the solution (no notes allowed).
- You can earn up to full credit for the question back.
- The deadline for the presentations will be two weeks from the date graded exams were returned.

Please check early in the semester for time conflicts with these exams:

Midterm 1	Thursday, October 7th	12:40 - 2:00 pm	A334 Wells Hall
Midterm 2	Thursday, November 18th	12:40 - 2:00 pm	A334 Wells Hall
Final Exam	Thursday, December 16th	12:45 - 2:45 pm	A334 Wells Hall

No make-up midterm exams will be offered, but any student having two other final exams scheduled the day of this final exam may take a make-up exam given the next day. If you qualify for the make-up final exam, you must fill out a request at C212 Wells Hall no later than Friday, December 10th at 12:00pm (noon) and provide a recent copy of your schedule as documentation. You will NOT be allowed to take the make-up final without registering.

Final grades will be based on the following scale:

Grade	0.0	1.0	1.5	2.0	2.5	3.0	3.5	4.0
Percentage	$[0, 60)$	$[60, 65)$	$[65, 70)$	$[70, 75)$	$[75, 80)$	$[80, 86)$	$[86, 92)$	$[92, 100]$

This scale is subject to change if a curve is required, but any such change will only improve your final grade. If you believe there is an error with the grading of any course material, **you must notify the instructor within 14 calendar days** of when it was completed, otherwise it will not be given further consideration.

Academic Integrity: Cheating will not be tolerated. Students who cheat may receive a 0.0 on the assignment or fail the course. This includes plagiarism and copying another's work. MSU policies on academic misconduct can be found here.

Student Accommodations: If the Resource Center for Persons with Disabilities (RCPD) has determined that you eligible for testing or classroom accommodations, then you should submit a Verified Individualized Services and Accommodations document (VISA) to the instructor no later than Thursday, September 23rd.

COVID Policies: Students are expected to follow all current MSU COVID Directives. In particular, students are expected to wear masks in class for the first weeks of the semester. In the event of a campus shutdown, lectures will be delivered virtually via Zoom.

Course Calender: The following is a tentative schedule for the course.

Week 1	9/1 - 9/3	Class begins on 9/1, follow Monday's schedule First discussion section on 9/1
Week 2	9/6 - 9/10	No class on 9/6 (Labor Day) Homework 1 due on 9/9
Week 3	9/13 - 9/17	Quiz 1 on 9/13, Homework 2 due on 9/16
Week 4	9/20 - 9/24	Quiz 2 on 9/20, Homework 3 due 9/23
Week 5	9/27 - 10/1	Quiz 3 on 9/27, Homework 4 due 9/30
Week 6	10/4 - 10/8	Quiz 4 on 10/4, **Midterm 1** on 10/7
Week 7	10/11 - 10/15	Homework 5 due 10/14
Week 8	10/18 - 10/22	Quiz 5 on 10/18, Homework 6 due 10/21
Week 9	10/25 - 10/29	No class 10/25, 10/26 (Fall Break)
Week 10	11/1 - 11/5	Quiz 6 on 11/1, Homework 7 due 11/4
Week 11	11/8 - 11/12	Quiz 7 on 11/8, Homework 8 due 11/11
Week 12	11/15 - 11/19	Quiz 8 on 11/15, **Midterm 2** on 11/18
Week 13	11/22 - 11/26	No Class on 11/28 (Thanksgiving)
Week 14	11/29 - 12/3	Quiz 9 on 11/29, Homework 9 due 12/2
Week 15	12/6 - 12/10	Quiz 10 on 12/6, Homework 10 due 12/9
Finals Week	12/13 - 12/17	**Final Exam** on 12/16 (12:45 - 2:45 pm)

Other important dates:

- Wednesday 9/8 – Online open add period for fall semester ends at 8:00 pm.

- Monday 9/27 – Last day to drop with Tuition Refund (drop must be before 8:00 pm)

- Wednesday 10/20 – Middle of Semester. Last day to drop a course without a grade being reported (drop must be before 8:00 pm).

- Friday 12/10 – Last day of classes.