

ACADEMY OF THE HOLY ANGELS

CURRICULUM GUIDE

2023-2024

CEEB CODE 310-390

'A New Jersey Service-Learning Leader School'

'A National Service-Learning Leader School'

'National Green Faith Green Flag School'

'A National Blue Ribbon School of Excellence'

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RELIGIOUS STUDIES DEPARTMENT

Course Numbers: 0101 - 0411

All courses are College-Preparatory (CP)

Requirement: All students are required to take 4 years of Religious Studies courses.

God's Revelation in Scripture (0101) GRADE 9 3 QUARTERS

This course analyzes Sacred Scripture in its many literary forms in order to better understand the faith message. It involves a study of the major divisions of the Old Testament Scriptures and how they are related to our faith life today. Attention will be given to the themes of the prophetic writings and the role played by the literary prophets in the history of the Judeo-Christian people.

Prayer: SSND Charism and Spirituality (0101) GRADE 9 QUARTER

This course explores the meaning of prayer as a relationship with God and to provide opportunities for prayer experiences. Students are introduced to the founding story of the School Sisters of Notre Dame, their charism and the goals of an SSND education. They explore the nature of God, the praying person and the communication skills necessary for any relationship. Attention is given to personal and liturgical prayer with specific reference to the Catholic liturgical cycle.

Morality: Life in Christ (0201) GRADE 10 SEMESTER

This course explores the nature of Christian morality, examines the process of conscience formation, the role of authority and responsibility in the exercise of freedom. It studies the processes of value choosing and decision-making, presents a theology of sin and reconciliation, and invites the students to a model for response-morality.

Who is Jesus Christ? (0201) GRADE 10 SEMESTER

This course explores the humanity and divinity of Jesus Christ by examining the theological and historical background of the gospels. A study of the message of each gospel affects a clearer understanding of the challenge of Christian living.

World Religions (0301) GRADE 11 SEMESTER

This course shows how religion is a way of life for all peoples. This is accomplished by the study of the development of religious awareness with a primary focus on the principal living religions of the world, including their beginnings, scriptures, beliefs and worship.

Catholic Social Teaching: Living as a Disciple of Jesus Christ in Society (0301) GRADE 11 QUARTER

This course is designed to raise the consciousness of the students to the network of injustice and oppression which are obstacles to the Christian task of building a global community. Students will be led to an awareness of individual and corporate responsibility to establish justice based on the themes of Catholic Social Teaching.

Sacraments: Encounters with Jesus (0301) GRADE 11 QUARTER

This course presents the sacraments as a celebration of Christ's values and His presence among us. It seeks to explore the symbolic action of human life and the profound social dimension of sacramental experience. In addition, a study of the historical, liturgical, and theological dimensions helps students discover the relationship between the sacraments and their own life.

SENIOR YEAR

The semester course, **Christian Lifestyles (0401)**, is required for all Seniors.

Two other quarter courses are selected as electives by preference.

Christian Lifestyles (0401)

GRADE 12

SEMESTER

This course presents students with a comprehensive overview of Christian lifestyles. It combines good information, sound psychology and a meaningful religious dimension. Emphasis is on Christ as the model for Christian values inherent in marriage, the single life and the religious life.

Death and Dying (0401)

GRADE 12

QUARTER

This course is designed to help students acknowledge and confront the reality of death in a truly human way by a consideration of how we should deal with the dying, the beliefs about death and resurrection in Scripture, and the idea of creative grief. Emphasis is on Christ as the one who is the Resurrection and the Life.

Search for Meaning (0401)

GRADE 12

QUARTER

This course explores contemporary media and writers, alongside ancient thinkers in an attempt to understand the human search for the meaning of life. Students will consider a spirituality that seeks to fulfill Jesus' promise, "I came that they might have life, and have it to the full."

Peacemaking (0401)

GRADE 12

QUARTER

This course will build on the foundation of Catholic Social Teaching studied in the 10th grade. The course will take an integrated approach of prayer, study and action to explore the many aspects of peacemaking, including modern day peacemakers and nonviolent social movements. In light of the Gospel call to be peacemakers, students will learn and practice personal peacemaking skills.

Ethical Issues in Today's World (0411)

GRADE 12

SEMESTER

This course will address the meaning, the foundations and the requirements of ethics in general, building on the material covered in both the Morality and Catholic Social Teaching courses. Students will then explore units in business ethics, medical ethics and ethics in a technological age using practical current case studies. Focus on decision making and discernment will serve students as they encounter dilemmas in both their personal and professional lives.

ENGLISH DEPARTMENT

Course Numbers: 1101 – 1721, 6701, 6801 and 6811

Courses are: College Preparatory (CP) Courses of a more rigorous nature are indicated by Honors (H), High Honors (HH), or Advanced Placement (AP).

Requirements: All students are required to take 4 years of the English course sequence. All averages presented are unweighted, yearly averages unless otherwise noted. Students will read, analyze, discuss and write about the literary works assigned. Vocabulary will be studied each year.

Placement: Freshmen are placed according to scores on SSAT exams, and 7th & 8th grade averages in English. Sophomore, Junior and Senior placement:

1. Semester 1 average
2. Writing Competency as reflected by Essay/Writing Grade for Quarters 1 & 2
3. Teacher recommendation (which includes: classroom performance: initiative, motivation, participation)
4. Completion of assignments
5. Qualifying exams (AP English only)

<u>English I (1101)</u>	GRADE 9	YEAR
This course is designed to develop the student's reading and writing skills through a study of literary genres (short story, the novel, the epic, drama, poetry).		

<u>English I – Honors (1102)</u>	GRADE 9	YEAR
This honors course is designed to develop the student's reading and writing skills through an in-depth development of the literary genres of short story, essay, autobiography, novel, drama and poetry. Students must demonstrate a high level of competence in oral and written work.		

Prerequisites: The Secondary School Admission Test (SSAT) and a “B+” Average in elementary school English courses.

<u>English I - High Honors (1103)</u>	GRADE 9	YEAR
This advanced course is designed to develop the student's reading and writing skills through an in-depth development of the literary genres of short story, essay, autobiography, novel, drama and poetry. Students must demonstrate a high level of competence in oral and written work. Emphasis is placed on interpretation of ideas and themes as well as evaluation of style. The format of this course allows for the development of the unique responses of each student. Independent research and critical analysis are stressed.		

Prerequisites: The Secondary School Admission Test (SSAT) and an “A” Average in elementary school English courses.

<u>English II (1201)</u>	GRADE 10	YEAR
This course continues to develop the student's reading and writing skills through a chronological survey of American literature.		

<u>English II – Honors (1202)</u>	GRADE 10	YEAR
This honors course focuses on an in-depth study of American literature from colonial to modern times. Students must demonstrate a high level of competence in oral and written work.		

Prerequisites: **College Preparatory Students** – 95% Average, and a 92% average in Essay/Writing
Honors Students - 90% Average, and an 90% average in Essay/Writing

English II – High Honors (1203) **GRADE 10** **YEAR**

This advanced course focuses on an in-depth study of American literature from colonial to modern times. Students must demonstrate a high level of competence in oral and written work. Emphasis is placed on interpretation of ideas and themes, and other literary elements, as well as evaluation of style. The format of this course allows for the development of the unique voice of each student. Independent research and critical analysis are stressed.

Prerequisites: **College Preparatory Students** - 97% Average, and a 95% average in Essay/Writing
Honors Students - 95% Average, and a 92% average in Essay/Writing
High Honors Students – 90% Average, and an 90% average in Essay/Writing

English III (1301) **GRADE 11** **YEAR**

This course continues to develop the student's reading and writing skills through a chronological survey of English literature. Instruction in writing a literary research/term paper is an integral part of this course.

English III – Honors (1302) **GRADE 11** **YEAR**

This advanced course focuses on an in-depth, chronological study of English literature from Anglo-Saxon to contemporary writers. Students must demonstrate a high level of competence in oral and written work, including a literary research/term paper.

Prerequisites: **College Preparatory Students** – 95% Average, and a 92% average in Essay/Writing
Honors Students - 90% Average, and an 90% average in Essay/Writing

English III – High Honors (1303) **GRADE 11** **YEAR**

This advanced course focuses on an in-depth, chronological study of English literature from Anglo-Saxon to contemporary writers. Emphasis is placed on interpretation of ideas and themes, and other literary elements, as well as evaluation of style. The format of this course allows for the development of the unique responses of each student. Independent research and critical written analysis are stressed. Students must demonstrate a high level of competence in oral and written work, including a literary research/term paper. Students will have the option to take the Advanced Placement exam in English Language and Composition in May.

Prerequisites: **College Preparatory Students** - 97% Average, and a 95% average in Essay/Writing
Honors Students - 95% Average, and a 92% average in Essay/Writing
High Honors Students – 90% Average, and an 90% average in Essay/Writing

English IV (1401) **GRADE 12** **YEAR**

This course continues to develop the student's reading and writing skills through a chronological survey of world literature. A literary research/term paper is also required.

English IV – Honors (1402) **GRADE 12** **YEAR**

This advanced course focuses on an in-depth study of world literature. Students must demonstrate a high level of competence in oral and written interpretation, including a literary term paper. Emphasis is placed on making critical and stylistic comparisons. A literary research/term paper is also required.

Prerequisites: **College Preparatory Students** – 95% Average, and a 92% average in Essay/Writing
Honors Students - 90% Average, and an 90% average in Essay/Writing

English IV Literature & Composition – Advanced Placement (1404) **GRADE 12** **YEAR**

This college level course covers a variety of genres and periods. Emphasis is placed on interpretation of ideas and themes, and other literary elements, as well as evaluation of style. The format of this course allows for the

development of the unique responses of each student. Independent research and critical written analysis are stressed. A literary research/term paper is also required.

Prerequisites: Honors Students – 95% Average, and a 92% average in Essay/Writing (including the Literary Term Paper), sit for the AP Literature Qualifying Exam in February.

High Honors Students – 90% Average, and a 90% average in Essay/Writing

Note: All students take the AP Exam in May.

ADDITIONAL ENGLISH ELECTIVE COURSES

Creative Writing (1701)

GRADE 10, 11, 12

SEMESTER

Students will learn to write a variety of forms of poetry and prose using select models and writing prompts. The class culminates with a reading of student work. This course fulfills the graduation requirement for fine and performing arts.

East Asian Literature (1801)

GRADE 10, 11, 12

SEMESTER

In this elective with an international and literary focus, students will read and respond to notable works, ancient and modern, from China, Japan, and Korea. The course materials will cover various literary forms (poetry, short stories, drama, selections from epics, etc.) in addition to fundamental works of mythology, religion, and philosophy. Students will explore the history and beliefs that inform the works and build an understanding of the culture of the Asian continent as they read. Modern works covered in the course will challenge students with questions raised in postwar literature, and students with an interest in international affairs will have a chance to grapple with some issues taking place in Asia today—issues within individual countries, among Asian nations, and especially those that reach across the globe.

Communications (6801)

GRADE 10, 11, 12

SEMESTER

This course provides an introduction into the exciting and important field of modern communications and gives an overview of Interpersonal Communications and Mass Communications. Students also explore career opportunities in the media and advertising as well as in the field of Interpersonal Communication.

Journalism (6811)

GRADE 10, 11, 12

SEMESTER

This semester course is intended to provide the student with a general overview of the profession and history of Journalism. This includes experience in the reporting and writing of news, discussing and reading issues and ethics surrounding journalism, and the creation of a classroom newsletter. Students will also study a nonfiction novel and discuss the author's reporting process and journalistic technique.

Film (6701)

GRADE 10, 11, 12

SEMESTER

This semester course is intended to increase the enjoyment of film by raising awareness of the ways a film communicates. Students will become more knowledgeable and critical viewers as we watch and discuss a series of films. This course fulfills the graduation requirement for fine and performing arts.

SOCIAL STUDIES DEPARTMENT

Course Numbers: 2101 - 2702

Courses are: College Preparatory (CP), or College Preparatory of a more rigorous nature are indicated by Honors (H), High Honors (HH), or Advanced Placement (AP).

Requirement: All students are required to take 3 years of Social Studies courses.
(One year of World History and 2 years of U.S. History.)

All averages presented are unweighted, yearly averages unless otherwise noted.

World History (2101) GRADE 9 YEAR
This course is a global study of civilizations from the antiquities to modern times, stressing the contributions of ancient societies to the development of modern political, economic, social and religious concepts. Current events are a regular feature in this course. This course uses all available technology.

World History - Honors (2102) GRADE 9 YEAR
This honors level course in World History will have as its focus: a description and comparison of the major social, political, economic and cultural themes from the ancient civilizations to the early modern age. By means of several techniques special emphasis will be placed on the development of critical thinking skills. Students will be responsible for research projects, supplementary readings, treatments of current events using all available technology.

Prerequisites: Minimum of 88% National Percentile on SSAT Exam (Verbal), and a “B+” Average in English courses in elementary school

World History - High Honors (2103) GRADE 9 YEAR
This accelerated course in World History will have as its focus: an analysis and evaluation of the major social, political, economic and cultural themes from the ancient civilizations to the early modern age. By means of several techniques special emphasis will be placed on the development of critical thinking skills, and the use of primary sources. Critical essays based on assigned outside readings and research papers are regularly required.

Prerequisites: Minimum of 92% National Percentile on SSAT Exam (Verbal), and an “A” Average in English courses in elementary school.

United States History I (2201) GRADE 10 YEAR
This is a survey course of early American History covering the period from European exploration to the Industrial Age. Emphasis is placed on the connection of the past to the present through daily homework, current events, and research assignments.

United States History I – Honors (2202) GRADE 10 YEAR
This is an honors level course in United States History. It is designed to provide a curriculum in American History stressing primary source material and research. Critical essays based on assigned outside readings and research papers are required.

Prerequisites: Department recommendation
Minimum average of 86 % in World History H
Minimum average of 90% in World History CP

Note: Recommended- An average of 90 % in English

United States History I – High Honors (2203) GRADE 10 YEAR
This is an advanced level curriculum. It is designed to provide a college-level course in American History stressing primary source material and research skills necessary for analysis of the document-based questions that are taught at this level. Critical essays based on assigned outside readings and research papers are required regularly. Students in this course will be screened for enrollment in U.S. History II – Advanced Placement.

Prerequisites: Students are selected on the basis of:

Department Recommendation
Minimum average of 86% in World History-High Honors
Minimum average of 92 % in World History-Honors
Minimum average of 95% in World History-CP

Note: Recommended- 90 % in English

Note: All students are required to complete a summer assignment which is due the 1st day of class in September. This assignment is in addition to the Holy Angels Summer Reading Program.

United States History II (2301) GRADE 11 YEAR

This course continues the study of the United States begun in U.S. History I. Emphasis is placed on the United States in the 20th and 21st centuries and current issues. Students are responsible for daily homework, current events and research assignments.

United States History II - Honors (2302) GRADE 11 YEAR

This course continues the study of the United States begun in the sophomore year. Emphasis is placed on the United States in the 20th and 21st centuries and current events. Honors students are responsible for research papers, supplementary readings, critical analysis essays, and pro and con treatments of current events and cultural issues, using all available technology.

Prerequisite: Department Recommendation
Minimum average of 86 % in US History 1 Honors 86
Minimum average of 90 % in US History 1 CP

Note: Recommended- 90% in English

United States History II – Advanced Placement (2304) GRADE 11 YEAR

This U. S. History course is designed to offer junior students who are capable of pursuing college-level studies in history the opportunity of working at an advanced level. Critical essays based on assigned outside readings, DBQs, and research/position papers are required regularly.

Prerequisite: US History I – High Honors
Minimum average of 90% in US History I – High Honors and 90% in English II
Department recommendation and department administered qualifying test.

Note: All students take the AP Exam in May.

Note: All students are required to complete a summer assignment which is due the 1st day of class in September. This assignment is in addition to the Holy Angels summer reading program.

Economics- Honors (2211) GRADE 10, 11, 12 SEMESTER / ELECTIVE

This course will impart both theoretical and practical information in the subject area. A major concern will be increasing student understanding of how economics works, and the individual's role in the domestic and global economies and the relationship between politics and economics.

A comprehensive project is required at the end of the semester.

Macroeconomics- AP (2804) GRADE 10, 11, 12 SEMESTER / ELECTIVE

This is a one semester course taught in the spring that is open to tenth, eleventh and twelfth graders who took the Economics elective and scored over an 88% for their cumulative grade. The course is rigorous and will require hard work, effort, and significant time studying outside the classroom. Many different topics will be taught including: international trade, aggregate supply and demand, reading and using economic indicators (CPI, GDP, and Gini Index), the pricing system, the banking system, monetary policy, fiscal policy, and finance. The course will also improve student's critical thinking skills, their ability to read and interpret graphs, and their knowledge of finance and public policy.

Prerequisites: Having taken the Economics course, received a minimum grade of 88% and Economics teacher recommendation.

Psychology (2401) **GRADE 12** **SEMESTER / ELECTIVE**

This course introduces students to the scientific study of human behavior, cognition, and emotion. The focus of the course is grappling with an analysis of the individual in relationship to his or her environment (which includes both the physical world and social relationships). The goal of the course is to synthesize content in ways that are meaningful to the students-so that they can appreciate the interdependent relationship between mind and body, better understand themselves and others as complex beings, and become active participants in improving the human condition. A major project is required at the end of the semester and serves as a final exam grade.

Sociology (2411) **GRADE 12** **SEMESTER / ELECTIVE**

The threat of terrorism in our world, the growing popularity of social media and the internet, the continued partisanship in our government and the conflicts it has caused, along with the effect that the global pandemic has had on the United States and the world. All are examples of the latest trends and concerns of our society. In this course we will examine how our society has changed and how it will continue to change in the future. Some of the topics that will be discussed in this class are the history of Sociology, social interaction, criminal behavior, interracial relationships, gender inequality, and growing economic concerns. The course requires a major project at the end of the semester that will serve as the final exam.

International Studies-Honors/Middle College Program (MCP) (2702) **GRADE 12** **YEAR/ELECTIVE**

International Studies offers students an opportunity to learn about international issues through in-depth research, constructive dialogue and simulation. Students reconcile national interests with the needs of the international community, becoming immersed in an active learning process. By researching country backgrounds, students learn about the historical, religious and cultural institutions that influence a country's perspective. Through the study of displaced people and territorial disputes, students develop an understanding and tolerance for other cultures as well as the connection between resource distribution and conflict. Comprehensive project assignments are required throughout the year. This course does include a final exam.

Prerequisite: Minimum 88 in CP U.S. History II
Minimum 85 in Honors U.S. History II
Department recommendation

Note: Students enrolled in this course are eligible for college credit through the Fairleigh Dickinson University Middle College Program. Separate registration in September is required through OACC for FDU.

Government and Politics U.S. – Advanced Placement (2404) **GRADE 12** **YEAR/ELECTIVE**

This course is designed to offer senior students a college level survey of American government. Major emphasis is placed on political ideology, the evolution of democratic institutions and the political behavior of the American electorate.

Prerequisite: Minimum average of 90 in U.S. History I-HH and U.S. History II-AP
Minimum average of 92 in U.S. History I-H and U.S. History II-H
Minimum average of 92 in English-H or HH
Department administered qualifying test. Department recommendation.

Note: All students are required to complete a summer assignment which is due on the first day of class in September. All must take the AP exam in May.

MATHEMATICS

Course Numbers: 3101 - 3801

Courses are: College Preparatory (CP), or College Preparatory of a more rigorous nature are indicated by Honors (H), High Honors (HH), or Advanced Placement (AP).

Requirement: All students are required to take 3 years of a Mathematics course sequence. All averages presented are unweighted, yearly averages, unless otherwise noted.

Incoming Freshmen: Students must have completed a full year of Algebra I to be eligible to sit for the Geometry Placement Exam.

Algebra I (3101) **GRADE 9** **YEAR**

This course is a modern introduction to Algebra which leads to the understanding of the basic structure of algebra through an informal and intuitive approach. Students will be provided with an in-depth study of the language of Algebra. A substantial amount of time is spent on skills and concepts to enable students to make the transition from arithmetic to Algebra. Application of these skills and concepts is also enforced. The graphing calculator, TI-84, will be introduced when graphing is studied.

Prerequisites: The Secondary School Admission Test (SSAT) and their reading scores and math grades from previous years.

Algebra I – Honors (3102) **GRADE 9** **YEAR**

This course is a modern introduction to Algebra which leads to the understanding of the basic structure of Algebra through an informal and intuitive approach. Appropriate emphasis is placed on mastering more rigorous skills, concepts and mathematical content. Students are encouraged to develop thinking and problem solving skills throughout the course, and applications of these skills will be of primary importance. The graphing calculator, TI-84, will be introduced when graphing is studied.

Prerequisites: The Secondary School Admission Test (SSAT) and their reading scores and math grades from previous years.

Algebra I - High Honors (3103) **GRADE 9** **YEAR**

This accelerated course is a modern approach to algebra in which the concepts, principles and basic structure of algebra are explored. Emphasis will be placed on problem solving and real-life applications so that the students can be given a greater appreciation for the relevance of algebra in their lives and careers. Additional topics that will be covered beyond the scope of an Algebra I course include radical expressions, quadratics and an introduction to probability and statistics. The graphing calculator, TI-84, will be introduced when graphing is studied.

Prerequisites: The Secondary School Admission Test (SSAT) and their reading scores and math grades from previous years.

Eligibility for two math courses in 10th grade or Geometry summer math course:

1. If you have taken Algebra I there are two possibilities:
 - 95% average
 - Teacher recommendationYour two courses would be Geometry and Algebra II-Honors.

OR

- 90 – 94% average
 - Teacher recommendation
- Your two courses would be Geometry and Algebra-II.

2. If you have taken Algebra I-Honors there are 2 possibilities:
 - 95% average
 - Teacher recommendationYour two courses would be Plane & Solid Geometry-Honors and Algebra II-High Honors.

OR

- 90 – 94% average

- Teacher recommendation

Your two courses would be Geometry and Algebra II-Honors.

ACCELERATED GEOMETRY MATH OPTION (3201SS) GRADE 10 SUMMER

Students meeting the above prerequisites will have the option to complete a Geometry College Prep course at AHA **over the summer**. Upon successful completion, students will receive credit for a full year Geometry course. The course will be taught at AHA for 6 weeks, Monday – Thursday, 4 hours a day. **There will be an additional fee required to attend this course.**

Algebra I / Plane and Solid Geometry - High Honors (3113) GRADE 9 YEAR

This is an extremely rigorous course which is designed for students who have completed a semester of Algebra I in Middle School. It will begin with a review of Algebra I concepts and proceed to a detailed study of advanced Algebra I topics. During the second semester, students will study the basic principles of Euclidean Geometry in order to develop a knowledge of geometric elements and their relationships. A study of three-dimensional solids including their lateral areas, surface areas and volumes will be studied during the fourth quarter. A TI-84 Graphing Calculator is required for the 2nd quarter.

Prerequisites: The Secondary School Admission Test (SSAT), their reading scores, reports from previous years, and the score on our placement exam.

Geometry (3201) GRADE 9, 10 YEAR

A modern approach to the basic principles of Geometry aims to develop a knowledge of geometric elements and their relationships in order to help the student grow in mathematical awareness and conceptual understanding. This course will cover all the basic ideas and terms of traditional geometry. A non-rigorous approach to the deductive method of proof will be presented to promote logical reasoning skills. The key concepts of Algebra will be re-enforced throughout the year. TI-84 Graphing Calculator is required for the 3rd quarter.

Prerequisites – Freshmen: The Secondary School Admission Test (SSAT), a full year course of Algebra I and successful completion of the Geometry Placement exam. Middle School students not meeting the prerequisites for Plane and Solid Geometry Honors will be placed in this course.

Plane and Solid Geometry – Honors (3202) GRADE 9, 10 YEAR

A modern approach to the basic principles of geometry aims to develop a knowledge of geometric elements and their relationships in order to help the student grow in the use of the deductive method of proof. Formal proofs will be explored in detail throughout the entire course. A study of three-dimensional solids including their lateral areas, surface areas and volumes will be studied during the fourth quarter. TI-84 Graphing Calculator is required for the 3rd quarter.

Prerequisites - Freshmen: The Secondary School Admission Test (SSAT), a full year course of Algebra I and successful completion of the Geometry Placement exam. Middle School students with a minimum average of 86% in Algebra I Honors will be placed in this course.

Prerequisites - Sophomores: Minimum average of 86% in Algebra I – Honors. Students entering this course from Algebra I must have a 95% average.

Plane and Solid Geometry - High Honors (3203) GRADE 9, 10 YEAR

This course provides an in-depth study of geometry with heavy emphasis on deductive proofs from the outset. All of the traditional topics of Euclidean geometry will be studied in detail as well as coordinate geometry and an introduction to right triangle trigonometry. A study of three-dimensional solids including their lateral areas, surface areas and volumes will be studied during the fourth quarter as well as an introduction to geometric probability. TI-84 Graphing Calculator is required for the 3rd quarter.

Prerequisites - Freshmen: The Secondary School Admission Test (SSAT), a full year course of Algebra I and successful completion of the Geometry Placement exam. Middle School students with a minimum average of 95% will be placed in this course.

Prerequisites - Sophomores: Minimum average of 88 % in Algebra I-HH. Students entering this course from Algebra I- H must have a 95% average.

Algebra II (3301) GRADE 10, 11 YEAR

A modern integrated course in Algebra consists of a thorough review of Algebra I. A complete study of quadratic equations, factoring, completing the square, the quadratic formula, graphing, problem solving, solving systems of equations and inequalities and polynomial equations will be provided. Additional topics will include operations on rational expressions and radicals. TI-84 Graphing Calculator is required.

Prerequisites: Successful completion of Algebra I and Geometry. Geometry may also be taken simultaneously with this course for those sophomores doubling up in math.

Algebra II - Honors (3302) GRADE 10, 11 YEAR

An extended study of the topics introduced in Algebra I is made. The real number system with emphasis on linear functions and relations, systems of equations and inequalities, rational expressions, radicals and irrational numbers, complex numbers, polynomial functions, conic sections, and exponential and logarithmic functions are included in the course of the year. Students review and expand their knowledge of problem solving.

Prerequisites: Acceptance will be based on earning a minimum average of 86% in Plane & Solid Geometry – H. Students not meeting the requirements for Algebra II-HH will also be placed in this course. Students entering this course from Geometry must have a 95% average. TI-84 Graphing Calculator is required.

Algebra II - High Honors (3303) GRADE 10, 11 YEAR

An extended study of the topics introduced in Algebra I is made. The real number system with emphasis on linear functions and relations, systems of equations and inequalities, rational expressions, radicals and irrational numbers, polynomial functions, conic sections, exponential and logarithmic functions, trigonometry, sequences and series, and probability. The course is fast-paced and emphasis will be placed on higher order thinking and problem solving. TI-84 Graphing Calculator is required.

Prerequisites: Students entering this course from Plane & Solid Geometry – H must have a 95% average. Students entering this course from Plane and Solid Geometry-HH must have an 88% average. Students entering from Algebra I/Plane and Solid Geometry must have an 88% average.

Any JUNIOR wishing to take Precalculus at an outside source must meet the following requirements. This will enable students to take Calculus as a Senior. Any student who wishes to pursue this must indicate so to their College Counselor when they are selecting their courses. NO OTHER STUDENT WILL BE ABLE TO TAKE ANY COURSES AT AN OUTSIDE SOURCE.

Eligibility for JUNIORS to take Precalculus at an outside source:

1. If you have taken Algebra II:
 - 95% average
 - Passing score on both Precalculus semester exams in August.
 - Teacher recommendation

Your course would be Calculus.

2. If you have taken Algebra II-Honors:
 - 93% average
 - Passing score on both Precalculus semester exams in August.
 - Teacher recommendation

Your course would be Calculus.

3. If you have taken Algebra II-Honors:

- 95% average
- Passing score on both Precalculus-Honors semester exams in August.
- Teacher recommendation

Your course would be Calculus-HH.

4. If you have taken Algebra II-High Honors:

- 90 – 91% average
- Passing score on both Precalculus semester exams in August.
- Teacher recommendation

Your course would be Calculus.

5. If you have taken Algebra II-High Honors:

- 92 - 94% average
- Passing score on both Precalculus Honors semester exams in August.
- Teacher recommendation

Your course would be Calculus-High Honors.

6. If you have taken Algebra II-High Honors:

- 95% average
- Passing score on both Precalculus-High Honors semester exams in August.
- Teacher recommendation

Your course would be AP Calculus AB.

Precalculus

(3411)

GRADE 11, 12

YEAR

This course is a continuation of Algebra II. Topics will include a complete study of trigonometry, conic sections, exponential and logarithmic functions, probability, and sequences and series. TI-84 Graphing Calculator is required.

Prerequisites: Minimum average 86% in Algebra II. Students not meeting the requirements for Precalculus-Honors will also be placed in this course.

Precalculus –Honors

(3412)

GRADE 11, 12

YEAR

This course is a preparation for Calculus. Topics will include a complete study of trigonometry, functions and their inverses, advanced graphing techniques, exponential and logarithmic functions, sequences and series, the binomial theorem and probability. Applications of these concepts will also be included. An introduction to limits and continuity may also be explored. TI-84 Graphing Calculator is required.

Prerequisites: Minimum average of 86% in Algebra II-Honors. Students not meeting the requirements for Precalculus-HH will also be placed in this course.

Precalculus-High Honors

(3413)

GRADE 11, 12

YEAR

This rigorous course will provide the students with a strong background for Calculus (AB) or Calculus HH. Topics include trigonometry, advanced graphing, polynomial functions, logarithm and exponential functions, complex numbers in polar form, polar graphing, limits, and continuity will be studied in depth. An introduction to Differential Calculus will also be included. The course will also focus on the theoretical development of each of these topics, and emphasis will be placed on higher order thinking skills and challenging applications. Use of the graphing calculator will be essential to the course.

Prerequisites: A minimum yearly grade of 88% in all High Honors courses to date. TI-84 Graphing Calculator is required.

Calculus (3401) **GRADE 12** **YEAR/ELECTIVE**

This course is open to students who have successfully completed Precalculus. The course will include a study of limits, continuity, the basic rules of differentiation, as well as applications of differentiation to curve sketching and word problems involving related rates and optimization. The derivative of the exponential and logarithmic functions will also be studied. Techniques of integration will be introduced. Limits of trigonometric functions and differentiation and integration of trigonometric functions will not be studied in this course.

Prerequisites: Students entering this course must have a minimum average of 86% in Precalculus. Students entering this course from Precalculus H must have a minimum average of 80%. Students not meeting the requirements for Calculus (HH) will also be placed in this course. TI-84 Graphing Calculator is required.

Calculus-High Honors/Middle College Program (MCP) (3403) **GRADE 11, 12** **YEAR/ELECTIVE**

In this course, students will continue to study the concepts of limits and continuity. The basic concepts of the derivative with its applications to velocity, acceleration, curve sketching, related rates, and max-min problems will be studied in the first semester. The definite and indefinite integral will be introduced during second semester. Techniques of differentiation and integration of the trigonometric functions, the natural logarithmic function, the exponential function and the inverse trigonometric functions will be studied. Integration will be applied to finding area and volume.

Prerequisite: Students entering this course from Precalculus-HH must have a minimum average of 83%. Students entering this course from Precalculus-H must have a minimum average of 88%. TI-84 Graphing Calculator is required. Students not meeting the requirements for Calculus-Advanced Placement will also be placed in this course.

Note: Students may earn college credit through the Middle College Program of Fairleigh Dickinson University upon successful completion of this course in Calculus.

Note: All students are required to complete a summer assignment as further preparation. This assignment is due the 1st week of school in September.

Calculus (AB) -Advanced Placement (3404) **GRADE 11, 12** **YEAR / ELECTIVE**

Students will continue to study limits and continuity begun in Precalculus. An introduction to the basic concepts of differential and integral calculus with applications to velocity, acceleration, curve sketching, related rates and max-min problems will be given. Techniques of differentiation and integration will be studied and applied to areas, radioactive decay, and volumes and surface areas of revolution. The theoretical development of each of these topics will be stressed. The course concludes with the Advanced Placement Examination in May. TI-84 Graphing Calculator is required.

Prerequisites: A minimum cumulative average of 90% in Precalculus-High Honors. Students in Precalculus-H may take Calculus (AB)-Advanced Placement if they have a minimum average of 96% in Precalculus-H. These students will be expected to make up a chapter on the study of limits.

Note: All students take the AP Exam in May.

Note: All students are required to complete a summer assignment as further preparation. There will be an assessment based on the summer assignment during the first week of school in September.

Calculus (BC) -Advanced Placement (3414) **GRADE 11, 12** **YEAR / ELECTIVE**

This course covers all topics of Calculus of functions of a single variable as described in the AP Calculus BC topic outline in the AP Calculus Course Description. Calculus BC includes all topics covered in Calculus AB plus additional topics including Techniques of Integration, parametric, vector, and polar functions; sequences and series (including the Taylor and Maclaurin series). It is designed to develop the student's understanding of the concepts covered in the first two semesters of college level Calculus. The course concludes with the Advanced Placement Examination in May. TI-84 Graphing Calculator is required.

Prerequisites: A minimum cumulative average of 95% in Precalculus-High Honors.

Note: All students take the AP Exam in May.

Note: All students are required to complete a summer assignment as further preparation. There will be an assessment based on the summer assignment during the first week of school in September.

ADDITIONAL MATHEMATICS COURSES

Probability and Statistics (3421) GRADE 12 YEAR / ELECTIVE

This full-year mathematics course will cover basic concepts in statistics and probability. Emphasis will be placed on the collection, processing, analysis and interpretation of numerical data, as well as probability theory and combinatorics. This course will be highly beneficial not only to students planning to study mathematics and science but also to those who wish to pursue a career in the social sciences or business (for example Sociology, Psychology, Economics). TI-84 Graphing Calculator is required.

Prerequisite: This course is open to all seniors who wish to take a fourth year of mathematics and to those who wish to take two mathematics courses simultaneously.

Statistics-Advanced Placement (3424) GRADE 11, 12 YEAR / ELECTIVE

This course is open to juniors and seniors who have successfully completed Precalculus-Honors or Precalculus-High Honors or who are taking either of these courses simultaneously with AP Statistics. The focus of this course is on problem solving. The course will introduce students to the major concepts and tools for collecting, analyzing and drawing inferences from data. Students will concentrate on the following topics: exploring data, planning a study, anticipating patterns and statistical inferences. TI-84 Graphing Calculator is required.

Prerequisites: A minimum average of 90% in Math-Honors and English-Honors courses or a minimum average of 88% in Math-High Honors and English-High Honors courses. Precalculus must have been completed or taken simultaneously with this course. Teacher recommendation is also required.

Note: All students take the AP Exam in May.

Introduction to Creative Coding (3811) GRADE 10, 11, 12 SEMESTER / ELECTIVE

Introduction to Creative Coding is an introductory computer programming course that uses codesters.com and lays the foundation for understanding the principles and practices of computer science. This class uses the coding language, Python, to walk students through fundamental computer science topics such as variables, strings, loops, functions and more. Student will take what they learn throughout the course to create a cohesive final project from scratch.

Prerequisites: This course is open to all 10th, 11th and 12th graders who have completed Geometry.

Introduction to Computer Science (3801) GRADE 10, 11, 12 SEMESTER / ELECTIVE

Introduction to Computer Science is a semester course which handles fundamental ideas of Computer Science. Through lecture and projects, students will be given hands on experience with computer, programming and coding skills that gear towards the technology industry. Students will be given insight into the many career opportunities that study in Computer Science can make them available to.

Prerequisites: This course is open to all 10th, 11th and 12th graders who have completed Geometry.

Computer Science A - Advanced Placement (3704) GRADE 11, 12 YEAR / ELECTIVE

The AP Computer Science A course is equivalent to a first-semester, college-level course in computer science. The course continues to make students familiar with fundamental computer science topics such as: problem solving, design strategies, organization of data, approaches to processing data, analysis of potential solutions, data structures, abstraction and the ethical and social implications of computing. The course uses the programming language Java to emphasize object-oriented programming methodology with a focus on problem solving and algorithm development.

Prerequisites: Students must have an 87% semester average and 80% on the final project in Intro to Computer Science.

Note: All students take the AP Exam in May.

SCIENCE DEPARTMENT

Course Numbers: 4101 - 4732

Courses are: College Preparatory (CP), or College Preparatory of a more rigorous nature are indicated by Honors (H), High Honors (HH), or Advanced Placement (AP).

Requirements: All students must take a minimum of 3 years of laboratory science courses for graduation. The three courses must include Biology, Chemistry and Physics. All averages presented are unweighted, yearly averages unless otherwise noted. *Prior attendance records will be considered for acceptance into Honors, High Honors and Advanced Placement courses.*

Course approval is contingent upon students maintaining required grades through June.

B I O L O G Y, a ninth grade course, is required for graduation. Placement in Biology is based on previous math and science grades, SSAT scores and, when applicable, the recommendation of previous science and math teachers.

Biology (4101) GRADE 9 YEAR

A laboratory integrated course offered to freshmen emphasizing the fundamental unity in the diversity of life forms. Life is studied from the simplest biochemical process to the most complex level of biological organization. Topics include: biochemistry, ecology, cell structure, photosynthesis, cellular respiration, genetics, protein synthesis, evolution, classification, and plant structures.

Biology - Honors (4102) GRADE 9 YEAR

This course is designed for the academically qualified science student. It is a laboratory integrated course with emphasis on the inquiry method. An in-depth approach incorporates analytical and critical thinking skills. The student will be instilled with an appreciation of all life forms through project work, laboratory investigations, and outside reading. Some of the areas covered are cell theory, biochemistry, genetics, DNA, RNA and protein synthesis, evolution, ecology, plant and animal classification.

Prerequisites: Placement is based on standardized test scores and performance in science in 7th and 8th grades.

C H E M I S T R Y, a tenth grade course, is required for graduation. Placement in Chemistry is based on previous math and science grades, and the recommendation of previous science and math teachers. Students must maintain grades in prerequisite courses through final exams in June.

Chemistry (4201) GRADE 10 YEAR

This basic course in chemistry covers the traditional topics of chemistry through lecture and experimentation. Some topics include atomic structure, periodicity, chemical formulas, chemical bonding, chemical reactions, and the mole concept.

Prerequisites: Successful completion of Biology

Chemistry-Honors (4202) GRADE 10 YEAR

A thorough course in chemistry covers a wide spectrum of concepts which students should find both interesting and challenging: atomic theory and structure, the mole concept, periodicity, chemical bonding, kinetic theory, gas laws, thermochemistry, stoichiometry, and acid-base theory. This course requires more rigorous mathematical application than the college prep course. An extensive lab program reinforces the principles learned.

Prerequisites: Minimum average of 90% in Biology or 86% in Biology-H
Minimum average of 90% in Algebra I, 87% in Algebra I - H or 85% in Algebra I – HH, or 90% in Geometry, 87% in Geometry H, or 85% in Geometry HH. (Teacher recommendations and prior attendance record will be considered).

Chemistry-High Honors (4203) GRADE 10 YEAR

This in-depth lab-integrated course is geared for the highly qualified student. It is a fast paced study of the laws and principles of chemistry. Problem-solving is an integral tool of the course. Several areas that are covered comprehensively include: atomic theory, chemical reactions, molecular structure and geometry, periodicity, equilibrium, acid-base theories, kinetics, thermochemistry, redox reactions, and electrochemistry. An extensive lab program reinforces the principles learned.

Prerequisites: Minimum average in Biology of 96%, Biology-H of 90%
Minimum average in Algebra I of 96%, Algebra I - H of 90%, Algebra I-HH of 87%, or 96% in Geometry, 90% in Geometry H or 87% in Geometry HH. (Teacher recommendations and prior attendance record will be considered).

P H Y S I C S is required for graduation and may be completed in the junior or senior year. Placement is based on previous Math and Science grades, and recommendation of previous Math and Science teachers.

Physics (4301) GRADE 11, 12 YEAR

This laboratory integrated course concentrates on the concepts of physics and involves basic mathematical applications of mathematics to the concepts of force, motion, heat, light, and electricity. The course encourages students to discover and develop concepts, relationships, and an appreciation of physics and the natural world.

Prerequisites: Successful completion of previous science courses.

Physics-Honors (4302) GRADE 11, 12 YEAR

This rigorous laboratory integrated course is intended for the student who is proficient in mathematics. It covers the main topics of force, motion, heat, light, and electricity. Problem solving requires an adequate preparation in algebra and geometry. Elementary trigonometry is necessary for some problem solving will be introduced where required.

Prerequisites: Minimum average of 92% in CP Chemistry, 88% in Chemistry-H, 82% in Chemistry-HH.
Minimum average of 93% in Algebra I or Geometry, 90% in Algebra I-H or Geometry H, 86% in Algebra I-HH or Geometry HH. Algebra II and Precalculus grades will be considered when sufficient growth has been achieved beyond Algebra I and Geometry courses.

ADVANCED PLACEMENT COURSES: The Advanced Placement Program is designed to allow high school students to pursue college-level studies while attending high school. No transfers into an AP course will be permitted after June 30th. Grades in course prerequisites must be maintained through final exams. **Courses are fast-paced and rigorous, and all students take the AP exam in May.**

Biology- Advanced Placement (4704) GRADE 11, 12 YEAR

This college level course prepares the student for the Advanced Placement Biology Examination. Cellular and molecular biology, genetics, evolution, biotechnology, plant and animal systems, and ecology will be studied in depth. The class focuses on the inquiry-based learning of essential concepts and the content that supports them. Laboratory investigations help develop advanced inquiry and reasoning skills. Graphing calculators are required.

Prerequisites: Minimum average of 90% in Biology-H or 93% in Biology.
Minimum average of 90% in Chemistry-HH or 95% in Chemistry-H or 97% in Chemistry.
Minimum of 80% on semester exams. (Teacher recommendations and prior attendance record will be considered).

Chemistry-Advanced Placement (4714)**GRADE 11, 12****YEAR**

This college level course prepares students for the Advanced Placement Chemistry Examination. Structure of matter, states of matter, gas laws, redox reactions, stoichiometry, chemical reactions, thermochemistry, molecular structure, equilibrium, kinetics, organic chemistry, nuclear chemistry, acid-base theory, and electrochemistry will be studied in depth. Descriptive chemistry will be covered in depth and laboratory exercises will reinforce the principles learned. The class focuses on the inquiry-based learning of essential concepts and the content that supports them. Laboratory investigations help develop advanced inquiry and reasoning skills. Graphing calculators are required.

Prerequisites: Minimum average of 96% in Biology or 92% in Biology-H
Minimum average of 95% in Chemistry-H or 90% in Chemistry-HH, or 97% in Chemistry.
Minimum average in Algebra I or in Geometry of 95%, Algebra I H or in Geometry H of 90%, or Algebra I – HH or in Geometry HH of 87%. (Teacher recommendations and prior attendance record will be considered).

Physics 1- Advanced Placement (4504)**GRADE 11, 12****YEAR**

This course is the equivalent to a first-semester college course in general physics. It is a fast-paced inquiry-based laboratory course meant to prepare students planning to major in engineering or the sciences. A thorough background in algebra and knowledge of trigonometry are required. Emphasis will be placed on conceptual understanding and mathematical problem solving. The course covers topics including Newtonian mechanics (including linear and rotational kinematics, dynamics, and momentum); work, energy, and power; and mechanical waves and sound. It will also introduce electric circuits. Scientific or graphing calculators are required.

Prerequisites: Minimum average in Chemistry H of 95%, Chemistry HH of 91% or 97% in Chemistry.
Minimum average in Algebra I H or Geometry H of 95%, or Algebra I HH or Geometry HH of 91%. More recent grades in Algebra II and/or Precalculus will be considered: H level - 92%, HH level - 90%. (Teacher recommendations and prior attendance record will be considered).

Physics 2- Advanced Placement (4414)**GRADE 12****YEAR**

This algebra-based course is the equivalent to a second-semester college course in general physics. It is a fast-paced inquiry-based laboratory course meant to prepare students planning to major in engineering or the sciences. A thorough background in algebra and knowledge of trigonometry are required. Emphasis will be placed on conceptual understanding and mathematical problem solving. The course covers fluid mechanics; thermodynamics; electricity and magnetism; optics; and atomic and nuclear physics. Scientific or graphing calculators are required.

Prerequisites: Minimum average of 95% in Physics - H or 85% in AP Physics 1.
Minimum average of 92% in Algebra II H or Precalculus H, or 90% in Algebra II HH or Precalculus HH. (Teacher recommendations and prior attendance record will be considered).

ADDITIONAL SCIENCE COURSES**Anatomy and Physiology****(4421)****GRADE 12****YEAR/ ELECTIVE**

This is a fundamental course that offers an introduction to anatomy and physiology. It will cover the essentials of the structure and functions of the human body with an emphasis on homeostasis. Students will be provided with a paced, logical development of the body systems. A variety of teaching aids will be used and dissections will be an integral part of the course. Real-world issues (e.g. cancer prevention, stress management, healthy diet, etc.) add relevancy and promote better understanding of concepts. There is an active lab component to this course.

Prerequisites: Successful completion of previous science courses. (Teacher recommendations will be considered).

Anatomy and Physiology-Honors/Middle College Program (MCP) (4402)**GRADE 12****YEAR/ELECTIVE**

This course is offered to qualified seniors and comprises an in-depth introduction to the human body from anatomical and physiological perspectives with emphasis placed on understanding the relationship between structure and function. The integration of current health care topics, medical technology, and health related social

issues will also be addressed. Laboratory sessions are designed to correlate with lecture topics to increase understanding.

Prerequisites: Minimum average of 85% in H Biology and H or HH Chemistry
Minimum average of 92% in CP Biology or CP Chemistry
Minimum grade of 80% in both Biology and Chemistry semester exams
(Teacher recommendations and prior attendance record will be considered).

Note: Students enrolled in this course are eligible to receive college credit through the Middle College Program of Fairleigh Dickinson University. Separate FDU course registration is required.

Engineering- Innovation and Design-Honors (4732) GRADE 11, 12 YEAR / ELECTIVE

This is a hands-on, project based course, with a laboratory component. It is for students who are willing to take on the challenge of utilizing their creative skills to design solutions to solve current global issues. Students will work independently and in teams. Through activities and projects, students will have the opportunity to develop and understand the problem-solving and decision-making processes of an engineering project. Students will also explore various disciplines and options of an engineering career.

Prerequisites: Minimum average of 87% in Chemistry-H and Biology-H, 82% in Chemistry-HH, 87% in Algebra I-H and Geometry H, 82% in Algebra I-HH and Geometry HH, and minimum grade of 80% on both semester exams. (Teacher recommendations and prior attendance record will be considered).

Engineering: Models and Toolkits (4801) GRADE 10, 11, 12 SEMESTER / ELECTIVE

This is a one semester introduction to Engineering class. This course gives students the opportunity to develop skills and understanding of engineering concepts through activity, project-based learning. Students will work independently and in teams. This course assumes no previous knowledge.

Prerequisites: Successful completion of previous science and math courses. (Teacher recommendations and prior attendance record will be considered).

Forensics Science (4421) GRADE 12 YEAR / ELECTIVE

This introductory course explores the field of criminalistics and introduces students to investigations behind crime scenes. Students will use their knowledge of biology, chemistry, and physics to analyze forensic science and to problem-solve case studies. Hands-on activities will provide students with the experience of forensic investigating and anthropology. Assessments include a variety of analytical exercise including case studies, virtual labs, projects, and formative assessment questions.

Prerequisites: Successful completion of biology, chemistry, and physics.

Robotics and Automation (4811) GRADES 10, 11, 12 SEMESTER / ELECTIVE

This semester elective course is designed for sophomores and juniors. Students will be introduced to robotics and the engineering process using the VEX EDR system. Through the VEX code platform, students will learn to program basic robotic behaviors using smart motors with rotation, sound, light, touch and ultrasonic sensors. The VEX EDR system provides the ability to build mechanically complex robots which can perform sophisticated tasks. Students will learn to construct, control and program these robots through investigative and exploration activities. Students will develop skills in mechanical design and construction as they work in teams to build simple and complex robotic devices. They will also explore usage of robotics in modern business and industry and examine how robotic devices are affecting our lives and shaping our culture.

Prerequisites: Successful completion of previous science courses. (Teacher recommendations and prior attendance record will be considered).

Environmental Science-Honors/Middle College Program (MCP)(4722) GRADE 11,12 YEAR/ELECTIVE

This course will investigate the interactions between humans and our global environment. Students will be given the opportunity to examine the scientific, social, political, and economic aspects of contemporary environmental issues. Students will be able to find information and then evaluate its quality and analyze the veracity of the information. Educated students will understand how scientific investigations are done and how results and conclusions are reported in order to make informed decisions in their own lives. Current events, global warming,

carbon foot printing, water pollution, and Trout in the Classroom are highlighted in this program as well as hands-on laboratory activities (including field work) raise global awareness and appreciation of our biosphere. Assessments include a variety of critical thinking exercises including, but not limited to, case studies, formative assessment questions, active reading, virtual labs, etc.

Prerequisites: Minimum average of 85% in both Biology Honors and 90% in Biology CP, and a minimum grade of 80% on both semester exams. Teacher recommendations and prior attendance record will be considered.

Note: Students enrolled in this course are eligible to receive college credit through the Middle College Program of Fairleigh Dickinson University. Separate FDU course registration is required.

Organic Chemistry-Honors (4412) GRADE 12

YEAR / ELECTIVE

Organic Chemistry is the study of carbon and its compounds. Students will learn nomenclature, stereochemistry, compound classifications, syntheses and reactions of organic molecules. They will also learn to predict structure-function relationships. This course is designed to give seniors interested in majoring in biology, chemistry or pre-med an advantage when approaching organic chemistry in college.

Prerequisites and Requirements: Successful completion of AP Chemistry, AP Biology or AP Physics I, with a minimum of 3 on the AP exams, or High Honors Physics with a minimum grade of 93% or High Honors Chemistry with a grade of 93%. Simultaneous registration in another science is acceptable.

Environmental Science (4711)

GRADE 11,12

SEMESTER/ELECTIVE

This course will investigate the interactions between humans and our global environment. Students will be given the opportunity to examine the scientific, social, political, and economic aspects of contemporary environmental issues. Students will be able to find information and then evaluate its quality and analyze the veracity of the information. Educated students will understand how scientific investigations are done and how results and conclusions are reported in order to make informed decisions in their own lives. Current events, global warming, carbon foot printing, water pollution, and Trout in the Classroom are highlighted in this program as well as hands-on laboratory activities (including field work) raise global awareness and appreciation of our biosphere. Assessments include a variety of critical thinking exercises including, but not limited to, case studies, formative assessment questions, active reading, virtual labs, etc.

Prerequisites: Successful completion of previous science and math courses.

Sports Medicine

(9411)

GRADE 12

SEMESTER/ELECTIVE

This course will give a brief overview of the human body systems with an emphasis on the musculoskeletal system. It will cover a detailed study of the structure and functions of the musculoskeletal system, injuries of the musculoskeletal system, injury prevention, sports psychology, sports nutrition and strength and conditioning. There is also a focus on the career aspect of sports medicine.

WORLD LANGUAGE DEPARTMENT

Course Numbers: 5102 - 5444

Courses are: College Preparatory (CP), or College Preparatory of a more rigorous nature are indicated by Honors (H), High Honors (HH), or Advanced Placement (AP).

Requirements: Students are required to take 3 years of a World Language course sequence.
All averages presented are yearly, unweighted averages unless otherwise noted.

The Academy offers:
ROMANCE LANGUAGES in French, Italian and Spanish.
CLASSICAL LANGUAGE in Latin.

In general, grade levels are indicated for each course.
Incoming students who have studied 2 or more years one of the languages listed above must take a placement exam in order to continue study of that language.

FRENCH

French I - Honors (5102) GRADE 9, 10, 11, 12 YEAR
This course introduces the student to the four basic skills of listening, speaking, reading and writing in French. It also includes the culture of France, and French speaking countries. The Honors course requires the use of the target language more extensively and additional readings.
Note: Student enrolled in this course are required to take the National Exam in March.

French II (5201) GRADE 10, 11, 12 YEAR
This course furthers the development of the four basic skills and explores specific aspects of French culture in France and in the French speaking countries.
Prerequisites: Minimum average of 70% in French I or a score between 50-79% on the French placement exam.

French II - Honors (5202) GRADE 9, 10, 11, 12 YEAR
This course furthers the development of the four basic skills and explores specific aspects of French culture in France and in the French speaking countries. The Honors course requires the use of the target language more extensively and additional readings.
Prerequisites: Minimum average of 93% in French I-H and teacher recommendation, or a minimum average of 80% on the French placement exam.
Note: Student enrolled in this course are required to take the National Exam in March.

French III (5301) GRADE 10, 11, 12 YEAR
This required course offers more extensive study of the four skills. The course includes a study of the history and culture of France and French speaking countries.
Prerequisites: Minimum average of 70% in French II.

French III - Honors (5302) GRADE 10, 11, 12 YEAR
This required course offers more extensive study of the four skills. The course includes a study of the history and culture of France and French speaking countries. The Honors course requires the use of the target language more extensively and additional readings.
Prerequisites: Minimum average of 93% in French II and teacher recommendation.

Minimum average of 90% in French II-H and teacher recommendation

Note: Student enrolled in this course are required to take the National Exam in March.

French IV – Honors/Middle College Program (MCP) (5402) GRADE 11, 12 YEAR / ELECTIVE

This course is designed for students who wish to further their studies of French and learn more about the diversity of the Francophone culture. The course seeks to develop oral communicative skills and improve the reading and the writing skills. A review of the main elements of grammar is included.

Prerequisites: Minimum average of 85% in French III and teacher recommendation.

Minimum average of 83% in French III-H and teacher recommendation.

Note: Students enrolled in this course are eligible to receive college credit through the Middle College Program of Fairleigh Dickinson University. Separate FDU course registration is required.

Note: All students are required to complete a summer assignment as further preparation. This assignment is due the 1st week of school in September.

French V- Language and Culture Advanced Placement (5404) GRADE 11, 12 YEAR / ELECTIVE

This college level course prepares the students for the Advanced Placement French Language and Culture Examination. Essential to the course is the development of a high degree of competency in three modes of communication: interpretive, interpersonal and presentational. Students will work with authentic literary selections, magazine and newspaper articles, radio and French TV programs. French grammar and francophone culture and literature are studied in the context of the six themes: 1- Global Challenges; 2- Science and Technology; 3- Contemporary Life, 4- Personal and Public Identities, 5- Families and Communities and 6- Beauty and Aesthetics.

Prerequisites: Minimum average of:

93% in French III

90% in French III-H

88% in French IV-H

And qualifying listening and speaking assessment and teacher recommendation.

Note: All students take the AP Exam in May.

Note: Student enrolled in this course are required to take the National Exam in March.

Note: All students are required to complete a summer assignment as further preparation. This assignment is due the 1st week of school in September. This assignment is in addition to the Holy Angels summer reading program

ITALIAN

Italian I - Honors (5122) GRADE, 9, 10, 11, 12 YEAR

This course introduces the student to the four basic skills of listening, speaking, reading and writing. It also includes Italian culture. Honors is taught at a more rapid pace with higher expectations of students in all skills. Students are required to do additional readings.

Note: Student enrolled in this course are required to take the National Exam in March.

Italian II (5221) GRADE 10, 11, 12 YEAR

This course is designed to continue the process of developing the four basic skills of speaking, listening, reading and writing the Italian language. This is achieved through the teaching of structures in context and the presentation of various aspects of Italian culture.

Prerequisite: Minimum average of 70% in Italian I.

Italian II - Honors (5222) GRADE 9, 10, 11, 12 YEAR

This course is designed to continue the process of developing the four basic skills of speaking, listening, reading and writing the Italian language. This is achieved through the teaching of structures in context and the presentation of various aspects of Italian culture. Tests, projects, and finals will be more challenging than Italian II.

Prerequisite: Minimum average of 93% in Italian I-Honors or a minimum score of 80% on the Italian I placement exam.

Note: Students enrolled in this course are required to take the National Exam in March.

Italian III (5321) **GRADE 10, 11, 12** **YEAR**

This course offers a more extensive study of the four skills. This course also includes the study of Italian culture. Simplified literature and authentic audio sources will be used as a basis for conversation and writing activities in the target language.

Prerequisite: Minimum average of 70% in Italian II

Italian III - Honors (5322) **GRADE 10, 11, 12** **YEAR**

This course offers a more extensive study of the four skills. This course also includes the study of Italian culture. Simplified literature and authentic audio sources will be used as a basis for conversation and writing activities in the target language.

Prerequisite: Minimum average of 90% in Italian II-H, Minimum average of 93% in Italian II and teacher recommendation.

Note: Student enrolled in this course are required to take the National Exam in March.

Italian IV- Honors/Middle College Program (MCP) (5422) **GRADE 11, 12** **YEAR / ELECTIVE**

The primary objective of this course is to broaden students' understanding of contemporary Italian culture through viewing of Italian film clips and short readings. Themes of study are: regional cuisines, youth identity, family and relationships, healthy lifestyles, college and choosing a career, business and globalization, the environment, and geography. Students engage in activities to stimulate observation, reflection and conversation.

Prerequisites: Completion of Italian III or Italian III Honors and teacher recommendation

Note: Students enrolled in this course are eligible to receive college credit through the Middle College Program of Fairleigh Dickinson University. Separate FDU course registration is required.

Note: All students are required to complete a summer assignment as further preparation. This assignment is due the 1st week of school in September. This assignment is in addition to the Holy Angels' summer reading program.

Italian V Language and Culture – Advanced Placement (5424) **GRADE 11, 12** **YEAR / ELECTIVE**

This college level course prepares the students for the Advanced Placement Italian Language Examination. Essential to the course is the development of a high degree of competency in listening, speaking, reading and writing. Classes are conducted in Italian. Students will work with authentic literary selections, magazine articles, newspaper articles, and radio. An AP student must be able to give oral presentations in Italian. Advanced Placement Italian is equivalent to a 4th semester college course.

Prerequisites: Minimum average of 85 in Italian III-H and teacher recommendation.

Note: All students take the AP Exam in May.

Note: All students are required to complete a summer assignment as further preparation. This assignment is due the 1st week of school in September. This assignment is in addition to the Holy Angels summer reading program.

Note: Student enrolled in this course are required to take the National Exam in March.

LATIN

Latin I - Honors (5132) **GRADE 9, 10, 11, 12** **YEAR**

Latin I introduces students to Latin vocabulary and grammar, to Latin's practical application to English and romance languages, to the National Latin Exam, to basic learning skills for all courses, and to time honored values for a lifetime.

Latin II - Honors (5232) **GRADE 9, 10, 11, 12** **YEAR**

Latin II students are expected to learn advanced grammar, translation, and Latin vocabulary; to take the national Latin Exam; and to master additional study skills and classical values.

Prerequisites: A minimum average of 70% in Latin I, or a passing grade on the Latin I placement exam.

Latin III – Honors (5332) GRADE 11, 12 YEAR / ELECTIVE

This course is an introduction to Roman poetry and prose. Students will read in alternating years selections from Ovid's *Metamorphoses* and Vergil's *Aeneid*, Cicero's *Pro Caelio*. Students will study these literary texts to apply their philological skills to reading the foundational works of the Great Books. Special attention will be paid to the reception and portrayal of these authors and their works in the visual arts and in the Catholic Intellectual Tradition. Students will learn the various forms of Latin poetry and prose to become familiar with the composition styles of major Latin authors. Students are expected to participate in the National Latin Exam.

Prerequisites: Minimum average of 70% in Latin II-H

Latin III – High Honors (5333) GRADE 11, 12 YEAR

AP Latin is a two-year course of study which begins in Latin III High Honors. Students must sit for the AP Latin exam at the end of the second year. In the Latin III High Honors course of study students will read selections from Caesar's *De Bello Gallico*, with emphasis on Rome's military goals and Caesar's both personal and political aims in the invasion of Gaul. Vocabulary development and sight translation are essential to this course. Students are expected to participate in the National Latin Exam.

Prerequisites: Minimum average of 92% in Latin II-H and Teacher recommendation.

Latin IV – Honors (5432) GRADE 11, 12 YEAR / ELECTIVE

The students will read in alternating years selections from Ovid's *Metamorphoses* and Vergil's *Aeneid*. Special attention is given to the style, versification and variations in grammar peculiar to poetry. The history, mythology and culture of the Augustan Age are emphasized. Students are expected to participate in the National Latin Exam.

Prerequisite: Completion of Latin III-H.

Latin Literature V – Advanced Placement (5434) GRADE 11, 12 YEAR / ELECTIVE

The students will read selections from Vergil's *Aeneid*. Special attention is given to the style, versification and variations in grammar peculiar to poetry. Vocabulary development and sight translation are essential to this course. The history, mythology and culture of the Augustan Age are emphasized. **Students who are currently taking Latin III High Honors and wish to sit for the AP Latin Exam in May must be approved by the instructor. Additionally, they must meet with the Latin teacher at least two hours per cycle (times and days of the week to be determined) to review the required AP readings in Caesar and advanced concepts and grammar unique to the exam.** Students are expected to participate in the National Latin Exam.

Prerequisites: Minimum average of 90% or above in Latin III-HH, and teacher recommendation

Note: All students take the AP Latin Exam in May.

Latin VI Honors (5436) YEAR / ELECTIVE

In this course students will study how the vernacular languages of European literature developed out of Latin. They will do this by reading the works of Boethius, Saint Augustine, Saint Thomas Aquinas, Saint Perpetua, and the Latin Bible in correlation with one work of vernacular Latin literature. Students will focus on reading and translating Medieval Latin texts throughout the year to learn Medieval philosophy, theology, history, and linguistics. Students will study the linguistic differences between Medieval Latin and Classical Latin, as well as the forms and literatures of the rising vernacular tongues. To supplement the study of Medieval Latin texts, students will read one vernacular text from the following authors: Dante Alighieri, Miguel Cervantes, Chretien de Troyes. The main goal of this course is to illustrate the linguistic development of Western European languages and literatures.

Prerequisites: Students who have completed Latin V AP may take this course.

SPANISH

Spanish I - Honors (5142) GRADE 9, 10, 11, 12 YEAR

This course introduces the student to the four basic skills of listening, speaking, reading and writing. Spanish and

Latin American culture is studied with an emphasis on its influences in the United States. Honors is taught at a more rapid pace with higher expectations of students in all skills. Students are required to do additional readings and simple translations.

Note: Students enrolled in this course are required to participate in the Spanish National Exam.

Spanish II (5241) **GRADE 10, 11, 12** **YEAR**

This course continues the development of the four basic skills. Various aspects of Latin American culture are presented.

Prerequisites: Minimum average of 70% in Spanish I.

Spanish II - Honors (5242) **GRADE 9, 10, 11, 12** **YEAR**

This course continues the development of the four basic skills. Various aspects of Latin American culture are presented. This honors course is taught at a more rapid pace with higher expectations of students in all skills.

Prerequisites: Minimum average of 93% in Spanish I–H,
Teacher recommendation,
Or a minimum of 80% on the Spanish Placement Test.

Note: Students enrolled in this course are required to participate in the Spanish National Exam.

Spanish III (5341) **GRADE 10, 11, 12** **YEAR**

This course reviews the structure of the Spanish language and provides for additional practice in the four basic skills. It also includes a study of the culture and literature of Spain and other Spanish speaking countries.

Prerequisite: Minimum average of 70% in Spanish II

Spanish III – Honors (5342) **GRADE 10, 11, 12** **YEAR**

This course reviews the structure of the language and provides for additional practice in the four basic skills. It also includes a study of the culture, geography, history and literature of Spain. Honors is taught at a more rapid pace with higher expectations of students in all skills, requiring students to use the target language more extensively and do additional readings and translations.

Prerequisites: Minimum average of 90% in Spanish II – Honors
Minimum average of 92% in Spanish II, and
Teacher recommendation

Note: Students enrolled in this course are required to participate in the Spanish National Exam.

Spanish III –High Honors (5343) **GRADE 10, 11, 12** **YEAR**

This course reviews the structure of the Spanish language and provides for extensive practice in the four basic skills. It also includes a more in-depth study of the culture, geography, history and literature of Spain. High Honors is taught at a more rapid pace with considerably higher expectations of students in all skills, requiring students to use the target language more extensively and do additional readings and translations.

Prerequisites: Minimum average of 92% in Spanish II – Honors, and Teacher recommendation
Spanish II students are not eligible

Note: Students enrolled in this course are required to participate in the Spanish National Exam.

Spanish IV (5441) **GRADE 11, 12** **YEAR / ELECTIVE**

This course is designed for those students who have successfully completed Spanish III and who wish to further their studies. The students will review all of the main elements of Spanish grammar that will be applied to conversation and written work. Emphasis is placed on the use of the four skills of the language – reading, writing, speaking and listening. The students will have a workbook for grammar skills and a reader that deals with stories from Spanish and Latin American countries.

Prerequisites: Completion of Spanish III or Spanish III-H, and Teacher recommendation

Spanish IV –Honors**(5442)****GRADE 11, 12****YEAR / ELECTIVE**

This course is a complete review of grammar. Some Spanish and Latin American authors will be studied. Classes are conducted in Spanish and students are required to respond in the target language. Speaking, listening and writing skills are emphasized.

Prerequisites: Minimum average of 87% in Spanish III – HH
Minimum average of 90% Spanish III – H
Minimum average of 93% Spanish III and
Teacher recommendation.

Spanish V Language Culture – Advanced Placement (5444)**GRADE 11, 12****YEAR /ELECTIVE**

This college level honors course prepares the student for the Advanced Placement Spanish Language examination. Essential to the course is the development of a high degree of competency in listening, speaking, reading and writing. Classes are conducted in Spanish. Students are encouraged to familiarize themselves with Spanish literary selections, Spanish magazine articles, newspaper articles, Spanish TV and radio. An AP student must be able to give oral presentations in Spanish. Advanced Placement Spanish is equivalent to a 3rd year college course.

Prerequisites: Minimum average of 90% in Spanish IV-H
Minimum average of 90% in Spanish III–HH
Minimum average of 92% in Spanish III–H and
Teacher recommendation

Note: All students take the AP Exam in May

Note: All students are required to complete a summer assignment as further preparation. This assignment is due the 1st week of school in September. This assignment is in addition to the Holy Angels summer reading program.

**BUSINESS AND TECHNOLOGY
DEPARTMENT**

Course Numbers: 7101 - 7801

Courses are: College-Preparatory (CP), and Principles of Accounting - Honors

Business and Technology courses are taken as **ELECTIVES** to fulfill graduation requirements, with the exception of the one semester Computer Applications course which is required in ninth grade for graduation.

Requirement: Ninth graders are required to take one semester of Computer Applications for graduation.

BUSINESS

Marketing (7811) GRADE 10, 11, 12 SEMESTER/ ELECTIVE
Students will explore the world of marketing and will be familiarized with basic marketing concepts, history, analysis strategies, and both traditional and online advertising. These methods and concepts will be experienced through project based learning and creative team assignments. This course will expose students to future opportunities in this field as well, and delve into marketing careers, such as brand management, sales, consumer behavior, and marketing research. Ways in which to construct a marketing plan will also be included, alongside problem solving and examining marketing case studies.

Personal Finance (7721) GRADE 10, 11, 12 SEMESTER/ELECTIVE
Personal Finance is an essential course which provides the student with lifelong learning skills. Students will learn to become financially independent by maximizing their earning potential and developing strategies for managing their resources. It is critical that young women become empowered to make sound decisions concerning budgeting, banking, spending, saving, credit cards, and investing. Decisions in setting financial goals and marketing investments are the basis for this course, along with discovering the student's career direction. The main project is a comprehensive budgeting portfolio which includes a guide for the student's necessary future purchases, financial help and security, aspects of managing credit and debt, managing resources and personal risks.

Principles of Business- I (7731) GRADE 11, 12 SEMESTER/ ELECTIVE
This course covers business topics as preparatory learning for college-bound students. While it helps for other majors, it is recommended that students who are considering business as a college major enroll in this course. The goals of this course are:

- (1) To furnish the college-bound student with a background for future business courses.
- (2) To introduce basic business concepts that the college bound student may encounter in the future.

The content of the course includes topics such as: Business and Its Environment; Economics Basics; Forms of Business Ownership; Ethics & Corporate Social Responsibility; Entrepreneurship; Global Business; Product Planning, Production, & Development; Business Law. Through group work and hands on learning, students will explore these concepts, and connect them to the businesses that play a role in their everyday lives. Computers are an integral part of this class, as students will be immersed in a virtual business simulation retail program. Technology will be involved in the research and creation of an entrepreneurial project as well.

Principles of Business-II (7511) GRADE 11, 12 SEMESTER/ELECTIVE
This course will be a continuation and expansion of Principles of Business I. The content of the course includes topics such as: Marketing & Advertising; Management Principles; Human Resources; Leadership & Teamwork Tactics; Finance; Accounting Principles; Supply Chain Management; Business Life Skills; and Business Career Writing & Preparation (Resumes, Cover Letters, Interviews, Email/Memo/Presentation Etiquette). This course specifically focuses on taking the concepts from part I and applying them to the various careers in business. Students will explore the many job opportunities this field of work has to offer, their strengths and weaknesses in each, and which they may be most passionate about. Throughout the class we will be developing a deeper

understanding of how each of these careers interact with each other, and the importance each has to the overall structure. This will be an activity centered and project based course, that will also include the business simulation retail program. Pre-requisites are Principles of Business I.

Principles of Accounting–Honors (7402) GRADE 12 YEAR/ ELECTIVE

This course provides an understanding of the basic principles of the accounting cycle. This course is recommended for all students planning a business major in college, as most college business programs require 2 semesters of accounting, regardless of the individual business discipline. The accounting cycle includes the analysis and the recording of transactions of a service business organized as a proprietorship and a merchandising business organized as a partnership; preparation and interpretation of the financial statements; processing and posting journal entries to subsidiary ledgers. In the second half of this course, students will explore recording specific accounting entries and understanding various components of company financial statements, including cash, inventory, accounts receivable, loans, and revenues and expenses. Both manual and automated accounting procedures will be emphasized. Computers will be used to generate reports using spreadsheet programs as well as textbook exercises, and several business simulations will allow the students to process the accounting cycle and analyze results.

TECHNOLOGY

Computer Applications (7111) GRADE 9 SEMESTER/REQUIRED

This course is a one-semester introduction to technology used within the school day. The use of the tablet for printing, saving and working effectively between home and school are taught along with the proper use of MS Office 2016 programs. The understanding of these programs are enhanced through consistent practice using exercises and creation of projects. Students are also taught basic study skills, note taking, digital and oral presentation skills as well as business-related skills such as resume writing, interview skills and spreadsheets. Students learn safe and successful researching techniques using databases as research tools to explore the topics of internet safety and cyberbullying. MLA skills are taught by learning proper citation techniques and formatting. Students will also be introduced to computer science using a web based program to learn the purpose of coding and how to create basic codes.

Digital Film I (7521) GRADE 11 & 12 SEMESTER/ELECTIVE

This course focuses on learning the techniques of digital filmmaking. Students will explore the stages of digital filmmaking, including storyboarding, lighting, camera and audio recording techniques, video and audio editing. Students will learn to film using Canon DSLR cameras and Tascam digital audio recorders. Adobe Premiere Pro will be used for video and audio editing and effects. Emphasis will be placed on acquiring the technical skills necessary to create a professional quality film.

Digital Film II: (7531) GRADE 11 & 12 SEMESTER/ELECTIVE

In this project based course, students will use the skills that they have acquired in Digital Film I to create their own films. Students write, produce, direct and edit their own projects, as well as work as crew members on their classmates projects. Projects can include commercials, music videos, short documentary and fiction films, as well as cross-curricular projects. Prerequisite: Digital Film I.

Introduction to Creative Coding (3811) GRADES 10, 11, 12 SEMESTER / ELECTIVE

Introduction to Creative Coding is an introductory computer programming course that uses codesters.com and lays the foundation for understanding the principles and practices of computer science. This class uses the coding language, Python, to walk students through fundamental computer science topics such as variables, strings, loops, functions and more. Student will take what they learn throughout the course to create a cohesive final project from scratch.

Introduction to Computer Science (3801)**GRADE 10, 11, 12 SEMESTER / ELECTIVE**

Introduction to Computer Science is a semester course which handles fundamental ideas of Computer Science. Through lecture and projects, students will be given hands on experience with computer, programming and coding skills that gear towards the technology industry. Students will be given insight into the many career opportunities that study in Computer Science can make them available to.

Prerequisites: This course is open to all 10th, 11th and 12th graders who have completed Geometry.

Computer Science A - Advanced Placement (3704)**GRADE 11, 12****YEAR / ELECTIVE**

The AP Computer Science A course is equivalent to a first-semester, college-level course in computer science. The course continues to make students familiar with fundamental computer science topics such as: problem solving, design strategies, organization of data, approaches to processing data, analysis of potential solutions, data structures, abstraction and the ethical and social implications of computing. The course uses the programming language Java to emphasize object-oriented programming methodology with a focus on problem solving and algorithm development.

Prerequisites: Students must have an 87% semester average and 80% on the final project in Intro to Computer Science.

Note: All students take the AP Exam in May.

FINE AND PERFORMING ARTS DEPARTMENT

Course Numbers: 7801, 8101 – 8911

Courses are: College Preparatory (CP) or college preparatory of a more rigorous nature are indicated by Honors (H), High Honors (HH), or Advanced Placement (AP).

Requirements: All students are required to take 1 quarter of Music Appreciation and 1 quarter of Art Appreciation during Freshman Year.

Sophomores are required to take a semester of a Fine or Performing Arts course or the equivalent. This requirement can be fulfilled the following ways:

- 1) One semester of a Fine or Performing Arts course; or
- 2) One year of the Instrumental Music Lessons (Pull Out) course; or
- 3) Two years of Academy Orchestra course.

FINE ARTS

Art I (8161) GRADE 9 QUARTER / REQUIRED

This beginning course will explore a variety of visual art media. The course is designed to expose the student to art elements, principles and styles through art projects that promote problem solving, risk taking, team work and creativity. Each student will have the opportunity to express herself through two-dimensional and three-dimensional projects in drawing, painting, mixed media, and sculpture. Rubrics are introduced. Critiques are conducted.

Art II (8261) GRADE 10, 11, 12 SEMESTER / ELECTIVE

This course will ask the questions: What is Art? Why do we create art? Students will expand their voice, style and growth as artists through the exploration and investigation of various mediums, such as printmaking, painting and three-dimensional materials. Their understanding of the versatility of materials will increase their technical proficiency and enhance their visual expression. Students will learn to become better visual communicators and critical thinkers through theme based projects, as well as regular in-class critiques and written reflections.

Note: Priority for students who intend to take Studio Art (8474 or 8462).

Drawing (8271) GRADE 10, 11, 12 SEMESTER / ELECTIVE

Students will experience drawing through a formal approach of learning “to see.” Emphasis will be placed on developing the students’ perceptual abilities by drawing from life such as still-life and figural drawings, as well as drawing from memory. Skills and techniques taught in drawing include contours, space, relationships, lights & shadows, and proportions. Students will explore a variety of media and be responsible for sketchbook assignments. There will be six to seven major projects per quarter based on rubrics as well as smaller units. Students will participate in critiques.

Note: Priority for students who intend to take Studio Art (8474 or 8462).

Painting (8861) GRADE 10, 11, 12 SEMESTER / ELECTIVE

Students gain confidence and technical skills in the acrylic paint medium through the exploration of still life, landscape and observational studies. Emphasis is placed on the formal elements of art, particularly the use of line, value and color to create the illusion of space and light. Traditional and experimental painting techniques, including monochromatic painting, under-painting, glazing and optical mixing are covered. All students are expected to complete a variety of representational and expressive paintings, based on rubrics and grounded in art historical styles, resulting in the completion of a final painting portfolio. Regular in-class group critiques provide essential feedback for optimum artistic growth throughout the semester.

Note: Priority for students who intend to take Studio Art (8474 or 8462).

Color and Design (8361) GRADE 10, 11, 12 SEMESTER / ELECTIVE

The understanding of the complexities of color is essential for any artist. This course is for sophomores, juniors, and seniors who wish to become more proficient in the use and mixing of color. Color Theory will be addressed in relation to color mixing and optical blending as well as color comparisons, relations, and interactions. Students will become skilled in color matching and mixing through a variety of problem-based projects in painting and drawing media. Composition and fashion/jewelry design will be addressed. Six major projects based on rubrics are required. Students will participate in group critiques as well as color-related experiments.

Graphic Arts (8371) GRADE 10, 11, 12 SEMESTER / ELECTIVE

Visual literacy is essential to success in the modern world. Students will be introduced to the visual language of commercial graphic design in this course. By solving a series of problems, students will explore the areas of typography, color theory, layout design, package design, illustration and advertising. Projects include designing an album cover, business card, book jacket and a font, as well as color experiments. Traditional manual rendering techniques, including calligraphy and illustration, as well as *Adobe Photoshop* will be introduced. The sharing and “selling” of ideas and creative problem solving will be stressed in class through group discussions and critiques. This class meets in the state-of-the-art Mac Lab.

Studio Art I-Honors (8362) GRADES 11, 12* YEAR/ELECTIVE

This course is for juniors intending to pursue a career, or serious course of study in Fine Arts at the college level. While focusing on the creation and development of their artist’s portfolio, students will gain increased proficiency in the use of a variety of drawing, painting, collage, and printmaking media. Oil-painting will be introduced. Emphasis will be placed on drawing and painting from close observation of still life, nature, and the human form. By completing a series of projects, students will explore a variety of topics and themes, including the influence of contemporary artists and art theory on “making art.” Group critiques and monthly creative sketchbook assignments are required. Students must have proficient drawing and painting skills prior to entering. The ability to work independently without constant supervision is essential for success in this course. Limited Enrollment.

Prerequisite: Drawing/Painting/Art II or relevant experience with Studio Art teacher. Students must have a portfolio interview with the department in January during sophomore year to determine acceptance for the course. All students will complete summer assignments in preparation for Studio Art I.

Studio Art - 2D Design/Drawing – Advanced Placement (8474) GRADE 12 YEAR/ELECTIVE

This intensive version of Studio Art II is designed for the serious advanced art student who intends to pursue a course of study in Fine Arts at the college level *and* create a portfolio which fulfills the requirements of the AP Studio Art Exam. Students will further develop their skills in 2-D media, an understanding of formal and conceptual relationships, and their identity as an artist. Concurrent with Studio Art II Honors, this course emphasizes the conceptual and technical problems proposed by the AP Studio Art exam. This exam requires the completion of 21 art pieces, 16 of which must be based on a sustained investigation (theme) with documentation and written analyses. Students will participate in both formal and informal group critiques and complete written reflections about their work. Students must commit to independent study, experimentation and innovation without constant supervision. In addition to class, students must commit to four independent lab periods per cycle, when the instructor is not accessible for personal help. This class is responsible for painting the mural and mounting the annual Art Show. Limited enrollment.

Prerequisite: Studio Art I students must have a portfolio interview with the department in January during junior year to determine acceptance for the course. All students will complete summer assignments in preparation for Studio Art II.

Art History - Advanced Placement (8464) GRADE 11, 12 YEAR / ELECTIVE

This course is designed to give students a rigorous introductory college level course in art history from the early civilization to the postmodern era. The course will provide an understanding and knowledge of architecture, sculpture, painting and other art forms within diverse historical and cultural contexts. In the course, students examine and critically analyze major forms of artistic expression from the past and the present from a variety of

cultures. Art History emphasizes understanding works in context, considering such issues as patronage, gender, and the function and effects of works of art. Course textbooks are the current edition of *Gardner's Art Through the Ages* and *Barron's AP Art History*. Course requirements include daily preparation for class discussions and quizzes, tests, essays, and one museum trip each quarter. Limited enrollment.

Prerequisite: This course is open to honors students who have maintained an average of 90% or above in English-H and History-H and 85% or above in English-HH and History-HH. Students must be committed to an intense workload of frequent reading and writing assignments.

Note: All students are required to take the AP Exam in May. This course fulfills the one year Humanities graduation requirement.

Photography I (6711) GRADE 10, 11, 12 SEMESTER/ELECTIVE

This introductory digital photography course is designed to teach students basic camera and post-editing techniques, while expanding their voices as artists through this medium. Students will become proficient with understanding the camera functions and using *Adobe Photoshop* in processing final digital images and professional artist-quality prints. Projects will be based on technical and theme-based projects. During the semester, students will cultivate their eye for composition and various subject matter. Projects are based on rubrics and regular in-class critiques are implemented. This class meets in the state-of-the-art Mac Lab.

Prerequisite: Must be comfortable using computers. Basic computer skills.

Required Material: digital camera

Photography II (6721) GRADE 10, 11, 12 SEMESTER/ELECTIVE

This course continues to explore the digital medium as an art form with the emphasis placed upon individual growth. Students will further explore composition and their aesthetic sensibilities in the theme-based projects. Students will use *Adobe Photoshop* to post-edit their photos. The class will also explore different alternative processes with the digital and technological equipment. This class meets in the state-of-the-art Mac Lab.

Prerequisite: Photography I (6711) or relevant experience.

Required Material: digital camera

Digital Design (7801) GRADE 10, 11, 12 SEMESTER/ELECTIVE

Make beautiful pictures with the click of your mouse! This course emphasizes the development of technical skills in Adobe Photoshop software through a variety of design, technology and art-related projects. Students gain mastery in a variety of Photoshop tools and applications, including tools and palettes for drawing and painting, making selections, manipulating layers, adjustments, masks, filters and composition. All projects incorporate creative problem-solving, personal expression, the exploration of art-related styles and themes and written reflections. New digital techniques, including overprinting, scanning and photo-retouching may also be addressed. Students will have the opportunity to manipulate their own digital photographs in most projects. All coursework will result in a final digital portfolio. Limited to 16 students per section. This course fulfills the graduation requirements for fine and performing arts.

Prerequisite: Curiosity, ability to work independently. Basic computer skills.

Required Materials: Digital Camera

PERFORMING ARTS

Music Appreciation (8101) GRADE 9 QUARTER / REQUIRED

What makes music, music? Just as you need certain ingredients to make your favorite food, so you need certain ingredients to create a piece of music. These ingredients are the elements of music: rhythm, melody, harmony, tone color, texture and form. They are the musical concepts that the students will experience and study through listening exercises and hands-on musical composition.

AP Music Theory (8804) GRADE 10, 11, 12 YEAR/ELECTIVE

AP Music Theory is an introductory college-level course that allows students to cultivate their understanding of music theory through analyzing performed and notated music. Students will explore aspects of melody, harmony, texture, rhythm, form, music analysis, elementary composition, as well as music history and style. Musicianship skills such as rhythmic, melodic and harmonic dictation, as well as other listening skills such as sight-singing and keyboard harmony will be covered in this course. The student's ability to read and write music notation, as well as basic proficiency on either voice or an instrument are fundamental to this course.

Prerequisite: Must have at least a 95% in Music Appreciation

Note: All students are required to take the AP Exam in May. This course fulfills the one year Humanities graduation requirement.

Musical Theater (8811) GRADE 10, 11, 12 SEMESTER / ELECTIVE

This course is NOT a performance based course, but rather students will be asked to view Broadway musical performances in class and assess them. There is absolutely no singing involved in this class. Musicals will range from the classical (*West Side Story*) to the contemporary (*Hamilton*) and they will give students the opportunity to see musicals from a new and exciting perspective. Assessments will be in the form of projects and creative assignments.

Theater Arts I (8821) GRADE 10, 11, 12 SEMESTER / ELECTIVE

This class is for non-actors as well as those who love to be on the stage! Students will begin developing understandings, skills, and enjoyment of the performing arts. This course will help the beginning actor and non-theater student create believable characters using improvisation, imagination, and observation. The class will take you through theatre history with exercises in Greek drama, Italian Commedia del'Arte, and Shakespeare to name a few. It is a great course if you want to enhance your public speaking skills or your overall confidence.

Theater Arts II (8831) GRADE 10, 11, 12 SEMESTER / ELECTIVE

Continues development of skills acquired in Theater Arts I. Helps students develop believable characters while working on acting exercises and scenes from contemporary dramatic literature. Actors are invited to more closely examine the playwright's intentions as well as theatrical terminology. Opportunities to engage in directing are also offered.

Prerequisite: Theater Arts I

Musical Activism (8841) GRADE 10,11,12 SEMESTER/ELECTIVE

Throughout history, people have used music to bring awareness to important social justice issues. Music has been used to alleviate human suffering, bring about positive social change, and to bring people together. In this course, students will look at historical moments through a musical lens and identify the social, psychological, and political impact that music can have.

Piano Performance (8851) GRADE 10,11,12 SEMESTER/ELECTIVE

Piano Performance is a self-paced course designed for students with varying levels of experience. From beginner to advanced, students will spend class time working on repertoire and exercises that are designed to develop their keyboarding skills. Classes will be split between individual practice time, one-on-one instruction, as well as group breakout sessions to learn new techniques. Students will be evaluated based on personal improvement and achievement.

Music Theory (8881) GRADE 10, 11, 12 YEAR/ELECTIVE

Students will study the building blocks of music. Using both written and aural skills, students will learn to analyze key signatures, modes, melodies, intervals and chord progressions using traditional four part writing practices. Musicianship skills such as dictation, sight-singing and keyboard skills will be included. Students will also study the use of form. These skills will be expanded through the course to include more complex music and the creation of student compositions.

Theater Arts Independent Study (8891)**GRADE 12****SEMESTER/ELECTIVE**

For seniors who have completed Theatre Arts I and II and want a personalized theatre class. Student will meet with teacher to discern topics within the theater arts discipline to create an individual student-defined course, goals and objectives. Independent Study must be approved.

Academy Orchestra**(8911)****GRADE 9, 10, 11 12****YEAR / ELECTIVE**

This is a performance course which provides woodwind, brass, percussion, and string students the opportunity to rehearse, study and perform a variety of classic and contemporary orchestral literature. Students wishing to enroll in this course must have basic performance skills on their instrument and must participate in all Academy Orchestra performances.

Prerequisites: Students must demonstrate some proficiency on their instrument. No instruments will be provided by the Academy. Students must rent or provide their own instrument.

Note: Two years of this course fulfills one semester of the Fine & Performing Arts requirement.

INSTRUMENTAL MUSIC LESSONS

Instrumental Music Lessons (Pull-Out) (8901)**GRADE 9, 10, 11, 12****YEAR/ELECTIVE**

Students will learn the skills involved in playing a musical instrument.

Students may sign up for individual lessons or be a part of a small group lesson.

Instruction is offered on the following instruments:

Woodwinds (clarinet, flute, oboe, saxophone)

Brass (trumpet, trombone, French horn)

Strings (violin, viola, cello, string bass), and Percussion

Students participating in the Academy Orchestra who are not studying privately are encouraged to register for this class. Participation in the Academy Orchestra is required for all students enrolled in lessons. No instruments are provided by the Academy. Students must rent their own instruments.

Note: Completion of the course for one year fulfills the sophomore year Fine and Performing Arts Requirement of one semester.

Note: A numeric grade is awarded for this course and incorporated in your GPA.

ADDITIONAL FINE AND PERFORMING ARTS COURSES
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Humanities–Honors/Middle College Program (MCP) (8452)**GRADE 11, 12 YEAR/REQUIRED**

Humanities is the study of art, music, theater, dance, architecture and literature primarily to develop a cultural awareness through several historical periods. Assessments will be in the form of class discussion, projects, and creative assignments.

Prerequisite: In general, one year of Fine and Performing Arts at the college preparatory level.

Note: This course fulfills the one year Humanities graduation requirement. This course is equivalent to a freshman level humanities college course. Students enrolled in this course are eligible to earn college credits from Fairleigh Dickinson University Middle College Program. Separate online registration in September is required through FDU.

PHYSICAL EDUCATION DEPARTMENT

Course Numbers: 9101 - 9401

All courses are College-Preparatory.

Requirement: All students are required to take 4 years of the Physical Education sequence, and 3 quarters of Health.

Physical Education I, II, III, and IV (9101, 9201, 9301, 9401) GRADE 9, 10, 11, 12 YEAR/REQUIRED

The goal of the course is to provide students with a wide variety of activities to maintain their wellness. Each class will begin with a daily reflection that focuses on social emotional components. Elements of project adventure and cooperative games and team sports are included in each grade level. Lifetime activities such as tennis, archery, badminton, golf, bowling, yoga and pilates are offered. Physical fitness is incorporated into all aspects of the curriculum. A self-assessment of their fitness level is required in the fall and spring. This is used to provide students with an opportunity to set their own fitness goals.

Health I Freshmen (9111) GRADE 9 SEMESTER/REQUIRED

Each class will begin with a 10 minute daily reflection to help students become their best selves! The goal of these activities is to help individuals create a life that is motivated, optimistic, vibrant, empathetic and strong. The main focus of the course is to encourage students to use the decision making techniques that are presented in class to promote overall health and reach their optimum level of wellness. Through class discussions, research projects, presentations and skits, girls will learn how to make the best decisions for a healthy lifestyle while developing a good sense of self, strong character and healthy relationships.

Health II Sophomores (9211) GRADE 10 QUARTER/REQUIRED

This course is designed to provide accurate health information to help students maintain a healthy lifestyle. The goal of the course is to recognize influences on healthy behaviors and be able to use skills learned to make decisions that would prevent health risks. Students will analyze family life topics and practice decision making skills through class discussions, research assignments, group work and written reflections.

COMMUNITY SERVICE

Community Service is a requirement for graduation at the Academy. It consists of 20 hrs. of service which has been approved by the Campus Ministry Office, a completed evaluation form, and a three to four-page reflection paper. The guidelines for all aspects of this graduation requirement are set forth in the Student Handbook. This requirement must be completed by mid-September of junior year. Refer to the Student Handbook and the Campus Ministry BlackBaud page for details.

AHA GRADUATION AUDIT

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**Seniors are encouraged to take
ONLY 7 courses**

MINIMUM REQUIREMENTS FOR GRADUATION

1	RELIGIOUS STUDIES I		RELIGIOUS STUDIES II		RELIGIOUS STUDIES III		RELIGIOUS STUDIES IV	
2	ENGLISH I		ENGLISH II		ENGLISH III		ENGLISH IV	
3	WORLD HISTORY		US HISTORY I		US HISTORY II		HUMANITIES-H/MCP, or ART HISTORY - AP	
4	MATHEMATICS (ALGEBRA I or GEOMETRY)		MATHEMATICS		MATHEMATICS		ELECTIVE (2 semester or 1 year course)	
5	SCIENCE - BIOLOGY		SCIENCE – CHEMISTRY		SCIENCE - PHYSICS		ELECTIVE (2 semester or 1 year course)	
6	WORLD LANGUAGE		WORLD LANGUAGE		WORLD LANGUAGE		ELECTIVE (2 semester or 1 year course)	
7	TECH Computer Applications (1 semester)	FINE & PEFORMING ARTS (1 quarter each of Art & Music Appreciation)	FINE & PERFORMING ARTS (1 semester)	ELECTIVE (1 semester)	ELECTIVE (2 semester or 1 year course)		ELECTIVE (2 semester or 1 year course)	
8	PHYSICAL ED I / HEALTH		PHYSICAL ED II / HEALTH		PHYSICAL EDUCATION III		PHYSICAL EDUCATION IV	

Religious Studies	4 years	Fine & Performing Arts	2 years (includes either Humanities or Art History)
English	4 years	Physical Education	4 years
History	3 years	Electives	Equivalent of 2.5 year courses
Mathematics	3 years	Technology	1 semester
Science	3 years	Community Service	20 hrs Completed before Jan of Junior year
World Language	3 years (of the same language)	Health	2 semesters

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FULL YEAR COURSES

<i><u>9th Grade</u></i>	<i><u>10th Grade</u></i>	<i><u>11th Grade</u></i>	<i><u>12th Grade</u></i>
Religion:	Religion:	Religion:	Religion:
God's Revelation in Scripture Prayer: SSND Charism and Spirituality	Morality: Life in Christ Who is Jesus Christ? Catholic Social Teaching: Living As a Disciple of Jesus Christ in Society	World Religions Sacraments: Encounters with Jesus	Christian Lifestyles Death & Dying (Quarter) Ethical Issues in Today's World Search for Meaning (Quarter) Peacemaking (Quarter)
English:	English (American Literature):	English: (English Literature)	English (World Literature):
English I English I Honors English I High Honors	English II English II Honors English II High Honors	English III English III Honors English III - High Honors	English IV English IV Honors English IV Literature & Comp AP
History:	History:	History:	History:
World History World History - Honors World History - High Honors	US History I US History I- Honors US History I - High Honors	US History II US History II – Honors US History II - AP	Government & Politics – AP International Studies (MCP)
Math:	Math:	Math:	Math:
Algebra I Algebra I - Honors Algebra I - High Honors	Geometry P&S Geometry - Honors P&S Geometry - High Honors	Algebra II Algebra II - Honors Algebra II - High Honors	Precalculus Precalculus - Honors Precalculus - High Honors
Algebra I Algebra I - Honors Algebra I - High Honors	Geometry P&S Geometry - Honors P&S Geometry - High Honors and: Algebra II Algebra II - Honors Algebra II - High Honors	Probability & Statistics Statistics - AP Precalculus Precalculus - Honors Precalculus - High Honors	Probability & Statistics Statistics - AP Calculus Calculus - High Honors/MCP Calculus – AP AB and BC
Geometry P&S Geometry- Honors Algebra I/P&S Geo - HH or: P&S Geometry– High Honors	Algebra II Algebra II – Honors Algebra II – High Honors	Precalculus Precalculus – Honors Precalculus – High Honors Probability & Statistics Statistics – AP Computer Science A – Advanced Placement	Calculus Calculus – High Honors/MCP Calculus – AP AB and BC Probability & Statistics Statistics - AP Computer Science A – Advanced Placement
Algebra II Algebra II - Honors Algebra II - High Honors	Precalculus Precalculus - Honors Precalculus - High Honors	Calculus Calculus - High Honors/MCP Calculus – AP AB and BC Probability & Statistics Statistics – AP Computer Science A – Advanced Placement	Calculus Calculus - High Honors/MCP Calculus – AP AB and BC Probability & Statistics Statistics – AP Computer Science A – Advanced Placement

Science:	Science:	Science:	Science:
Biology	Chemistry	Physics, CP, H	Physics – CP, H, AP
Biology – Honors	Chemistry – Honors	Biology – AP	Anatomy & Physiology
	Chemistry – High Honors	Chemistry – AP	Anatomy & Physiology – Honors/MCP
		Environmental Science	Biology – AP
		Physics 1 – AP	Chemistry – AP
			Environmental Science/MCP

World Languages:	World Languages:	World Languages:	World Languages:
French I or French I-Honors	French II or French II-Honors	French III or French III-Honors	French IV- H/MCP or French V AP
French II- CP or Honors	French III or French III- Honors	French IV-Honors/MCP, V-AP	French V-AP
Italian I or Italian I Honors	Italian II or Italian II-Honors	Italian III or Italian III-Honors	Italian IV- H/MCP or Italian V AP
Italian II- CP or Honors	Italian III or Italian III-Honors	Italian IV-Honors/MCP	Italian V – AP
	Latin II – Honors	Latin III Honors	Latin IV High Honors
Latin I-Honors	Latin III-Honors	Latin III High Honors	Latin V – AP
Latin II- Honors	Latin III- High Honors	Latin IV High Honors, V AP	Latin VI – Lyric & Elegiac Poetry – Honors
Spanish I or Spanish I H	Spanish II or Spanish II-Honors	Spanish III CP or H or HH	Span IV- CP or H
Spanish II- CP or Honors	Spanish III- CP or H or HH	Spanish IV-CP or H	Spanish V – AP

All Honors, High Honors, and AP have prerequisites. Please refer to the Curriculum Guide for more information and full course descriptions. 10th, 11th, and 12th Grade you can double up in any language at any level/year.

ELECTIVE AND SEMESTER COURSES

9th Grade

10th Grade

11th Grade

12th Grade

English/Communications:	English/Communications:	English/Communications:
Communications	Communications	Communications
Journalism	Journalism	Journalism
Film	Film	Film
East Asian Literature	East Asian Literature	East Asian Literature
Creative Writing	Creative Writing	Creative Writing
		Creative Writing
History:	History:	History:
Economics	Economics	Economics
Macroeconomics – AP	Macroeconomics – AP	Macroeconomics – AP
		Psychology
		Sociology
		International Studies-H/MCP (year)
Mathematics:	Mathematics:	Mathematics:
Introduction to Creative Coding	Introduction to Creative Coding	Introduction to Creative Coding
Introduction to Computer Science	Introduction to Computer Science	Introduction to Computer Science
Science:	Science:	Science:
Engineering: Models and Tool Kits	Engineering: Models and Tool Kits	Engineering: Models and Tool Kits
Robotics and Automation	Robotics and Automation	Robotics and Automation
	Environmental Science	Sports Medicine
		Environmental Science

Technology (required):	Technology:	Technology/Business:	Technology/Business:
Computer Applications	Digital Design	Digital Design	Digital Design
		Digital Media	Digital Media
	Personal Finance	Personal Finance	Personal Finance
		Principles of Business-I	Principles of Business-I
	Marketing	Marketing	Principles of Business - II
			Principles of Accounting - H (year)
			Marketing
Fine Arts: (required):	Fine Arts::	Fine Arts::	Fine Arts::
Art I (quarter)	Art II	Art II	Art II
	Drawing	Drawing	Drawing
	Painting	Painting	Painting
	Color and Design	Color and Design	Color and Design
	Graphic Arts	Graphic Arts	Graphic Arts
	Photography I	Studio Art I - Honors (year)	Studio Art I - Honors (year)
		*Art History - AP (year)	Studio Art II - AP (year)
			*Art History - AP (year)
		Photography I	Photography I
		Photography II	Photography II
Music Appreciation (quarter)	Instrumental Ensemble	Instrumental Ensemble	Instrumental Ensemble
Instrumental Music Lessons	Musical Theater	Musical Theater	Musical Theater
	Theater Arts I	Theater Arts I	Theater Arts I
	Theater Arts II	Theater Arts II	Theater Arts II
	Music Theory (year)	Music Theory (year)	Music Theory (year)
	*Instrumental Music Lessons (year)	*Instrumental Music Lessons (year)	Theater Arts -Independent Study
			*Instrumental Music Lessons (year)
		*Humanities - H (year)	*Humanities - H (year)
Academy Orchestra	Academy Orchestra	Academy Orchestra	Academy Orchestra
	AP Music Theory	AP Music Theory	AP Music Theory
	Piano Performance	Piano Performance	Piano Performance
	Musical Activism	Musical Activism	Musical Activism
Physical Education:	Physical Education:	Physical Education:	Physical Education:
Health I	Health II		

Electives are a Semester unless otherwise noted. All Honors, High Honors, and AP courses have prerequisites. Please refer to the Curriculum Guide for more information and a full description of courses.

*Students must take Humanities - H OR AP Art History – AP OR AP Music Theory to fulfill their Fine & Performing Arts requirement.

*Two years of Pull-Out Lessons is equal to one semester of a fine and performing arts credit required.

AHA ADVANCED PLACEMENT PROGRAM Course Offerings
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	Sophomore Year	Junior Year	Senior Year
English Literature & Composition			X
US History		X	
US Government & Politics			X
Macroeconomics	X	X	X
Statistics		X	X
Calculus AB		X	X
Calculus BC		X	X
Computer Science A		X	X
Biology		X	X
Chemistry		X	X
Physics 1		X	X
Physics 2			X
French Language and Culture		X	X
Italian Language and Culture		X	X
Latin		X	X
Spanish Language and Culture		X	X
Studio Art - 2D Design/Drawing			X
Art History		X	X
Music Theory	X	X	X
English Language & Composition		X (test only) Students enrolled in English III – HH only	Rev. 1/23

ADVANCED PLACEMENT (AP) POLICY

Several academic disciplines offer Advanced Placement (AP) Courses to students who have demonstrated through past achievement that they are able to handle college-level courses in high school. Candidates must meet all appropriate criteria for placement in these courses. These courses are rigorous. Students are asked to discuss their participation in these classes with their teachers, parents and counselors. **Students are required to complete summer assignments and readings prior to the start of some AP courses. Therefore, no student may transfer in September to an AP course which requires summer assignments and readings.**

Once enrolled, students are expected to fulfill all course requirements including sitting for the AP exam in May. ***Consistent lack of achievement in the course may result in teacher's recommendation that the student be withdrawn from the AP course.** Further, at the teacher's discretion, students may be required to take both the AP exam and the final exam. Such decisions may be rendered up to and including the day after the administration of the AP exam in that subject.

AP exams are administered at the Academy for a fee set by the College Board (approximately \$100 per exam). The exams are scored by the College Board. Colleges may grant credit based upon the student's AP score. Students who for any reason do not take the AP exam on the designated date must take the AP Late-Testing exam on the date and time determined by the College Board and pay the Late-Testing fee (approximately \$45 per exam).

By enrolling in an AP course at AHA, you're letting colleges and universities know that you have what it takes to succeed in a competitive college undergraduate environment. AP courses signal to admissions officers that you've undertaken the most rigorous classes your high school offers. In the increasingly competitive admissions process, this knowledge can be very valuable.

AP Exams are administered to enrolled students only. However, AHA may administer AP exams on a space available basis to students enrolled in our neighboring public school district, Northern Valley School District – Demarest (Demarest, Closter, Haworth) and our neighboring Town of Cresskill, Cresskill High School.

AP EXAMS IN SUBJECTS NOT OFFERED AT AHA

Although AHA offers a comprehensive AP program to our students, there are other AP courses available which can be taken at AHA or off-campus. Students may not take an AP exam in a subject offered at AHA without being enrolled in the AP course at AHA.

AP exams in disciplines not offered at AHA may be administered to students who are enrolled in, or have successfully completed, a College Board, Inc. approved course or program in that subject area. Students seeking to take an AP exam in a discipline offered at AHA, but are not enrolled in the course may do so under specific guidelines outlined in the AP Policy Agreement Form. Before enrolling in any program:

- Speak with your College Counselor regarding this academic pursuit
- Speak with the AP Coordinator, Mrs. Goff, regarding registration and payment procedures. Not all AP exams may be taken at AHA. The AP Coordinator reserves the right to determine which exams can be offered at AHA in a given year.
- If approved, enroll in a College Board, Inc. Approved Course.
- **If student chooses to self-study, the AP Exam(s) may not be taken at AHA.**
- Complete the AP Policy Agreement Form (found on OACC Blackbaud) and attach confirmation of enrollment in a College Board, Inc. approved course.

These items should be addressed at the beginning of the academic school year in which the student would like to take an exam. The deadline to submit the AHA AP Policy Agreement Form to Mrs. Goff, is no later than the last school day in September.

Students enrolled in a College Board approved course will not receive recognition or credit on their AHA transcript. In addition, students taking an AP exam in a discipline offered at AHA, but are not enrolled in the course, will not receive recognition or credit on their AHA transcript. However, students can report their scores on their College Applications or College Resume to enhance their overall profile.

COLLEGE BOARD APPROVED PROGRAMS

Johns Hopkins Center for Talented Youth – CTY Online
http://cty.jhu.edu/ctyonline/courses/advanced_placement/

Apex Learning Virtual High School
<https://www.apexlearningvs.com/advanced-placement/>

VHS Learning

<https://www.vhslearning.org/educators/what-vhs-offers/advanced-placement>

One Schoolhouse

<https://www.oneschoolhouse.org/parent-information.html>

If the AP exam you would like to take is not available at AHA:

Visit the AP Course Ledger Site (<https://apcourseaudit.inflexion.org/ledger/>) to find a school nearest to you, or call or email AP services and they can find a testing site nearest to you.

AP Services – Phone: 888-225-5427

Email: <https://form.collegeboard.org/f/ap-services-inquiry>

If you have any questions, please speak with Mrs. Goff, AP Coordinator at rgoff@holyangels.org or 201-768-7822 ext. 206.

AP COURSE DESCRIPTIONS AND REQUIREMENTS

English IV Literature & Composition – Advanced Placement (1404) GRADE 12 YEAR

This college level course covers a variety of genres and periods. Emphasis is placed on interpretation of ideas and themes, and other literary elements, as well as evaluation of style. The format of this course allows for the development of the unique responses of each student. Independent research and critical written analysis are stressed. A literary research/term paper is also required.

Prerequisites: **Honors Students** – 95% Average, and a 92% average in Essay/Writing (including the Literary Term Paper), sit for the AP Literature Qualifying Exam in February.

High Honors Students – 90% Average, and a 90% average in Essay/Writing

Note: All students take the AP Exam in May.

United States History II – Advanced Placement (2304) GRADE 11 YEAR

This U. S. History course is designed to offer junior students who are capable of pursuing college-level studies in history the opportunity of working at an advanced level. Critical essays based on assigned outside readings, DBQs, and research/position papers are required regularly.

Prerequisite: US History I – High Honors

Minimum average of 90% in US History I – High Honors and 90% in English II

Department recommendation and department administered qualifying test.

Note: All students take the AP Exam in May.

Note: All students are required to complete a summer assignment which is due the 1st day of class in September. This assignment is in addition to the Holy Angels summer reading program.

Macroeconomics- AP (2804) GRADE 10, 11, 12 SEMESTER / ELECTIVE

This is a one semester course taught in the spring that is open to tenth, eleventh and twelfth graders who took the Economics elective and scored over an 88% for their cumulative grade. The course is rigorous and will require hard work, effort, and significant time studying outside the classroom. Many different topics will be taught including: international trade, aggregate supply and demand, reading and using economic indicators (CPI, GDP, and Gini Index), the pricing system, the banking system, monetary policy, fiscal policy, and finance. The course will also improve student's critical thinking skills, their ability to read and interpret graphs, and their knowledge of finance and public policy.

Prerequisites: Having taken the Economics course, received a minimum grade of 88% and Economics teacher recommendation.

Government and Politics U.S. – Advanced Placement (2404) GRADE 12 YEAR/ELECTIVE

This course is designed to offer senior students a college level survey of American government. Major emphasis is placed on political ideology, the evolution of democratic institutions and the political behavior of the American electorate.

Prerequisite: Minimum average of 90 in U.S. History I-HH and U.S. History II-AP
Minimum average of 92 in U.S. History I-H and U.S. History II-H
Minimum average of 92 in English-H or HH
Department administered qualifying test. Department recommendation.

Note: All students are required to complete a summer assignment which is due on the first day of class in September. All must take the AP exam in May.

Calculus (AB) -Advanced Placement (3404) GRADE 11, 12 YEAR / ELECTIVE

Students will continue to study limits and continuity begun in Precalculus. An introduction to the basic concepts of differential and integral calculus with applications to velocity, acceleration, curve sketching, related rates and max-min problems will be given. Techniques of differentiation and integration will be studied and applied to areas, radioactive decay, and volumes and surface areas of revolution. The theoretical development of each of these topics will be stressed. The course concludes with the Advanced Placement Examination in May. TI-84 Graphing Calculator is required.

Prerequisites: A minimum cumulative average of 90% in Precalculus-High Honors. Students in Precalculus-H may take Calculus (AB)-Advanced Placement if they have a minimum average of 96% in Precalculus-H. These students will be expected to make up a chapter on the study of limits.

Note: All students take the AP Exam in May.

Note: All students are required to complete a summer assignment as further preparation. There will be an assessment based on the summer assignment during the first week of school in September.

Calculus (BC) -Advanced Placement (3414) GRADE 11, 12 YEAR / ELECTIVE

This course covers all topics of Calculus of functions of a single variable as described in the AP Calculus BC topic outline in the AP Calculus Course Description. Calculus BC includes all topics covered in Calculus AB plus additional topics including Techniques of Integration, parametric, vector, and polar functions; sequences and series (including the Taylor and Maclaurin series). It is designed to develop the student's understanding of the concepts covered in the first two semesters of college level Calculus. The course concludes with the Advanced Placement Examination in May. TI-84 Graphing Calculator is required.

Prerequisites: A minimum cumulative average of 95% in Precalculus-High Honors.

Note: All students take the AP Exam in May.

Note: All students are required to complete a summer assignment as further preparation. There will be an assessment based on the summer assignment during the first week of school in September.

Statistics-Advanced Placement (3424) GRADE 11, 12 YEAR / ELECTIVE

This course is open to juniors and seniors who have successfully completed Precalculus-Honors or Precalculus-High Honors or who are taking either of these courses simultaneously with AP Statistics. The focus of this course is on problem solving. The course will introduce students to the major concepts and tools for collecting, analyzing and drawing inferences from data. Students will concentrate on the following topics: exploring data, planning a study, anticipating patterns and statistical inferences. TI-84 Graphing Calculator is required.

Prerequisites: A minimum average of 90% in Math-Honors and English-Honors courses or a minimum average of 88% in Math-High Honors and English-High Honors courses. Precalculus must have been completed or taken simultaneously with this course. Teacher recommendation is also required.

Note: All students take the AP Exam in May.

Computer Science A - Advanced Placement (3704) GRADE 11, 12 YEAR / ELECTIVE

The AP Computer Science A course is equivalent to a first-semester, college-level course in computer science. The course continues to make students familiar with fundamental computer science topics such as: problem solving, design strategies, organization of data, approaches to processing data, analysis of potential solutions, data structures, abstraction and the ethical and social implications of computing. The course uses the programming language Java to emphasize object-oriented programming methodology with a focus on problem solving and algorithm development.

Prerequisites: Students must have an 87% semester average and 80% on the final project in Intro to Computer Science.

Note: All students take the AP Exam in May.

Biology- Advanced Placement (4704) GRADE 11, 12 YEAR

This college level course prepares the student for the Advanced Placement Biology Examination. Cellular and molecular biology, genetics, evolution, biotechnology, plant and animal systems, and ecology will be studied in depth. The class focuses on the inquiry-based learning of essential concepts and the content that supports them. Laboratory investigations help develop advanced inquiry and reasoning skills. Graphing calculators are required.

Prerequisites: Minimum average of 90% in Biology-H or 93% in Biology.

Minimum average of 90% in Chemistry-HH or 95% in Chemistry-H or 97% in Chemistry.

Minimum of 80% on semester exams. (Teacher recommendations and prior attendance record will be considered).

Chemistry-Advanced Placement (4714) GRADE 11, 12 YEAR

This college level course prepares students for the Advanced Placement Chemistry Examination. Structure of matter, states of matter, gas laws, redox reactions, stoichiometry, chemical reactions, thermochemistry, molecular structure, equilibrium, kinetics, organic chemistry, nuclear chemistry, acid-base theory, and electrochemistry will be studied in depth. Descriptive chemistry will be covered in depth and laboratory exercises will reinforce the principles learned. The class focuses on the inquiry-based learning of essential concepts and the content that supports them. Laboratory investigations help develop advanced inquiry and reasoning skills. Graphing calculators are required.

Prerequisites: Minimum average of 96% in Biology or 92% in Biology-H

Minimum average of 95% in Chemistry-H or 90% in Chemistry-HH, or 97% in Chemistry.

Minimum average in Algebra I or in Geometry of 95%, Algebra I H or in Geometry H of 90%, or Algebra I – HH or in Geometry HH of 87%. (Teacher recommendations and prior attendance record will be considered).

Physics 1- Advanced Placement (4504) GRADE 11, 12 YEAR

This course is the equivalent to a first-semester college course in general physics. It is a fast-paced inquiry-based laboratory course meant to prepare students planning to major in engineering or the sciences. A thorough background in algebra and knowledge of trigonometry are required. Emphasis will be placed on conceptual understanding and mathematical problem solving. The course covers topics including Newtonian mechanics (including linear and rotational kinematics, dynamics, and momentum); work, energy, and power; and mechanical waves and sound. It will also introduce electric circuits. Scientific or graphing calculators are required.

Prerequisites: Minimum average in Chemistry H of 95%, Chemistry HH of 91% or 97% in Chemistry.

Minimum average in Algebra I H or Geometry H of 95%, or Algebra I HH or Geometry HH of 91%. More recent grades in Algebra II and/or Precalculus will be considered: H level - 92%, HH level - 90%. (Teacher recommendations and prior attendance record will be considered).

Physics 2- Advanced Placement (4414) GRADE 12 YEAR

This algebra-based course is the equivalent to a second-semester college course in general physics. It is a fast-paced inquiry-based laboratory course meant to prepare students planning to major in engineering or the sciences. A thorough background in algebra and knowledge of trigonometry are required. Emphasis will be placed on conceptual understanding and mathematical problem solving. The course covers fluid mechanics; thermodynamics; electricity and magnetism; optics; and atomic and nuclear physics. Scientific or graphing calculators are required.

Prerequisites: Minimum average of 95% in Physics - H or 85% in AP Physics 1.

Minimum average of 92% in Algebra II H or Precalculus H, or 90% in Algebra II HH or Precalculus HH. (Teacher recommendations and prior attendance record will be considered).

French V- Language and Culture Advanced Placement (5404) GRADE 11, 12 YEAR / ELECTIVE

This college level course prepares the students for the Advanced Placement French Language and Culture Examination. Essential to the course is the development of a high degree of competency in three modes of communication: interpretive, interpersonal and presentational. Students will work with authentic literary

selections, magazine and newspaper articles, radio and French TV programs. French grammar and francophone culture and literature are studied in the context of the six themes: 1- Global Challenges; 2- Science and Technology; 3- Contemporary Life, 4- Personal and Public Identities, 5- Families and Communities and 6- Beauty and Aesthetics.

Prerequisites: Minimum average of:

93% in French III

90% in French III-H

88% in French IV-H

And qualifying listening and speaking assessment and teacher recommendation.

Note: All students take the AP Exam in May.

Note: Student enrolled in this course are required to take the National Exam in March.

Note: All students are required to complete a summer assignment as further preparation. This assignment is due the 1st week of school in September. This assignment is in addition to the Holy Angels summer reading program

Italian V Language and Culture – Advanced Placement (5424) GRADE 11, 12 YEAR / ELECTIVE

This college level course prepares the students for the Advanced Placement Italian Language Examination. Essential to the course is the development of a high degree of competency in listening, speaking, reading and writing. Classes are conducted in Italian. Students will work with authentic literary selections, magazine articles, newspaper articles, and radio. An AP student must be able to give oral presentations in Italian. Advanced Placement Italian is equivalent to a 4th semester college course.

Prerequisites: Minimum average of 85 in Italian III-H and teacher recommendation.

Note: All students take the AP Exam in May.

Note: All students are required to complete a summer assignment as further preparation. This assignment is due the 1st week of school in September. This assignment is in addition to the Holy Angels summer reading program.

Note: Student enrolled in this course are required to take the National Exam in March.

Latin Literature V – Advanced Placement (5434) GRADE 11, 12 YEAR / ELECTIVE

The students will read selections from Vergil's *Aeneid*. Special attention is given to the style, versification and variations in grammar peculiar to poetry. Vocabulary development and sight translation are essential to this course. The history, mythology and culture of the Augustan Age are emphasized. **Students who are currently taking Latin III High Honors and wish to sit for the AP Latin Exam in May must be approved by the instructor. Additionally, they must meet with the Latin teacher at least two hours per cycle (times and days of the week to be determined) to review the required AP readings in Caesar and advanced concepts and grammar unique to the exam.** Students are expected to participate in the National Latin Exam.

Prerequisites: Minimum average of 90% or above in Latin III-HH, and teacher recommendation

Note: All students take the AP Latin Exam in May.

Spanish V Language Culture – Advanced Placement (5444) GRADE 11, 12 YEAR /ELECTIVE

This college level honors course prepares the student for the Advanced Placement Spanish Language examination. Essential to the course is the development of a high degree of competency in listening, speaking, reading and writing. Classes are conducted in Spanish. Students are encouraged to familiarize themselves with Spanish literary selections, Spanish magazine articles, newspaper articles, Spanish TV and radio. An AP student must be able to give oral presentations in Spanish. Advanced Placement Spanish is equivalent to a 3rd year college course.

Prerequisites: Minimum average of 90% in Spanish IV-H

Minimum average of 90% in Spanish III-HH

Minimum average of 92% in Spanish III-H and

Teacher recommendation

Note: All students take the AP Exam in May

Note: All students are required to complete a summer assignment as further preparation. This assignment is due the 1st week of school in September. This assignment is in addition to the Holy Angels summer reading program.

Studio Art - 2D Design/Drawing – Advanced Placement (8474) GRADE 12 YEAR/ELECTIVE

This intensive version of Studio Art II is designed for the serious advanced art student who intends to pursue a course of study in Fine Arts at the college level *and* create a portfolio which fulfills the requirements of the AP Studio Art Exam. Students will further develop their skills in 2-D media, an understanding of formal and conceptual relationships, and their identity as an artist. Concurrent with Studio Art II Honors, this course emphasizes the conceptual and technical problems proposed by the AP Studio Art exam. This exam requires the completion of 21 art pieces, 16 of which must be based on a sustained investigation (theme) with documentation and written analyses. Students will participate in both formal and informal group critiques and complete written reflections about their work. Students must commit to independent study, experimentation and innovation without constant supervision. In addition to class, students must commit to four independent lab periods per cycle, when the instructor is not accessible for personal help. This class is responsible for painting the mural and mounting the annual Art Show. Limited enrollment.

Prerequisite: Studio Art I students must have a portfolio interview with the department in January during junior year to determine acceptance for the course. All students will complete summer assignments in preparation for Studio Art II.

Art History - Advanced Placement (8464) GRADE 11, 12 YEAR / ELECTIVE

This course is designed to give students a rigorous introductory college level course in art history from the early civilization to the postmodern era. The course will provide an understanding and knowledge of architecture, sculpture, painting and other art forms within diverse historical and cultural contexts. In the course, students examine and critically analyze major forms of artistic expression from the past and the present from a variety of cultures. Art History emphasizes understanding works in context, considering such issues as patronage, gender, and the function and effects of works of art. Course textbooks are the current edition of *Gardner's Art Through the Ages* and *Barron's AP Art History*. Course requirements include daily preparation for class discussions and quizzes, tests, essays, and one museum trip each quarter. Limited enrollment.

Prerequisite: This course is open to honors students who have maintained an average of 90% or above in English-H and History-H and 85% or above in English-HH and History-HH. Students must be committed to an intense workload of frequent reading and writing assignments.

Note: All students are required to take the AP Exam in May. This course fulfills the one year Humanities graduation requirement.

AP Music Theory (8804) GRADE 10, 11, 12 YEAR/ELECTIVE

AP Music Theory is an introductory college-level course that allows students to cultivate their understanding of music theory through analyzing performed and notated music. Students will explore aspects of melody, harmony, texture, rhythm, form, music analysis, elementary composition, as well as music history and style. Musicianship skills such as rhythmic, melodic and harmonic dictation, as well as other listening skills such as sight-singing and keyboard harmony will be covered in this course. The student's ability to read and write music notation, as well as basic proficiency on either voice or an instrument are fundamental to this course.

Prerequisite: Must have at least a 95% in Music Appreciation

Note: All students are required to take the AP Exam in May. This course fulfills the one year Humanities graduation requirement.

AHA MIDDLE COLLEGE PROGRAM (MCP) Course Offerings
--

Junior Year

Senior Year

	Junior Year	Senior Year
International Studies - Honors		X
Calculus - High Honors	X	X
Anatomy and Physiology - Honors		X
Environmental Science - Honors	X	X
French IV - Honors	X	X
Italian IV - Honors	X	X
Humanities - Honors	X	X

MIDDLE COLLEGE PROGRAM (MCP) POLICY
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There are seven (7) courses offered to Juniors and Seniors for which students can earn both high school credit and college credit, simultaneously.

These courses, offered through an affiliation with Fairleigh Dickinson University, NJ, are AHA high school courses which have been evaluated by FDU and deemed equivalent to college level. Upon satisfactory completion, each course will earn the student three undergraduate FDU college credits.

Therefore, IF you are enrolled in any of these courses at AHA and also wish to simultaneously earn FDU undergraduate college credit, you must register online in September through Fairleigh Dickinson University. MCP/FDU program information is posted online at OACC Blackbaud page.

MCP COURSE DESCRIPTIONS AND REQUIREMENTS

International Studies - Honors/MCP (2702) **GRADE 12 **YEAR /ELECTIVE****

International Studies offers students an opportunity to learn about international issues through in-depth research, constructive dialogue and simulation. Students reconcile national interests with the needs of the international community, becoming immersed in an active learning process. By researching country backgrounds, students learn about the historical, religious and cultural institutions that influence a country's perspective. Through the study of displaced people and territorial disputes, students develop an understanding and tolerance for other cultures as well as the connection between resource distribution and conflict. Comprehensive project assignments are required throughout the year. This course does include a midterm and a final exam.

Prerequisite: Minimum 88 in CP U.S. History II
 Minimum 85 in Honors U.S. History II
 Department recommendation

Note: Students enrolled in this course are eligible for college credit through the Fairleigh Dickinson University Middle College Program. Separate registration in September is required through OACC for FDU.

Calculus - High Honors/MCP (3403) **GRADE 11, 12 **YEAR /ELECTIVE****

In this course, students will continue to study the concepts of limits and continuity. The basic concepts of the derivative with its applications to velocity, acceleration, curve sketching, related rates, and max-min problems will be studied in the first semester. The definite and indefinite integral will be introduced during second semester. Techniques of differentiation and integration of the trigonometric functions, the natural logarithmic function,

the exponential function and the inverse trigonometric functions will be studied. Integration will be applied to finding area and volume.

Prerequisite: Students entering this course from Precalculus-HH must have a minimum average of 83%. Students entering this course from Precalculus-H must have a minimum average of 88%. TI-84 Graphing Calculator is required. Students not meeting the requirements for Calculus-Advanced Placement will also be placed in this course.

Note: Students may earn college credit through the Middle College Program of Fairleigh Dickinson University upon successful completion of this course in Calculus.

Note: All students are required to complete a summer assignment as further preparation. This assignment is due the 1st week of school in September.

Anatomy and Physiology - Honors /MCP (4402) GRADE 12 YEAR/ELECTIVE

This course is offered to qualified seniors and comprises an in-depth introduction to the human body from anatomical and physiological perspectives with emphasis placed on understanding the relationship between structure and function. The integration of current health care topics, medical technology, and health related social issues will also be addressed. Laboratory sessions are designed to correlate with lecture topics to increase understanding.

Prerequisites: Minimum average of 85% in H Biology and H or HH Chemistry
Minimum average of 92% in CP Biology or CP Chemistry
Minimum grade of 80% in both Biology and Chemistry semester exams
(Teacher recommendations and prior attendance record will be considered).

Note: Students enrolled in this course are eligible to receive college credit through the Middle College Program of Fairleigh Dickinson University. Separate FDU course registration is required.

Environmental Science – Honors /MCP (4722) GRADE 11, 12 YEAR/ELECTIVE

This course will investigate the interactions between humans and our global environment. Students will be given the opportunity to examine the scientific, social, political, and economic aspects of contemporary environmental issues. Students will be able to find information and then evaluate its quality and analyze the veracity of the information. This class has been tailored to fit a hybrid model utilizing multiple facets of technology to expose students to diverse learning environments including independent study and discussion board. Educated students will understand how scientific investigations are done and how results and conclusions are reported in order to make informed decisions in their own lives. Current events, global warming, carbon foot printing, water pollution, and Trout in the Classroom are highlighted in this program as well as hands-on laboratory activities (including field work) raise global awareness and appreciation of our biosphere. Assessments include a variety of critical thinking exercises including, but not limited to, case studies, formative assessment questions, active reading, virtual labs, etc.

Prerequisites: Minimum average of 85% in both Biology Honors and 90% in Biology CP, and a minimum grade of 80% on both semester exams. Teacher recommendations and prior attendance record will be considered.

Note: Students enrolled in this course are eligible to receive college credit through the Middle College Program of Fairleigh Dickinson University. Separate FDU course registration is required.

French IV – Honors/MCP (5402) GRADE 11, 12 YEAR /ELECTIVE

This course is designed for students who wish to further their studies of French and learn more about the diversity of the Francophone culture. The course seeks to develop oral communicative skills and improve the reading and the writing skills. A review of the main elements of grammar is included.

Prerequisites: Minimum average of 85% in French III and teacher recommendation.
Minimum average of 83% in French III-H and teacher recommendation.

Note: Students enrolled in this course are eligible to receive college credit through the Middle College Program of Fairleigh Dickinson University. Separate FDU course registration is required.

Note: All students are required to complete a summer assignment as further preparation. This assignment is due the 1st week of school in September.

Italian IV- Honors/MCP (5422)

GRADE 11, 12

YEAR / ELECTIVE

The primary objective of this course is to broaden students' understanding of contemporary Italian culture through viewing of Italian film clips and short readings. Themes of study are: regional cuisines, youth identity, family and relationships, healthy lifestyles, college and choosing a career, business and globalization, the environment, and geography. Students engage in activities to stimulate observation, reflection and conversation.

Prerequisites: Completion of Italian III or Italian III Honors and teacher recommendation

Note: Students enrolled in this course are eligible to receive college credit through the Middle College Program of Fairleigh Dickinson University. Separate FDU course registration is required.

Note: All students are required to complete a summer assignment as further preparation. This assignment is due the 1st week of school in September. This assignment is in addition to the Holy Angels' summer reading program.

Humanities – Honors/MCP (8452)

GRADE 11, 12

YEAR / REQUIRED

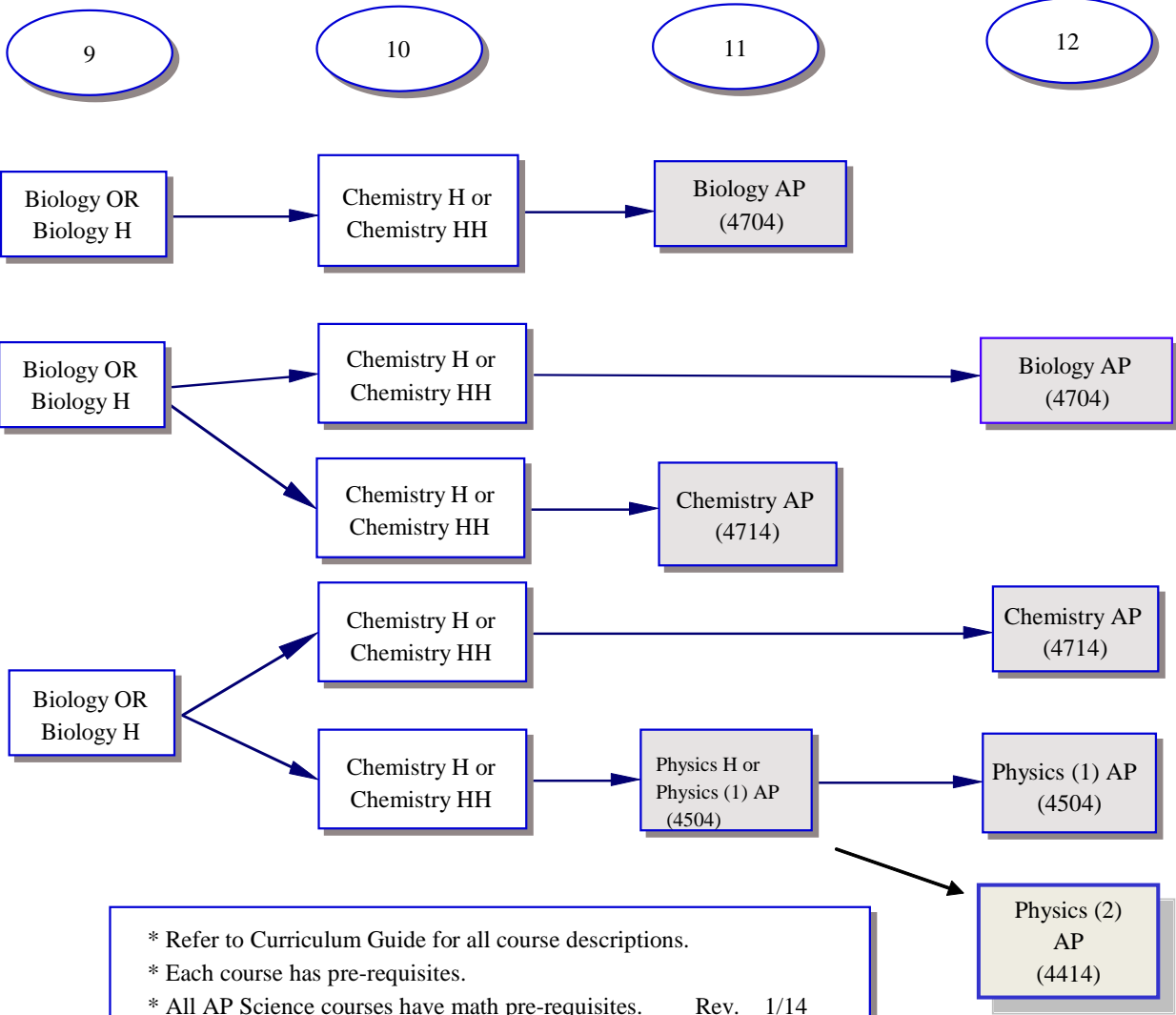
Humanities is the study of art, music, theater, dance, architecture and literature primarily to develop a cultural awareness through several historical periods.

Prerequisite: In general, one year of Fine and Performing Arts at the college preparatory level.

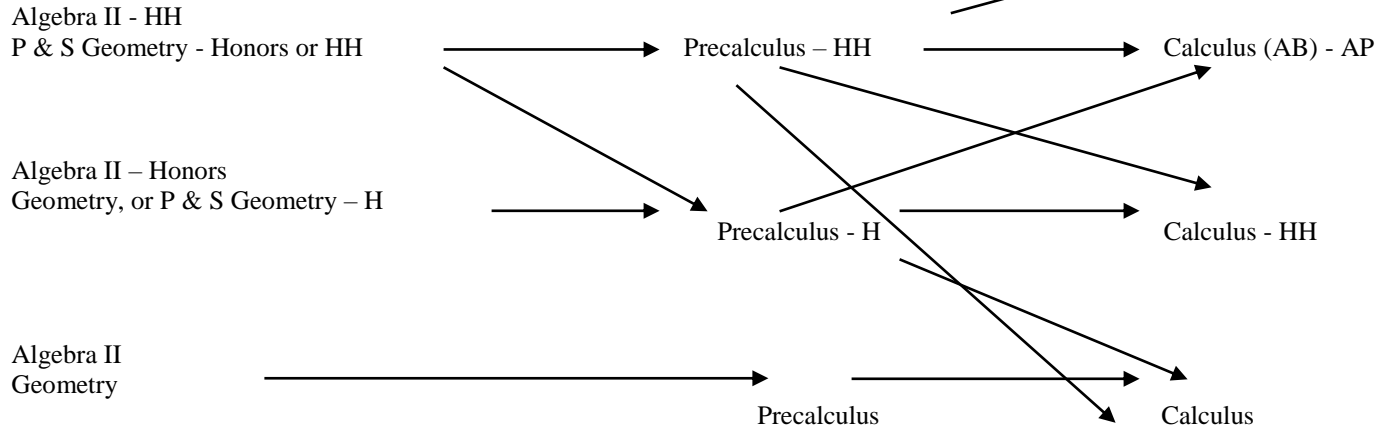
Note: This course fulfills the one year Humanities graduation requirement. This course is equivalent to a freshman level humanities college course. Students enrolled in this course are eligible to earn college credits from Fairleigh Dickinson University Middle College Program. Separate online registration in September is required through FDU.

SCIENCE DEPARTMENT*

PATH TO AP SCIENCE COURSES
 BIOLOGY AP (4704), CHEMISTRY AP (4714), PHYSICS (1) AP (4504),
 PHYSICS (2) AP (4414)



**Sophomore Year:
Math Sequence for 2 Math Courses**

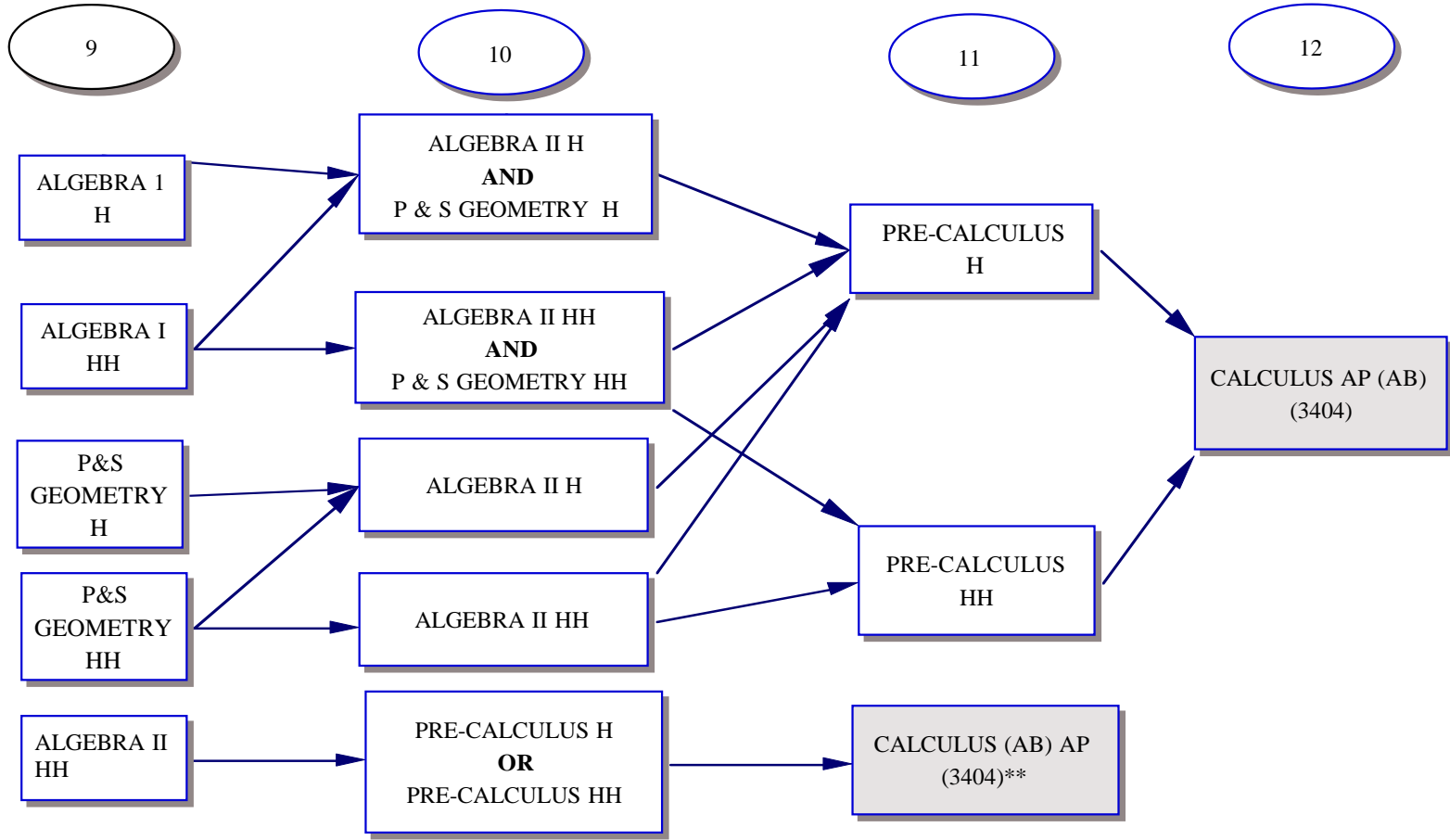


Notes:

- 1) Refer to [AHA Curriculum Guide](#) for all course descriptions.
 - 2) Each course has pre-requisites.
-

MATHEMATICS
DEPARTMENT *

PATH TO CALCULUS
(AB) AP
(3404)



* Refer to Curriculum Guide for all course descriptions.

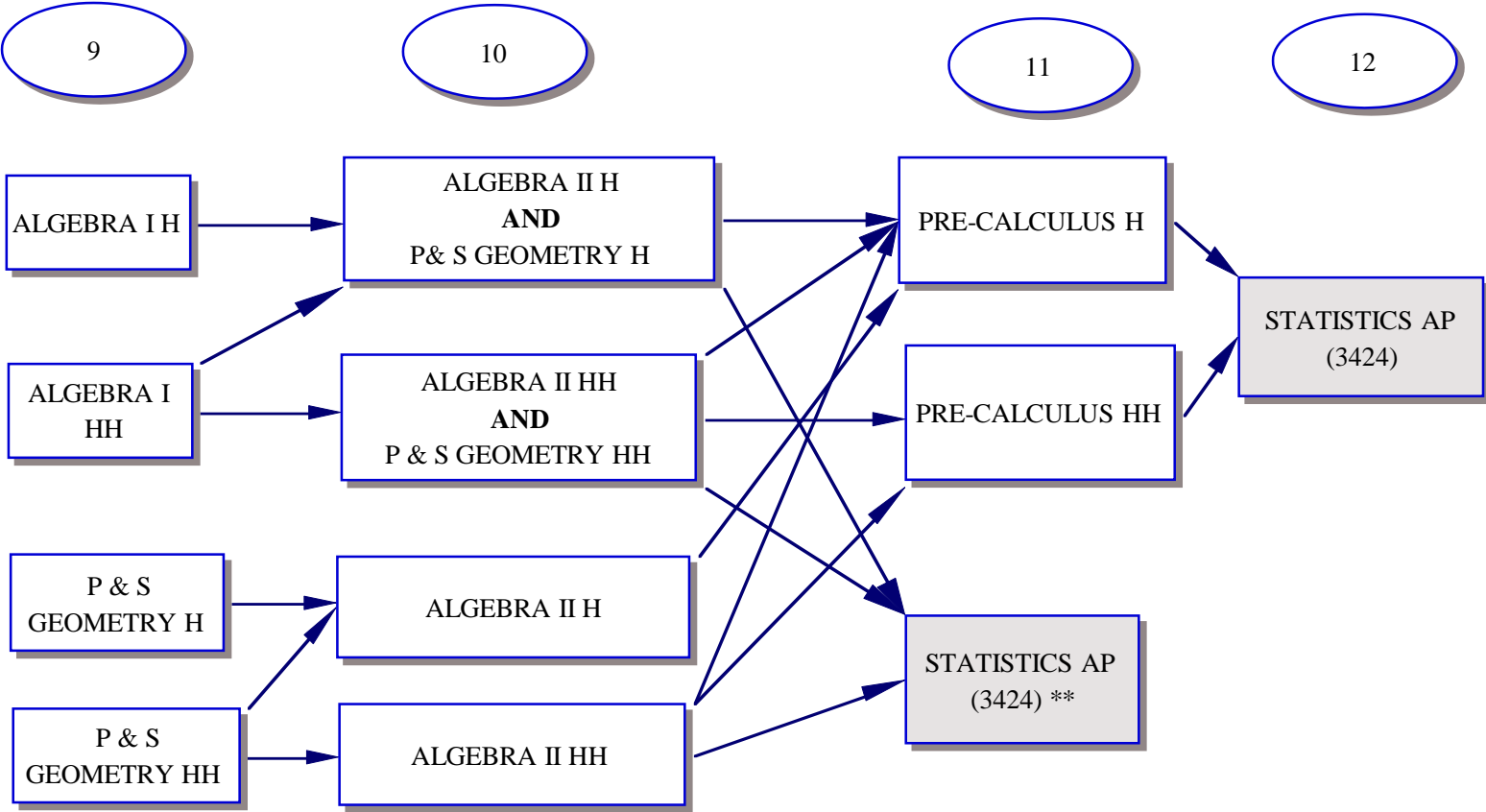
* Each course has pre-requisites.

** Department approval is required to take Algebra II in 9th grade by placement test.

Rev. 1/13

MATHEMATICS DEPARTMENT*

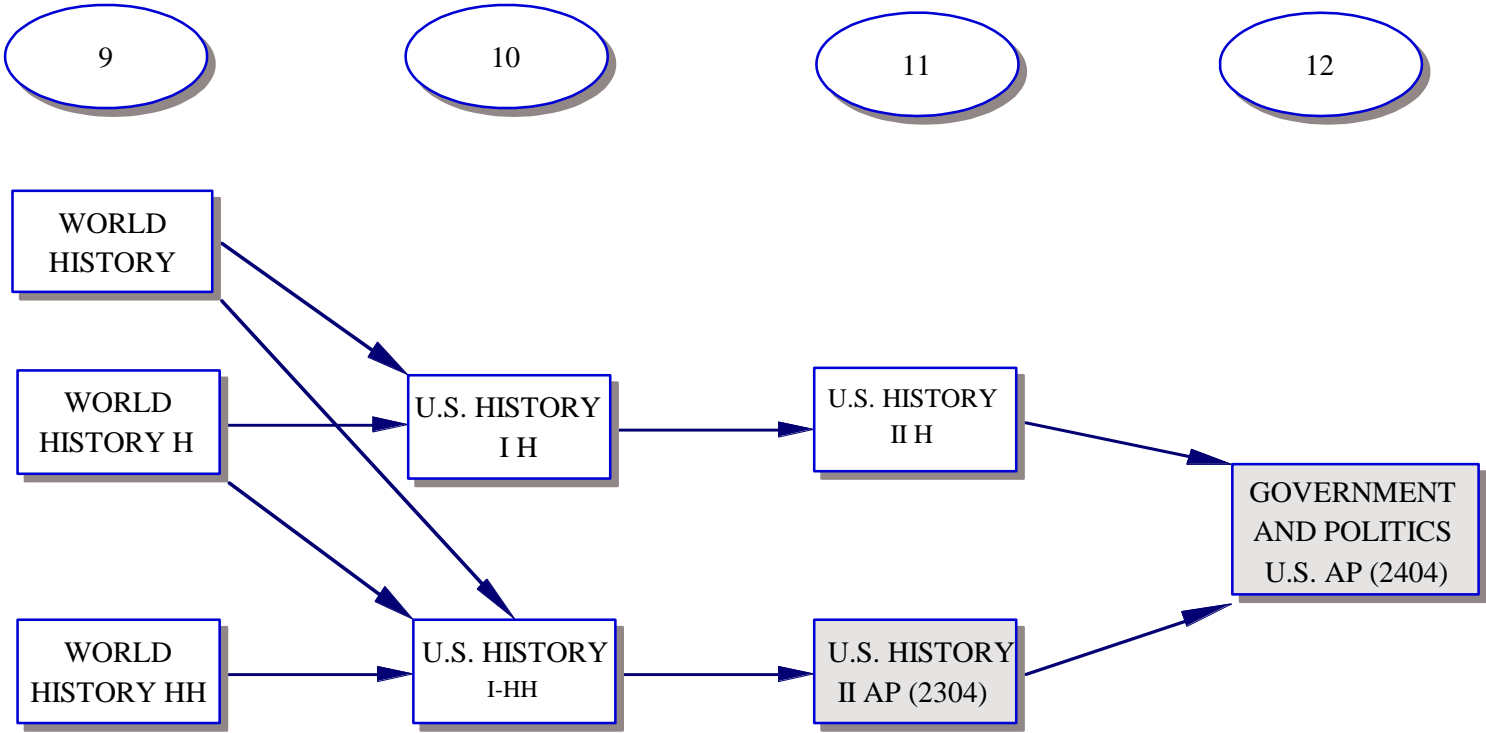
PATH TO STATISTICS AP (3424)



* Refer to Curriculum Guide for all course descriptions.
 * Each course has pre-requisites.
 ** Must be enrolled in Pre-Calculus H, Pre-Calculus HH, Calculus HH, OR Calculus (AB) AP
 Rev. 1/13

SOCIAL STUDIES DEPARTMENT*

PATH TO
U.S. HISTORY AP (2304) GOVERNMENT &
POLITICS U.S. AP (2404)



* Refer to Curriculum Guide for all course descriptions.
* Each course has pre-requisites.
* AP Courses also have English pre-requisites Rev. 1/17

ENGLISH DEPARTMENT *

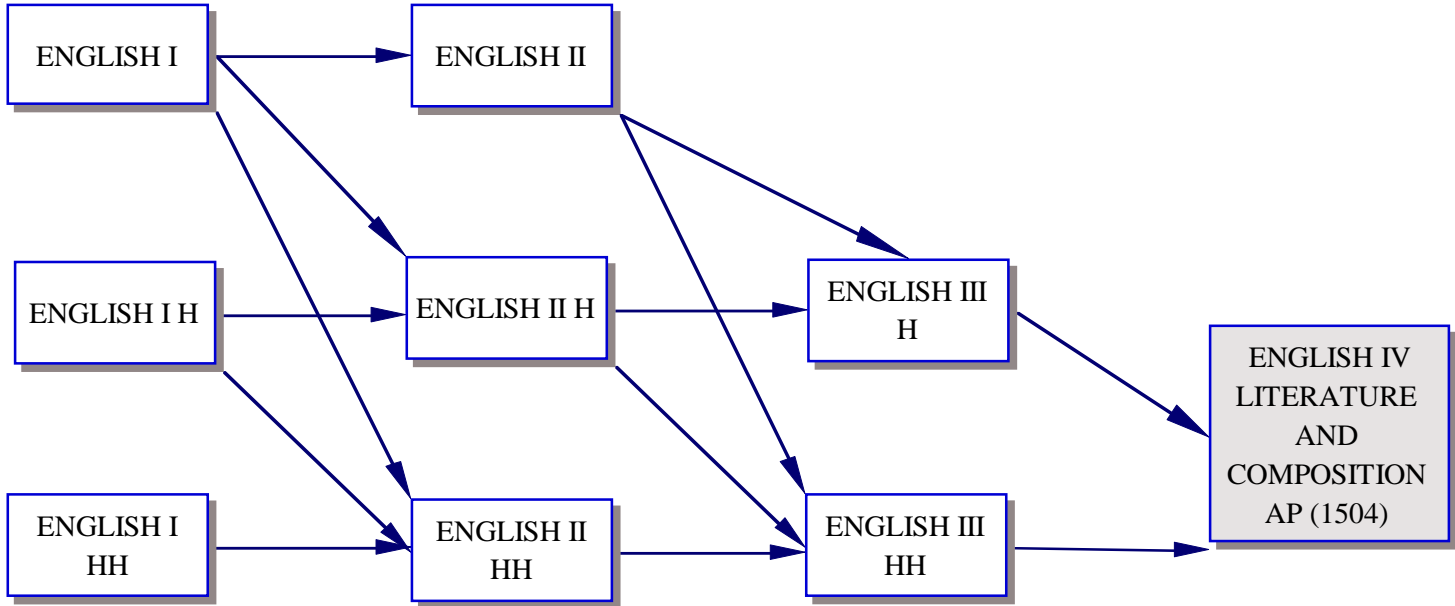
PATH TO
ENGLISH IV LITERATURE &
COMPOSITION AP (1504)

9

10

11

12



* Refer to Curriculum Guide for all course descriptions
* Each course has pre-requisites
Rev. 1/11



WORLD LANGUAGE DEPARTMENT*

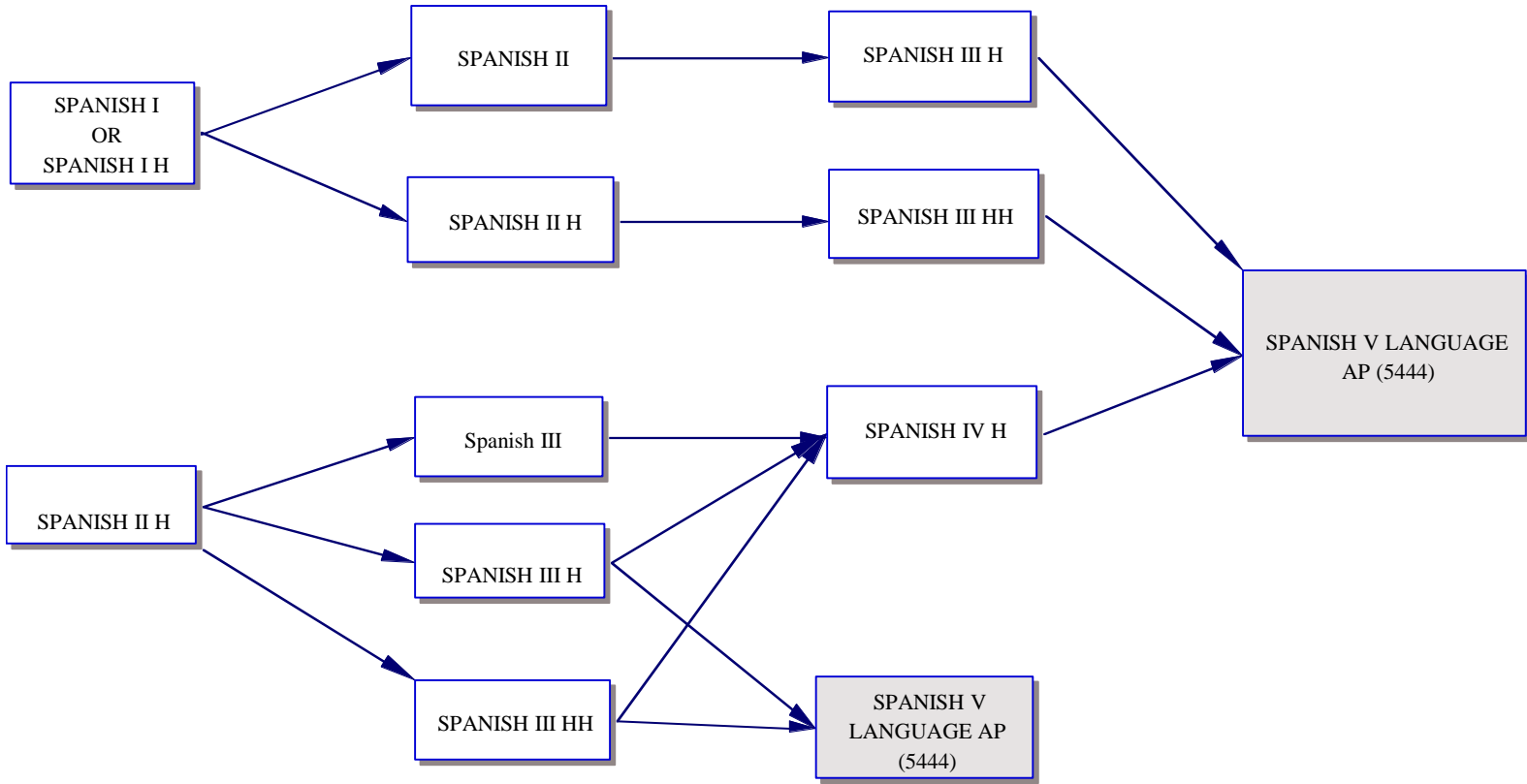
PATH TO SPANISH V LANGUAGE AP (5444)

9

10

11

12



* Refer to Curriculum Guide for all course descriptions
* Each course has pre-requisites
Rev 12/18



WORLD LANGUAGE
DEPARTMENT *

PATH TO
FRENCH V LANGUAGE AND CULTURE AP
(5404)

9

10

11

12

FRENCH I OR
FRENCH I H

FRENCH II
OR
FRENCH II H

FRENCH III OR
FRENCH III H

FRENCH V
LANGUAGE AND
CULTURE AP
(5404)

FRENCH II H

FRENCH III OR
FRENCH III H

FRENCH IV H

* Refer to Curriculum Guide for all course descriptions.
* Each course has pre-requisites. Rev. 12/18



WORLD LANGUAGE
DEPARTMENT *

PATH TO
ITALIAN V LANGUAGE AND
CULTURE AP (5424)

9

10

11

12

ITALIAN I

ITALIAN II OR
ITALIAN II H

ITALIAN III H

ITALIAN V
LANGUAGE AND
CULTURE AP (5424)

ITALIAN II H

ITALIAN III OR
ITALIAN III H

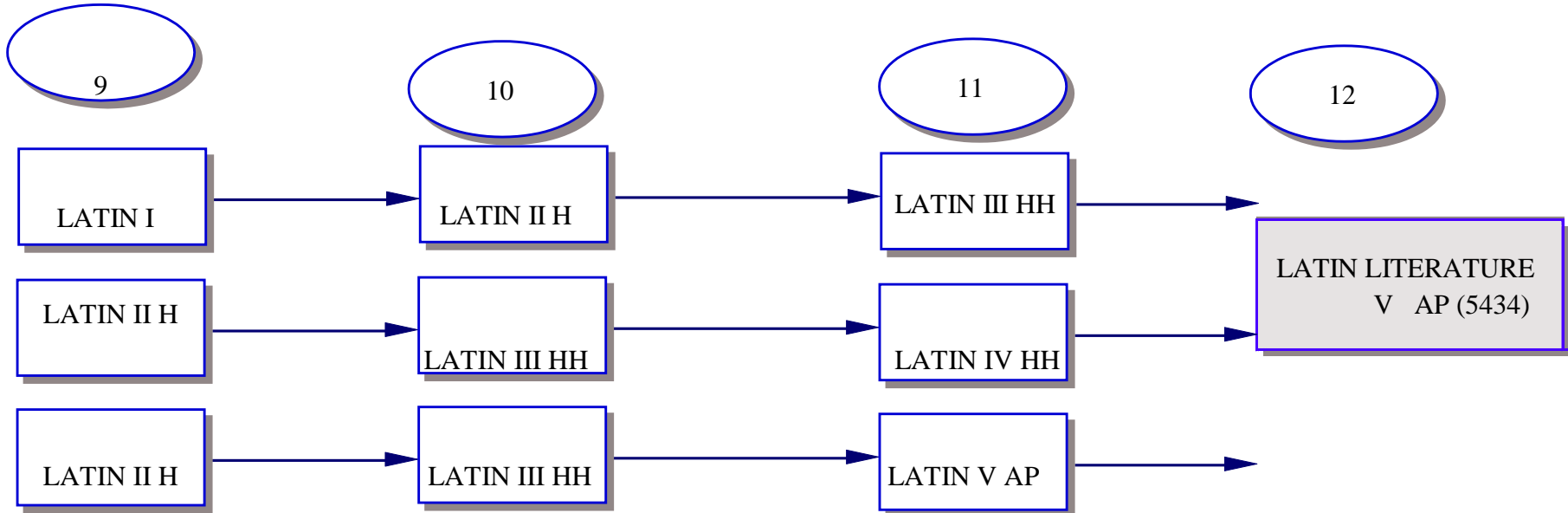
ITALIAN III H

* Refer to Curriculum guide for all course descriptions.
* Each course has pre-requisites. Rev. 12/18



WORLD LANGUAGE
DEPARTMENT *

PATH TO
LATIN LITERATURE V AP
(5434)



*Refer to Curriculum Guide for all course descriptions
* Each course has pre-requisites
Rev. 2/14

Fine and Performing Arts
Department *

PATH to
Art History AP 8464
Studio Art AP 8474

10

90 and Above
in English H
and History H

11

Art History
AP 8464

12

Art History
AP 8464

Studio Art I
H 8362

Studio Art: 2D –
AP
Design/Drawing
8474

*Refer to Curriculum Guide for all course descriptions.
*Each course has pre-requisites.

Revised 2/16

SCHEDULING AND GRADING POLICY

ADVANCED PLACEMENT (AP) POLICY

Several academic disciplines offer Advanced Placement (AP) Courses to students who have demonstrated through past achievement that they are able to handle college - level courses in high school. Candidates must meet all appropriate criteria for placement in these courses. **These courses are rigorous and require students to be able to work independently.** Students are asked to discuss their participation in these classes with their teachers, parents and counselors. **Students are required to complete summer assignments and readings prior to the start of some AP courses. Therefore, no student may transfer in September to an AP course, which require summer assignments and readings.**

If a student chooses to drop an AP class, courses and/or levels of alternate classes cannot be guaranteed. In this case, a student will be placed in available courses and if it can fit into her existing schedule.

Once enrolled, students are expected to fulfill all course requirements including sitting for the AP exam in May. AP exams are administered at the Academy for a fee set by the College Entrance Examination Board (approximately \$100 per exam). The exams are scored by The College Board. Colleges may grant credit, based upon the student's AP score. Students who for any reason do not take the AP exam on the designated date must take the AP Late-Testing exam on the date and time determined by The College Board and pay the Late-Testing fee (approximately \$45 per exam).

*** Consistent lack of achievement in the course may result in the teacher's recommendation that the student be withdrawn from the AP course.**

Although AHA offers a comprehensive AP program to our students, there are other AP courses available which can be taken at AHA or off-campus. **Students may not take an AP exam in a discipline offered at AHA without being enrolled in the AP course at AHA.** AP exams in disciplines not offered at AHA may be administered to students who are enrolled in, or have successfully completed, a College Board, Inc. approved course or program in that subject area. AP Exams are administered to enrolled students only. For complete information about our AP Program and policy procedures, please refer to the current Curriculum Guide.

CLASS RANK

The Academy does not rank.

Due to the challenging nature of the Academy's curriculum and the high academic caliber of the student body, the cumulative weighted, grade point average is regarded as the most significant indicator of the student performance. First and second in merit will be recognized at graduation

COURSE CHANGE EXCEPTION

If for any extraordinary reason, a course change is requested after the sixteenth (16th) school day (two eight day school cycles) the following steps must be taken to review the request:

The student must speak with her Academic and College Counselor to initiate an AHA Course Change Request Form. Following this meeting, an email request for the drop must be made by the student, and her parent. The request must state the reason(s) for the drop. Additional supporting documentation may be required.

The **AHA Course Change Request Form**, the email requests, and the additional supporting documentation (if needed) are forward to Administration for review.

The student and parent will be contacted by Administration regarding the request.

If approved, the student's official transcript will indicate "WP" (withdrawn passing) or "WF" (withdrawn failing) for the dropped course. In all instances, the grade from the previous course will be averaged into the new course. If the student is enrolled in an Honor's course at the time of the request, the weighted grades will be transferred to the new course.

COURSE GRADE-LEVEL GUIDELINES

Freshmen: are required to take Religious Studies I, English I, World History, Biology, Mathematics, a World Language, Physical Education/Health, Art, Music and Technology.

Sophomores: are required to take Religious Studies II, English 11, Mathematics, Chemistry, U.S. History I, a World Language, Physical Education/Health, a semester of art or Music and electives to complete their course of study.

Juniors: are required to take Religious Studies III, English III, U.S. History II, Mathematics, Science, World Language, Physical Education, and are required to take an elective to complete the course of studies.

Seniors: are required to take Religious Studies IV, English IV, Humanities (if not taken in Junior Year), Physical Education and must elect at least three/four other year courses or the equivalent. A minimum of 7 full-year courses or the equivalent is required.

Please refer to the Curriculum Guide for course descriptions.

COURSE REPETITION

A student may not repeat any quarter, semester, or year-long course. The exception is for a course failure as outlined in the section, "ACADEMIC FAILURE".

COURSE SCHEDULE (STUDENT)

Considerable time and attention are given to planning the student's schedule courses for the next academic year. During this time, both students and parents have the opportunity for consultation with individual instructors, department heads, and college counselors concerning the student's projected schedule. Students will be notified of their placement in their core subjects during their course selection meeting. It is not always possible to honor students' selections of elective courses. However, every effort is made to ensure the student is enrolled in her core courses. Because of scheduling conflicts, some students may be assigned to elective courses they did not select. Students are asked to choose their electives and alternates carefully so that changes will not be necessary. Parents must approve this course selection.

EXAMINATIONS

Full Year Courses: Mid – Year and Final examinations are given in all full year courses. Examination grades represent approximately 20% of the averages.

Semester Courses: Final examinations are usually given in semester courses.

Quarter Courses: Final exams are usually given in quarter courses.

Senior Exam Exemptions: Seniors are exempt from the June examinations in a particular subject if they meet the following criteria:

1. 90% unweighted average for the year
 $(Q1*.22) + (Q2*.22) + (MYE*.12) + (Q3*.22) + (Q4*.22)$
2. Have had no more than:
 - ten absences for the year for any reason
 - six lates for the year
 - six early leavings for the year.

Exceptions may be made due to inclement weather.

The Dean of Students will notify students of exemptions by posting a master list outside the Attendance Office.

For the purpose of senior exam exemptions, early leavings will be counted separately from absences.

State Loan Textbooks: MUST be turned in on the day of the final exam or paid for in full before the student will be permitted to take her exam.

School Attire: is required for all examinations: Students will not be admitted late to an exam: No student may leave the examination room before 90 minutes of the exam time have passed for the final.

Rescheduled Exams: exams are given at a scheduled time and place, illness (attested to by a doctor's certificate) is the only acceptable reason for waiving the \$30 fee attached to each rescheduled exam. Students must report for exams in uniform.

GRADE POINT AVERAGE (GPA)

Courses: All courses, except for Physical Education, Community Service, and Summer School, are used to calculate the yearly and cumulative unweighted and weighted GPA.

Final, yearly course GPAs are weighted using the appropriate multipliers and credits.

Cumulative, weighted GPAs are calculated several times during high school: at the end of 9th (second semester), 10th (fourth semester), 11th (sixth semester), a 12th (eighth semester) grades.

Senior Year: As required by college and universities, a seventh semester weighted average is calculated for seniors. This average is sent to all colleges as part of the required college admissions 'Mid-Year Report'.

National Honor Society: For purposes of admission to NHS, cumulative, weighted grade point averages are calculated after the fifth semester of 11th grade, and the seventh semester of 12th grade.

Transfer Students: Cumulative weighted and unweighted GPAs are calculated using only grades earned at AHA.

GRADE POINT AVERAGE (GPA) CALCULATION WEIGHTED AND UNWEIGHTED

Unweighted Yearly GPA is calculated using the appropriate credits.

For each course taken that year, perform the following

1. Final Grade * Credits = Points (QP)
2. Total all QPs for all courses taken that year (except those indicated in 'GPA section)
3. Divide the Total QPs by the Total Credits attempted for the year

For cumulative, unweighted GPA:

For each course taken in the students AHA career, perform the following

1. Final Grade * Credits = Points (QP)
2. Total all QPs for all courses taken (except those indicated in 'GPA section)
3. Divide the Total QPs by the Total Credits attempted

Weighted Yearly –GPA:

Is calculated using the appropriate credits and multipliers,

For each course, perform the following:

1. Final Grade * Multiplier * Credits = Quality Points (QP)
2. Total all QPs for all courses taken that year (except those indicated in 'GPA' section)
3. Divide the Total QPs by the Total Credits attempted for the year

For cumulative, weighted GPA:

For each course taken in the students AHA career, perform the following:

1. Final Grade * Multiplier * Credits = Quality Points (QP)
2. Total all QPs for all courses taken (except those indicated in 'GPA' section)
3. Divide the Total QPs by the Total Credits attempted

Course Multipliers

College Preparatory (CP) (1.00 multiplier)

Honors (H) (1.03 multiplier)

High Honors (HH) (1.06 multiplier)

Advanced Placement (AP) (1.07 multiplier)

GRADE POINT AVERAGE (GPA) CONVERSION CHART

Academy of the Holy Angels uses a Numeric (percentage) grading scale along with a corresponding Alpha (letter) grading scale for grade designation. Holy Angels does not grade on a 4.0 or 5.0 scale. In the event a student must report their GPA on a 4.0 weighted scale, the following weighted conversion chart may be used.

ACADEMY OF THE HOLYANGELS		
Weighted GPA Conversion Chart		
100%	4.0	Alpha
100	5.0	A+
99	4.9	A+
98	4.8	A+
97	4.7	A+
96	4.6	A+
95	4.5	A+
94	4.4	A
93	4.3	A
92	4.2	A
91	4.1	A
90	4.0	A
89	3.9	B+
88	3.8	B+
87	3.7	B+
86	3.6	B+
85	3.5	B+
84	3.4	B
83	3.3	B
82	3.2	B
81	3.1	B
80	3.0	B
79	2.9	C
78	2.8	C

GRADING SYSTEM

Achievement is reported by numerical grades. Letter grades are used for physical education courses.

Scale Codes

A+ = 95 – 100

A = 90-94

B+ = 85-89

B = 80-84

C = 75-79

D = 70-74

F = Less than 70

Com = Complete

EX = Excused

P = Passing

SS = Summer School

WP = Withdraw Passing

WF = Withdraw Failing

I = Incomplete

HONOR ROLL AND PRINCIPAL'S LIST

The Honor Roll and Principal's list for each quarter are based upon the unweighted numerical average of all numeric quarter grades.

Principal's List 95-100 and B or higher in Physical Education and a minimum of an 85 in all courses

Honor Roll 90- 94 and B or higher in Physical Education and a minimum of an 80 in all courses

A violation of the Honesty Policy will disqualify a student from the honor roll for the quarter in which the violation occurred.