

El Paso Community College

Syllabus

Part II

Official Course Description

SUBJECT AREA	<u>Mathematics</u>		
COURSE RUBRIC AND NUMBER	<u>MATH 0303</u>		
COURSE TITLE	<u>Introductory Algebra</u>		
COURSE CREDIT HOURS	<u>3</u>	<u>3</u>	<u>0</u>
	Credits	Lec	Lab

I. Catalog Description

Includes topics on solving linear equations, systems of linear equations and inequalities in two variables. Provides introduction which covers functions, fundamental operations on polynomial, and factoring. May not be counted toward graduation requirements. **Prerequisite:** MATH 0301 with a "C" or better, or NCBM 0101 with a "CR" or better or ME01 or by placement exam. (3:0).

II. Course Objectives

- A. Unit I – Real Numbers and Variable Expressions
Upon satisfactory completion of this unit, the unit will be able to:
 1. Perform operations with integers and rational numbers.
 2. Perform exponential operations, and know the order of operations.
 3. Work with variable expressions.
 4. Translate verbal expressions into variable expressions.
- B. Unit II – Solving Equations and Inequalities
Upon satisfactory completion of this unit, the student will be able to:
 1. Solve linear equations.
 2. Work application problems involving linear equations.
 3. Solve inequalities in one variable.
 4. Solve absolute value equations and inequalities. .
- C. Unit III – Linear Functions and Inequalities in Two Variables
Upon satisfactory completion of this unit, the student will be able to:
 1. Find points on a rectangular coordinate system.
 2. Evaluate a function.
 3. Graph a linear function.
 4. Find the equation a straight line and the slope of a line.
 5. Identify parallel and perpendicular lines.
 6. Graph inequalities in two variables.
- D. Unit IV – Systems of Equations and Inequalities
Upon satisfactory completion of this unit, the student will be able to:
 1. Solve a system of linear equations by graphing, substitution, using the addition method and by matrices.
 2. Solve application problems that involve systems of linear equations.
 3. Solve a system of linear inequalities.
- E. Unit V – Polynomials
Upon satisfactory completion of this unit, the student will be able to:
 1. Identify and evaluate polynomial functions.
 2. Add, Subtract, Multiply and Divide polynomials.

3. Write numbers in Scientific Notation.

F. Unit VI – Factoring

Upon satisfactory completion of this unit, the student will be able to:

1. Identify common factors in a polynomial.
2. Factor quadratic polynomials by grouping and by using “trial factors”.
3. Factor special polynomials (difference of two squares, sum or differences of two cubes, etc.).
4. Solve equations by factoring.

III. Evaluation

a. Pre-assessment

Instructors will check prerequisites for every student during the first day(s) of class. Students without the proper prerequisites for the class will be sent to the registrar to revise their schedules.

b. Challenge Exam

Students may challenge the course by contacting the Division Dean and making the necessary arrangements with the Testing Center. Challenges must be accomplished before the census cut-off date. Students who previously have received a W or letter grade for the course are not eligible to challenge the course.

c. Post-Assessment

It is recommended that at least four (4) unit tests worth 100 points each be given to evaluate student learning for the course. A comprehensive final exam must be given. Quizzes/homework worth up to 100 points may be assigned and graded to determine the student's grade for the course. This recommended assessment would give a student a total of 600 possible points which when divided by six and would give an average to determine the grade for the course.

This average would determine a student's course grade based on the scale below.

A = 90 – 100
 B = 80 – 89
 C = 70 – 79
 D = 60 – 69
 F = Below 60

- d. The homework grade will be weighted no more than the weight of one exam; the comprehensive final exam will be weighted at least as much as one exam. The final exam can not be dropped.

e. I and W Grades

The student is responsible for completing the necessary forms for I or W grades (except as noted below). I and W grades may be assigned whenever appropriate deadlines are met. To be eligible for an Incomplete, I, the student must complete 80% of the course work with at least a 75% average. The proper forms must also be signed by both the student, and the instructor before being submitted to the registrar.

IV. Disability Statement (American with/Disabilities Act [ADA])

EPCC offers a variety of services to persons with documented sensory, mental, physical, or temporary disabling conditions to promote success in classes. If you have a disability and believe you may need services, you are encouraged to contact the Center for Students with Disabilities to discuss your needs with a counselor. All discussions and documentation are kept confidential. Offices located: VV Rm C-112 (831-2426); TM Rm 1400 (831-5808); RG Rm B-201 (831-4198); NWC Rm M-54 (831-8815); and MDP Rm A-125 (831-7024).

V. 6 Drop Rule

Students who began attending Texas public institutions of higher education for the first time during the Fall 2007 semester or later are subject to a 6-Drop limit for all undergraduate classes. Developmental, ESL, Dual Credit and Early College High School classes are exempt from this rule. All students should consult with their instructor before dropping a class. Academic assistance is available. Students are encouraged to see Counseling Services if dropping because exemptions may apply. Refer to the EPCC catalog and website for additional information.