SYLLABUS PART I

EDISON STATE COMMUNITY COLLEGE MTH 093D MATH LITERACY 4 CREDIT HOURS

COURSE DESCRIPTION

Basic math literacy course. Topics include: fractions, decimals, percentages, exponents, order of operations, probability, dimensional analysis, and linear equations and inequalities. Satisfactory math assessment score. NOTE: Credits earned in this course do not count toward degree requirements. Lab fee.

COURSE GOALS

The student will:

Bloom's		Gen Ed
Level		Outcomes
2	1. Add, subtract, multiply, and divide fractions and decimals.	1, 3
3	2. Express repeated multiplication with exponents.	1, 3
3	3. Calculate the mean, median, and mode of a dataset.	1, 3
3	4. Use the order of operations to evaluate non-algebraic expressions.	1, 3
2	5. Round whole numbers and decimals to a specified place value.	1, 3
3	6. Use square roots to solve application problems involving the Pythagorean Theorem.	1, 3
3	7. Use fractions and decimals to solve application problems.	1, 3
3	8. Calculate and analyze the perimeter, area, and/or volume of basic geometric shapes.	1, 3
2	9. Convert rates and ratios to fractions in lowest terms.	1, 3
3	10. Use ratios and proportions to solve application problems, including problems involving the lengths of sides of similar figures.	1, 3
2	11. Convert between fractions, decimals, and percentages.	1, 3
5	12. Integrate percentages to solve application problems, including problems involving taxes, discounts, and interest.	1, 3
3	13. Use unit analysis to convert lengths, rates, and temperatures within the U.S. and metric systems of measurement.	1, 3
3	14. Add, subtract, multiply and divide real numbers.	1, 3
3	15. Use the distributive property to simplify algebraic expressions.	1, 3
3	16. Solve linear equations and inequalities in one variable.	1, 3
4	17. Analyze linear equations and inequalities to solve application problems.	1, 3
1	18. Locate points in the Cartesian coordinate system.	1, 3
2	19. Graph and interpret linear equations and inequalities in the Cartesian coordinate plane.	1, 3
2	20. Interpret slope as a rate of change.	1, 3
5	21. Formulate equations of lines in slope-intercept form given (a) the slope and a point on the line, or (b) two points on the line.	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. Order of Operations
- 2. Rounding Rules
- 3. Fractions, Decimals, and Percentages
- 4. Critical Comprehension
- 5. Real Numbers
- 6. Linear Equations including Slope
- 7. Linear Equations and Inequalities in One Variable
- 8. Linear Equations and Inequalities in Two Variables