



<b>Division:</b>	Science/Mathematics	<b>Area:</b>	Mathematics
<b>Course Number:</b>	MATH 090	<b>Course Name:</b>	Basic Mathematics Skills
<b>Prerequisite:</b>	NONE		
<b>Corequisite:</b>	NONE		
<b>Hours Required:</b>	<b>Class:</b> 45	<b>Lab:</b> 0	<b>Credits:</b> 3 (three [ <i>*Institutional!</i> ])

## Course Description/Purpose

Basic Mathematics Skills will provide instruction in elementary arithmetic skills, mathematical operations and their applications, with early introduction to integers and algebraic concepts. This approach provides for students the necessary tools to succeed in developmental math and prepares them for future math courses. The content of the course includes operations with whole numbers, whole-number and decimal fractions, ratio and proportion, percent, introduction to variables and algebraic concepts, emphasis on problem-solving skills, vocabulary comprehension, real-world applications and calculator fundamentals. Some topics must be completed without the use of a calculator. The purpose of the course is to prepare students for the transition from arithmetic to algebra.

This Basic Mathematics Skills course will be graded on a Pass/Fail mastery basis. *\*The Institutional credits earned in this course do not count toward graduation.* This course does not fulfill the math competency requirement.

## Major Units

- Whole Numbers & Integers
- Whole-Number Fractions
- Decimal Fractions
- Ratio, Proportion, Measurement
- Percent
- Descriptive Statistics

## Educational/Course Outcomes

Student learning will be assessed by a variety of methods, including, but not limited to, quizzes and tests, journals, essays, papers, projects, laboratory/clinical exercises and examinations, presentations, simulations, portfolios, homework assignments, and instructor observations.

**Performance** Each student will be expected to *Demonstrate/Practice*. . .

- adding, subtracting, multiplying, and dividing whole numbers, whole-number fractions, decimal fractions, and percents;
- solving word problems involving whole numbers, whole-number fractions, decimal fractions, and percents;
- finding the factors of any given whole number;

**Performance** Each student will be expected to *Demonstrate/Practice*. . . (continued)

- finding the least common multiple of two or more numbers;
- writing fractional notation for ratios;
- determining whether two ratios are proportional;
- solving proportions for the unknown quantity;
- organizing and solving word problems involving percents;
- interconverting among decimal notation, fractional notation, and percent notation;
- using the calculator to aid in performing calculations involving whole numbers, decimal fractions, ratio and proportion, and percents;
- calculating mean, median, mode.