

# COLLEGEWIDE COURSE OUTLINE OF RECORD

## MAT 044, MATHEMATICS

COURSE TITLE: Mathematics

COURSE NUMBER: MAT 044

PREREQUISITES: Demonstrated competency on the numerical skills section of the placement exam.

DIVISION: General Education

PROGRAM: Academic Skills Advancement

CREDIT HOURS: 3

CONTACT HOURS: Lecture: 3

DATE OF LAST REVISION: Spring, 2004

EFFECTIVE DATE OF THIS REVISION: Fall, 2004

CATALOG DESCRIPTION: Reviews basic operations with fractions, decimals and their applications. Concentrates on ratio, proportion, percents, measurement, geometric concepts, signed numbers, interpreting and constructing graphs, basic linear equations, and applications. A developmental mathematics course.

MAJOR COURSE LEARNING OBJECTIVES: Upon successful completion of this course the student will be expected to:

1. Perform basic operations with fractions and decimals.
2. Solve ratio, proportion, and percent problems.
3. Measure and convert within and between English and metric systems.
4. Add, subtract, multiply, and divide signed numbers.
5. Read, construct, and interpret graphs.
6. Solve algebraic equations in one variable.
7. Use order of operations.
8. Understand the basic concepts of whole number exponents, square roots, and scientific notation.
9. Demonstrate knowledge of basic geometry concepts including area, perimeter, and volume.
10. Use relevant mathematical terminology, laws, and notation.
11. Solve a variety of application problems in the above areas.
12. Use a scientific and/or graphing calculator proficiently as related to coursework.
13. Use computer technology, which may include the Internet, the Web, email, or computer tutorials to enhance the course objectives.

COURSE CONTENT: Topical areas of study include--

Fractions  
Decimals  
Ratio, proportion, percents

Geometric concepts  
Signed numbers  
Graphs

English and metric measurement  
Applications

Basic linear equations

#### ACADEMIC HONESTY STATEMENT:

The College is committed to academic integrity in all its practices. The faculty value intellectual integrity and a high standard of academic conduct. Activities that violate academic integrity undermine the quality and diminish the value of educational achievement.

Cheating on papers, tests or other academic works is a violation of College rules. No student shall engage in behavior that, in the judgment of the instructor of the class, may be construed as cheating. This may include, but is not limited to, plagiarism or other forms of academic dishonesty such as the acquisition without permission of tests or other academic materials and/or distribution of these materials and other academic work. This includes students who aid and abet as well as those who attempt such behavior.

#### ADA STATEMENT:

Ivy Tech State College seeks to provide reasonable accommodations for qualified individuals with documented disabilities. If you need an accommodation because of a documented disability, please contact the Office of Disability Support Services.

If you will require assistance during an emergency evacuation, notify your instructor immediately. Look for evacuation procedures posted in your classroom.