

**MATH 3A: INTRODUCTION TO LINEAR ALGEBRA
SYLLABUS - FALL 2019**

Instructor: Paata Ivanisvili, Ph.D.

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Office: Rowland Hall 510K

Office Hours: MF 11:00-11:59 am, and by appointment.

Lecture: MSTB 124 - MWF 10:00-10:50am

Teaching Assistant: Daniel Bergman

E-mail: drbergma@uci.edu

Webpage: TBA

Office: Rowland Hall 540M

Office Hours: TuTh 11:00-12:00.

Discussion:

- RH 114 - TuTh 10:00-10:50am.

Midterm Exam: Friday, Nov 1, 10:00-10:50am, in class

Final Exam: Monday, Dec 9, 10:30–12:30pm, in class.

Course description: System of linear equations and their solutions; linear independence; linear transformations; matrices and their properties (matrix multiplication; determinants; inverse matrix; eigenvectors; eigenvalues; characteristic equation; diagonalization; rank); linear transformation; orthogonality; Gram–Schmidt process.

Textbook:

- “Linear Algebra and its Applications” (fifth edition) by David C. Lay, Steven R. Lay and Judi J. McDonald

Grading: The final grade will be computed with the following weights:

Weekly Quizzes (lowest score dropped)	35%
Midterm Exam	30%
Final Exam	35%

If you meet the following thresholds, you’ll be guaranteed the corresponding grade:

90%	A+/-
80%	B+/-
70%	C+/-
60%	D

These thresholds will be adjusted, if needed, at the end of the course (only in your favor).

Homework: We will have weekly homework. Each Friday you will receive an email indicating homework problems (I will list number of exercises from the textbook). Solving homework problems is necessary to learn Linear Algebra, to be well prepared for the weekly quizzes, midterm and the final exam. With high probability there will be always a problem on the quiz from the homework.

Exams: There will be one midterm exam (time TBA in class) and one final exam. You must bring a photo ID to each exam. The final exam is scheduled on Monday, Dec 9, 10:30–12:30pm, in class.

Policy on out-of-sequence exams and missed quizzes: We are only able to accommodate a limited number of out-of-sequence exams due to limited availability of rooms and proctors. For this reason, we may approve out-of-sequence exams in the following cases:

- A documented medical excuse.
- A University sponsored event such as an athletic tournament, a play, or a musical performance. Athletic practices and rehearsals do not fall into this category. Please have your coach, conductor, or other faculty advisor contact your instructor.

- A religious holiday.
- Extreme hardship such as a family emergency.

We will not be able to accommodate out-of-sequence exams, quizzes, and finals for purposes of more convenient travel, including already purchased tickets. Please note again the date of the final and plan any travel accordingly. Scheduled out-of-sequence exams and quizzes (those not arising from emergencies) must be taken before the actual exam. Makeups must occur within one week of the regularly scheduled exam or quiz, otherwise a zero score will be given.

Academic Honesty: Academic honesty is a requirement for passing this class. Any student who compromises the academic integrity of this course is subject to a failing grade. The work you submit must be your own. Academic dishonesty includes, but is not limited to copying answers from another student, allowing another student to copy your answers, communicating exam answers to other students during an exam, attempting to use notes or other aids during an exam, or tampering with an exam after it has been corrected and then returning it for more credit. If you do so, you will be in violation of the UCI Policies on Academic Honesty (see <https://aisc.uci.edu/>). It is your responsibility to read and understand these policies. Note that any instance of academic dishonesty will be reported to the Academic Integrity Administrative Office for disciplinary action and is cause for a failing grade in the course. If you wish to record the lectures in any way, you must obtain prior permission.

Important dates: <https://www.reg.uci.edu/calendars/quarterly/2019-2020/quarterly19-20.html>

Below is the schedule for covering topics during the quarter. All are subject to change as the quarter progresses.

9/1 - 10/4 (Week 1)	Sections 1.1, 1.2
10/7 - 10/11 (Week 2)	Sections 1.3, 1.4, 1.5
10/14 - 10/18 (Week 3)	Sections 1.7, 1.8, 1.9
10/21 - 10/25 (Week 4)	Sections 2.1, 2.2, 2.3
10/28 - 11/1 (Week 5)	Sections 2.8, 2.9
11/4 - 11/8 (Week 6)	Sections 3.1, 3.2
11/11 - 11/15 (Week 7)	Sections 3.3, 5.1
11/18 - 11/22 (Week 8)	Sections 5.1, 5.2, 5.3
11/25 - 11/29 (Week 9)	Sections 5.4, 6.1, 6.2
12/2 - 12/6 (Week 10)	Sections 6.3, 6.4

Note: the instructor does not have control over course enrollment. All add/drop/change requests must be submitted online via WebReg before the dates specified by the university.