## Syllabus - Math 1513 – College Algebra Fall 2011 TR 2-3:15pm

Instructor: Derek Rush E-Mail: derek@rushmath.com Office Hours: By Appointment Only

**Course Description:** This course includes the study of complex numbers, equations and inequalities, graphing, functions, systems of equations, matrices, zeroes of polynomials, and sequences.

Prerequisites: Intermediate Algebra and/or high school Algebra II

 Text: Bittinger, Beecher, Ellenbogen, Penna, College Algebra: Graphs and Models, 4<sup>th</sup> Edition. ISBN: 0-321-52832-8 A graphing calculator, such as TI-83 or TI-84, is recommended but not required.

## **Course Objectives:**

- Develop a working knowledge of algebra necessary for application to other fields of study.
- Develop the necessary manipulative skills to study more advanced mathematics and statistics.
- Serve as a preparatory course for calculus to benefit students whose high school mathematics background is inadequate for this purpose.
- Continue to assist students in improving their abilities to read, understand, and use mathematics.

## **Student Objectives:**

- Analyze functions and their graphs.
- Sketch the graphs of functions including constant, linear, absolute value, square root, polynomial, exponential, and logarithmic equations.
- Solve polynomial, exponential, and logarithmic equations.
- Solve systems of linear equations.
- Create mathematical models to solve application problems.
- Analyze numeric and algebraic patterns; generate numeric and algebraic patterns.

**Evaluation:** There will be an in-class quiz every week (except weeks we have an exam). Suggested problems from the text will be issued after every lecture. The quizzes will consist of 3-5 questions which will be closely related to the suggested homework assignments. There will be absolutely NO MAKEUP QUIZZES.

m 1:00pm-2:50pm
30%
30% (3 exams, 10% each)
40%

**Special Accomodations:** The University of Central Oklahoma complies with Section 501 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Students with disabilities who need special accommodations must make their requests by contacting the Adaptive Needs Coordinator at (405)974-2549. Students should notify the instructor of special accommodation needs by the end of the first week of classes.