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 096D. Designed for technical program majors. Credits earned in this course do not transfer for math credit.

COURSE GOALS

The student will:

Bloom's		Gen Ed
Level		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. 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