Math 214 - Linear Algebra

Lecture: MWF 9:35-10:30 am, Fowler 301
Instructor: Viktor Grigoryan, (323) 259-2876, vgrigoryan@oxy.edu
URL: http://sites.oxy.edu/vgrigoryan/214
Office Hours: MW 12:30 - 2:00 pm (and by appointment) in Fowler 305

Resources

Moodle: http://moodle.oxy.edu/
College Catalog: http://www.oxy.edu/academics/course-catalog
Student Handbook: http://www.oxy.edu/student-handbook
Academic Calendar http://www.oxy.edu/registrars-office/academic-calendar

Syllabus

Textbook: Linear Algebra: A Modern Introduction, 3rd ed. by D. Poole

Outline: The goal of the course is to introduce the geometry and algebra of vectors, and to develop a method of solving linear systems of equations. The course will be based on developing abstract concepts and investigating their properties via proof-based techniques. So the emphasis will be on general methods, rather than tricks to solve particular problems.
The learning objectives of the course are:
- Vector operations, finding equations of lines and planes
- Solving systems of linear equations by Gaussian eliminations
- Matrix algebra, linear transformations in Euclidean spaces
- Finding eigenvalues, determinants
- Diagonalizing matrices
- Finding orthogonal complements, projections

Homework: There will be weekly assignments beginning from the second week of classes. You are encouraged to discuss and work on the homework with your classmates; however, your write-up must represent your own understanding. No late homeworks will be accepted.

Quizzes: A total of four quizzes will be given during the semester, each about a week before an exam. These are meant to encourage students to start studying for exams beforehand, and will serve as practice for the actual exams.

Exams: There will be three midterm exams and a final exam. They will consist of problems related to your lectures and homework. No calculators will be allowed during the exams. No make-up exams will be offered. The midterms will be administered during class time on the dates indicated below, while the cumulative final will be a 3-hour exam.

- Exam I: Friday, February 15
- Exam II: Friday, March 22
- Exam III: Friday, April 19
- Final exam: Wednesday, May 8, 8:30-11:30 am
Grading: Grading will be based on homework, labwork, 3 midterm exams and a final exam
Quizzes 10%
Homework 10%
Midterm exams 50% (total)
Final exam 30%

Final grades will be assigned according to the following guideline:

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<tr>
<th>Grade</th>
<th>Percentage</th>
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<tr>
<td>A</td>
<td>94-100%</td>
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<td>A-</td>
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<td>B+</td>
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<td>B</td>
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Tips for success: Attending lectures; regularly consulting the textbook and provided notes; attempting and working out each and all assigned problems; taking advantage of office hours; asking questions in class; not falling behind; being ready to work hard. Discussing with classmates may provide insight and further motivation!

Classroom Courtesy: Lectures and class discussions are crucial contributors to this course. Reading a newspaper, chatting with a neighbor or sleeping during the lecture drastically reduces the usefulness of the class both for you and your fellow classmates. Please respect the mutual investment (time, effort, resources) of the class participants in this educational experience. Cellphones must be inaudible.

Students with Disability: If you believe that you need special accommodations due to a disability, please contact Disability Services immediately. Such arrangements may take time, and contacting them early is crucial. I will work with you and the Disability Services to ensure that the best possible accommodations are made available.

http://www.oxy.edu/disability-services (323) 259-2969

Academic Ethics: “Shared commitment to ethical principles is essential to the educational purposes and fairness of the academic enterprise. Occidental College assumes that students and faculty will embrace a high ethical standard for academic work. Fundamental to academic ethics is a spirit of honor. A spirit of honor thrives when students challenge each other to attain the highest levels of scholarship, civility, and responsibility.”

http://www.oxy.edu/student-handbook/academic-ethics/academic-ethics