For up-to-date Bright Futures and State University System course eligibility information, go to:
www.floridastudentfinancialaid.org/SSFAD/bf/acadrequire.htm

For up-to-date NCAA Clearinghouse course eligibility information, go to:
https://web1.ncaa.org/eligibilitycenter/student/index_student.html

The first seven digits of any course number listed below are determined by the Florida Department of Education. The 8th digit of any course number listed below is issued only by BCPS to meet the scheduling needs of our district.

Course Title: **Intensive Mathematics**
Course Number: **1200400**
Credit: **Multiple Elective Credit**
Grade Level: **6-12**
Major Concepts/Content

The purpose of this course is to provide remedial instruction and practice in mathematics skills and concepts. The instruction should include, but not be limited to, the use of a variety of problem-solving strategies such as drawing a diagram, guess-and-check; solving a simpler problem, examining simpler problems, and working backwards; using technology when appropriate. In addition, focus will be placed on deciding whether a solution is reasonable in the context of the original situation.

SPECIAL NOTE: This is a remedial course. Placement requires completion of a Progress Monitoring Plan. When appropriate, placement must also be indicated on the I.E.P. or 504 Plan.

General Course Information:

	YES	NO	Other
Graduation Requirement		X	EL
Bright Futures (BF)			
Florida Academic Scholar (FAS)		X	
Florida Medallion Scholar (FMS)		X	
Florida Gold Seal Vocational (FGSV)	X		4 YR 24 CREDIT OPTION ONLY **
State University System (SUS)		X	
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course		X	

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			N/A

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.
** For the 3-year, 18 credit option, requirements may differ. See your guidance counselor for more information.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Title: Pre-Algebra (R)
Course Number: 1200300
Credit: 1.00
Grade Level: 9-12

Major Concepts/Content

Pre-Algebra is a course to review benchmarks from grades 6-8 and introduce concepts from algebra, probability and statistics. New topics shall include, but not be limited to, know equivalent forms and perform operations on real numbers (including integer exponents and radicals, percents, scientific notation, absolute value, rational and irrational numbers), identify and apply properties of real numbers, compare and simplify real number expressions, use dimensional (unit) analysis, create and interpret a graph representing a real-world situation, solve linear equations in one variable, simplify monomial expressions, use counting principles to determine size of finite sample spaces and probabilities of events in those spaces, determine probabilities of independent events, and apply the definition of random sample and basic types of sampling.

SPECIAL NOTE: This is a Level I mathematics course. Placement requires student's assessment results to indicate that a more rigorous course of study would be inappropriate and completion of a Progress Monitoring Plan. When appropriate, placement must also be indicated on the I.E.P. or 504 Plan. Does not apply towards some Bright Futures Scholarship Program.

General Course Information:

	YES	NO	Other
Graduation Requirement	X		MA
Bright Futures (BF)			
Florida Academic Scholar (FAS)		X	
Florida Medallion Scholar (FMS)		X	
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)		X	
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course	X		

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			1

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Title: Algebra IA (R)
Course Number: 1200370
Credit: 1.00
Grade Level: 9-12

Major Concepts/Content

Algebra IA is a course designed to develop the algebraic concepts and processes that can be used to solve a variety of real world and mathematical problems. The content shall include, but not be limited to, perform set operations, use fundamental concepts of logic including Venn diagrams, know equivalent forms of and perform operations on real numbers (including integer exponents, and radicals, percents, scientific notation, absolute value, rational and irrational numbers), compare and simplify real number expressions, identify and apply properties of real numbers, create and interpret a graph representing a real-world situation, describe the concept of a function, use function notation, solve real-world problems involving relations and functions, determine the domain and range of relations and functions, simplify algebraic expressions, solve linear and literal equations, solve and graph simple and compound inequalities, solve linear equations and inequalities in real-world situations, rewrite equations of a line into slope-intercept form and standard form, graph a line given any variation of information, determine the slope, x- and y- intercepts of a line given its graph, its equation or two points on the line, write an equation of a line given any variation of information, determine a line of best fit and recognize the slope as the rate of change, and graph a system of linear equations and inequalities.

PREREQUISITE:
SPECIAL NOTE: This is the first of a two-year sequence of courses, Algebra IA and Algebra IB. Taken sequentially they equate to 0.5 unit of Algebra I for some Bright Futures Scholarship Programs and satisfy the Algebra I graduation requirement. NCAA.

General Course Information:

	YES	NO	Other
Graduation Requirement	X		MA
Bright Futures (BF)			
Florida Academic Scholar (FAS)	X		
Florida Medallion Scholar (FMS)	X		
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)	X		
National Collegiate Athletic Association (NCAA)	X		
BCPS "Core" Course	X		
Course Level 1=below grade level, 2= at grade level, 3= above grade level			2
Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Title: **Algebra IB (R)**
Course Number: **1200380**
Credit: **1.00**
Grade Level: **9-12**
Major Concepts/Content

Algebra IB is a course designed to develop the algebraic concepts and processes that can be used to solve a variety of real world and mathematical problems. The content shall include, but not be limited to, simplify and factor polynomial expressions, perform operations with polynomials, simplify and solve algebraic ratios and proportions, simplify and perform operations with radical expressions, graph systems of linear equations and inequalities in two and three variables and quadratic functions, and use varied solution strategies for quadratic equations and for systems of linear equations and inequalities in two and three variables.

PREREQUISITE: Algebra IA

SPECIAL NOTE: This is the second of a two-year sequence of courses, Algebra IA and Algebra IB. Earning credit in Algebra IB precludes earning credit in Applied Mathematics II, Integrated Mathematics II, Algebra I, or Algebra I Honors. Algebra IA and Algebra IB, taken sequentially, equate to one unit of Algebra I, thus meeting the algebra graduation requirement, and as 0.5 unit of an academic core course into the State University System of Florida and for some Bright Futures Scholarship Programs / NCAA. Students completing this course will be required to take the State of Florida End-of Course Algebra Exam.

General Course Information:

	YES	NO	Other
Graduation Requirement*	X		MA
Bright Futures (BF)			
Florida Academic Scholar (FAS)	X		
Florida Medallion Scholar (FMS)	X		
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)	X		
National Collegiate Athletic Association (NCAA)	X		
BCPS "Core" Course	X		

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			2

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must pass the EOC exam to earn credit.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Title: **Algebra I (R)**
Course Number: **1200310**
Credit: **1.00**
Grade Level: **9-12**
Major Concepts/Content

Algebra I is a course designed to develop the algebraic concepts and processes that can be used to solve a variety of real-world and mathematical problems. The content shall include, but not be limited to, perform set operations, use fundamental concepts of logic including Venn diagrams, describe the concept of a function, use function notation, solve real-world problems involving relations and functions, determine the domain and range of relations and functions, simplify algebraic expressions, solve linear and literal equations, solve and graph simple and compound inequalities, solve linear equations and inequalities in real-world situations, rewrite equations of a line into slope-intercept form and standard form, graph a line given any variation of information, determine the slope, x- and y- intercepts of a line given its graph, its equation or two points on the line, write an equation of a line given any variation of information, determine a line of best fit and recognize the slope as the rate of change, factor polynomial expressions, perform operations with polynomials, simplify and solve algebraic ratios and proportions, simplify and perform operations with radical expressions, graph systems of linear equations and inequalities in two and three variables and quadratic functions, and use varied solution strategies for quadratic equations and for systems of linear equations and inequalities in two and three variables.

PREREQUISITE:
SPECIAL NOTE: Earning credit in this course precludes earning credit in Algebra I Honors, Algebra IB, Integrated Mathematics II, and Applied Mathematics II. This course satisfies the algebra graduation requirement. Students completing this course will be required to take the State of Florida End-of Course Algebra Exam. This course meets an academic unit for some Bright Futures Scholarship Programs. NCAA

General Course Information:

	YES	NO	Other
Graduation Requirement*	X		MA
Bright Futures (BF)			
Florida Academic Scholar (FAS)	X		
Florida Medallion Scholar (FMS)	X		
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)	X		
National Collegiate Athletic Association (NCAA)	X		
BCPS "Core" Course	X		

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			2

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must pass the EOC exam to earn credit.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Title: Algebra I Honors (A)
Course Number: 1200320
Credit: 1.00
Grade Level: 9-12
Major Concepts/Content

Algebra I Honors is a rigorous course designed to develop the algebraic concepts and processes that can be used to solve a variety of real-world and mathematical problems. The content shall include, but not be limited to, perform set operations, use fundamental concepts of logic including Venn diagrams, describe the concept of a function, use function notation, solve real-world problems involving relations and functions, determine the domain and range of relations and functions, simplify algebraic expressions, solve linear and literal equations, solve and graph simple and compound inequalities, solve linear equations and inequalities in real-world situations, rewrite equations of a line into slope-intercept form and standard form, graph a line given any variation of information, determine the slope, x- and y- intercepts of a line given its graph, its equation or two points on the line, write an equation of a line given any variation of information, determine a line of best fit and recognize the slope as the rate of change, factor polynomial expressions, perform operations with polynomials, simplify and solve algebraic ratios and proportions, simplify and perform operations with radical and rational expressions, simplify complex fractions, solve rational equations including situations involving mixture, distance, work and interest, solve and graph absolute value equations and inequalities, graph systems of linear equations and inequalities in two and three variables and quadratic functions, and use varied solution strategies for quadratic equations and for systems of linear equations and inequalities in two and three variables.

PREREQUISITE:
SPECIAL NOTE: Earning credit in this course precludes the earning of credit in Algebra I, Algebra IB, Applied Mathematics II, and Integrated Mathematics II. This course satisfies the algebra graduation requirement. Students completing this course will be required to take the State of Florida End-of Course Algebra Exam. This course meets an academic unit for some Bright Futures Scholarship Programs. NCAA.

General Course Information:

	YES	NO	Other
Graduation Requirement*	X		MA
Bright Futures (BF)			
Florida Academic Scholar (FAS)	X		
Florida Medallion Scholar (FMS)	X		
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)	X		
National Collegiate Athletic Association (NCAA)	X		
BCPS "Core" Course	X		

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			3

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)	X		
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must pass the EOC exam to earn credit.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Title: Informal Geometry (R)
Course Number: 1206300
Credit: 1.00
Grade Level: 10-12

Major Concepts/Content

Informal Geometry is a course designed to develop the geometric knowledge that can be used to solve a variety of real-world and mathematical problems. Geometric relationships are developed inductively, with hands-on activities. This course does not include formal deductive proofs. The content will include, but not be limited to, geometric constructions, terminology and fundamental properties of geometry, coordinate geometry, inductive reasoning, making justifying conjectures, introduction to deductive reasoning, properties of polygons and circles, measurement of plane and solid figures, including perimeter, area, and volume, applications of the inequality and Pythagorean Theorems, applications involving right triangles and special right triangles, exploration and application of geometric relationships including geometric solids, parallelism, perpendicularity, congruence, and similarity.

PREREQUISITE: Algebra I, Algebra IB, or Applied Mathematics II.
SPECIAL NOTE: This course may not meet the academic requirements for entry into the State University System of Florida or for some Bright Futures Scholarship Programs.

General Course Information:

	YES	NO	Other
Graduation Requirement	X		MA
Bright Futures (BF)			
Florida Academic Scholar (FAS)		X	
Florida Medallion Scholar (FMS)		X	
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)	X		ELECTIVE
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course	X		

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			2

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Title: Geometry (R)
Course Number: 1206310
Credit: 1.00
Grade Level: 9-12

Major Concepts/Content

Geometry is a course designed to develop the geometric relationships and deductive strategies that can be used to solve a variety of real world and mathematics problems. The content will include, but not be limited to, geometric constructions, terminology and fundamental properties of geometry, deductive and inductive reasoning and their application to formal and informal proof, properties and applications of polygons and circles, formulas pertaining to the measurement of plane and solid figures, coordinate geometry involving circles, apply transformations to polygons, applications of the inequality and Pythagorean Theorems, exploration of geometric relationships such as parallelism, perpendicularly, congruence, and similarity, and right triangle trigonometry.

PREREQUISITE: Algebra I, Algebra IB or Algebra I Honors.
SPECIAL NOTE: Earning credit in this course precludes earning credit in Geometry Honors. This course satisfies the geometry graduation requirement. Students completing this course will be required to take the State of Florida End-of Course Geometry Exam. This course meets an academic unit for some Bright Futures Scholarship Programs and NCAA.

General Course Information:

	YES	NO	Other
Graduation Requirement*	X		MA
Bright Futures (BF)			
Florida Academic Scholar (FAS)	X		
Florida Medallion Scholar (FMS)	X		
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)	X		
National Collegiate Athletic Association (NCAA)	X		
BCPS "Core" Course	X		

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			2

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must take the Geometry EOC exam.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Title: Geometry Honors (A)
Course Number: 1206320
Credit: 1.00
Grade Level: 9-12

Major Concepts/Content

Geometry Honors is a rigorous course designed to develop the geometric relationships and deductive strategies that can be used to solve a variety of real world and mathematics problems. The content will include, but not be limited to, geometric constructions, terminology and fundamental properties of geometry, deductive and inductive reasoning and their application to formal and informal proof, properties and applications of polygons and circles, formulas pertaining to the measurement of plane and solid figures, coordinate geometry involving circles, apply transformations to polygons, use and apply vectors, explore and use sequences, applications of the inequality and Pythagorean Theorems, exploration of geometric relationships such as cross sections of solid objects, parallelism, perpendicularly, congruence, and similarity, and right triangle trigonometry.

PREREQUISITE: Algebra I or Algebra I Honors
SPECIAL NOTE: Earning credit in this course precludes earning credit in Geometry. This course satisfies the geometry graduation requirement. Students completing this course will be required to take the State of Florida End-of Course Geometry Exam. This course meets an academic unit for some Bright Futures Scholarship Programs and NCAA.

General Course Information:

	YES	NO	Other
Graduation Requirement*	X		MA
Bright Futures (BF)			
Florida Academic Scholar (FAS)	X		
Florida Medallion Scholar (FMS)	X		
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)	X		
National Collegiate Athletic Association (NCAA)	X		
BCPS "Core" Course	X		

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			3

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)	X		
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must take the Geometry EOC exam.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Title: **Liberal Arts Mathematics (R)**
Course Number: **1208300**
Credit: **1.00**
Grade Level: **10-12**
Major Concepts/Content

Liberal Arts Mathematics is a course designed to strengthen mathematical skills from Algebra I and Geometry, and for further study of statistical concepts. This course is designed to prepare students for Algebra 2. Topics shall include, but not be limited to, know equivalent forms of and perform operations on real numbers (including integer exponents, and radicals, percents, scientific notation, absolute value, rational and irrational numbers), compare and simplify real number expressions, identify and apply properties of real numbers, create and interpret a graph representing a real-world situation, describe the concept of a function, use function notation, solve linear and literal equations, solve and graph simple and compound inequalities, solve linear equations and inequalities in real-world situations, rewrite equations of a line into slope-intercept form and standard form, graph a line given any variation of information, determine the slope, x- and y- intercepts of a line given its graph, its equation or two points on the line, write an equation of a line given any variation of information, determine a line of best fit and recognize the slope as the rate of change, graph a system of linear equations and inequalities, solve quadratic equations using various methods, and the geometry of polygons, measurement, similarity and congruence.

PREREQUISITE: Geometry or Informal Geometry
SPECIAL NOTE: This course does not meet the academic requirements for entry into the State University System of Florida or for some Bright Futures Scholarship Programs.

General Course Information:

	YES	NO	Other
Graduation Requirement	X		MA
Bright Futures (BF)			
Florida Academic Scholar (FAS)		X	
Florida Medallion Scholar (FMS)		X	
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)	X		ELECTIVE
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course	X		

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			2

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Title: **Advanced Algebra with Financial Applications (R)**
Course Number: **1200500**
Credit: **1.00**
Grade Level: **12**
Major Concepts/Content

Advanced Algebra with Financial Applications is a course designed for seniors in high school who have passed the State assessment. This is a course that can be taken before or after Algebra II. It provides students with the basic tools and knowledge to make informed financial decisions. Topics shall include, but not be limited to, simple and compound interests, present and future values of money, cash versus a credit card, credit scores and reports, finance charges, deferred payments, financing options and fees, fees associated with a mortgage, fixed rate, adjustable rate, and balloon mortgages, cash management strategies, retirement savings plans, investment options, and exchange rates of currency.
PREREQUISITE: Algebra I or Algebra I Honors and Geometry or Geometry Honors
SPECIAL NOTE: This course meets an academic unit for some Bright Futures Scholarship Programs.

General Course Information:

	YES	NO	Other
Graduation Requirement	X		MA
Bright Futures (BF)			
Florida Academic Scholar (FAS)	X		
Florida Medallion Scholar (FMS)	X		
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)	X		
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course	X		

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			2

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Title: Algebra II (R)
Course Number: 1200330
Credit: 1.00
Grade Level: 9-12

Major Concepts/Content

Algebra II is a course designed to continue the study of algebra and to provide the foundation for applying these skills to other mathematical and scientific fields. This course provides the necessary preparation for College Algebra. Topics shall include, but not be limited to, structure and properties of the complex number system, arithmetic and geometric sequences and series, identify and graph transformations of functions such as linear, rational, quadratic, cubic, radical, absolute value, polynomial, exponential, and logarithmic, describe end behavior of polynomial functions, perform operations and compositions of functions, varied solution strategies for linear equations, inequalities, and systems of equations and inequalities, and varied solution strategies for variations, quadratic, polynomial, rational, radical, exponential and logarithmic equations.

PREREQUISITE: Algebra I, Algebra IB or Algebra I Honors
SPECIAL NOTE: Earning of credit in this course precludes earning credit in Algebra II Honors.
This course meets an academic unit for some Bright Futures Scholarship Program. NCAA

General Course Information:

	YES	NO	Other
Graduation Requirement	X		MA
Bright Futures (BF)			
Florida Academic Scholar (FAS)	X		
Florida Medallion Scholar (FMS)	X		
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)	X		
National Collegiate Athletic Association (NCAA)	X		
BCPS "Core" Course	X		

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			2

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Title: Algebra II Honors (A)
Course Number: 1200340
Credit: 1.00
Grade Level: 9-12

Major Concepts/Content

Algebra II Honors is a rigorous course designed to continue the study algebra and to provide the foundation for applying these skills to other mathematical and scientific fields. This course provides the necessary preparation for College Algebra. Topics shall include, but not be limited to, structure and properties of the complex number system, arithmetic and geometric sequences and series including partial sums, study of conic sections, identify and graph transformations of functions such as linear, rational, quadratic, cubic, radical, absolute value, piece-wise, polynomial, exponential, and logarithmic, describe end behavior of polynomial functions, identify discontinuities and asymptotes of rational functions, perform operations and compositions of functions, apply the Binomial Theorem, varied solution strategies for linear equations, inequalities, and systems of equations and inequalities, and varied solution strategies for variations, non-linear systems of equations, quadratic, polynomial, rational, radical, exponential and logarithmic equations.

PREREQUISITE: Algebra I or Algebra I Honors
SPECIAL NOTE: Earning credit in this course precludes earning credit in Algebra II. This course meets an academic unit for some Bright Futures Scholarship Program. NCAA

General Course Information:

	YES	NO	Other
Graduation Requirement	X		MA
Bright Futures (BF)			
Florida Academic Scholar (FAS)	X		
Florida Medallion Scholar (FMS)	X		
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)	X		
National Collegiate Athletic Association (NCAA)	X		
BCPS "Core" Course	X		

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			3

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)	X		
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Title: **Math for College Success**
Course Number: **1200410**
Credit: **Elective Credit 0.5**
Grade Level: **12**

Major Concepts/Content

Math for College Success is a secondary-postsecondary readiness mathematics course, which is equivalent to remedial Elementary Algebra, MAT 0024, approved for delivery as a high school semester-long math elective for 12th grade students. This course is designed for students comfortable performing arithmetic without a calculator and solving linear equations. This course will broaden students' algebra skills to include solving linear inequalities, polynomial factoring, solving quadratic equations, laws of exponents, rational and radical expressions, and graphing of lines. Problem solving involving real-life scenarios is an integral part of this course. This course will teach students to understand and communicate concepts of algebra in the language of mathematics, both orally and written. This course enhances students' problem-solving skills, and helps prepare the student for college-level mathematics and mathematics-based courses. Due to the nature of this course, calculators are NOT permitted. To pass the course, students must pass a mandatory Florida State Examination.

PREREQUISITE: Placement is determined by scores on either the CPT, SAT, ACT, or PERT. If an 11th grade student was level 2, 3, or 4 on their 10th grade SSS Mathematics FCAT, and they have a CPT<72, SAT<440, ACT<19 or PERT<113, then the student is required to be scheduled into the course.
SPECIAL NOTE: This course does not count as a mathematics credit for graduation.

General Course Information:

	YES	NO	Other
Graduation Requirement		X	EL
Bright Futures (BF)			
Florida Academic Scholar (FAS)		X	
Florida Medallion Scholar (FMS)		X	
Florida Gold Seal Vocational (FGSV)	X		4 YR 24 CREDIT OPTION ONLY **
State University System (SUS)	X		ELECTIVE
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course		X	

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			2

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.
** For the 3-year, 18 credit option, requirements may differ. See your guidance counselor for more information.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Title: **Math for College Readiness**
Course Number: **1200700**
Credit: **1.0**
Grade Level: **12**

Major Concepts/Content

Math for College Readiness is a secondary-postsecondary readiness mathematics course, which is equivalent to Intermediate Algebra, MAT 1033. approved for delivery as a high school mathematics course for 12th grade students. This course is a continuation of algebra containing topics such as factoring polynomials, operations with rational expressions, absolute value, exponents, radicals, and roots, complex numbers, linear and quadratic equations and linear inequalities, graphs, systems of equations, and functions, all with applications throughout the course. Problem solving involving real-life scenarios is an integral part of this course. This course will teach students to understand and communicate concepts of algebra in the language of mathematics, both orally and written. This course enhances students' problem-solving skills, and helps prepare the student for college-level mathematics and mathematics-based courses. Due to the nature of this course, calculators are NOT permitted. Upon successful completion of this course, students should be able to demonstrate knowledge of skills necessary to enter college-level mathematics courses such as MAC 1105, STA 2023, MGF 1106 or MGF 1107 when they retake the CPT for college entrance.

PREREQUISITE: Placement is determined by scores on either the CPT, SAT, ACT, or PERT.
SPECIAL NOTE: This course meets an academic unit for some Bright Futures Scholarship Program.

General Course Information:

	YES	NO	Other
Graduation Requirement	X		MA
Bright Futures (BF)			
Florida Academic Scholar (FAS)	X		
Florida Medallion Scholar (FMS)	X		
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)	X		
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course	X		
Course Level 1=below grade level, 2= at grade level, 3= above grade level			2
Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Title: Integrated Mathematics III (R)
Course Number: 1207330
Credit: 1.00
Grade Level: 11-12
Major Concepts/Content

Integrated Mathematics is the final course in a three course sequence and is designed to develop the advanced algebraic, geometric, and statistical concepts and process that can be used and their relationships to each other. The content shall include, but not be limited to, structure and properties of the complex number system, arithmetic and geometric sequences and series, identify and graph transformations of functions such as linear, rational, quadratic, cubic, radical, absolute value, polynomial, exponential, and logarithmic, describe end behavior of polynomial functions, perform operations and compositions of functions, varied solution strategies for linear equations, inequalities, systems of equations and inequalities, variations, quadratic, polynomial, rational, radical, exponential and logarithmic equations, study of polyhedra and spheres, exploration of area and volume of solids, application of trigonometric ratios, and application of statistical concepts such as measure of central tendency, variance, and standard deviation.

PREREQUISITE: Geometry or Geometry Honors and Algebra II or Algebra II Honors or Integrated Mathematics II.
SPECIAL NOTE: This course meets an academic unit for some Bright Futures Scholarship Programs. NCAA
General Course Information:

	YES	NO	Other
Graduation Requirement	X		MA
Bright Futures (BF)			
Florida Academic Scholar (FAS)	X		
Florida Medallion Scholar (FMS)	X		
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)	X		
National Collegiate Athletic Association (NCAA)	X		
BCPS "Core" Course	X		

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			2

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Title: **Analysis of Functions (A)**
Course Number: **1201310**
Credit: **1.00**
Grade Level: **10-12**
Major Concepts/Content

The purpose of this course is to enable students to develop advanced mathematics knowledge and skills in algebra and trigonometry, using functions as a unifying theme. Topics shall include, but not be limited to, identify and graph transformations of functions such as linear, rational, quadratic, cubic, radical, absolute value, piece-wise, polynomial, exponential, logarithmic and trigonometric, describe end behavior of polynomial functions, identify discontinuities and asymptotes of rational functions, perform operations and compositions of functions, and varied solution strategies for linear equations, inequalities, and systems of equations and inequalities, and varied solution strategies for variations, non-linear systems of equations, quadratic, polynomial, rational, radical, exponential, logarithmic and trigonometric equations.
PREREQUISITE: Geometry or Geometry Honors and Algebra II or Algebra II Honors
SPECIAL NOTE: This course meets an academic unit for some Bright Futures Scholarship Programs.

General Course Information:

	YES	NO	Other
Graduation Requirement	X		MA
Bright Futures (BF)			
Florida Academic Scholar (FAS)	X		
Florida Medallion Scholar (FMS)	X		
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)	X		
National Collegiate Athletic Association (NCAA)	X		
BCPS "Core" Course	X		

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			3

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)	X		
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Title: **Probability and Statistics with Applications (A)**
Course Number: **1210300**
Credit: **1.00**
Grade Level: **11-12**
Major Concepts/Content

Probability and Statistics is a full year course designed to explore the concepts of probability, elementary statistics, and hypothesis testing. Topics shall include, but not be limited to random experiments, probability concepts, permutations, combinations, sample space, binomial, normal and exponential distributions, concepts of descriptive statistics, measures of central tendency, measures of variability, basic types of sampling, correlation and regression, hypothesis testing using the normal distribution, the t-distributions, the chi-squared distributions, the F-distributions, and applications of various nonparametric statistical tests.

PREREQUISITE: Algebra II or Integrated Mathematics III or Analysis of Functions
SPECIAL NOTE: Earning credit in this course precludes earning credit in AP Statistics. This course meets an academic unit for some Bright Futures Scholarship Programs. NCAA

General Course Information:

	YES	NO	Other
Graduation Requirement	X		MA
Bright Futures (BF)			
Florida Academic Scholar (FAS)	X		
Florida Medallion Scholar (FMS)	X		
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)	X		
National Collegiate Athletic Association (NCAA)	X		
BCPS "Core" Course	X		

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			3

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)	X		
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Title: Advanced Placement Statistics (A)
Course Number: 1210320
Credit: 1.00
Grade Level: 11-12

Major Concepts/Content

AP Statistics is a course designed to give students college level mathematics under the guidance of the Advanced Placement Program. The purpose of this course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes:

 * Exploring Data: Describing patterns and departures from patterns
 * Sampling and Experimentation: Planning and conducting a study
 * Anticipating Patterns: Exploring random phenomena using probability and simulation
 * Statistical Inference: Estimating population parameters and testing hypotheses

The student enrolled in this course will be expected to take the Advanced Placement Examination in Statistics. Students who successfully complete the course and examination may receive credit and/or advanced placement for a one-semester introductory college statistics course. Download a complete course description from the College Board website.

PREREQUISITE: Algebra II or Algebra II Honors
SPECIAL NOTE: Earning credit in this course precludes earning credit in Probability and Statistics with Applications. This course meets an academic unit for some Bright Futures Scholarship Programs. NCAA

General Course Information:

	YES	NO	Other
Graduation Requirement	X		MA
Bright Futures (BF)			
Florida Academic Scholar (FAS)	X		
Florida Medallion Scholar (FMS)	X		
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)	X		
National Collegiate Athletic Association (NCAA)	X		
BCPS "Core" Course	X		

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			3

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *	X		
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Title: Pre-Calculus (A)
Course Number: 1202340
Credit: 1.00
Grade Level: 10-12

Major Concepts/Content

The purpose of this course is to emphasize the study of functions and other skills necessary for the study of calculus. Topics shall include, but not be limited to, polynomial, rational, exponential, inverse, logarithmic, trigonometric and circular functions, understand and use the Intermediate Value and Extreme Value Theorems, find partial sums of arithmetic and geometric series, understand and find limits, understand and apply vectors, applications of parametric and trigonometric equations, graph and apply conic sections, polar coordinates, complex numbers, and mathematical induction.

PREREQUISITE: Geometry or Geometry Honors and Algebra II or Algebra II Honors or Integrated Mathematics III or Analysis of Functions

SPECIAL NOTE: Earning credit in this course precludes the earning of credit in both Trigonometry and Analytic Geometry. This course meets an academic unit for some Bright Futures Scholarship Programs. NCAA

General Course Information:

	YES	NO	Other
Graduation Requirement	X		MA
Bright Futures (BF)			
Florida Academic Scholar (FAS)	X		
Florida Medallion Scholar (FMS)	X		
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)	X		
National Collegiate Athletic Association (NCAA)	X		
BCPS "Core" Course	X		

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			3

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)	X		
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Title: Mathematical Analysis (A)
Course Number: 1201300
Credit: 1.00
Grade Level: 11-12

Major Concepts/Content

Math Analysis is a course designed to emphasize the skills necessary for the study of calculus. Topics shall include, but not be limited to, the extension of systems of linear equations and inequalities in two and three variables, piece-wise, rational, exponential, logarithmic, and polynomial functions, understand and find limits, find partial sums of arithmetic and geometric series, permutations and combinations, conditional probability, measure of central tendency, measures of variability, mathematical induction, logic, matrix algebra, vectors, and conic sections.

PREREQUISITE: Trigonometry and Analytic Geometry or Pre-Calculus
SPECIAL NOTE: This course meets an academic unit for some Bright Futures Scholarship Programs. NCAA

General Course Information:

	YES	NO	Other
Graduation Requirement	X		MA
Bright Futures (BF)			
Florida Academic Scholar (FAS)	X		
Florida Medallion Scholar (FMS)	X		
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)	X		
National Collegiate Athletic Association (NCAA)	X		
BCPS "Core" Course	X		

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			3

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)	X		
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Title: **Calculus (A)**
Course Number: **1202300**
Credit: **1.00**
Grade Level: **11-12**
Major Concepts/Content
This course is designed to provide a foundation for the study of advanced mathematics. Topics shall include, but not be limited to, elementary functions, hyperbolic functions, limits and continuity, derivatives, differentiation including partial differentiation, applications of the derivative, antiderivatives, definite integrals, indeterminate forms, and applications of the integral.
PREREQUISITE: Trigonometry and Analytic Geometry or Pre-Calculus
SPECIAL NOTE: This course meets an academic unit for some Bright Futures Scholarship Programs. NCAA

General Course Information:

	YES	NO	Other
Graduation Requirement	X		MA
Bright Futures (BF)			
Florida Academic Scholar (FAS)	X		
Florida Medallion Scholar (FMS)	X		
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)	X		
National Collegiate Athletic Association (NCAA)	X		
BCPS "Core" Course	X		

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			3

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)	X		
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Title: **Advanced Placement Calculus AB (A)**
Course Number: **1202310**
Credit: **1.00**
Grade Level: **11-12**
Major Concepts/Content

AP Calculus AB is a course designed to offer students college level mathematics under the guidelines of the Advanced Placement Program. Topics shall include, but not be limited to, elementary functions, hyperbolic functions, limits and continuity, derivatives, differentiation including partial differentiation, applications of the derivative, antiderivatives, definite integrals, indeterminate forms, and applications of the integral. The student enrolled in this course will be expected to take the Advanced Placement Examination in Calculus AB. Download a complete course description from the College Board website.
PREREQUISITE: Trigonometry and Analytic Geometry or Pre-Calculus
SPECIAL NOTE: This course meets an academic unit for some Bright Futures Scholarship Programs. NCAA

General Course Information:

	YES	NO	Other
Graduation Requirement	X		MA
Bright Futures (BF)			
Florida Academic Scholar (FAS)	X		
Florida Medallion Scholar (FMS)	X		
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)	X		
National Collegiate Athletic Association (NCAA)	X		
BCPS "Core" Course	X		

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			3

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *	X		
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.

Course Title: **Advanced Placement Calculus BC (A)**
All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Number: 1202320
Credit: 1.00
Grade Level: 11-12
Major Concepts/Content

Advanced Placement Calculus BC is a course designed to offer students college level mathematics under the guidance of the Advanced Placement Program. Topics shall include, but not be limited to, elementary functions, hyperbolic functions, limits and continuity, derivatives, differentiation including partial differentiation, applications of the derivative, antiderivatives, definite integrals, indeterminate forms, applications of the integral, sequences of real numbers, convergence, and elementary differential equations. The student enrolled in this course will be expected to take the Advanced Placement Examination in Calculus BC. Download a complete course description from the College Board website.

PREREQUISITE: Pre-Calculus or Advanced Placement Calculus AB.
SPECIAL NOTE: This course meets an academic unit for some Bright Futures Scholarship Programs. NCAA

General Course Information:

	YES	NO	Other
Graduation Requirement	X		MA
Bright Futures (BF)			
Florida Academic Scholar (FAS)	X		
Florida Medallion Scholar (FMS)	X		
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)	X		
National Collegiate Athletic Association (NCAA)	X		
BCPS "Core" Course	X		

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			3

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *	X		
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

 * Must take AP exam; otherwise only 1 quality point.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Title: Discrete Mathematics (A)
Course Number: 1220910
Credit: 1.00
Grade Level: 9-12
Major Concepts/Content

Discrete Mathematics is a course designed to provide students with further study in topics of mathematics necessary for success in the advanced study of mathematics and computer science. The content includes, but is not limited to, recursion, graph theory, set theory, matrices, logic, sequences and series, permutations and combinations, probability, and optimization.

PREREQUISITE: Algebra 2, Analysis of Functions, Trigonometry, Analytic Geometry, or Pre-Calculus.

SPECIAL NOTE: This course meets an academic unit for some Bright Futures Scholarship Programs. NCAA

General Course Information:

	YES	NO	Other
Graduation Requirement	X		X
Bright Futures (BF)			
Florida Academic Scholar (FAS)	X		
Florida Medallion Scholar (FMS)	X		
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)	X		
National Collegiate Athletic Association (NCAA)	X		
BCPS "Core" Course	X		

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			3

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)	X		
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Title: **Trigonometry International Baccalaureate (A)**
Course Number: **1211800**
Credit: **.50**
Grade Level: **11-12**
Major Concepts/Content

The purpose of this course is to provide students with the study of circular and trigonometric functions and their applications. The content shall include, but not be limited to, circular functions, trigonometric identities, graphs of trigonometric functions, particular and general solutions of trigonometric equations, and solutions of right and oblique triangles.

PREREQUISITE: Algebra II or Algebra II Honors and acceptance into the International Baccalaureate Program.
SPECIAL NOTE: This course qualifies for some Bright Futures Scholarship Program. NCAA

General Course Information:

	YES	NO	Other
Graduation Requirement	X		MA
Bright Futures (BF)			
Florida Academic Scholar (FAS)	X		
Florida Medallion Scholar (FMS)	X		
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)	X		
National Collegiate Athletic Association (NCAA)	X		
BCPS "Core" Course	X		

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			3

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)	X		
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Title: Analytic Geometry International Baccalaureate (A)
Course Number: 1206800
Credit: .50
Grade Level: 11-12

Major Concepts/Content

The purpose of this course is to stress the relationship between Algebra, Geometry, and Trigonometry and to use this relationship in preparation for Calculus. The content shall include, but not be limited to, straight lines, graphs and curve sketching, vectors, families of curves, conic sections including translation and rotation of axes, equations and graphs of curves in polar form, analytic proofs, and parametric equations.

PREREQUISITE: Trigonometry International Baccalaureate
SPECIAL NOTE: This course qualifies for some Bright Futures Scholarship Programs. NCAA

General Course Information:

	YES	NO	Other
Graduation Requirement	X		MA
Bright Futures (BF)			
Florida Academic Scholar (FAS)	X		
Florida Medallion Scholar (FMS)	X		
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)	X		
National Collegiate Athletic Association (NCAA)	X		
BCPS "Core" Course	X		

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			3

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)	X		
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Title: Calculus International Baccalaureate (A)
Course Number: 12028000
Credit: 1.00
Grade Level: 11-12

Major Concepts/Content

The purpose of this course is to provide a foundation for the study of advanced mathematics. The content shall include, but not be limited to, elementary functions, limits and continuity, derivatives, differentiation, application of the derivative, antiderivatives, definite integral, and application of the integral. This course will also include periodic comprehensive reviews of the International Baccalaureate Examination.

PREREQUISITE: Trigonometry IB and Analytic Geometry IB
SPECIAL NOTE: This course meets an academic unit for some Bright Futures Scholarship Programs. NCAA

General Course Information:

	YES	NO	Other
Graduation Requirement	X		MA
Bright Futures (BF)			
Florida Academic Scholar (FAS)	X		
Florida Medallion Scholar (FMS)	X		
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)	X		
National Collegiate Athletic Association (NCAA)	X		
BCPS "Core" Course	X		

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			3

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)	X		
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Title: **Mathematical Studies International Baccalaureate (A)**
Course Number: **1209800**
Credit: **1.00**
Grade Level: **11-12**
Major Concepts/Content

The purpose of this course is to provide for the study of certain advanced topics. Topics shall include, but not be limited to, structure of mathematics; number theory; logic; relations, linear and exponential functions; probability and statistics; and sequences and series. In addition to these topics, the course will require a project in which the student prepares a paper as the result of an in-depth study of a certain area of mathematics. Examples of project topics are: Geometry and Art, Tax Shelters, Probability, Sampling and Statistics.

PREREQUISITE: Algebra II or Algebra II Honors and acceptance into the International Baccalaureate Program.
SPECIAL NOTE: This course meets an academic unit for some Bright Futures Scholarship Programs. NCAA

General Course Information:

	YES	NO	Other
Graduation Requirement	X		MA
Bright Futures (BF)			
Florida Academic Scholar (FAS)	X		
Florida Medallion Scholar (FMS)	X		
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)	X		
National Collegiate Athletic Association (NCAA)	X		
BCPS "Core" Course	X		

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			3

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)	X		
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Title: AICE Mathematics
Course Number: 1202360
Credit: 1.00
Grade Level: 10-12

Major Concepts/Content

The purpose of this course is to provide a thorough understanding of algebraic, trigonometric, and calculus concepts. The content shall include, but not be limited to, polynomials, quadratic-like equations, indices and proportionality, sequences, graphs and coordinate geometry, vectors, functions, logarithmic and exponential functions, circular measure, trigonometrical functions, differentiation, integration, applications of calculus, first order differential equations, numerical methods, and probability. This course will also include embedded assessments and an internationally scored end-of-course assessment.

PREREQUISITE: Algebra II or Algebra II Honors and acceptance into the AICE program.
SPECIAL NOTE: The Advanced International Certificate of Education (AICE) is an international pre-university curriculum and examination system administered by the Local Examinations Syndicate at the University of Cambridge. This course meets an academic unit for some Bright Futures Scholarship Program.

General Course Information:

	YES	NO	Other
Graduation Requirement	X		MA
Bright Futures (BF)			
Florida Academic Scholar (FAS)	X		
Florida Medallion Scholar (FMS)	X		
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)	X		
National Collegiate Athletic Association (NCAA)	X		
BCPS "Core" Course	X		

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			3

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)	X		
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.

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Course Title: **AICE Further Mathematics**
Course Number: **1202370**
Credit: **1.00**
Grade Level: **11-12**
Major Concepts/Content

The purpose of this course is to provide a thorough understanding of analytical geometry, pre-calculus, and calculus concepts and their applications. The content shall include, but not be limited to, sequences and series, modulus function, rational functions and graphs, trigonometrical functions, complex numbers, vectors, differentiation and integration, forces and equilibrium, rectilinear motion, motion of a projectile, Newton's laws of motion, momentum and impulse, and energy, power and work. This course will also include embedded assessments and an internationally scored end-of-course assessment.

PREREQUISITE: AICE Mathematics
SPECIAL NOTE: The Advanced International Certificate of Education (AICE) is an international pre-university curriculum and examination system administered by the Local Examinations Syndicate at the University of Cambridge. This course meets an academic unit for some Bright Futures Scholarship Program.

General Course Information:

	YES	NO	Other
Graduation Requirement	X		MA
Bright Futures (BF)			
Florida Academic Scholar (FAS)	X		
Florida Medallion Scholar (FMS)	X		
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)	X		
National Collegiate Athletic Association (NCAA)	X		
BCPS "Core" Course	X		

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			3

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)	X		
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program.

Course Title: AICE Mathematics: Statistics
Course Number: 1210330
Credit: 0.5
Grade Level: 11-12

Major Concepts/Content

The purpose of this course is to provide an understanding of the basis for all necessary statistical calculations. The content shall include, but not be limited to, collection of data, data representation, measures of central tendency, index numbers and time series, bivariate data, and probability. This course will also include embedded assessments and an internationally scored end-of-course assessment.

PREREQUISITE: Algebra II or Algebra II Honors and acceptance into the AICE program.

SPECIAL NOTE: The Advanced International Certificate of Education (AICE) is an international pre-university curriculum and examination system administered by the Local Examinations Syndicate at the University of Cambridge. This course qualifies for some Bright Futures Scholarship Program.

General Course Information:

	YES	NO	Other
Graduation Requirement	X		MA
Bright Futures (BF)			
Florida Academic Scholar (FAS)	X		
Florida Medallion Scholar (FMS)	X		
Florida Gold Seal Vocational (FGSV)	X		
State University System (SUS)	X		
National Collegiate Athletic Association (NCAA)	X		
BCPS "Core" Course	X		

Course Level
   1=below grade level,
   2= at grade level,
   3= above grade level
			3

Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)	X		
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.

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