

Math 420 – Linear Algebra – Fall 2018

This syllabus is subject to change at the discretion of the instructor.

Course: Math 420 (3 credits)
Website: math.wsu.edu/faculty/tasaki/Classes/Math420
Times: MWF 12:10 – 1:00
Location: CUE 316
Instructor: Tom Asaki (tasaki@wsu.edu), Neill 228
Office Hours: M 1:10-2:00, W 10:30-12:00, Th 12:10-1:00 and by appointment
Required Text: supplied by instructor

Description

This is an upper-division mathematics course in **theoretical and applied** Linear Algebra.

Prerequisites are MATH 220/230 and MATH 301. Both of these prerequisites are very important. Students should already be familiar with arithmetic on matrices and vectors, parametric solutions to systems of linear equalities, elementary row operations on matrices, determinants and their properties, proof construction.

The classroom format is to motivate and learn concepts through exploring applications, exercises and proofs. We will often engage in small group work. We will make use of software (Matlab/Octave) for completing many homework assignments (details to be given in class).

My expectations for the students are for them to read relevant material and consider relevant assignments before class, formulate questions for class discussions, participate in class discussions, spend time out of class practicing problem solving and proof construction, and keep me apprised of concerns and progress.

My expectations for myself are to ensure that course concepts are revealed in class and homework, provide tests that measure concept understanding and problem solving skills, implement a fair and reasonable grading standard, and adjust to the learning needs of my students.

Grade Basis

Assignments (homework, in-class activities, quizzes and group work) contribute 40% to your grade. The two midterm exams and the final exam each contribute 20%.

Course grades will be based on the instructor's judgement of student mastery of concepts and problem solving skills. However, it will not be more strict than the standard 90-80-70-60 grading scale.

If a midterm exam is missed for a valid documented reason, the grading scale will be adjusted accordingly. No makeup midterm exams will be given. Late homework will not be accepted without prior notice or unavoidable and reasonable extenuating circumstances.

Classwork

Classwork in this course will be a combination of homework assignments, in-class discussion and written activities, quizzes, and small group work. The course is not statically structured with respect to these elements, giving us the freedom to redirect the course based on student needs. Work will be assigned and collected often. To be successful in this class, you must be prepared to attend and participate regularly.

This is a *second* course in linear algebra. We will cover typical initial linear algebra topics very quickly in the first three weeks of the course. It is essential for you to keep current on reading and assignments, especially in these first three weeks.

Text

We will use the text "Application Inspired Linear Algebra." The book is in late draft form and will be supplied by the instructor. This text and all course materials are under strict copyright restrictions and are being supplied for your educational use only. This material should not be disseminated in any form, written or electronic, to any other person. Solutions to exercises should not be solicited from any source.

Academic Integrity

Please note that we take extremely seriously the university policy on the need for academic honesty in all your work. Any form of dishonesty in an assignment or exam will lead to a zero (fail) score and we reserve the right to give a grade of F for the course as well. Link: [Academic Integrity](#).

Academic integrity includes the expectation that students avoid mathematical plagiarism. It is expected that students emulate the procedues and ideas formulated as a result of the classroom and study experience. However, copying or paraphrasing

another's work is not acceptable. Your work should demonstrate your *own* understanding. This means that you may need to include citations of other people's work or ideas.

Plagiarism: the practice of taking someone else's work or ideas and passing them off as one's own; to use the words or ideas of another person as if they were your own words or ideas.

The guiding principle: Your work should be an honest representation of what you understand, and what you do not understand, about the course concepts.

WSU Safety Measures

Washington State University is committed to maintaining a safe environment for its faculty, staff, and students. Links: [Campus Safety Plan](#), [Emergency Information](#).

Students with Disabilities

Reasonable accommodations are available for students with a documented disability. If you have a disability and may need accommodations to fully participate in this class, please visit the University Access Center. All accommodations **MUST** be approved through this office. Please stop by or call 509-335-3417 to make an appointment with a specialist. Link: [Access Center Website](#)