

Course Information

Course Number:	Math 3330
Course Name:	Discrete Structures 2
CRN:	3330
Location:	MCS 213
Class Hours:	9am-9:50am MWF
Textbook:	Discrete Mathematics by Johnsonbaugh, 7 th edition
Prerequisites:	Math 2330 or Math 2335

Instructor Information

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

Course Description

This course in discrete mathematics is designed for mathematics and computer science majors. The topics include recursion, graph theory, matrices, algorithms, basics of formal languages and automata theory. Applications leading to the development of algorithms are emphasized.

Office Hours

My availability changes every day. Go to the website below for up to date availability. When you schedule an appointment, please specify what you're coming for.

Walk-ins are also welcome: if my office door is open, I'm available. However, if somebody with an appointment comes, they will receive priority.

Office Hours Website: <https://ucamath.youcanbook.me/>



Question: Will we be doing computer programming?

Answer: This course is primarily about mathematics. We will see ties to computer algorithms, ties to programming languages, and ties to programming. But the primary focus is mathematics

**Course Objectives and Requirements**

The primary goal of this course is to further the study of discrete mathematics started in discrete I. It will focus, in particular, on topics relevant to studies in computer science.

Grading Policy

- Your grade will be computed from tests, quizzes, homework, projects, 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.
- Homework problems will be assigned on a weekly basis. Some problem(s) will be graded for correctness; others will be graded for completion.
- There will be two projects during the course of the semester.
- In order to pass the course, your test average or final exam must be passing ($\geq 60\%$).

Test 1	15%
Test 2	15%
Test 3	15%
Quizzes	10%
Homework	10%
Projects	10%
Final Exam	25%

Student Learning Objectives

- Be able to analyze simple and recursive algorithms in terms of runtime and space requirements.
- Be able to apply combinatorial techniques to solve advanced counting problems.
- Be able to explain and trace algorithms on graphs; also be able to apply related theoretical results.
- Be able to solve recurrence relations.
- Be able to analyze a formal language or automata.

Important Dates

Last day to Drop Drop means the course is not on your record	August 30 th
Test 1	February 9 th
Test 2	March 16 th
Last day to Withdraw Withdraw means the course is on your record with a "W" but does not factor into your GPA	November 10 th
Test 3	April 18 th
Final Exam	Wednesday May 2 nd 2-4pm

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.