

Math 21002-001: Applied Linear Algebra

Spring 2024

Instructor: Peter Gordon, Ph.D.
Office: MSB 338
E-mail: gordon@math.kent.edu
Internet: <http://www.math.kent.edu/~gordon/>
Phone: (330) 672-9014

Course prerequisites: Math 11012 Intuitive Calculus or 12002 Analytic Geometry and Calculus I or Math 12012 Calculus with Precalculus or Math 12021 Calculus for Life Sciences with a minimum C grade.

Textbook: Linear Algebra by S. Lipschutz and M. Lipson, Sixth Edition, McGraw Hill, 2018

Meetings: Monday, Wednesday and Friday 12:05 pm - 12:55 pm in MSB 120.

Office hours: Monday, Wednesday and Friday 1:00 pm -2:15 pm and by appointment.

Course description from catalog: Systems of linear equations and the associated matrix operations, linear transformations, vector spaces, bases, eigenvectors.

Learning outcomes: At the end of this course the students will be expected to learn basics language of linear algebra and learn basic operations with vectors and matrices.

Core material to be covered (Selected topics from Chapters 1–9 of the textbook):

1. Linear Equations;
2. Matrix Algebra;
3. Determinants;
4. Vector Spaces;
5. Linear Mappings;
6. Orthogonality;
7. Eigenvalues and Eigenvectors.

Enrollment/official registration: The official registration deadline for this course is January 22, 2024. University policy requires all students to be officially registered in each class they are attending. Students who are not officially registered for a course by published deadlines should not be attending classes and will not receive credit or a grade for the course. Each student must confirm enrollment by checking his/her class schedule (using Student Tools in FlashLine) prior to the deadline indicated. Registration errors must be corrected prior to the deadline. Last day to elect credit/audit or credit hour option.

Withdrawal: Last day to drop the course before grade of "W" is assigned, January 29, 2024. Last day to drop the course with grade of "W" assigned: April 1, 2024.

Course requirements and grading policies:

1. **Grading Policy:** There will be two midterm exams and the final exam. The final grade in this course will be determined as follows:

Midterm exams 20% each;

Quizzes (altogether) 30%;

Final exam 30 %.

The letter grade will be assigned as follows: A=90-100; B=80-89; C=70-79; D=60-69; F=0-59. Plus and minus grades will be given at discretion of the instructor.

2. **Make-Up tests:** There will be no make up tests.
3. **Quizzes:** will be given regularly on a weekly basis at the beginning of the class, typically on Fridays.
4. **Homework:** will be assigned on a weekly basis.
5. **Communications via e-mail:** I am reachable by email during standard business hours. I will reply within 3 business days (usually much earlier than that). Please make sure that your real name appears in the message. Work submitted electronically must be in pdf format.
6. **Cellular phones:** All cellular phones MUST be switched off during all class times.
7. **Face masks:** All students MUST follow the Universities mask regulations.

Class attendance policy: Class attendance policies is outlined in University policy 3-01.2 (see <http://www.kent.edu/policyreg/administrative-policy-regarding-class-attendance-and-class-absence>). Sections (B), (C) and (D) especially of this policy will be strictly enforced.

Cheating and plagiarism: University policy 3-01.8 deals with the problem of academic dishonesty, cheating, and plagiarism. None of these will be tolerated in this class. The sanctions provided in this policy will be used to deal with any violations. If you have any questions, please read the policy at <http://www.kent.edu/policyreg/administrative-policy-regarding-student-cheating-and-plagiarism> and/or ask.

Students with disabilities: Kent State University is committed to inclusive and accessible educational experiences for all students. University Policy 3342-3-01.3 requires that students with disabilities be provided reasonable accommodations to ensure equal access to course content. Students with disabilities are encouraged to connect with Student Accessibility Services as early as possible to establish accommodations. If you anticipate or experience academic barriers based on a disability (including mental health, chronic medical conditions, or injuries), please let me know immediately.

Student Accessibility Services (SAS) Contact Information:
Location: University Library, Suite 100
Email: sas@kent.edu
Phone: 330-672-3391; VP 330-968-0490
Web: www.kent.edu/sas

Accommodations for student religious and spiritual beliefs: Any student enrolled in this class can request accommodations of religious and spiritual beliefs . Administrative policy 3 - 01.14 regarding accommodations for student religious and spiritual beliefs can be found here: (<https://www.kent.edu/policyreg/administrative-policy-regarding-accommodations-student-religious-and-spiritual-beliefs>).

Important dates:

First Midterm Exam: Friday, February 23, 2023;

Midterm grades Available to students in FlashLine: March 4, 2024;

Second Midterm Exam: Friday, April 5, 2024;

Last day of classes: Friday, May 3, 2023;

Final Exam: Wednesday, May 8, 2023 from 10:15 am till 12:30 p.m in MSB 120.

We will not have a classes on: Monday March 25, Wednesday March 27 and Friday March 29 (Spring break).