

Course Information

Course Number:	Math 2335
Course Name:	Transition to Advanced Mathematics
CRN:	20540
Location:	MCS 212
Class Hours:	MWF 10:00-10:50am
Textbook:	A Transition to Advanced Mathematics by Smith, Eggen, & St. Andre. 7 th Edition
Prerequisites:	Math 1497

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	8-8:50am; 11-11:50am
Tuesday	3-4:00pm
Wednesday	8-8:50am; 11-11:50am*
Thursday	9-11:00am†
Friday	8-8:50am

*The office hours on Wednesday are in the MRC

†These office hours online: message me using Google Apps

Question: Can I only come during office hours?

Answer: You can come anytime, if I am there! I am typically in my office from 8am until 4pm; office hours are merely designated times that I try not to schedule meetings.

**Course Description**

This course is an introduction to the language and methods of advanced mathematics. The student will learn the basic concepts of formal logic and its use in proving mathematical propositions. Specific topics that will be covered may vary depending upon the instructor, but will include basic number theory and set theory.

Question: Will we need to know our way around a computer?

Answer: Yes, as part of this course you'll learn how to type mathematics on a computer. Many of the proofs we do in class will be typed real-time by the professor. All homework assignments should be typed.

**Course Objectives and Requirements**

The primary goal of this course is to develop an understanding of logic and the deductive thinking process used in mathematics.

Grading Policy

Your grade will be computed from participation, coursework, quizzes, tests, and a final exam. Tests will be administered approximately halfway into the semester and during the last two weeks of class. 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 are able to return to class. Borderline grades will be determined based on the final exam and effective participation throughout the course.

Blackboard Quizzes	10%
In Class Quizzes	15%
Test 1	15%
Test 2	15%
Homework	15%
Participation In Class	5%
Final Exam	25%

Question: What will tests be like?

Answer: Tests in this course will have a significant number of outside the box questions where you need to apply what you've learned to new problems.



Question: What will homework be like?

Answer: Homework comes in 2 flavors:



- (1) Computations and proofs from the textbook
- (2) Detailed proofs with multiple drafts and a peer review

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 construct mathematical proofs using formal logic and quantification.
- Be able to analyze mathematical proofs.
- Be able to illustrate relationships between sets and prove statements involving sets.
- Be able to construct and analyze mathematical proofs involving relations, functions, and cardinality.
- Be able to describe common proof techniques in a nonspecific manner.

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	January 13 th
Test 1	February 26 th
Midterm Grades Available	March 2 nd
Last day to Withdraw Withdraw means the course is on your record with a "W" but does not factor into your GPA	March 18 th
Test 2	April 8 th
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.	April 15 th
Final Exam	Monday April 25 th 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 able to help 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.