

MATHEMATICS

M101/M102 ALGEBRA I

(ALG 1)

Peims #03100500

Recommended Grade Placement: 9

1 credit - state

Prerequisite: None.

This two semester course covers concepts and skills involving relations, foundations for functions, function concepts, linear function, quadratics, nonlinear functions, and operations with real numbers & their properties.

B919/B920 ALGEBRA I LAB

(LOC)

Peims # 84100XXX

Recommended Grade Placement: 9

1 credit – local

This two semester course is intended to be a lab for Algebra I.

M121/M122 ALGEBRA I PRE-AP *FOR ECHSs and ADVANCED ACADEMIES ONLY* (ALG 1)

Peims #03100500

Recommended Grade Placement: 9

1 credit - state

Weight Reference District Policy EIC Local as weights are dependent upon high school year entry date. Prerequisite: Additional requirements may be imposed at individual campuses.

This two semester course covers concepts and skills involving relation, foundations for functions, functions concepts, linear function, quadratics, nonlinear functions, and operations with real numbers & their properties.

This course is designed for students who show advanced interest and aptitude for math. This class goes beyond the usual course in content and depth.

M103/M104 ALGEBRA I IB PREPARATORY (El Dorado High School Only)

(ALG 1)

Peims #03100500

Recommended Grade Placement: 9

1 credit – state

Weight: Reference District Policy EIC Local as weights are dependent upon high school year entry date.

Prerequisite: IB Guidelines.

This two semester course covers concepts and skills involving relations, foundations for functions, function concepts, linear function, quadratics, nonlinear functions, and operations with real numbers & their properties.

M107/108 IB Prep Algebra I/Geometry Combo Class: (El Dorado High School Only) (ALG 1 GEOM)

Peims # 03100500/03100700

Recommended Grade Placement: 9

2 credit – state

This course broadens the concepts mastered in Algebra I by including all of Geometry TEKS as well as building a firm foundation of upper level IB courses. This course prepares students for entrance into IB at the junior level or taking Advance Placement courses.

M129/M130 ALGEBRA I - RETAKE

(ALG 1)

Peims #03100500

Recommended Grade Placement: 9-10

1 credit - state

Prerequisite: Previously failed Algebra I in high school.

This two semester course covers concepts and skills involving relations, foundations for functions, function concepts, linear function, quadratics, nonlinear functions, and operations with real numbers & their properties. This course is designed for those students who must “retake” Algebra due to failure.

M109/M110 ALGEBRA I/ ALGEBRA II COMBO CLASS

(ALG 1 ALG 2)

Peims#03100500/03100600

Recommended Grade Placement: 9-11

2 credits – state

This course broadens the concepts mastered in Algebra I by including all of Algebra II TEKS.

M117/M118 IB PREP ALGEBRA I/ ALGEBRA II COMBO CLASS (El Dorado High School Only)
(ALG 1 ALG 2)

Peims#03100500/03100600 **Recommended Grade Placement: 9-11** **2 credits – state**

Weight: Reference District Policy EIC Local as weights are dependent upon high school year entry date.

Prerequisite: Campus Specific – IB Guidelines

This course broadens the concepts mastered in Algebra I by including all of Algebra II TEKS as well as building a firm foundation for upper level IB courses. This course prepares students for entrance into IB at the junior level or taking Advanced Placement courses.

M119/M120 PRE-AP ALGEBRA I/ PRE-AP ALGEBRA II COMBO CLASS (ALG 1 ALG 2)

Peims#03100500/03100600 **Recommended Grade Placement: 9-11** **2 credits – state**

Weight: Reference District Policy EIC Local as weights are dependent upon high school year entry date.

Prerequisite: Additional requirements may be imposed at individual campuses.

This course broadens the concepts mastered in Algebra I by including all of Algebra II TEKS as well as building a firm foundation for upper level AP courses. This course prepares students for entrance into Advanced Placement courses in mathematics.

M607M608 ALGEBRAIC REASONING (ALGREA)

Peims # 03102540 Recommended Grade Placement: 9-10 1 credit - state

In Algebraic Reasoning, students will build on the knowledge and skills for mathematics in Kindergarten-Grade 8 and Algebra I, continue with the development of mathematical reasoning related to algebraic understandings and processes, and deepen a foundation for studies in subsequent mathematics courses.

Students will broaden their knowledge of functions and relationships, including linear, quadratic, square root, rational, cubic, cube root, exponential, absolute value, and logarithmic functions. Students will study these functions through analysis and application that includes explorations of patterns and structure, number and algebraic methods, and modeling from data using tools that build to workforce and college readiness such as probes, measurement tools, and software tools, including spreadsheets.

M201/M202 GEOMETRY (GEOM)

Peims #03100700 Recommended Grade Placement: 9–10 1 credit - state

Prerequisite: Algebra I.

This two semester course covers the concepts of points, lines, planes, spatial reasoning, polygraphs, circles, solids, and their relationships to one another. In addition, it covers geometric structure and patterns, dimensionality and geometry of location, congruence and geometry of size, and similarity and the geometry of shape.

M205/M206 GEOMETRY PRE-AP (GEOM)

Peims #03100700 Recommended Grade Placement: 9–10 1 credit - state

Weight: Reference District Policy EIC Local as weights are dependent upon high school year entry date.

Prerequisites: Successful completion of Algebra I. Additional requirements may be imposed at individual campuses.

This two semester course covers the concepts of points, lines, planes, spatial reasoning, polygraphs, circles, solids, and their relationships to one another. This course is designed for students with advanced interest and aptitude for mathematics. This class goes beyond the usual course in content and depth. In addition it covers geometric structure and patterns, dimensionality and geometry of location, congruence and geometry of size, and similarity and the geometry of shape.

M115/M116 GEOMETRY IB PREP (EL Dorado High School Only) (GEOM)

Peims #03100700 Recommended Grade Placement: 9-10 1 credit – state

Weight: Reference District Policy EIC Local as weights are dependent upon high school year entry date.

Prerequisite: IB Guidelines

This course extends the content of Geometry by developing an awareness of the structure of a mathematical system connecting definitions, theorems, logical reasoning, postulates, proofs, and coordinate geometry.

Revised 1-16-19

This course prepares students for entrance into IB or Advanced courses. In addition, it covers geometric structure and patterns, dimensionality and geometry of location, congruence and geometry of size, and similarity and the geometry of shape.

M111/M112 ALGEBRA II

(ALG 2)

Peims #03100600

Recommended Grade Placement: 9-12

1 credit - state

Prerequisite: Algebra I, Geometry is recommended

This two semester course, emphasis is placed on data handling and analysis sequencing, conics, and the following relations and functions: linear, quadratic, polynomial, rational, exponential & logarithmic.

M123/M124 ALGEBRA II PRE-AP

(ALG 2)

Peims #03100600

Recommended Grade Placement: 9-11

1 credit - state

Weight: Reference District Policy EIC Local as weights are dependent upon high school year entry date.

Prerequisites: Successful completion of Algebra I. Additional requirements may be imposed at individual campuses.

This two semester course, places emphasis on data handling and analysis sequencing, conics, and the following relations and functions: linear, quadratic, polynomial, rational, exponential & logarithmic.

Higher levels of understanding such as relationship of ideas, analysis, synthesis, and evaluation will be stressed. This course is designed for students with advanced interest and aptitude for mathematics. This class goes beyond the usual course in content and depth.

M113/M114 ALGEBRA II IB PRERATORY (El Dorado High School Only)

(ALG 2)

Peims #03100600

Recommended Grade Placement: 9-11

1 credit - state

Weight: Reference District Policy EIC Local as weights are dependent upon high school year entry date.

Prerequisite: IB Guidelines

This course extends the content in Algebra II by developing an awareness of the structure of higher level mathematics. Students will study the same topics as defined in Algebra II plus additional topics in sequences, series, and probability. In addition, more emphasis will be given to algebraic proof of theorems, rational, exponential, and logarithmic. Higher levels of understanding such as relationship of ideas, analysis, synthesis, and evaluation will be stressed. This course prepares students for entrance into IB or Advanced courses.

M401/M402 MATH MODELS WITH APPLICATIONS

(MTHMOD)

Peims #03102400

Recommended Grade Placement: 10-12

1 credit - state

Prerequisite: Algebra I, follow TEA Guidelines. **Must be taken prior to receiving credit for Algebra II.**

In this two semester course, students will use algebraic reasoning to recognize patterns, model information and solve real-life applied problems. The primary purpose of this course is to use mathematics as a tool to model real-world phenomena in science, finance, music, and art.

M503/M504 STATISTICS AP

(APSTATS)

Peims # A3100200

Recommended Grade Placement: 10-12

1 credit - state

Weight: Reference District Policy EIC Local as weights are dependent upon high school year entry date.

Prerequisites: Successful completion of Pre-AP Algebra II. Additional requirements may be imposed at individual campuses.

This two semester course studies counting principles, probabilities, distributions, data handling and analysis. This course is designed for the student with advanced interest and aptitude for math. Upon completion of this course, students are strongly encouraged to take the AP Exam and, depending on their score, may receive college credit.

Revised 1-16-19

M301/M302 PRE - CALCULUS

(PRE CALC)

Peims #03101100

Recommended Grade Placement: 10-12

1 credit - state

Prerequisites: Algebra I, Algebra II, Geometry.

In this two semester course, students will use symbolic reasoning and analytical methods to study polynomial, exponential, logarithmic, trigonometric, and piecewise functions. In addition students translate among verbal, numerical, graphical and symbolic representations of functions. The student interprets the meaning of the symbolic representation of functions and their properties to model and solve real-life problems. The student uses sequences and series to represent, analyze, and solve real-life problems, and uses conic sections, their properties, parametric representations and vectors to model physical situations.

M303/M304 PRE - CALCULUS PRE-AP

(PRE CALC)

Peims #03101100

Recommended Grade Placement: 10-12

1 credit - state

Weight: Reference District Policy EIC Local as weights are dependent upon high school year entry date.

Prerequisites: Successful completion of Algebra I, Algebra II and Geometry. Additional requirements may be imposed at individual campuses.

In this two semester course, students will use symbolic reasoning and analytical methods to study polynomial, exponential, logarithmic, trigonometric, piecewise functions, and parametric functions. Emphasis is placed on mathematical concepts including limits, advanced algebraic formulas, and trigonometric functions, series and sequences. The student uses sequences and series to represent, analyze, and solve real-life problems, and uses conic sections, their properties, parametric representations and vectors to model physical situations. This course is designed for the student with advanced interest and aptitude for math.

M305/M306 AP CALCULUS AB

(APCALCAB)

Peims #A3100101

Recommended Grade Placement: 11-12

1 credit - state

Weight: Reference District Policy EIC Local as weights are dependent upon high school year entry date.

Prerequisite: Successful completion of Pre-AP Pre-Calculus. Additional requirements may be imposed at individual campuses.

This course is designed for the student with advanced interest and aptitude in mathematics. This two-semester course covers the concepts in mathematical differentiation and integration and their applications. The course emphasizes a multi-representational approach to calculus with concepts, results, and problems being expressed graphically, numerically, analytically and verbally. Upon completion of this course, students are strongly encouraged to take the AP Exam and, depending on their score, may receive college credit.

M307/M308 AP CALCULUS BC

(APCALCBC)

Peims # A3100102

Recommended Grade Placement: 11-12

1 credit - state

Weight: Reference District Policy EIC Local as weights are dependent upon high school year entry date.

Prerequisite: Successful completion of Pre-AP Pre-Calculus. Additional requirements may be imposed at individual campuses.

This two-semester course is an extension of Calculus AB and it is a full year course in the calculus of functions of a single variable. It includes all topics covered in Calculus AB plus additional topics such as parametric, polar, and vector functions; polynomial approximations and series will help students develop an appreciation of calculus as a body of knowledge and as a human accomplishment. Upon completion of this course, students are strongly encouraged to take the AP Exam and, depending on their score, may receive college credit.

M309/M310 AP CALCULUS AB / CALCULUS BC

(AP CALCAB) (APCALCBC)

Peims # A3100101/A3100102

Recommended Grade Placement: 12

2 credits - state

Weight: Reference District Policy EIC Local as weights are dependent upon high school year entry date.

Prerequisite: Successful completion of Pre-AP Calculus. Additional requirements may be imposed at individual campuses.

This two-semester course is an extension of Calculus AB and it is a full year course in the calculus of functions of a single variable. It includes all topics covered in Calculus AB plus additional topics such as parametric, polar, and vector functions; polynomial approximations and series will help students develop an appreciation of calculus as a body of knowledge and as a human accomplishment. Enrolling in this course implies that students will take the BC level of the College Board AP Examination in the spring semester.

Revised 1-16-19

This two semester course covers the concepts in mathematical differentiation and integration. This course is designed for the student with advanced interest and aptitude for math. This two semester course covers advanced concepts in mathematical differentiation and integration. Upon completion of this course, students are strongly encouraged to take the AP Exam and, depending on their score, may receive college credit.

M701/M702 MATHEMATICAL STUDIES SL IB (El Dorado High School Only) (IBMASTL)
Peims#I3100100 Recommended Grade Placement: 11-12 1 credit-state

Weight: Reference District Policy EIC Local as weights are dependent upon high school year entry date.

Prerequisite: IB Guidelines

This course is a two year course where students will earn a Pre-Calculus credit their first year and a Statistics credit second year. This course will consist of number theory and algebra, sets and logic, geometry, trigonometry, probability and statistics, functions, financial mathematics, and differential calculus. This course is designed to facilitate college bound students whose emphasis will not be in math, but need to develop their mathematical skill in a variety of topics to further deal with the mathematical demands in real life problem solving. This course is also designed to teach students to solve real-world problems concretely and mathematically through probability and statistics. In addition, course will develop mathematical knowledge, concepts and principles then apply logical, critical, and creative thinking to real world situations.

M703/M704 MATHEMATICS SL IB (El Dorado High School Only) (IBMASL)
Peims#I3100200 Recommended Grade Placement: 11-12 1 credit - state

Weight: Reference District Policy EIC Local as weights are dependent upon high school year entry date.

Prerequisite: IB Guidelines

This course is a two year course where students will earn a Pre-Calculus credit their first year and a Calculus credit the second year. Students will use symbolic reasoning and analytical methods to study polynomial, exponential, logarithmic, trigonometric, piecewise functions, and parametric functions. Emphasis is placed on mathematical concepts including limits, advanced algebraic formulas, and trigonometric functions. Student will represent, analyze, and solve real-life problems. This course also covers the concepts in mathematical differentiation and integration and their applications. The course emphasizes a multi-representational approach to calculus with concepts, results, and problems being expressed graphically, numerically, analytically and verbally.

M551/M552 ADVANCED QUANTITATIVE REASONING (ADQUANR)
Peims # 03102510 Recommended Grade Placement: 11-12 1 credit - state

Prerequisites: Algebra II and Geometry

This course includes the analysis of information using statistical methods and probability, modeling change and mathematical relationships and special and geometric modeling for mathematical reasoning. Students learn to become critical consumers of real-world quantitative data, knowledgeable problem solvers who use logical reasoning and mathematical thinkers who can use their quantitative skills to solve authentic problems. Students develop critical skills for success in college and careers, including investigation, research, collaboration, and both written and oral communication of their work as they solve problems in many types of applied situations.

M501/M502 INDEPENDENT STUDY/MATH LEVEL I (INSTUMTH)
Peims #03102500 Recommended Grade Placement: 11-12 1 credit - state

Prerequisites: Algebra I, Algebra II, and Geometry

Independent study topics are campus specific. Full year course.

M509/M510 INDEPENDENT STUDY/MATH LEVEL II (INSTUMTH2)
Peims #03102501 Recommended Grade Placement: 11-12 1 credit - state

Prerequisites: Algebra I, Algebra II, and Geometry

Independent study topics are campus specific. Full year course.

M513/M514 INDEPENDENT STUDY/MATH LEVEL III (INSTUMTH3)
Peims #03102502 Recommended Grade Placement: 11-12 1 credit - state

Prerequisites: Algebra I, Algebra II. And Geometry

Revised 1-16-19

Independent study topics are campus specific. Full year course.

M313/M314 INDEPENDENT STUDY OF MATH - MATHEMATICS FOR BUSINESS AND SOCIAL STUDIES/DUAL CREDIT (INSTUMTH)

Peims #03102500 Recommended Grade Placement: 12 1 credit - state

Weight: Reference District Policy EIC Local as weights are dependent upon high school year entry date.

Prerequisite: Algebra I, Algebra II, Geometry, EPCC Guidelines.

Students will extend their mathematical understanding beyond the Algebra II in a specific area or areas of mathematics. Students apply mathematical and technical skills to address business application of emerging technologies. The student will investigate: Special Functions and Matrices, Exponential and Logarithmic Functions, and Mathematics of Finance. This course will fulfill the requirements for Math 1324 "Introductory Mathematics for Business and Social Science" and Math 1325 "Math for Business and Social Sciences II."

M805/M806 COLLEGE PREPARATORY INTEGRATED MATHEMATICS II (CPMAT)

Peims #CP111200 Recommended Grade Placement: 12 1 credit – state

Prerequisite: None

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 success in college. Mathematics topics include: factoring techniques, radicals, algebraic fractions, complex numbers, graphing linear equations and inequalities, quadratic equations, systems of equations, graphing quadratic equations, an introduction to functions, and probability. 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 college-level mathematics.