Course Information

Course Number:	Math 2330
Course Name:	Discrete Structures I
CRN:	12244
Location:	MCS 105
Class Hours:	MWF 10:00-10:50am
Textbook:	Discrete Mathematics by Johnsonbaugh (7^{th}) Note that this text is also used for Discrete Structures II
Prerequisites:	CSCI 1470 and (Math 1491 or Math 1496)

Instructor Information

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

Office Hours: By appointment or walk-in. Designated walk-in times are:

Monday	11:00-11:50
Tuesday	10:50-11:55
Wednesday	11:00-11:50*
Thursday	10:50-11:55
Friday	11:00-11:50

*The office hours on Wednesday are in the MRC

Question: Can I only come during office hours?
Answer: You can come anytime, if I am there! I am typically in my office from 7:30 until 4pm; office hours are merely designated times that I try not to schedule meetings.

Course Description

This course provides a mathematical foundation for applications in computer science and for the development of more advanced mathematical concepts required for a major in computer science. Topics include sets, relations, functions, induction and recursion, graphs and digraphs, trees and languages, algebraic structures, groups, Boolean algebra, and finite state machines.

Question: Will we be doing any computer programming?
Answer: This course is primarily about mathematics. We will see ties to computer algorithms, but there will be few computer programming assignments.

Course Objectives and Requirements

The primary goal of this course is to develop the common tools in mathematics used throughout math and computer science.

Grading Policy

Your grade will be computed from quizzes, tests, two projects, and a final exam.
Quizzes will be approximately once per week.
Tests will be administered approximately one third, two thirds, and three thirds into the semester.
Make-up tests 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 return to class.
Borderline grades will be determined based on the final exam and effective participation throughout the course.

Quizzes	20%
Test 1	15%
Test 2	15%
Test 3	15%
Induction Project	5%
Algorithm analysis Project	5%
Final Exam	25%

Course Average	Course Grade
$[90,100]$	A
$[80,90)$	B
$[70,80)$	C
$[60,70)$	D
$[0,60)$	F

Student Learning Objectives

- Be able to use deductive reasoning.
- Be able to express common types of sets.
- Be able to determine and justify properties of relations.
- Be able to determine and justify properties of functions.
- Be able to work in the integers mod n.
- Be able to use mathematical induction.

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 fail to regularly and actively participate it will demonstrate that you are not making a reasonable effort to complete this course, and you will be administratively dropped for non-attendance with a grade of WF.

Important Dates

Last day to Drop Drop means the course is not on your record	August 26th
Test 1	September 25th
Test 2	October 26th
Last day to Withdraw Withdraw means the course is on your record with a "W" but does not factor into your GPA	October 30th
Test 3	November 30th
Last day for WF/WP WF means withdraw failing and is factored into your GPA as an "F" WP means withdraw passing and is not factored into your GPA WF/WP will be decided by whether or not your current grade is above or below 60%. Please see me to verify your grade before withdrawing with a WF/WP.	November 30th
Final Exam	Monday December 7th 8am-10am

Outside of class resources

- The Textbook
  - Description of material
  - Example problems
  - Exercise problems
- Blackboard
  - Quiz/test solutions
- Previous course materials (http://faculty.uca.edu/jbeyerl/courses.html)
  - Quizzes, tests, and solutions
- Office Hours
  - Individual help
  - Come with questions
- The Math Resource Lab
  - Group Study Area
  - Some tutors may be familiar with this material, but there is no guarantee
- Torreyson Library
  - Group Study Rooms

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.

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.