MATHEMATICS DEPARTMENT

The Mathematics Department offers a range of courses to provide students with opportunities to actively participate in learning the structure and the nature of mathematics, which follows the Mathematical Standards and Practices defined by the state. Students begin their mathematics program at FHS at different points, based on their middle school programs. The basic sequence of mathematics courses is Algebra I, Geometry, and Algebra II. Many students enroll in higher-level mathematics courses after successful completion of Algebra II. All mathematics courses make use of technology, such as Geometer's Sketchpad, Minitab, and/or graphing calculators, when appropriate. The Mathematics Department expects that students purchase their own graphing calculators (which will be used throughout their math program at the high school and beyond).

Course Title:	**Algebra I**	*Course No.:*	1202	*Offered:*	All year
Grade:	9	*Level:*	Honors	*Credits:*	5
Department:	Mathematics	*Affiliated Dept.:*	n/a	*Duration:*	Full year

Description: Algebra I Honors is the entry level course offered in the honors program. The major topics covered include the properties of the real number system, operations with polynomial and rational expressions, solutions to equations and inequalities, and the concept of a function. These algebraic topics are integrated in real world problems that also explore topics from discrete mathematics, such as statistics and probability.   Since algebra permeates all of mathematics, a strong foundation in this first course is essential for success in future courses. For success in this course, students need fluency with number facts and operations and a commitment to work effectively both in and out of class. Students are assessed on both content and fluency. Upon completion of this course, students are able to enroll in Geometry CP or Honors based on grades and recommendation of Algebra 1 teacher.

Prerequisite(s):   Recommendation of 8th grade Math teacher.

Expectations Supported: 1A, 1B, 1C, 1D, 2, 4A, 4B   *Expectations Assessed:* 3A, 3B, 3C, 3D

Course Title:	**Algebra I**	*Course No.:*	1201	*Offered:*	All year
Grade:	9	*Level:*	College Prep	*Credits:*	5
Department:	Mathematics	*Affiliated Dept.:*	n/a	*Duration:*	Full year

Description: Algebra I is an entry level course offered in the college preparatory program. The major topics covered include the properties of the real number system, operations with polynomial and rational expressions, solutions to equations and inequalities, and the concept of a function. These algebraic topics are integrated in real world problems that also explore topics from discrete mathematics, such as statistics and probability. Since algebra permeates all of mathematics, a strong foundation in this first course is essential for success in future courses. For success in this course, students need fluency with number facts and operations and a commitment to work effectively both in and out of class. Upon completion of this course, students are able to enroll in Geometry CP or Honors based on grades and recommendation of Algebra 1 teacher.

Prerequisite(s):   Completion of 8th grade Math.

Expectations Supported: 1A, 1B, 1C, 1D, 2, 4A, 4B   *Expectations Assessed:* 3A, 3B, 3C, 3D

Course Title: **Algebra II** *Course No.:* 1222 *Offered:* All year

Department: Mathematics *Affiliated Dept.:* n/a *Duration:* Full year

Grade: 9, 10, 11 *Level:* Honors *Credits:* 5

Description: Algebra II Honors extends and further explores topics previously developed in Algebra I and Geometry. Additional topics covered include the complex number system, vectors, matrices, and trigonometry. Students explore and analyze the mathematics algebraically, numerically, and graphically. To be successful in this honors course students must have a strong algebraic foundation and fluency in algebraic vocabulary and notation. Students also need fluency with number facts and operations and a commitment to work effectively both in and out of class. Students are assessed on both content and fluency. A graphing calculator is required. Upon completion of this course, students are able to enroll in Pre-Calculus.

Prerequisite(s): Completion of Geometry Honors with minimum grade of C or completion of Geometry CP with minimum grade of B+

Expectations Supported: 1A, 1B, 1C, 1D, 2, 4A, 4B *Expectations Assessed:* 3A, 3B, 3C, 3D

Course Title: **Algebra II** *Course No.:* 1221 *Offered:* All year

Grade: 9, 10, 11 *Level:* College Prep *Credits:* 5

Department: Mathematics *Affiliated Dept.:* n/a *Duration:* Full year

Description: Algebra II CP extends and further explores topics previously developed in Algebra I and Geometry. Additional topics covered include the complex number system, vectors, matrices, and trigonometry. Students explore and analyze the mathematics algebraically, numerically, and graphically. To be successful in this course, students must have a competent algebraic foundation and fluency in algebraic vocabulary and notation. Students also need fluency with number facts and operations and a commitment to work effectively both in and out of class. A graphing calculator is required. Upon completion of this course, students are able to enroll in Pre-Calculus.

Prerequisite(s): Successful completion of Geometry CP or Honors.

Expectations Supported: 1A, 1B, 1C, 1D, 2, 4A, 4B *Expectations Assessed:* 3A, 3B, 3C, 3D

Course Title: **Algebra II - FAA** *Course No.:* 1282 *Offered:* All year

Grade: 10, 11 *Level:* College Prep *Credits:* 5

Department: Mathematics *Affiliated Dept.:* Franklin Arts Academy *Duration:* Full year

Description: Algebra II - FAA extends and further explores topics previously developed in Algebra I and Geometry. Additional topics covered include the complex number system, vectors, matrices, and trigonometry. Students explore and analyze the mathematics algebraically, numerically, and graphically. To be successful in this honors course students must have a competent algebraic foundation and fluency in algebraic vocabulary and notation. Students also need fluency with number facts and operations and a commitment to work effectively both in and out of class. Students are required to complete assignments that integrate both art and mathematics. A graphing calculator is required. Upon completion of this course, students are able to enroll in Pre-Calculus.

Prerequisite(s): Successful completion of Geometry CP/Honors.

Expectations Supported: 1A, 1B, 1C, 1D, 2, 4A, 4B *Expectations Assessed:* 3A, 3B, 3C, 3D

Course Title: **Algebra II Applications**   *Course No.:* 1220   *Offered:* All year

Grade: 12   *Level:* College Prep   *Credits:* 5

Department: Mathematics   *Affiliated Dept.:* n/a   *Duration:* Full year

Description: The Algebra II Applications CP course is the second course in this two-year sequence that is designed specifically for students who need more time to become proficient with the concepts of Algebra. This course extends and further explores topics previously developed in Algebra I and Geometry. Additional topics covered include the complex number system, vectors, matrices, and trigonometry. Students explore and analyze the mathematics algebraically, numerically, and graphically. To be successful in this course students need fluency with number facts and operations and a commitment to work effectively both in and out of class. A graphic calculator is required. Upon successful completions of this course, students are able to enroll in Statistics.

Prerequisite(s): Successful completion of Algebra II Concepts CP.

Expectations Supported: 1A, 1B, 1C, 1D, 2, 4A, 4B   *Expectations Assessed:* 3A, 3B, 3C, 3D

Course Title: **Algebra II Concepts**   *Course No.:* 1219   *Offered:* All year

Grade: 11, 12   *Level:* College Prep   *Credits:* 5

Department: Mathematics   *Affiliated Dept.:* n/a   *Duration:* Full year

Description: The Algebra II Concepts CP course is the first part of a two-year course sequence that is designed specifically for students who need more time to become proficient with the concepts of Algebra. This course extends and further explores topics previously developed in Algebra I and Geometry. Additional topics covered include the complex number system, vectors, matrices, and trigonometry. Students explore and analyze the mathematics algebraically, numerically, and graphically. To be successful in this course students need fluency with number facts and operations and a commitment to work effectively both in and out of class. A graphing calculator is required. Upon successful completion of this course, students are required to enroll in Algebra II Applications CP.

Prerequisite(s): Successful completion of Geometry CP and recommendation of Geometry teacher.

Expectations Supported: 1A, 1B, 1C, 1D, 2, 4A, 4B   *Expectations Assessed:* 3A, 3B, 3C, 3D

Course Title: **Calculus AB**   *Course No.:* 1252   *Offered:* All year

Grade: 11, 12   *Level:* Honors   *Credits:* 5

Department: Mathematics   *Affiliated Dept.:* n/a   *Duration:* Full year

Description: Calculus AB Honors develops all topics on the Advanced Placement Calculus AB exam, but at a slower pace than AP. A preliminary review of polynomial, rational, exponential, logarithmic, and trigonometric functions and conics is completed during summer break and assessed during the first week of school. The concepts of differentiation and integration and their applications are explored, developed, and analyzed in detail. To be successful in this honors course students must have a strong algebraic foundation and fluency in algebraic vocabulary and notation. All topics are explored numerically, graphically, and algebraically. Success in this course requires a strong and sound foundation in logic, algebra, geometry, and trigonometry, in addition to persistent, effective effort. A graphing calculator is required. Upon completion of this course, students may enroll in AP Calculus BC or Statistics (AP, Honors, or CP) based on grades and recommendation of the calculus honors teacher.

Prerequisite(s): Completion of Pre-Calculus Honors with a minimum grade of C or completion of Pre-Calculus CP with minimum grade of B+

Expectations Supported: 1C, 2, 4A   *Expectations Assessed:* 1D, 3A, 3D

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Course Title: **Calculus**

		Course No.: 1251	*Offered:* All year
Grade:	11, 12	*Level:* College Prep	*Credits:* 5
Department:	Mathematics	*Affiliated Dept.:* n/a	*Duration:* Full year

Description: Calculus CP develops most topics on the Advanced Placement Calculus AB exam, but at a slower pace than AP and Honors. A preliminary review of polynomial, rational, exponential, logarithmic, and trigonometric functions and conics is strongly recommended during summer break and assessed during the first week of school. The concepts of differentiation and integration and their applications are explored, developed, and analyzed in detail. To be successful in these course students must have a competent algebraic foundation and fluency in algebraic vocabulary and notation. All topics are explored numerically, graphically, and algebraically. Success in this course requires a competent and sound foundation in logic, algebra, geometry, and trigonometry, in addition to persistent, effective effort. A graphing calculator is required. Upon completion of this course, students are able to enroll in Statistics.

Prerequisite(s): Successful completion of Pre-Calculus Honors or CP.

Expectations Supported: 1C, 2, 4A   *Expectations Assessed:* 1D, 3A, 3D

Course Title: **Advanced Placement Calculus AB**

		Course No.: 1253	*Offered:* All year
Grade:	11, 12	*Level:* Advanced Placement	*Credits:* 5
Department:	Mathematics	*Affiliated Dept.:* n/a	*Duration:* Full year

Description: AP Calculus AB develops all topics on the Advanced Placement Calculus AB exam. A preliminary review of polynomial, rational, exponential, logarithmic, and trigonometric functions and conics is completed during summer break and assessed during the first week of school. The concepts of differentiation and integration and their applications are explored, developed, and analyzed in detail with a high degree of rigor and sophistication. All topics are explored numerically, graphically, and algebraically. The course is demanding with respect to classwork and homework. Success in this course requires a strong and sound foundation in logic, algebra, geometry, and trigonometry, in addition to persistent, effective effort. A graphing calculator is required. Students who complete this course take the AP Calculus AB exam for credit and/or advanced placement standing in college. If the student does not take the AP exam, the student is required to take a final exam of the same rigor as the AP exam, regardless of his/her final course grade.

Prerequisite(s): Prerequisite: Completion of Pre-Calculus H with minimum grade of B+ and recommendation of Pre-Calculus teacher. Refer to the Program of Studies for additional information and requirements.

Expectations Supported: 1C, 2, 4A   *Expectations Assessed:* 1D, 3A, 3D

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Course Title: **Advanced Placement Calculus BC**

Course No.: 1254	*Offered:* All year	
Grade: 12	*Level:* Advanced Placement	*Credits:* 5
Department: Mathematics	*Affiliated Dept.:* n/a	*Duration:* Full year

Description: AP Calculus BC continues the development of all topics on the Advanced Placement Calculus BC exam. The course completes the remaining topics of a second semester college calculus course which includes vectors, parametric, series, and the polar coordinate system. A review of the foundation of these remaining topics is completed during summer break and is assessed during the first week of school. All topics are explored numerically, graphically, and algebraically. The course is demanding with respect to classwork and homework. Success in this course requires a strong and sound foundation in logic, algebra, geometry, and trigonometry, in addition to persistent, effective effort. A graphing calculator is required. Students who complete this course take the AP Calculus BC exam for credit and/or advanced placement standing in college. If the student does not take the AP exam, the student is required to take a final exam of the same rigor as the AP exam, regardless of his/her final course grade.

Prerequisite(s): Prerequisite: Completion of Calculus AB with minimum grade of C or Calculus H with minimum grade of B+ and recommendation of Calculus H teacher. Refer to the Program of Studies for additional information and requirements.

Expectations Supported: 1C, 2, 4A   *Expectations Assessed:* 1D, 3A, 3D

Course Title: **Computer Science AP**

Course No.: 1264	*Offered:* All year	
Grade: 11, 12	*Level:* Advanced Placement	*Credits:* 5
Department: Mathematics	*Affiliated Dept.:* n/a	*Duration:* Full year

Description: AP Computer Science develops all topics on the AP Computer Science exam. Students design and implement computer-based solutions to problems in a variety of application areas, develop and select appropriate algorithms and data structures to solve problems and code fluently in an object-oriented paradigm using the programming language Java. Students become familiar with and are be able to use standard Java library classes from the AP Java subset and read and understand a large program consisting of several classes and interacting objects. Students also learn to read and understand a description of the design and development process leading to such a program, to identify the major hardware and software components of a computer system, their relationship to one another, and the roles of the components within the system. Students who complete this course take the AP Computer Science an exam for credit and/or advanced placement standing in college. If the student does not take the AP exam, the student is required to take a final exam of the same rigor as the AP exam, regardless of his/her final course grade.

Prerequisite(s): Completion of Algebra 2 H with a minimum grade of C. Refer to the Program of Studies for additional information and requirements.

Expectations Supported: 1A, 1B, 1C, 1D, 2   *Expectations Assessed:* 3A, 3B, 3C, 3D

Course Title: **Concepts in Algebra and Geometry**

Grade: 10, 11

Department: Mathematics

Course No.: 1210

Level: College Prep

Affiliated Dept.: n/a

Offered: All year

Credits: 5

Duration: Full year

Description: Concepts in Algebra and Geometry is a course that continues the development of algebraic thinking established in Algebra 1 CP. The content of this course is designed for those 10th grade students who need more time to assimilate the basic algebraic concepts necessary for the continuation of mathematics. This course also covers content in foundational geometry. Students explore and analyze the mathematics algebraically, numerically, and graphically. For success in this course, students need fluency with number facts and operations and a commitment to work effectively both in and out of class. Upon completion of this course, students are able to enroll in Geometry CP or Honors. *Prerequisite(s):* Completion of Algebra 1 CP and recommendation from Algebra I CP teacher.

Expectations Supported: 1A, 1B, 1C, 1D, 2, 4A, 4B   *Expectations Assessed:* 3A, 3B, 3C, 3D

Course Title: **Geometry**

Grade: 9, 10, 11

Department: Mathematics

Course No.: 1212

Level: Honors

Affiliated Dept.: n/a

Offered: All year

Credits: 5

Duration: Full year

Description: Geometry Honors takes a formal approach to the discipline. Major topics include congruence, similarity, measurement, and dimension, along with probability. The course integrates algebra, which develops the student's mathematical power to explore, make conjectures, and reason logically. Students may use technology software, such as Geometer's Sketchpad, to explore concepts. To be successful in these course students must have a strong algebraic foundation and fluency in algebraic vocabulary and notation. Students also need fluency with number facts and operations and a commitment to work effectively both in and out of class. Students are assessed on both content and fluency. Upon completion of this course, students are able to enroll in Algebra 2.

Prerequisite(s): Completion of Algebra 1 Honors with minimum grade of C or completion of Algebra 1 CP with minimum grade of B+

Expectations Supported: 4A, 4B   *Expectations Assessed:* 3A, 3B, 3C, 3D

Course Title: **Geometry**

Grade: 9, 10, 11

Department: Mathematics

Course No.: 1211

Level: College Preparatory

Affiliated Dept.: n/a

Offered: All year

Credits: 5

Duration: Full year

Description: Geometry CP develops the same concepts as Geometry Honors. Major topics include congruence, similarity, measurement, and dimension, along with probability. The course integrates algebra, which develops the student's mathematical power to explore, make conjectures, and reason logically. Students may use technology software, such as Geometer's Sketchpad, to explore concepts. To be successful in these course students must have a competent algebraic foundation and fluency in algebraic vocabulary and notation. Students also need fluency with number facts and operations and a commitment to work effectively both in and out of class. Upon completion of this course, students are able to enroll in Algebra 2.

Prerequisite(s): Successful completion of Algebra 1 CP/Honors or Concepts in Algebra and Geometry.

Expectations Supported: 4A, 4B   *Expectations Assessed:* 3A, 3B, 3C, 3D

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Course Title: **Geometry - FAA** *Course No.:* 1286 *Offered:* All year

Grade: 10, 11 *Level:* Honors *Credits:* 5

Department: Mathematics *Affiliated Dept.:* Franklin Arts Academy *Duration:* Full year

Description: Geometry Honors takes a formal approach to the discipline. Major topics include congruence, similarity, measurement, and dimension, along with probability. The course integrates algebra, which develops the student's mathematical power to explore, make conjectures, and reason logically. Students may use technology software, such as Geometer's Sketchpad, to explore concepts. Students are required to complete assignments that integrate both art and mathematics. To be successful in this course, students must have a strong algebraic foundation and fluency in algebraic vocabulary and notation. Students also need fluency with number facts and operations and a commitment to work effectively both in and out of class. Students are assessed on both content and fluency. Upon completion of this course, students are able to enroll in Algebra 2.

Prerequisite(s): Completion of Algebra 1 Honors with minimum grade of C or completion of Algebra 1 CP with minimum grade of B+

Expectations Supported: 4A, 4B *Expectations Assessed:* 3A, 3B, 3C, 3D

Course Title: **Geometry - FAA** *Course No.:* 1285 *Offered:* All year

Grade: 10, 11 *Level:* College Prep *Credits:* 5

Department: Mathematics *Affiliated Dept.:* Franklin Arts Academy *Duration:* Full year

Description: Geometry - FAA CP develops the same concepts as Geometry - FAA Honors. Major topics include congruence, similarity, measurement, and dimension, along with probability. The course integrates algebra, which develops the student's mathematical power to explore, make conjectures, and reason logically. Students may use technology software, such as Geometer's Sketchpad, to explore concepts. Students are required to complete assignments that integrate both art and mathematics. To be successful in these course students must have a competent algebraic foundation and fluency in algebraic vocabulary and notation. Students also need fluency with number facts and operations and a commitment to work effectively both in and out of class. Upon completion of this course, students are able to enroll in Algebra 2.

Prerequisite(s): Successful completion of Algebra 1 CP/Honors or Concepts in Algebra and Geometry.

Expectations Supported: 4A, 4B *Expectations Assessed:* 3A, 3B, 3C, 3D

Course Title: **Pre-Calculus** *Course No.:* 1232 *Offered:* All year

Grade: 10, 11, 12 *Level:* Honors *Credits:* 5

Department: Mathematics *Affiliated Dept.:* n/a *Duration:* Full year

Description: Pre-Calculus Honors develops the foundation necessary to build the concepts of calculus. A solid foundation in algebra and geometry is essential, and students are expected to have successfully completed both Algebra II Honors and Geometry Honors. Students explore and analyze the mathematics algebraically, numerically, and graphically. To be successful in this honors course students must have a strong algebraic foundation and fluency in algebraic vocabulary and notation. Students also need fluency with number facts and operations and a commitment to work effectively both in and out of class. Students are assessed on both content and fluency. A graphing calculator is required. Upon completion of Pre-Calculus Honors, students are able to enroll in Calculus AP/H/CP, or Statistics AP/H.

Prerequisite(s): Completion of Algebra 2 Honors with minimum grade of C+ or completion of Algebra 2 CP with minimum grade of B+

Expectations Supported: 1C, 2, 4A *Expectations Assessed:* 1D, 3A, 3D

Course Title: **Pre-Calculus** *Course No.:* 1231 *Offered:* All year
Grade: 10, 11, 12 *Level:* College Prep *Credits:* 5
Department: Mathematics *Affiliated Dept.:* n/a *Duration:* Full year

Description: Pre-Calculus CP develops the foundation necessary to build the concepts of calculus. A solid foundation in algebra and geometry is essential. Students explore and analyze the mathematics algebraically, numerically, and graphically. To be successful in these course students must have a competent algebraic foundation and fluency in algebraic vocabulary and notation. Students also need fluency with number facts and operations and a commitment to work effectively both in and out of class. A graphing calculator is required. Upon completion of Pre -Calculus CP, students are able to enroll in Calculus H/CP or Statistics AP/H/CP.

Prerequisite(s): Successful completion of Algebra 2 CP/Honors.

Expectations Supported: 1C, 2, 4A *Expectations Assessed:* 1D, 3A, 3D

Course Title: **Pre-Calculus - FAA** *Course No.:* 1283 *Offered:* All year
Grade: 11 *Level:* College Prep *Credits:* 5
Department: Mathematics *Affiliated Dept.:* Franklin Arts Academy *Duration:* Full year

Description: Pre-Calculus - FAA develops the foundation necessary to build the concepts of calculus. A solid foundation in algebra and geometry is essential. Students explore and analyze the mathematics algebraically, numerically, and graphically. Students are required to complete assignments that integrate both art and mathematics. To be successful in this course, students must have a competent algebraic foundation and fluency in algebraic vocabulary and notation. Students also need fluency with number facts and operations and a commitment to work effectively both in and out of class. A graphing calculator is required. Upon completion of Pre -Calculus CP, students are able to enroll in Calculus H/CP or Statistics AP/H/CP.

Prerequisite(s): Successful completion of Algebra II CP/Honors.

Expectations Supported: 1C, 2, 4A *Expectations Assessed:* 1D, 3A, 3D

Course Title: **Statistics AP** *Course No.:* 1243 *Offered:* All year
Grade: 11, 12 *Level:* Advanced Placement *Credits:* 5
Department: Mathematics *Affiliated Dept.:* n/a *Duration:* Full year

Description: AP Statistics introduces students to the major concepts and tools for collecting, analyzing, and interpreting data. Both descriptive and inferential statistical concepts are developed. Summer work is assigned during summer break and is assessed the first week of school. The statistical program Minitab is used to explore concepts. The course is demanding with respect to classwork and homework. Success in this course requires a strong and sound foundation in algebra II concepts, in addition to persistent, effective effort. Writing skills are also essential in statistics. A graphing calculator is required. Students who complete this course take the AP Statistics exam for credit and/or advanced placement standing in college. If the student does not take the AP exam, the student is required to take a final exam of the same rigor as the AP exam, regardless of his/her final course grade.

Prerequisite(s): Completion of Algebra 2 Honors with a minimum grade of B+ and recommendation of Algebra 2 Honors teacher (or current math teacher). Refer to the first few pages of this document for information and requirements.

Expectations Supported: 1A, 1B, 2, 4A *Expectations Assessed:* 1C, 1D, 1E, 3A, 3B, 3C, 3D

Course Title: **Statistics** *Course No.:* 1242 *Offered:* All year
Grade: 12 *Level:* Honors *Credits:* 5
Department: Mathematics *Affiliated Dept.:* n/a *Duration:* Full year

Description: Statistics Honors introduces students to the major concepts and tools for collecting, analyzing, and interpreting data. Both descriptive and inferential statistical concepts are developed. The statistical program Minitab is used to explore concepts. Success in this course requires a strong and sound foundation in algebra II concepts, in addition to persistent, effective effort. Writing skills are also essential in statistics. Students are assessed on both content and fluency. A graphing calculator is required.

.   *Prerequisite(s):* Completion of Algebra 2 or Pre-Calculus H with a minimum grade of C or completion of Algebra 2 CP or Pre-Calculus CP with a minimum grade of B+

Expectations Supported: 1A, 1B, 2, 4A *Expectations Assessed:* 1C, 1D, 1E, 3A, 3B, 3C, 3D

Course Title: **Statistics** *Course No.:* 1241 *Offered:* All year
Grade: 12 *Level:* College Prep *Credits:* 5
Department: Mathematics *Affiliated Dept.:* n/a *Duration:* Full year

Description: Statistics CP introduces students to the major concepts and tools for collecting, analyzing, and interpreting data. Both descriptive and inferential statistical concepts are developed. The statistical program Minitab is used to explore concepts. Success in this course requires a strong and sound foundation in algebra II concepts, in addition to persistent, effective effort. Writing skills are also essential in statistics. A graphing calculator is required.

Prerequisite(s): Successful completion of Algebra 2 CP/H or Pre-Calculus CP.

Expectations Supported: 1A, 1B, 2, 4A *Expectations Assessed:* 1C, 1D, 1E, 3A, 3B, 3C, 3D

Course Title: **Statistics (Hybrid online course)** *Course No.:* 1241.ONL *Offered:* All year
Grade: 12 *Level:* College Preparatory *Credits:* 5
Department: Mathematics *Affiliated Dept.:* n/a *Duration:* Full year

Description: This Statistics hybrid online course has the same curriculum as the Statistics CP course. However, this section of the course integrates an online course management system as a medium to learn statistics. To take a hybrid course, students must be able to use their computer to send and read email, to find information on the Internet, to upload assignments, and to participate in online discussions. Students must have a basic understanding of computers and the Internet. Students need to be able to work both cooperatively and independently. In order to be successful in this course, students need to be self-motivated and disciplined. A graphing calculator is required.

Prerequisite(s): Successful completion of Algebra 2 CP/H or Pre-Calculus CP/H.

Expectations Supported: 1A, 1B, 2, 4A *Expectations Assessed:* 1C, 1D, 1E, 3A, 3B, 3C, 3D

Course Title: **Statistics - FAA**   *Course No.:* 1284   *Offered:* All year

Grade: 12   *Level:* College Preparatory   *Credits:* 5

Department: Mathematics   *Affiliated Dept.:* Franklin Arts Academy   *Duration:* Full year

Description: Statistics - FAA introduces students to the major concepts and tools for collecting, analyzing, and interpreting data. Both descriptive and inferential statistical concepts are developed. Students are required to complete assignments that integrate both art and mathematics. The statistical program Minitab is used to explore concepts. Success in this course requires a strong and sound foundation in algebra II concepts, in addition to persistent, effective effort. Writing skills are also essential in statistics. A graphing calculator is required.

Prerequisite(s):   Successful completion of Algebra 2 CP/H or Pre-Calculus CP/H.

Expectations Supported: 1A, 1B, 2, 4A   *Expectations Assessed:* 1C, 1D, 1E, 3A, 3B, 3C, 3D