

Course Information

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| Course Number: | Math 2335 |
| Course Name: | Transition to Advanced Mathematics |
| CRN: | 20540 |
| Location: | MCS 212 |
| Class Hours: | TR 10:50-12:05pm |
| Textbook: | A Transition to Advanced Mathematics by Smith, Eggen, & St. Andre. 7 th edition |
| Prerequisites: | Math 1497 |

Instructor Information

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| 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:

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| Monday | 10:00-10:50am; 1:00-1:50pm |
| Tuesday | 9:25-10:40am |
| Wednesday | 8:00-8:50am; 1:00-1:50pm |
| Thursday | 9:25-10:40am |
| Friday | 8:00-8:50am |

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 coursework, tests, and a final exam. Coursework includes homework, quizzes, presentations, and participation in class.

Homework assignments will vary in scope, length, duration, and process.

Quizzes will be given throughout the semester.

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 next class day.

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| Coursework | 20% |
| Test 1 | 20% |
| Test 2 | 20% |
| Final Exam | 20% |
| Final Exam or coursework (whichever is higher) | 20% |

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.

Often pre-class readings will be assigned and are considered part of class participation.

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.

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.