

El Paso Community College

Syllabus

Part II

Official Course Description

SUBJECT AREA	<u>Mathematics</u>
COURSE RUBRIC AND NUMBER	<u>NCBM 0302</u>
COURSE TITLE	<u>Non-Course Based Instruction for MATH</u>
COURSE CREDIT HOURS	<u>3 3 : 0</u> Credits Lec Lab

I. Catalog Description

Provides a deep and intense study of Operations of Real Numbers and Rounding including whole numbers, integers, fractions, decimals, ratios, and percents. The course will also dive deep into solving equations. Provides instruction to factoring and will contain study skills throughout the course. **Prerequisite: Placement by Math TSIA. (3:0).**

II. Course Objectives

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

- A. Unit I.
 1. Identify the place value of a given whole number.
 2. Solve problems and word problems involving operations on whole numbers.
 3. Identify integers and solve problems involving operations on integers.

- B. Unit II.
 1. Identify proper fractions, improper fractions, and mixed fractions.
 2. Change improper fractions to mixed fractions and vice versa.
 3. Solve problems involving operations on fractions.
 4. Round decimals to a given place value.
 5. Solve problems involving operations on decimals.
 6. Use properties of exponents.
 7. Use order of operations to simplify expressions.

- C. Unit III.
 1. Identify variables, coefficients, and terms in an expression.
 2. Use properties of numbers to multiply and combine like terms.
 3. Simplify expressions.
 4. Determine if a given number is a solution of an equation.
 5. Use the addition and multiplication properties of equality to solve linear equations.

- D. Unit IV.
 1. Multiply polynomials and identify special products.
 2. Factor out the greatest common factor (GCF).
 3. Factor trinomials with leading coefficient of 1, the difference of squares, and by grouping.
 4. Solve equations by factoring.

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

There will be at least four in class exams (100 points each) and one required in class comprehensive final exam to evaluate student learning for the course. Homework/quizzes, or other assignments may count toward the final grade at the instructor's discretion. Refer to instructor's course requirements for specific details grades will be assigned according to the following:

- A 90-100
- B 80-89
- C 70-75
- D 60-69
- F below 60 or for cheating

The final grade would then be computed by averaging the number of exams, and the grade for homework and quizzes. (Suggestion: Use the final grade to replace the lowest test grade, not to drop the lowest test grade.)

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. A comprehensive final exam and at least four unit exams will be given throughout the semester.

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.