

COLLEGEWIDE COURSE OUTLINE OF RECORD

MAT 112, FUNCTIONAL MATHEMATICS

COURSE TITLE: Functional Mathematics

COURSE NUMBER: MAT 112

PREREQUISITES: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in MAT 050 Basic Algebra

DIVISION: General Education

PROGRAM: General Education

CREDIT HOURS: 3

CONTACT HOURS: Lecture: 3

DATE OF LAST REVISION: Spring, 2004

EFFECTIVE DATE OF THIS REVISION: Fall, 2004

CATALOG DESCRIPTION: Through real-world approaches, presents mathematical concepts of measurement, proportion, geometry, equations and inequalities, probability and statistics. Brief survey of college mathematics.

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

1. Recognize and solve percentage and proportion problems.
2. Translate realistic problems into mathematical statements using formulas as appropriate.
3. Solve equations and inequalities by appropriate graphical, numerical, verbal, and algebraic methods.
4. Recognize and operate within and between different measurement systems.
5. Understand basic properties of angles, polygons, circles, and right triangles.
6. Calculate perimeter, area, and volume for basic plane and solid figures.
7. Collect and analyze data and draw conclusions.
8. Solve counting and probability problems using diagrams and formulas.
9. Use probability, graphing and statistical models to make inferences about real-world situations.
10. Solve a variety of application problems in the above areas.
11. Use a scientific and/or graphing calculator proficiently as related to coursework.
12. 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 --

Real life applications and problem solving

Measurement systems

Percent and proportion

Geometry

Equations and inequalities

Probability and statistics

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.