Linear Algebra
MATH 3083, Section 002, Fall 2019

Meeting times: MWF 2:00 pm – 2:50 pm	Instructor:Prof. Matthew Day
Room: SCEN 402	(pronouns he/him/his)
Office Hours: M 10:00 am – 11:00 am	Office: SCEN 421
W 10:00 pm – 12:00 noon	Email: matthewd@uark.edu
and by appointment	

Course webpage: https://matthewd.hosted.uark.edu/3083/

Course description: From the course catalog: Systems of linear equations, vector spaces, linear transformations, matrices, and determinants. Only one of MATH 3083 and MATH 3093 will count for credit. Prerequisite: MATH 2554 or MATH 2043, with a grade of C or better.

Course goals: At the end of this course, an 'A' student will be able to perform algorithms to solve problems in linear algebra, and will be able to explain the key concepts in words. We will cover most of chapters 1-6 of the textbook. Topics include the basics of matrices, solving linear systems, row reduction, vector spaces, linear transformations, orthogonality, and diagonalization.

Textbook: *Linear Algebra with Applications,* Steven J. Leon, Pearson, 9th ed, 2015. Homework problems and reading assignments will be taken from this textbook. Please let Dr. Day know if you have trouble getting access to the textbook (for example if it is too expensive). Also, there are a number of free resources for linear algebra online, including some complete textbooks. Using these is optional, but it might be helpful if you need a different point of view.

Attendance: Attendance at lectures is mandatory, and will be recorded. It does not directly factor into the course grade, but may be used to decide rounding of borderline grades.

Homework: Homework is assigned weekly and includes reading assignments, practice problems (not collected), and problems that will be collected and graded. Homework will be collected the Wednesday of the following week. You may consult with other students and you may use any references or resources you like, except that you may not refer to the solution of a problem that is essentially the same as the one you are trying to solve. **Copying of homework solutions from any source constitutes academic dishonesty.** Each student must turn in their own work.

Homework advice: Doing math is largely about problem solving, and you need practice *getting stuck* on hard problems and *getting yourself unstuck*! Please try every problem yourself before getting help or finding a solution. Try homework problems soon after they are assigned. Exact answers are always required unless explicitly stated otherwise. Do not answer with decimal approximations unless they are requested. Feel free to use words and sentences in your answers to improve clarity. Try not to rely on calculators or computers when doing the homework.

Exams and quizzes: There will be two 50-minute, in-class midterm exams and one cumulative final exam. There will also be surprise quizzes. Each quiz will be 10 minutes long and there will be at least eight quizzes. Tentatively assume the exams will be on October 2nd and November 6th. Exam dates will be confirmed two weeks in advance. The final is 3:00pm–5:00pm on Monday, December 16th, 2019.

Calculator policy: Only non-programmable calculators may be used for the tests and quizzes; graphing calculators, phones and computers may not be used for tests and quizzes.

Late homework and make-up exams: Please make every effort to turn in quality homework at the beginning of class on the day it is due. One late homework will be accepted at full credit per student per semester. No additional late homework will get any credit. No homework will be accepted after December 13th. No make-up exams will be given. Exceptions to these policies may be made for genuine emergencies (with documentation). Poor planning is not an excuse.

Course Grade: To compute your course grade percentage, take the following weighted average:

Homework	Quizzes	Test 1	Test 2	Final
10%	10%	20%	20%	40%

Grades will be assigned with an 'A' for 90-100%, 'B' for 80-89.5%, 'C' for 70-79.5%, 'D' for 60-69.5 %, and 'F' for 0-59.5%. At Dr. Day's discretion, the entire classes' grade percentages may be curved uniformly up, but the grading will be no harsher than described here.

Email and contact: Email is the best way to contact Dr. Day and Dr. Day promises to respond to emails in a timely fashion. Emails received after 9 pm or on weekends might not get a response until the next weekday. You do not need an appointment to come to regular office hours. If you want to meet with Dr. Day outside of the regular office hours, please send an email to make an appointment.

Emergency procedures: Many types of emergencies can occur on campus; instructions for specific emergencies such as severe weather, active shooter, or fire can be found at emergency.uark.edu.

Severe Weather (Tornado Warning):
• Follow the directions of the instructor or emergency personnel
• Seek shelter in the basement or interior room or hallway on the lowest floor, putting as many walls as possible between you and the outside
• If you are in a multi-story building, and you cannot get to the lowest floor, pick a hallway in the center of the building
• Stay in the center of the room, away from exterior walls, windows, and doors

Violence / Active Shooter (CADD):
• CALL- 9-1-1
• AVOID- If possible, self-evacuate to a safe area outside the building. Follow directions of police officers.
• DENY- Barricade the door with desk, chairs, bookcases or any items. Move to a place inside the room where you are not visible. Turn off the lights and remain quiet. Remain there until told by police it's safe.
• DEFEND- Use chairs, desks, cell phones or whatever is immediately available to distract and/or defend yourself and others from attack.

Inclement weather policy: Class will be held if the university is officially open.

Academic Honesty Policy: As a core part of its mission, the University of Arkansas provides students with the opportunity to further their educational goals through programs of study and research in an environment that promotes freedom of inquiry and academic responsibility. Accomplishing this mission is only possible when intellectual honesty and individual integrity prevail.
Each University of Arkansas student is required to be familiar with and abide by the University's Academic Integrity Policy which may be found at http://provost.uark.edu/. Students with questions about how these policies apply to a particular course or assignment should immediately contact their instructor.

Disability Accommodations: University of Arkansas Academic Policy Series 1520.10 requires that students with disabilities are provided reasonable accommodations to ensure their equal access to course content. If you have a documented disability and require accommodations, please contact Dr. Day privately at the beginning of the semester to make arrangements for necessary classroom adjustments. Please note, you must first verify your eligibility for these through the Center for Educational Access (contact 479–575–3104 or visit http://cea.uark.edu for more information on registration procedures).