MATH 313, Section 001 – Introduction to Linear Algebra

Instructor Information
Instructor: Matthias Morzfeld
Office: ENR2 S331
Office Hours: Regular office hours in S331, ENR2 – M 11-12, W 1-2
Tutoring in Mathematics 220 – F 11-12
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UTA: Hannah Knight
Discussion hour: T 3-4 in Math101
Office Hours: Mathematics 220 – Th 2-4

Lecture time and websites
Lecture: MWF 10:00 – 10:50 am, Engineering 311
Class website: `math.arizona.edu/∼mmo/math313/math313.html`
Math 313 Website: `http://math.arizona.edu/∼math313/`

General Information
Description: An algorithmic approach to solving systems of linear equations transitions into the study of vectors, vector spaces and dimension. Matrices are used to represent linear transformations and this leads to eigenvectors and eigenvalues. The precise use of definitions plays an important role. Examinations are proctored. This course is required in the math major and prepares students to take Math 323. It is a prerequisite to the majority of the higher level courses in mathematics.

Enrollment Requirements: MATH 129, MATH 223, MATH 243, MATH 254, or CSC 245.

Textbook
"Linear Algebra and Its Applications", by David C. Lay, Pearson, 5th ed. (2016), custom edition for University of Arizona. After class, read your notes and the textbook material thoroughly before attempting the assigned problems.

Quizzes
There may be up to three unannounced pop-quizzes, 10 points each.

Homework
Homework assignments (see class website) will be announced weekly. We expect to cover about one section per class. Each homework set counts 10 points. I may only grade a subset of the assigned problems.

MATLAB Project
A Matlab (group) project will be assigned, for a total of 25pts. The members of each group will work together and write up common solutions, but members of different groups are not to work together. You will need to download MATLAB using the University's Site license
`https://sitelicense.arizona.edu/matlab/index.php`

Links to various MATLAB tutorials can be found on my website. You are also encouraged to check out the course website
`http://math.arizona.edu/~math313` .

Exams (subject to change)
There will be three 50-point 50-min (midterm) exams given on
Exam 1: Sep. 14 (Wednesday),
Exam 2: Oct. 5 (Wednesday),
Exam 3: Nov. 18 (Friday).
The final exam is comprehensive, and given on
Final: Dec. 9 (Friday), 10:30 – 12:30 am.
All the exams are given in the usual classroom.

All electronic devices must be turned off during all exams. In general, there will be no make-up exams in the course. However, in complex and unusual circumstances, which are beyond your control, a make-up exam may be given on a case-by-case basis. This will require providing a detailed account of the situation and supporting documents. Approval in these cases is at the sole discretion of the instructor and/or the dean of students. You can use a calculator (see calculator section for what calculators are allowed) during the exams.

Important
Your written work should be neat. Show all your work. Answers with no work and/or no explanations will receive no credit.

Grade
Total: 3×50 (for the midterms) $+100$ (for the final) $+50$ (for the quizzes and Matlab project) $+160$ (for homework) $= 460$. The final grade will be based on this score.

Further information and class rules

Communication with Students
It is the student's responsibility to check for announcements and messages regularly. The best way to reach me is by email and I will try to answer within 48 hrs.

University statement on Accessibility and Accommodations
It is the University's goal that learning experiences be as accessible as possible. If you anticipate or experience physical or academic barriers based on disability or pregnancy, let your instructor know immediately so that you can discuss options. You are also welcome to contact Disability Resources (520-621-3268) to establish reasonable accommodations. Please be aware that the accessible table and chairs in your classroom should remain available for students who find that standard classroom seating is not usable

Attendance/Administrative Drops
The University policy may be found at
`http://catalog.arizona.edu/2015-16/policies/classatten.htm`.
Please note the following: All holidays or special events observed by organized religions will be honored for those students who show affiliation with that particular religion. Absences pre-approved

by the UA Dean of Students (or Dean's designee) will be honored. It is the student's responsibility to notify the instructor in advance of an absence related to religious observation or an activity for which a Dean's excuse has been granted, and to arrange for how any missed work will be handled.

University statement on Academic Integrity

Students are responsible to inform themselves of University policies regarding the Code of Academic Integrity. Students found to be in violation of the Code are subject to penalties ranging from a loss of credit for work involved to a grade of E in the course, and risk possible suspension or probation. The Code of Academic Integrity will be enforced in all areas of the course, including, but not limited to, homework, quizzes, and tests. For more information about the Code of Academic Integrity policies and procedures, including information about your rights and responsibilities as a student, see the following website:
http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity

University statement on the Student Code of Conduct

Students at The University of Arizona are expected to conform to the standards of conduct established in the Student Code of Conduct. Prohibited conduct includes:

1. All forms of student academic dishonesty, including cheating, fabrication, facilitating academic dishonesty, and plagiarism.

2. Interfering with University or University-sponsored activities, including but not limited to classroom related activities, studying, teaching, research, intellectual or creative endeavor, administration, service or the provision of communication, computing or emergency services.

3. Endangering, threatening, or causing physical harm to any member of the University community or to oneself or causing reasonable apprehension of such harm.

4. Engaging in harassment or unlawful discriminatory activities on the basis of age, ethnicity, gender, handicapping condition, national origin, race, religion, sexual orientation, or veteran status, or violating University rules governing harassment or discrimination.

Students found to be in violation of the Student Code of Conduct are subject to disciplinary action. For more information about the Student Code of Conduct, including a complete list of prohibited conduct, see the following website: http://deanofstudents.arizona.edu/accountability/students/student-accountability

Other Relevant University Policies Relating to Conduct

Please take note of the following University policies:

- Policy on Threatening Behavior by Students:
  http://policy.web.arizona.edu/education-and-student-affairs/threatening-behavior-students

- Nondiscrimination and Anti-Harassment Policy:
  http://policy.arizona.edu/human- resources/nondiscrimination-and-anti-harassment-policy

Expected Classroom Behavior

Students should turn off all electronic devices during class unless the device is deemed necessary for the class by the instructor. This includes, but is not limited to cell phones, mp3 players, and laptops. If you have a disability-related accommodation that involves the use of a computer during class, please discuss this with your instructor in advance.

Incomplete

A grade of "I" (Incomplete) will be given only at the instructor's discretion, according to University Policy as described at
`http://www.registrar.arizona.edu/gradepolicy/incomplete.htm`.

Changes to the Course Syllabus

The information contained in the instructor's syllabus, other than the grade and absence policies, as deemed appropriate by the instructor, are subject to change with reasonable advance notice. In particular, the dates of midterm exams, the number of exams, and the order in which topics are covered may differ from the dates and arrangement in the tentative weekly schedule.