

# **MATH 0301 - Campus Essentials of Mathematics**

## **Western Texas College**

- I. Basic Course Information
    - A. Course Description: Designed for students requiring remediation in basic mathematical operations. Topics include: basic arithmetic skills in whole numbers, integers, common fractions, decimal numbers, percentages, ratios, proportions, rates, basic geometric skills, and scientific notation. This course will not apply toward graduation requirements and will not transfer.
    - B. Any required prerequisites: Students are placed into this course based on placement test scores.
  - II. Student Learning Outcomes
    - A. Students will be able to organize and consolidate their mathematical thinking through communication. Success will be measured using a variety of formative assessment strategies in a collaborative learning environment.
    - B. Students will be able to analyze and evaluate the mathematical thinking and strategies of others. Success will be measured using a variety of formative assessment strategies in a collaborative learning environment.
    - C. Students will apply and adapt a variety of appropriate strategies to solve problems. Success will be measured using a variety of formative and summative assessment strategies.
    - D. Students will monitor and reflect on the process of mathematical problem solving. Success will be measured using a variety of formative and summative assessment strategies.
  - III. Testing Requirements - Online Students Only
    - A. Students are required to take the midterm and final exam at a testing center. Students should find a testing center near their current location and give the details to their instructor.
    - B. Students are not allowed to use their book or notes while testing. Students are allowed to use a calculator while taking the exams.
  - IV. Major Course Requirements
    - A. Major Requirement - Tests (30%), Final Exam (25%)
    - B. Major Requirement - Homework/Quizzes (30%), Participation (5%), Labs (10%)
- \*\* Important: (A = 93 - 100, B = 83-92, C = 76-82, D = 60-75, F = 59 and below)
- V. Information on Books and Other Course Materials
    - A. Book: Prealgebra and Introductory Algebra by Franklin Wright. (NOT REQUIRED)
    - B. Required Access Code: Students must have a Hawke's Learning access code.
    - C. Calculators: Calculators are not allowed in this course
  - VI. Other Policies, Procedures and important dates - See the [Catalog](#).
    - A. Campus Calendar
    - B. Final exam schedule
    - C. How to drop a class.
    - D. Withdrawal information
    - E. Student Conduct/Academic Integrity
    - F. Students with disabilities

- VII. Course Topics - Below are the main topics covered in this course. Each topic requires prerequisite knowledge; therefore, other topics may also be covered to ensure student success. Topics are subject to change.

Topics
Problem Solving with Whole Numbers
Solving Equations with Whole Numbers
Exponents and Order of Operations
Introduction to Polynomials
Introduction to Integers
Addition with Integers
Subtraction with Integers
Multiplication, Division and Order of Operations with Integers
Applications: Change in Value and Mean
Introduction to Like Terms and Polynomials
Solving Equations with Integers
Tests for Divisibility
Prime Numbers
Prime Factorization
Least Common Multiple (LCM)
Introduction to Fractions
Division with Fractions
Addition and Subtraction with Fractions
Solving Equations with Fractions
Ratios and Proportions
Measures of Center
Decimal Numbers, Fractions and Scientific Notation
Basics of Percents
Various Lab activities exploring the application of the mathematics learned will included.

Last Modified: August 19, 2015