SYLLABUS
PART I
EDISON STATE COMMUNITY COLLEGE
MTH 099D INTERMEDIATE ALGEBRA
5 CREDIT HOURS

COURSE DESCRIPTION
Topics include: linear equations, systems of equations, exponents, operations on polynomials, factoring, rational expressions, radicals, solving quadratic equations, complex numbers, and functions. Prerequisite: Satisfactory math assessment score and two years of high school algebra or a grade of C or better in MTH 093D. Co-requisite or prerequisite: GEN 101S. NOTE: Credits earned in this course do not count toward degree requirements. Lab fee.

COURSE GOALS

The student will:

Bloom's Level		Gen Ed Outcomes
3	1. Solve a system of linear equations in two variables algebraically and graphically.	1, 3
3	2. Solve application problems involving systems of equations in two variables.	1, 3
3	3. Use the properties of integer exponents to simplify algebraic expressions.	1, 3
3	4. Add, subtract, multiply, and divide polynomial expressions.	1, 3
3	5. Factor the greatest common factor from a polynomial.	1, 3
3	6. Factor trinomials.	1, 3
3	7. Use factoring to solve quadratic equations.	1, 3
3	8. Use factoring to solve application problems.	1, 3
3	9. Reduce rational expressions to lowest terms.	1, 3
3	10. Add, subtract, multiply, and divide rational expressions.	1, 3
3	11. Solve equations that contain rational expressions.	1, 3
3	12. Simplify complex fractions.	1, 3
3	13. Simplify radicals and radical expressions.	1, 3
3	14. Add, subtract, multiply, and divide radical expressions.	1, 3
3	15. Solve radical equations.	1, 3
3	16. Solve quadratic equations by completing the square and by applying the quadratic formula.	1, 3
3	17. Solve application problems involving quadratic equations.	1, 3
3	18. Add, subtract, multiply, and divide complex numbers.	1, 3
1	19. Identify the domain and range of a function or a relation.	1, 3
3	20. Determine whether a relation is a function.	1, 3
3	21. Use function notation to find the output value for a given input.	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 these Core Values whenever appropriate.

TOPIC OUTLINE

1. Linear Equations
2. Graphs of Equations and Inequalities
3. Systems of Equations
4. Exponents and Polynomials
5. Factoring Polynomials
6. Rational Expressions
7. Rational Exponents and Radicals
8. Quadratic Equations and Functions