

# Math 2135: Linear Algebra Summer 2018, Session B

**Where:** ENVD 122  
**When:** MTWRF 9:15am-10:50am  
**Course Website:** <http://math.colorado.edu/~nita/LinearAlgebraSum18.html>

**Instructor:** Alex Nita  
**Office:** Math 140  
**Email:** [alexander.nita@colorado.edu](mailto:alexander.nita@colorado.edu)  
**Office Hours:** Mon/Tues 11am-12pm, Wed 8-9am

**Required Text:** *Elementary Linear Algebra*, 5th Ed., Stephen Andrilli and David Hecker.  
**Supplementary Texts:** *Linear Algebra*, 4th Ed., Friedberg, Insel and Spense.  
*Advanced Linear Algebra*, 3rd Ed., Roman.  
*Mathematics: Form and Function*, 2nd Ed., MacLane.  
*A History of Vector Analysis*, Crowe.

**Course Description:** This course will examine the basic properties of systems of linear equations, vector spaces, linear independence, dimension, linear transformations, matrices, determinants, eigenvalues, and eigenvectors. Time permitting, we will also explore bilinear functions, quadratic forms and symmetric matrices.

## Grading:

Homework	30%
Quizzes	10%
Midterm 1	15%
Midterm 2	15%
Final	25%
In-Class Participation	5%

**Homework:** There will be ten homework assignments, spaced roughly every two or three class days apart. These are posted on the course website along with their due dates. **The rules are:**

- 1. Homework will be done in groups of three or four, and I will rotate group assignments throughout the class.** Everybody is expected to participate in problem solving and write-ups, though each group will hand in only one final write-up with the participants' names.
- 2. No late assignments will be accepted.** But I will drop your lowest score to make up for this stringency.
- 3. You may use outsider sources, such as websites, books and articles, but you must cite your sources.** These citations should include urls, site names (such as Stack Exchange or nLab or Wikipedia), and standard book and article references. **Place these citations at the end of each homework assignment.** *There will thus be no cheating in this class, because outside sources are legal—but you must be honest and open in your report about these.* If I feel you are over-reliant on outside sources to the point where you can't solve enough problems by yourself, I will say something. *Use outside sources only if you are really stuck and no other option seems available.*
- 4. Color coding of homework problems:** **blue problems** will be graded, **orange problems** and **red problems** will not be graded, but orange problems are considered as important as the blue, and may show up on quizzes and exams. You should thus *know how to do the green and the orange problems*. The red problems are routine, typically numerical in nature, and are meant as a simple check that you *can* do the calculations. You are thus simply *expected to*

*know how to do the red problems*, and these or similar problems will occasionally also make appearances on quizzes and exams.

**Quizzes:** There will be ten quizzes, roughly every two or three class periods. ***No makeup quizzes will be given*** without official documentation or prior arrangement with me.

**Exam dates:** Mark these dates in your calendar!

**Midterm 1:** Friday, July 20

**Midterm 2:** Thursday, August 2

**Final Exam:** Friday, August 10

***No makeup exams will be given*** without official documentation or prior arrangement.

**Accommodations for disabilities:** If you qualify for accommodations because of a disability, please submit a letter to me from Disability Services in a timely manner so that your needs may be addressed. Disability Services determines accommodations based on documented disabilities. Contact: 303-492-8671, Willard 322, or <http://www.colorado.edu/disabilityservices>. Religious observances: If you have any course-related conflicts due to religious obligations, please let me know as soon as possible so that accommodations can be made.

#### **Miscellaneous University Rules and Regulations:**

**Honor Code:** All students of the University of Colorado at Boulder are responsible for knowing and adhering to the academic integrity policy of this institution. Violations of this policy may include: cheating, plagiarism, aid of academic dishonesty, fabrication, lying, bribery, and threatening behavior. All incidents of academic misconduct shall be reported to the Honor Code Council ([honor@colorado.edu](mailto:honor@colorado.edu); 303-725-2273). Students who are found to be in violation of the academic integrity policy will be subject to both academic sanctions from the faculty member and non-academic sanctions (including but not limited to university probation, suspension, or expulsion). Additional information on the Honor Code can be found at

<http://www.colorado.edu/policies/student-honor-code-policy>

**Classroom behavior policy:** Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities. Class rosters are provided to the instructor with the students legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. See policies at

<http://www.colorado.edu/policies/student-classroom-and-course-related-behavior>

**Sexual harassment policy:** The University of Colorado at Boulder policy on Discrimination and Harassment, the University of Colorado policy on Sexual Harassment and the University of Colorado policy on Amorous Relationships apply to all students, staff and faculty. Any student, staff or faculty member who believes s/he has been the subject of discrimination or harassment based upon race, color, national origin, sex, age, disability, religion, sexual orientation, or veteran status should contact the Office of Institutional Equity and Compliance at (303) 492-2127 or [cureport@colorado.edu](mailto:cureport@colorado.edu). Information about the ODH, the above referenced policies and the campus resources available to assist individuals regarding discrimination or harassment can be obtained at

<https://www.cu.edu/oie/efficiency-and-effectiveness/presidents-task-force-efficiency/aps-5014-sexual-harassment-policy>

<http://www.colorado.edu/institutionalequity/>