SOUTHEAST COMMUNITY COLLEGE
DIVISION OF ARTS AND SCIENCES
Mathematics
Revision Date: 07-01-20
Syllabus Statements

I. CATALOG DESCRIPTION

Course Number:	MATH0902
Course Title:	Math Fundamentals Modular II
Prerequisite(s):	A grade of "B" or higher in MATH0901 OR co-enrollment in MATH0901.The prerequisite must be completed before the current course is completed.
Catalog Description:	Study of mixed numbers and decimals; order of operations with fractions, mixed numbers, and decimals; converting fractions to decimals and decimals to fractions; operations with positive and negative integers; study of ratios, rates, proportions, and percents.
Credit Hours:	1.0
Class Hours:	15
Lab Hours:	0
Total Contact Hours:	15

II. COURSE OBJECTIVES. *Course will:*

A. Develop computational skills for decimals.
B. Develop techniques for simplifying mathematical expressions containing decimals and fractions.
C. Develop techniques for converting fractions to decimals and decimals to fractions.
D. Develop techniques for solving application/word problems involving decimals.
E. Develop computational skills for positive and negative integers.
F. Develop a basic familiarity with variables and algebraic expressions.
G. Develop a conceptual understanding of ratios, rates, proportions, and percents.
H. Develop techniques for converting fractions and decimals to percents and vice versa.
I. Develop techniques for solving application/word problems involving ratios, rates, proportions, and percents using the percent equation and the percent proportion.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES

A. Student Learning Outcomes**:** *Student will be able to:*
1. Add, subtract, multiply, and divide decimals and mixed numbers.
2. Simplify mathematical expressions containing decimals and fractions.
3. Convert fractions to decimals and decimals to fractions.
4. Convert percents to decimals or fractions.
5. Convert decimals and fractions to percents
6. Solve application/word problems involving ratios, rates, proportions, and percents.

B. General Education Learning Outcomes
1. GELO #5: Analytical, Quantitative, and Scientific Reasoning
Outcome: Apply mathematical and scientific methods to solve problems from an array of contexts and everyday situations.
Outcome: Effectively develop strategies, algorithms, or experiments (or performing experiments) to better describe the systems or to solve the problems.

IV. CONTENT/TOPICAL OUTLINE (*course outline may provide more detailed information*)

A. The following topics will be covered in the course:
1. Operations with mixed numbers/improper fractions.

2. Operations with decimals.
3. Order of operations with mixed numbers, fractions, and decimals.
4. Converting decimals to fractions and fractions to decimals.
5. Ratios.
6. Rates.
7. Proportions.
8. Percent notation.
9. Percent/decimal/fraction conversion.
10. Percent equation.
11. Percent proportion.
12. Application of percents.

V. INSTRUCTIONAL MATERIALS

A. Required Text(s):

1. Direct Digital Access to MyLab Math (through Canvas) will be billed to your student account. ISBN: 9780136823766.

B. Other Resources:

1. Supplies: Paper and writing instrument.

VI. METHODS OF PRESENTATION/INSTRUCTION

A Methods of presentation typically include a combination of following:

1. Assigned reading and homework assignments for the student to do in class or outside of class on MyMathLab.
2. Individual tutorial with the student on any subject matter which the student is having difficulty comprehending.
3. Additional tutorial through the Multi Academic Center.
4. Mini-lectures

VII. METHODS OF EVALUATION

A. Methods of evaluation typically include a combination of the following:

1. MyMathLab HW
2. Module exam

B. GRADING SCALE

A+	95-100
A	90-94
B+	85-89
B	80-84
F	79 or less

VIII. SPECIFIC COURSE REQUIREMENTS

A. To successfully complete this course, the student must complete all assigned work and score 80% or better on the module exam. All work must be completed by the end of the quarter the student is registered.