Course Information

Course Number:	Math 3320
Course Name:	Linear Algebra
CRN:	21867
Location:	MCS 220
Class Hours:	1:00pm-1:50pm MWF
Textbook:	Linear Algebra with Applications by Holt, second edition
Prerequisites:	Math 1497 or Math 2330

Instructor Information

Name:	Dr. Jeffrey Beyerl
Office Location:	MCS 237
E-mail:	jbeyerl@uca.edu
Phone:	501-450-5652

Office Hours:

Monday	10:00am
Tuesday	10:00am
Wednesday	10:00am*
Friday	10:00am

*The office hours on Wednesday are in the MRC

Question: Can I only come during office hours? **Answer**: You can come anytime! I am typically in my office from 8am until 4pm; office hours are merely designated times that I avoid scheduling meetings or running errands.
For up-to-date availability, see the link on Blackboard.

Course Description

This course is required for all majors in mathematics, physics, and computer science. This course introduces matrix algebra, vector spaces, linear transformations, and Eigenvalues. Optional topics include inner product spaces, solutions to systems of differential equations, and least squares.

Course Objectives and Requirements

The primary objective in this course is to understand linear systems, linear spaces, linear operators, and matrix algebra.

Grading Policy
- Your grade will be computed from tests, quizzes, oral problem presentations, homework, and a comprehensive final exam.
- Make-up tests/quizzes will only be given for official university events or personal emergencies. In the former case the test must be taken before official test date, in the latter case a short letter explaining why you missed the test, why this justifies a make-up, and supporting documentation must be turned in by the day you're able to return to class. In the event that a make-up is justified, it must be taken before you are able to return to class. At his discretion, the instructor may choose to administer a make-up test or use the final exam to replace the make-up.
- Borderline grades will be determined based on the final exam and the quality of your work throughout the course.
- Oral problem presentations are in Dr. Beyerl's office. Each student will sign up for a time to meet with the instructor. There will be one problem presentation near the beginning of the course, and one near the end of the course.
- Homework problems will be assigned on a weekly basis. Some problem(s) will be graded for correctness; others will be graded for completion.

Test 1	15%
Test 2	15%
Test 3	15%
Quizzes	10%
Oral Problem Presentations	5%
Homework	10%
Project	5%
Final Exam	25%

Student Learning Objectives
Students who complete this course will have knowledge
- about various properties of matrices including but not limited to:
  - Solving linear systems in a systematic manner.
  - Determining linear dependence and independence of vectors.
  - Relating vectors to relevant vector spaces.
  - Finding and meaningfully interpreting the dimension of a vector space.
  - Demonstrating the duality between linear operators and matrices.
  - Performing algebraic operations on matrices.
  - Finding bases and performing a change-of-basis.
  - Finding and meaningfully interpreting determinants.
  - Finding eigenvalues, eigenvectors, and describing their nature.
  - Diagonalizing a matrix and find powers of matrices
- to solve system of linear equations using matrices.
- to use system of equations to model various applications

Important Dates

Last day to Drop Drop means the course is not on your record	August 30th
Test 1	September 29th
Test 2	November 3rd
Last day to Withdraw Withdraw means the course is on your record with a "W" but does not factor into your GPA	November 10th
Test 3	December 1st
Final Exam	Monday December 11th 11am-1pm

Outside of class resources

- The Textbook
    - Description of material
    - Example problems
    - Exercise problems
    - Homework problems
- Blackboard
    - Quiz/test solutions
    - Notes from class
- Office Hours
    - Individual help
    - Availability changes every day. See https://ucamath.youcanbook.me/ for up to date availability
- Previous course materials
    - http://faculty.uca.edu/jbeyerl/courses.html
- The Math Resource Lab
    - Study Area
    - Tutors available throughout the day

Attendance Policy
Your active participation in this course is expected and required for you to learn the material and earn a passing grade. If you miss more than two weeks of class meetings throughout the term, you may be administratively dropped from the course.

Academic Integrity Statement
The University of Central Arkansas affirms its commitment to academic integrity and expects all members of the university community to accept shared responsibility for maintaining academic integrity. Students in this course are subject to the provisions of the university's Academic Integrity Policy, approved by the Board of Trustees as Board Policy No. 709 on February 10, 2010, and published in the Student Handbook. Penalties for academic misconduct in this course may include a failing grade on an assignment, a failing grade in the course, or any other course-related sanction the instructor determines to be appropriate. Continued enrollment in this course affirms a student's acceptance of this university policy.
Academic integrity is taken seriously: cheating on a test or project will result in a failing grade in the course; allowing another student to copy off of your test will result in a one-letter-grade penalty.

Americans with Disabilities Act Statement
The University of Central Arkansas adheres to the requirements of the Americans with Disabilities Act. If you need an accommodation under this Act due to a disability, please contact the UCA Office of Disability Services, 450-3613.

Title IX disclosure:
If a student discloses an act of sexual harassment, discrimination, assault, or other sexual misconduct to a faculty member (as it relates to "student-on-student" or "employee-on-student"), the faculty member cannot maintain complete confidentiality and is required to report the act and may be required to reveal the names of the parties involved. Any allegations made by a student may or may not trigger an investigation. Each situation differs and the obligation to conduct an investigation will depend on those specific set of circumstances. The determination to conduct an investigation will be made by the Title IX Coordinator. For further information, please visit: https://uca.edu/titleix. *Disclosure of sexual misconduct by a third party who is not a student and/or employee is also required if the misconduct occurs when the third party is a participant in a university-sponsored program, event, or activity.

Sexual Harassment and Academic Policies Statement
All students are required to familiarize themselves with the University of Central Arkansas policy on sexual harassment and on academic policies. These policies are printed in the Student Handbook.

Building Emergency Plan Statement
An Emergency Procedures Summary (EPS) for the building in which this class is held will be discussed during the first week of this course. EPS documents for most buildings on campus are available at http://uca.edu/mysafety/bep/. Every student should be familiar with emergency procedures for any campus building in which he/she spends time for classes or other purposes.