El Paso Community College Syllabus Part II Official Course Description

SUBJECT AREA	Mathematics
COURSE RUBRIC AND NUMBER	<u>NCBM 0314</u>
COURSE TITLE	Non-Course Based Instruction for Math 1314
COURSE CREDIT HOURS	3 3 : 0 Credits Lec Lab

I. Catalog Description

Provides a "just-in-time" integration of reordered Developmental Skills needed to complement the Math 1314 concepts. This course is a Non-Course Base Option that supports students whose placement scores indicate that they can succeed in MATH 1314 with co-enrollment into NCBM 0314. Prerequisite: Placement by TSIA2 or equivalent; OR completion of NCBM 0302 with a "C" or better. (3:0).

II. Course Objectives

Upon satisfactory completion of the course, the student will be able to solve mathematical problems that relate to:

A. Unit I.

- 1. Order of Operations
- 2. Solving Linear Equations
- 3. Graphing
- 4. Introduction to Linear Equations
- 5. Introduction to Writing Linear Equations
- 6. Evaluating Functions

B. Unit II.

- 1. Zeros and Factors
- 2. Factoring
- 3. Solving Quadratic Equations I
- 4. Solving Quadratic Equations II
- 5. Introduction to Polynomials I
- 6. Introduction to Polynomials II
- 7. Rational Expressions
- 8. Radicals

C. Unit III.

- 1. Exponents
- 2. Evaluating Exponential Expressions
- 3. Solving Exponential Equations
- D. Unit IV
 - 1. Solving Systems of Linear Equations using Graphical Method
 - 2. Solving Systems of Linear Equations using Substitution and Addition Methods
 - 3. Solving Non-linear Systems

4. Systems of Linear and Non-linear Inequalities

E. Unit V

1. Introduction to Matrices

III. THECB Learning Outcomes (ACGM)

Upon successful completion of this course, students will:

- 1. Use appropriate symbolic notation and vocabulary to communicate, interpret, and explain mathematical concepts.
- 2. Define, represent, and perform operations on real numbers, applying numeric reasoning to investigate and describe quantitative relationships and solve real world problems in a variety of contexts.
- 3. Use algebraic reasoning to solve problems that require ratios, rates, percentages, and proportions in a variety of contexts using multiple representations.
- 4. Apply algebraic reasoning to manipulate expressions and equations to solve real world problems.
- 5. Use graphs, tables, and technology to analyze, interpret, and compare data sets.
- 6. Construct and use mathematical models in verbal, algebraic, graphical, and tabular form to solve problems from a variety of contexts and to make predictions and decisions.

IV. Evaluation

It is suggested that 1 - 2 quizzes are given for each unit. Homework, notebook, and attendance grades may also be used in the evaluation of the final grade, if the instructor so chooses. A comprehensive final quiz is mandatory for all students. Students will be assessed on Unit I-Unit III and given a comprehensive final exam.

The course grade will be assigned based on the following scale.

A.....90 -100 B.....80 - 89 C.....70 - 79 D.....60 - 69 F.....Below 60

I and W Grades: The student is responsible for completing the necessary forms for I or W (except as noted below). I and W grades may be assigned whenever appropriate deadlines are met. To be eligible for an I, the student must complete 80% of the course 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.

V. Disability Statement (Americans 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).

VI. 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.

VII. Title IX and Sex Discrimination

Title 9 (20 U.S.C. 1681 & 34 C.F.R. Part 106) states the following "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any educational program or activity receiving Federal financial assistance." The Violence Against Women Act (VAWA) prohibits stalking, date violence, sexual violence, and domestic violence for all students, employees and visitors (male and female). If you have any concerns related to discrimination, harassment, or assault (of any type) you can contact the Assistant to the Vice President for Student and Enrollment Services at 915-831-2655. Employees can call the Manager of Employee Relations at 915-831-6458. Reports of sexual assault/violence may also be reported to EPCC Police at 915-831-2200.