

[School District Name]
Syllabus
Part II
Official Course Description

SUBJECT AREA **Mathematics**

COURSE RUBRIC AND NUMBER **[District Course Number]**

COURSE TITLE **College Preparatory Integrated Mathematics Course I**

COURSE CREDIT **0.5 Advanced Mathematics**

I. Description

This course addresses a variety of mathematical topics needed to prepare students for success in college-level mathematics. In addition, the course supports students in developing skills and strategies needed to succeed in college. Mathematics topics include: real numbers, basic geometry, polynomials, factoring, linear equations, inequalities, quadratic equations, rational expressions and quantitative reasoning. Successful completion of this course, as defined by the Memorandum of Understanding (MOU) with the partnering institution(s), grants the student an exemption to TSI requirements for mathematics at the partnering institution(s). An overall grade for the semester of 75 or higher indicates that the student has met the college readiness standards established by the School Districts of Region 19, El Paso Community College (EPCC), and The University of Texas at El Paso (UTEP) indicating that the student is prepared for Integrated Mathematics Course II.

II. Course Learning Outcomes and Objectives

This course is intended for students who require state mandated remediation. In particular, this course is intended to prepare students for Integrated Mathematics Course II. Students are prepared to enter post-secondary work-force certificate programs with no additional remediation in mathematics. Students experience a combination of class and student-directed lab time to simulate the EPCC and UTEP course structure. Students manage their own learning through effective self-scheduling, self-monitoring, and effective peer study groups.

STUDENT LEARNING OUTCOMES	LEARNING OBJECTIVES	High School Equivalent
THE STUDENT WILL:		
1. Identify and apply properties of real numbers, and perform accurate arithmetic operations with numbers in various formats and number systems.	1.1 Add, subtract, multiply and divide, using order of operations, real numbers and manipulate certain expressions including exponential operations.	Algebra I & Geometry
	1.2 Solve problems using scientific notation.	
	1.3 Find square roots of perfect square numbers.	
	1.4 Solve problems involving calculations with percentages and interpret the results.	
	1.5 Use estimation skills, and know why, and when to estimate results.	
2. Demonstrate the ability to manipulate/simplify algebraic expressions, & classify/solve algebraic equations with appropriate techniques.	2.1 Solve problems using equations and inequalities.	Algebra I & Algebra II
	2.2 Factor polynomials using the techniques of the greatest common factor, grouping, difference of two squares and special trinomials.	
	2.3 Solve systems of linear equations in two variables.	

STUDENT LEARNING OUTCOMES	LEARNING OBJECTIVES	High School Equivalent
THE STUDENT WILL:		
	2.4 Graph linear equations & linear inequalities in two variables.	
	2.5 Find the slope of a line & write its equation.	
3. Demonstrate the use of elementary graphing techniques.	3.1 Read, interpret, and make decisions about data summarized numerically in tables, and in graphical displays.	Algebra I & Algebra II
	3.2 Plot ordered pairs on a rectangular coordinate system and graph linear equations.	
4. Apply basic geometric theorems and formulas to rectangles, squares, parallelograms, triangles, trapezoids, circles, and angles.	4.1 Find the perimeter and area of rectangles, squares, parallelograms, triangles, trapezoids and circles; volume and surface area, relations between angle measures, congruent and similar triangles, and properties of parallelograms.	Geometry
5. Understand, interpret, and make decisions based on financial information commonly presented to consumers.	5.1 Demonstrate understanding of common types of consumer debt and explain how different factors affect the amount that the consumer pays.	Mathematical Models with Applications
	5.2 Demonstrate understanding of compound interest and how it relates to saving money.	
	5.3 Use quantitative information to explore the impact of policies or behaviors on a population.	

III. Evaluation

- A. Students will take the Final Exam.
- B. If a student scores at least 60 on the Final Exam, then the student's overall grade for the semester will not be less than 75 on the high school transcript. If a student scores less than the required 60 on the Final Exam, then the student's overall grade for the semester will not exceed 74 on the high school transcript.
- C. An overall grade for the semester of 75 or higher indicates that the student has met the criteria, and the student is prepared for college level mathematics without further assessment or remediation.
- D. For the attendance policy, please refer to the [school district name]'s most current Student Handbook and Code of Conduct.