

*Course Information*

<b>Course Number:</b>	Math 2335
<b>Course Name:</b>	Transition to Advanced Mathematics
<b>CRN:</b>	14194
<b>Location:</b>	MCS 212
<b>Class Hours:</b>	TR 9:25-10:40am
<b>Textbook:</b>	A Transition to Advanced Mathematics by Smith, Eggen, & St. Andre. 7 <sup>th</sup> edition
<b>Prerequisites:</b>	Math 1497

*Instructor Information*

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

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

Monday	9:00-9:50am; 12:40-1:30pm
Tuesday	8:00-9:15am
Wednesday	9:00-9:50am; 12:40-1:30pm*
Thursday	8:00-9:15am
Friday	9:00-9:50am

\*The afternoon office hours on Wednesday are in the MRC

Sometimes my schedule changes; any changes will be reflected on the calendar outside my office.

**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.

**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 return to class.

Participation	5%
Proof Notebook	20%
In class quizzes	15%
Blackboard quizzes	5%
Test 1	15%
Test 2	15%
Final Exam	25%

### **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.

**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.