

# COURSE OUTLINE

## MATH – 060 BASIC MATHEMATICS

### Interactive Video Course 2 Credits

#### Course Description

In this course, students will improve their arithmetic skills as well as their ability to solve applications of arithmetic. The subject areas will be addition, subtraction, multiplication, and division of whole numbers, fractions, decimals and integers. Also included are factoring numbers into the products of primes; conversions between decimals, fractions and percents; ratio and proportion problems; place value; least common multiple. The use of the scientific calculator as a problem solving tool is also taught. This course is taught using computer-assisted instruction. To complete this course students may need to schedule additional time in our open computer labs

Prerequisite: ENGL 093 or appropriate score on math placement test (2 hours per week)

#### Overall course objectives

Upon successfully completing this course, students should be able to:

1. Add, subtract, multiply and divide whole numbers, rational numbers (fractions, mixed numbers and decimals), signed numbers.
2. Factor whole numbers into products of primes.
3. Change numbers from decimal, fractional, or percent form to one of the other forms.
4. Round off whole and decimal numbers.
5. Understand place value system.
6. Find least common multiple and least common denominator.
7. Simplify ratios and solve proportions.
8. Solve application problems involving whole numbers, fractions or percents.

#### Major Topics

Whole numbers

Basic operations

Prime factorization

Application Problems

Fractions

Basic operations

Least common multiple, least common denominator

Application Problems

Decimals

Basic operations

Place value

Rounding

Percents

Ratio/proportion

Application problems  
Integers  
Basic operations  
Application problems

### **Course requirements**

Grading/exams

The grading procedure is a division decision and will be distributed during the first week of classes. It typically includes a comprehensive final exam, unit mastery exams, computer quizzes, homework and a notebook grade.

Other course information

Credits awarded for the completion of this course do not fulfill degree requirements in any degree of certificate program and are not transferrable to four-year colleges.