El Paso Community College
Syllabus
Part II
Official Course Description

SUBJECT AREA   **Mathematics**

COURSE RUBRIC AND NUMBER   **Math 0301**

COURSE TITLE   **College Prep Math**

COURSE CREDIT HOURS

3	**3**	**0**
Credits	**Lec**	**Lab**

I. Catalog Description

Introduces basic mathematical concepts and skills of the real numbers including whole numbers, integers, fractions, decimals, ratios, percents, and an introduction to geometry. Extends the use of operations on the real numbers using applications in business and geometry. May not be counted toward graduation requirements. **Prerequisite: Score at appropriate level on placement exam. (3:0).**

II. Course Objectives

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

A. Unit I. Whole Numbers

1. Round whole numbers to a given place value.
2. Solve problems and word problems involving operations on whole numbers.
3. Simplify expressions containing exponents.
4. Use the Order of Operation Agreement to evaluate expressions
5. Find the factors of a whole number using divisibility tests.
6. Identify prime and composite numbers and find the prime factorization of a number.
7. Use the properties of real numbers.

B. Unit II. Integers

1. Find opposites and absolute value of signed numbers and compare signed numbers.
2. Solve problems and word problems involving operations on integers.

C. Unit III. Rational Numbers

1. Find the least common multiple (LCM) and the greatest common factor.
2. Change improper fractions to mixed numbers and vice versa.
3. Find equivalent fractions by expanding and reducing.
4. Identify the order relation between fractions.
5. Solve problems and word problems involving operations on rational numbers.

D. Unit IV. Decimals

1. Read and write decimals as words and digits and identify the order relation between decimals.
2. Change decimals into fractions and vice versa.
3. Round decimals to a given place value.

4. Solve problems and word problems involving operations on decimals.
5. Convert between fractions, decimals, and percents.
6. Recognize perfect squares and find square roots of real numbers.

E. Unit V. Geometry

1. Compare two quantities using ratios of like and unlike quantities.
2. Make conversions within and between the US and metric systems of measurement.
3. Classify geometric figures.
4. Solve problems involving lines and angles.
5. Find the perimeter, area, volume, and surface area of geometric figures.

F. Unit VI. Statistics

1. Organize data for display.
2. Find basic statistical measures: mean, median, and mode.
3. Find the probability of simple events.

III.   Evaluation

There will be at least three 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.

IV.   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).

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.