

SYLLABUS
PART I
EDISON COMMUNITY COLLEGE
MTH 115S APPLIED MATHEMATICS
3 CREDIT HOURS

COURSE DESCRIPTION

Topics include operations with positive and negative numbers, fractions and decimals; exponents; average; ratio and proportion; percent; units of measurement; linear equations in one variable. **Prerequisite:** Satisfactory math assessment score or a grade of "C" or better in MTH 093D. Designed for technical program majors. Credits earned in this course do not transfer for math credit.

COURSE GOALS

The student will:

Bloom's Level		Gen Ed Outcomes
2	1. Add, subtract, multiply, and divide positive and negative numbers, fractions, and decimals.	3
2	2. Round whole numbers and decimals to a specified place value.	3
2	3. Reduce fractions to lowest terms.	3
2	4. Simplify expressions with exponents.	1, 3
3	5. Solve application problems using fractions and decimals.	1, 3
2	6. Express ratios and rates in lowest terms.	1, 3
2	7. Express ratios as fractions in lowest terms.	1, 3
3	8. Solve application problems using ratios and proportions.	1, 3
2	9. Convert between fractions, decimals, and percents.	1, 3
3	10. Solve application problems using percents, including problems involving taxes, discounts, and interest.	1, 3
2	11. Convert lengths, weights, and capacity within the U.S. and metric systems of measurement.	1, 3
2	12. Convert lengths, weights, and capacity between the U.S. and metric systems of measurement.	1, 3
3	13. Solve application problems using unit analysis.	1, 3
2	14. Simplify algebraic expressions.	1, 3
3	15. Solve linear equations in one variable.	1, 3
3	16. Calculate slope of a line.	1, 3
3	17. Solve application problems using linear equations.	1, 3

CORE VALUES

The Core Values are a set of principles that guide in creating educational programs and environments at Edison State. They include communication, ethics, critical thinking, human

diversity, inquiry/respect for learning, and interpersonal skills/teamwork. The goals, objectives, and activities in this course will introduce/reinforce those Core Values whenever appropriate.

TOPIC OUTLINE

1. Positive and Negative Numbers
2. Fractions
3. Decimals
4. Ratios and Proportions
5. Percents
6. Unit Conversion
7. Linear Equations in One Variable
8. Applications