Math 3013: Linear Algebra, Section 801, TR 7:20-8:35 p.m., in T-NCB 246

Instructor: Kenneth Ward

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Office: 506 Mathematical Sciences Building

Office Phone: (405) 744-5688

Office Hours: TR 2:00-4:00, and by appointment.

Online Classroom (D2L) site: https://oc.okstate.edu (then log in and find our course)

Prerequisite: Math 2153

Textbook: Linear Algebra: A Modern Introduction (Third Edition) by David Poole

This is a three credit-hour mathematics class that goes quickly and is more abstract than calculus. You should expect to average six hours of work outside of class per week and more if you are struggling. It is very difficult to succeed at this level of mathematics without consistently spending that much time reading the textbook, doing practice problems, and getting help.

Syllabus Attachment: Please read the OSU syllabus attachment on the web at

http://academicaffairs.okstate.edu/faculty-a-staff/46-syllabus-attachment

This has a lot of important information, including instructions about disability accommodations. Please contact me privately during the first week of the course if you need accommodations as the result of a disability.

Grading: You will have 3 hour exams, each worth 15% of your grade. Quizzes, homework, and any classwork we do are worth 30%. The final exam is worth the remaining 25%. If it would give you a higher grade, I will instead use a scheme of 10% for each hour exam, 30% for homework, quizzes, and classwork, and 40% for the final exam, but this usually only affects a few students. Earning a score of 90% guarantees an A for the semester, 80% a B, 70% a C, and 60% a D. I reserve the right to use discretion if you are on the borderline between two grades, taking into consideration performance on the final exam, improvement or decline during the semester, attendance, and my subjective judgement of your effort. You should attend every class, though I won't take attendance every day. I'll give approximate grade updates after exams.

Exams: All exams will be in class. The tentative hour exam dates are Thursday, February 7, Thursday, March 7, and Thursday, April 11. I will communicate any changes in class and in writing. The final exam is on Tuesday, April 30, from 8:00 to 9:50 p.m., in our regular classroom. You must tell me in writing by Tuesday, April 16, if you have a university-approved conflict with the final exam time; if you do not meet that deadline, you may not be allowed to take a conflict exam, and if you are, you will have your score decreased up to 15% as a penalty. I cannot give a conflict exam if you do not have a university-approved conflict.

Quizzes, Homework, and Classwork: I will assign weekly homework. You should do all the problems, but not all the problems will be graded. On Fridays of weeks in which there is not an exam, you will take a quiz, turn in homework, or do both. On many of the quizzes, I will allow you to use your homework, and the problem(s) will be similar or identical to the homework problems you were assigned. I will not always announce in advance what

kind of assessment we will have for the week. Each assessment of this sort will be worth an equal number of points, and I will drop your lowest score. In addition, on some days (not necessarily always Friday), you may hand in other work that you complete in class. I will not announce days on which we do this classwork in advance, and I will not drop any classwork scores.

Quizzes and written homework are designed both to help you master the material and also to help you learn to communicate mathematical ideas in a clear, rigorous manner. You should expect to have to work hard to get some of the problems; you don't learn anything by doing problems identical to what I do in class. Some homework questions will be very conceptual and require deep understanding of the material. Almost all of my best students need to come to office hours at least occasionally; you should see me at the first sign of trouble.

Conflicts: I will offer reasonable accommodation in the event that you miss a major assessment activity for a valid and documented reason, assuming documentation is provided in advance unless absolutely impossible. For a quiz or exam, you need to tell me as soon as you know you have a conflict and will be ineligible for a make-up if you do not. If you won't be in class when homework is due, turn it in early or give it to someone else to turn in prior to the deadline. I require proof of the reason for your absence (e.g., a doctor's note, proof of involvement in an OSU-sponsored activity, etc.), and you should not assume you will be eligible for a make-up exam or quiz unless I have explicitly approved your request.

Calculators: I plan not to allow calculators on quizzes and exams, but they won't be necessary. You may use calculators on homework, but don't use them as a substitute for conceptual understanding.

Academic Honesty: Don't cheat. Don't copy off of other students, allow other students to copy your work, or present work you find in printed or electronic sources as your own. You may get help on homework from other people or sources but should write your solutions independently, without looking at anything someone else has produced. Copying on exams merits a Level 2 sanction and an F! in the course. Copying on homework, from another student or from a printed or electronic source, carries a penalty of up to 10 percentage points off of your semester homework grade per instance and a possible F! in the course on the second violation. Signing an attendance sheet for someone else or having someone sign for you results in a 10 percentage point deduction from your homework grade the first time and an F! for any subsequent violation. Participating in any behavior that violates academic integrity (e.g., unauthorized collaboration, plagiarism, multiple submissions, cheating on examinations, fabricating information, helping another person cheat, unauthorized advance access to examinations, altering or destroying the work of others, and fraudulently altering academic records) will result in your being sanctioned. For questions, contact the Office of Academic Affairs, 101 Whitehurst, (405) 744-5627, http://academicintegrity.okstate.edu. I deal with cheating very harshly; don't take any chances.

What if I need help? You have lots of resources for this course. Often students find it helpful to talk to each other and work through homework or practice problems together. For quick questions, you can send me e-mail, and you should certainly come see me in person during office hours if you have something more than a quick question. Finally, there is free tutoring available in the MLSC. See http://www.math.okstate.edu/mlsc for details.

Above all, see me early if you have questions. Good luck.

First Assignment (Easiest 5 points of the semester)

Please do this assignment by Tuesday, January 15.

- 1. Send me an e-mail at kward@math.okstate.edu. Write me a paragraph (not a list) including your name, year in school, major (if you know), hometown, last math class (and instructor if taken at OSU), and anything interesting about yourself you want to tell me, especially your interests in and out of school. These e-mails let me know something about my students and help me get to know everyone. If you don't get a reply from me within a day, I probably didn't receive the e-mail; talk to me about it.
- 2. Go to https://oc.okstate.edu to log on to the Online Classroom (Desire2Learn). After logging in, you should see Math 3013 in your list of courses. Look at the course documents in the Content section, and find the Discussion board. You should use the Discussion board to converse with me and with others in the class about homework and exam preparation.
- 3. Read the syllabus attachment at http://academicaffairs.okstate.edu/faculty-a-staff/46-syllabus-attachment