

# Garfield High School Course Catalog



Garfield High School  
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# Introduction

The course description catalogue was designed to aid you in planning your academic program. Garfield High School course offerings provide a wide variety of learning opportunities and require you to make discriminating selections because decision making is an important part of the total learning process. In February, students will receive their course recommendations from their teachers. It is very important for students to share this information with their parents/guardians. The offerings should be carefully reviewed in order to select courses that will best meet the needs and goals of each individual student. The courses you select every year are important. Your counselor, with the assistance of your teachers, case managers and parents/guardians, can help you select the courses that best fit your own talents, needs, interests and future goals. Plan to find out as much as you can about courses you are interested in and discuss them in school and at home before you sign up for any course.

# Student Course Checklist

\*\* Each student must complete a minimum of 130 credits in order to be eligible for graduation.\*\*

## Language Arts – 4 years

- English I (10 credits)
- English II (5 credits)
- English III (5 credits)
- English IV (5 credits)

## Mathematics – 3 years

- Algebra I (10 credits)
- Algebra II (5 credits)
- Geometry (5 credits)
- Pre-calculus (5 credits)

## Science – 3 years

- Environmental Science (5 credits)
- Biology (5 credits)
- Chemistry (5 credits)
- Elective (5 credits)

Elective 1 \_\_\_\_\_( Credits)  
Elective 2 \_\_\_\_\_( Credits)

## History – 3 years

- World History (5 credits)
- US History I (5 credits)
- US History II (5 credits)

## World Language – 1 year

- Year 1 (5 credits)
- Year 2 (for 4 year college)

## Fine and Performing Arts – 1 year

- Half year 1 (2.5 credits)
- Half year 2 (2.5 credits)

## 21<sup>st</sup> Century Life and Careers and

### Technical Education – 1 year

- Half year 1 (2.5 credits)
- Half year 2 (2.5 credits)

## Free Electives - Total of 17.5 Credits

Elective 3 \_\_\_\_\_( Credits)  
Elective 4 \_\_\_\_\_( Credits)

## Physical Education – 4 years

- Grade 9 (3.75 credits)
- Grade 10 (3.75 credits)
- Grade 11 (3.75 credits)
- Grade 12 (3.75 credits)

## Health – 4 years

- Grade 9 (1.25 credits)
- Grade 10 (1.25 credits)
- Grade 11 (1.25 credits)
- Grade 12 (1.25 credits)

## Financial Literacy – Half year (1 Semester)

**\*\*Select 1\*\***

- Economics (2.5 credits)
- Financial Literacy (5 credits)

Elective 5 \_\_\_\_\_( Credits)  
Elective 6 \_\_\_\_\_( Credits)

# Four Year Plan

<b>9<sup>th</sup> Grade</b>	
<b>Class</b>	<b># of Blocks</b>
English I	2 blocks
Algebra I	2 blocks
Biology or Environmental Science	1 block
World History	1 block
Gym and Health Grade 9	1 block
World Language 1 or Performing Arts	1 block

<b>10<sup>th</sup> Grade</b>	
<b>Class</b>	<b># of Blocks</b>
English II or American Studies I	1 block
Algebra II	1 block
Biology or Chemistry	1 block
US History I or American Studies I	1 block
Gym and Health Grade 10	1 block
World Language 2 or <b>**Free Elective**</b>	1 block
Economics or <b>**Free Elective**</b>	1 block
Fine/Practical Art or <b>**Free Elective**</b>	1 block

<b>11<sup>th</sup> Grade</b>	
<b>Class</b>	<b># of Blocks</b>
English III or American Studies II	1 block
Geometry	1 block
Chemistry or Science Elective	1 block
US History II or American Studies II	1 block
Gym and Health Grade 11	1 block
Fine/Practical Art or <b>**Free Elective**</b>	1 block
<b>**Free Elective**</b>	1 block
<b>**Free Elective**</b>	1 block

<b>12<sup>th</sup> Grade</b>	
<b>Class</b>	<b># of Blocks</b>
English IV or English Composition 101	1 block
Gym and Health Grade 12	1 block
Pre-Calculus or <b>**Free Elective**</b>	1 block
Financial Literacy or <b>**Free Elective**</b>	1 block
<b>**Free Elective**</b>	1 block
<b>**Free Elective**</b>	1 block
<b>**Free Elective**</b>	1 block
<b>**Free Elective**</b>	1 block

# Student Course Selection Sheet

## School Policy -

- All students must have a minimum of 4 academic classes (including seniors)
- All students need 5 credits of fine arts and 5 credits of practical arts to meet graduation requirements
- All students must take 2.5 credits of Economics or Financial Literacy prior to graduation

### **21st Century Life & Careers/Career Tech Education (Practical Art)**

**\*1 year/5 credits required for graduation\***

<b>176</b>	T.V. Production (1/2 year)
<b>174F</b>	Broadcast Journalism
<b>0177F</b>	Editing/Studio *PreReg. Broadcast Journalism*
<b>616</b>	Cooperative Marketing Education *Juniors and Seniors Only*
<b>630</b>	Computer Applications I (1/2 year)
<b>632</b>	Computer Applications II (1/2 year) *PreReq. Comp. Apps I*
<b>706</b>	Web Design (1/2 year)
<b>707</b>	Robotics (1/2 year)
<b>710</b>	Intro to Construction
<b>708</b>	Construction Technology *PreReq. Intro to Construction*
<b>711</b>	Tech Inventions
<b>719</b>	Tech Drawing & CAD (DE) *Sophomores & Juniors Only*
<b>721</b>	Engineering CAD (DE) *PreReq. Tech Drawing & CAD*

### **World Language Electives**

**\*1 year/5 credits required for graduation\***

**\*\*2 years required for entrance to a 4 year college\*\***

<b>321</b>	Italian I
<b>322</b>	Italian II
<b>323</b>	Italian III
<b>324</b>	Italian IV (DE)
<b>331</b>	Spanish I
<b>333</b>	Spanish II
<b>334</b>	Spanish III
<b>335</b>	Spanish IV
<b>336</b>	AP Spanish IV

### **Fine and Performing Arts**

**\*1 year/5 credits required for graduation\***

<b>801</b>	Chorus
<b>803</b>	Chorus (1/2 year)
<b>806</b>	Instrumental Music (1/2 year)
<b>807</b>	Instrumental Music
<b>804</b>	Music Spectrum (1/2 year)
<b>820</b>	History of Rock (1/2 year)
<b>821</b>	Digital Music
<b>715</b>	Digital Photo & Art I (1/2 year)
<b>716</b>	Digital Photo & Art II *PreReg. Digital Photo/Art*
<b>817</b>	Foundations of Art (1/2 year)
<b>810</b>	Basic Painting (1/2 year) *PreReg. Introduction to Drawing*
<b>818</b>	Introduction to Drawing (1/2 year) *PreReg. Foundations of Art*
<b>813</b>	Art II *PreReg. Basic Painting and Intro to Drawing*
<b>814</b>	Art III *PreReq. Art III*

### **Economics / Financial Literacy**

**\*1/2 year/2.5 credits required for graduation\***

<b>236</b>	Economics (1/2 year)
<b>455</b>	Probability & Financial Literacy

## Academic Electives

**\*All students must carry 4 academic classes\***

<b>English</b>	
<b>0151S</b>	SAT Prep ELA (1/2 year)
<b>161</b>	Public Speaking (1/2 year)
<b>170</b>	Journalism (1/2 year)
<b>171</b>	Creative Writing I (1/2 year)
<b>162</b>	Creative Writing II (1/2 year) (DE) *PreReq. Creative Writing*
<b>101WRT</b>	English Composition 101 (DE)
<b>IST123</b>	Success 101 (DE)
<b>History</b>	
<b>217</b>	Civics & Government
<b>222</b>	Sociology (1/2 year)
<b>223</b>	Psychology (1/2 year) *Juniors and Seniors Only*
<b>234</b>	Criminal Justice (1/2 year)
<b>0234DE</b>	Criminal Justice (1/2 year) (DE)
<b>0228F</b>	Holocaust/Genocide Studies (DE)
<b>211</b>	AP U.S. History II
<b>214</b>	U.S. History III (DE)
<b>200</b>	Tomorrow's Teachers (DE) *Juniors and Seniors Only*
<b>Science</b>	
<b>535</b>	Marine Biology (1/2 year) *PreReg. Biology & Chemistry*
<b>536</b>	Forensic Science (1/2 year) *PreReg. Biology & Chemistry*
<b>537</b>	Bio Ethics (1/2 year) *PreReq. Biology & Senior Only*
<b>554</b>	Chemistry Theories *PreReg. Chemistry*
<b>571</b>	Physics *PreReq. Biology & Chemistry*
<b>534</b>	Anatomy & Physiology (DE) *PreReq. Biology & Chemistry*
<b>538</b>	Research & Lab Techniques (1/2 year) (DE) *PreReq. Biology & Chemistry*
<b>560</b>	AP Biology *PreReq. Biology & Chemistry*
<b>Math</b>	
<b>0451S</b>	SAT Prep Math (1/2 year)
<b>440</b>	Pre-Calculus *PreReq. Algebra 2 & Geometry*
<b>445</b>	Honors Pre-Calculus *PreReq. Algebra 2 & Trig*
<b>446</b>	Calculus Honors *PreReq. Pre-Calculus Honors*
<b>448</b>	AP Calculus *PreReq. Algebra 2 & Trig*
<b>449</b>	Computer Science *PreReq. Algebra 1*
<b>450</b>	AP Computer Science *PreReq. Computer Science

Student Name: \_\_\_\_\_

**\*\*\*You are not guaranteed because of possible schedule conflicts. Electives will be chosen by you counselor based on graduation requirements.\*\*\***

1<sup>st</sup> Choice: \_\_\_\_\_

2<sup>nd</sup> Choice: \_\_\_\_\_

3<sup>rd</sup> Choice: \_\_\_\_\_

4<sup>th</sup> Choice: \_\_\_\_\_

5<sup>th</sup> Choice: \_\_\_\_\_

# Programs Offered

## **Advanced Placement (AP) –**

Advanced Placement is a program created by the College Board which offers college level curricula and examinations to high school students. American colleges and universities may grant placement and course credit to students who obtain high scores on the examination. The accepted scores are to be determined by the individual colleges and universities. The AP curriculum for each of the various subjects is created for the College Board by a panel of experts and college-level educators in that field of study. For a high school course to have the designation, the course must be audited by the College Board to ascertain that it satisfies the AP curriculum. If the course is approved, the school may use the AP designation and the course will be publicly listed on the AP Course Ledger.

- AP Spanish IV
- AP Literature and Composition
- AP U.S. History II
- AP Biology
- AP Calculus
- AP Computer Science

## **Dual Enrollment –**

Dual Enrollment programs allow students to be enrolled in two separate, academically related institutions. Generally, it refers to high school students taking college or university courses. Students will take courses here at Garfield High School which will earn them college credits through either Fairleigh Dickinson or Bergen Community College. Rigor and expectations for such courses are intended to be on a college level. Credits are only earned if students earn no less than a “C” average for the term. Students will have to pay for college credits; however, payment varies depending on the course and whether or not the student qualifies for free or reduced lunch. Students will need to check with the host school if their credits can be transferred to their college or university of choice.

- Technical Drawing and CAD
- Engineering and CAD
- Italian IV
- Creative Writing II (Half Year)
- English Composition 101
- Success 101
- Criminal Justice
- Holocaust/Genocide Studies
- U.S. History III
- Tomorrow’s Teachers
- Anatomy and Physiology
- Research and Lab Techniques (Half Year)



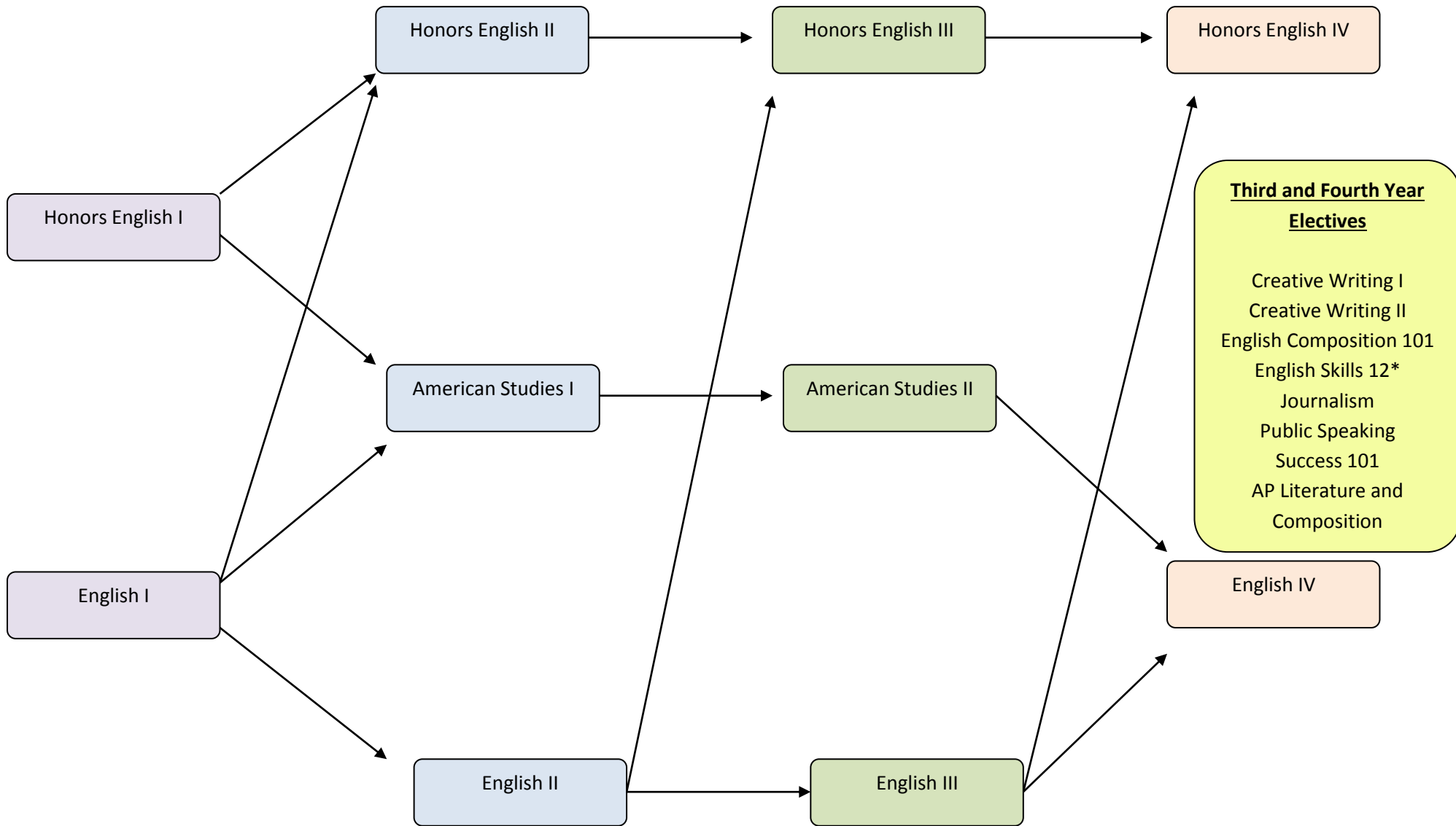
### **Satellite Program –**

The satellite program is a shared-time program between Garfield High School and Bergen County Technical Education Center in Paramus. For one half of the school day, students attend their home school for academic instruction, for the remainder of the day, the students prepare for vocational and technical careers at the technical education center.

### **ESL (Levels 1 – 4) –**

The English as a Second Language program is designed to teach skills in grammar, vocabulary, composition and reading so that a student may communicate clearly, effectively, and in an organized style in a second language. This program provides a comprehensive, developmental program in all four language domains: reading, speaking, writing, and listening. The program also addresses content area subjects and their themes through literature and vocabulary. Students qualify for the ESL program through a state wide pre screener, ACCESS, and move through the different levels by a multiple measure approach. This approach includes state testing results, grades, teacher recommendations, and ESL State Access testing. As students move through the different ESL levels, the core curriculum addresses their individual needs and language proficiency.

# English Department – Mapping



# English Department – Course Descriptions

## **Honors English I (Full year/10 credits)**

### **Prerequisites:90 or better in Language Arts Grade 8 and Teacher Recommendation**

In the Honors English 1 course, students will read from select novels, plays, short stories, nonfiction texts, informational articles, and editorials reflecting diverse perspectives. The majority of texts will relate to the hero's journey, the maturing process of the hero, and the hero's search for identity. Students will synthesize various literary elements and devices as they respond to the readings, using multiple texts to build and support a claim and refute opposing views. Students will also write fiction, poetry, informational, and persuasive essays, and complete research projects. Writing and reading will be assigned daily. In addition to assigned texts, students will be required to choose fiction and nonfiction related to their interests for independent reading and maintain a reading log. Students will also be required to maintain a folder of select writings that reflect their progress and personal excellence.

## **English I (Full year/10 credits)**

### **Prerequisites: Language Arts Grade 8**

English I is designed as a combination of a literature and writing class. As a survey course, English I will introduce students to several literary genres and include texts from diverse cultures and time periods. This class will focus on the Hero's Journey, and the connection it forms between pieces of literature. Each unit will build upon the other and students will see a pattern in universal themes, while they build connections between art and society. Studies will include, but are not limited to units in poetry, dystopian literature, dramas, memoirs, epics and fantasy novels. The class will also focus on emerging analytical skills, specifically regarding writing. Assessments will ultimately focus on developing students' ability to think critically and express their ideas in various forms, including papers, presentations, and creative outlets. The goal of the curriculum is for students to become well-rounded readers and life-long learners. Students will establish a strong foundation for college-level skills, which will prepares them for state testing.

## **Honors English II (Full year/5 credits)**

### **Prerequisites: Honors English I; 90 or better in English I and Teacher Recommendation**

This course focuses on literature which reflects themes related to a character's internal conflict and external challenges within a society. Symbol, metaphor, and irony are among the concepts which will be gleaned from selected novels, short stories, and poetry concurrently weaving a common literary and stylistic motif. Papers stressing creative as well as critical thought correlate what has been gleaned from the reading, research, and discussion.

### **American Studies I(Full year/5 credits)**

#### **Prerequisites: English I and Teacher Recommendation**

The American Studies I program uses an interdisciplinary approach to American History and Literature as its vehicle to historical and literary awareness. Parallel language arts and social studies units from the political literature of our Founding Fathers to the influential themes of Reconstruction will be presented in an analytical and critical manner. Assessments will heavily rely on student writing and historical interpretation skills and on individual ability of reflection and analysis of the historical documents from the designated themes or units. Literary techniques will be taught in order to further the students' appreciation of the historical relevance of literary works. Communication skills that allow for clear, analytical thinking and historical interpretation through both the written and spoken word will be highlighted as a primary goal of American Studies I.

### **English II(Full year/5 credits)**

#### **Prerequisites: English I**

English II presents literature that is identified by internal conflict, idealism, and loyalty vs. betrayal. Discussions and papers will spotlight and assess themes, characters, and literary focus. Short stories and poetry require the reader to draw conclusions from shorter pieces of fiction and grow as readers. Mechanics and usage will be reinforced through student work in each of the units being studied.

### **Honors English III (Full year/5 credits)**

#### **Prerequisites: Honors English II; 90 or better in English II and Teacher Recommendation**

This program uses the literature of America as its vehicle to literary awareness. Literary growth from the historical literature of our Founding Fathers to the critical contemporary themes of the 20th century will be featured and treated in an analytical and critical manner. Assessments will heavily rely on student writing skills and individual ability for interpretation of the use of literary techniques to advance theme, characterization, conflict or plot. Students will reflect on the role of literature with regard to values and lessons relevant to today's everyday life. In all cases, communication skills that allow for clear, analytical thinking, will be highlighted as a primary goal of English III Honors.

### **American Studies II (Full year/5 credits)**

#### **Prerequisites: American Studies I**

The American Studies II program uses an interdisciplinary approach to American History and Literature as its vehicle to historical and literary awareness. Parallel language arts and social studies units from the historic political literature of the Reconstruction through the Cold War will be featured and treated in an analytical and critical manner. Activities will heavily rely on student writing and historical interpretation skills and on individual ability of reflection and analysis of the historical documents from the designated themes or units. Literary techniques will be taught in order to further the students' appreciation of the historical relevance of literary works. Communication skills that allow for clear, analytical thinking and historical interpretation through both the written and spoken word will be highlighted as a primary goal of American Studies II.

### **AP Literature and Composition (Full year/5 credits)**

#### **Prerequisites: English II Honors**

An AP English Literature and Composition course engages students in careful reading and critical analysis of imaginative literature. Through the close trading of selected texts, students deepened their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a works structure, style and theme, as well as such smaller-scale elements as the use of figurative language, imagery, symbolism and tone. The course includes intensive study of representative works from various genres and periods, concentrating on works of recognized literary merit. In the course, students will read deliberately and thoroughly, taking time to understand a work's complexity, to absorb its richness of meaning, and to analyze how that meaning is embodied in literary form. In addition to considering a work's literary artistry, students reflect on the social and historical values it reflects and embodies. Furthermore, writing is an integral part of the course and exam. Writing assignments focus on critical analysis of literature and include expository, analytical, and argumentative essays. Writing instruction includes attention to developing and organizing ideas in clear, coherent and persuasive language. The course if designed to prepare students for both the Advanced Placement Literature and Composition exam and higher education.

### **Honors English IV (Full Year/5 credits)**

#### **Prerequisites: Honors English III; 90 or better in English III and Teacher Recommendation**

This course focus is British Literature and the origin and development of the English language. Through examining literature related to specific periods in British history, students will come to understand Britain's impact on our language. Specifically, students will study the Anglo-Saxon Period, The Middle Ages, and The English Renaissance in chronological order. Beowulf, The Canterbury Tales, and various works by William Shakespeare are mandatory components of this class. Beyond the mandatory readings discussed above, a variety of novels, short stories, and poetry will also be introduced and discussed. In keeping with the British Literature theme, students will be exposed to works by authors such as Charles Dickens, George Orwell, or Graham Greene among others. Victorian and Romantic Literature will also be heavily discussed. As students prepare for life beyond high school, writing for specific purposes becomes an essential skill for them to develop and master. The college application and other components in Writing for College are addressed.

## **English IV (Full Day/5 credits)**

### **Prerequisites: English III**

The focal point of the English IV curriculum is British Literature and the origin and development of the English language. Through examining literature related to specific periods in British history, students will come to understand Britain's impact on our language. Specifically, students will study the Anglo-Saxon Period, The Middle Ages, and The English Renaissance in chronological order. Beowulf, The Canterbury Tales, and various works by William Shakespeare are mandatory components of this class. Beyond the mandatory readings discussed above, a variety of novels, short stories, and poetry will also be introduced and discussed in this course. In keeping with the British Literature theme, students will be exposed to works by authors such as Charles Dickens, George Orwell, or Graham Greene among others. Victorian and Romantic Literature will also be heavily discussed. As students prepare for life beyond high school, writing for specific purposes becomes an essential skill for them to develop and master. With this in mind, a Writing for College component has been incorporated into the English IV curriculum. Personal statements and activity sheets to be included in the college application process, memoir projects, persuasive writing, and research skills are all included under the umbrella of Writing for College.

## **Creative Writing I (Half Year/2.5 credits)**

### **Prerequisites: None**

Creative Writing I is designed to instill a creative desire in students. They will learn that writing is not restricted to homework and research papers; writing can be fun and done on their own terms. When students realize that they are free to create their own worlds, characters and events, they enjoy the act writing that much more.

## **Creative Writing II (Half Year/2.5 credits)**

### **Prerequisites: Creative Writing I**

#### **Bergen Community College Dual Enrollment Eligible Course (3 credits)**

Creative Writing II is designed to expand the creative desire in students. They understand that writing is not restricted to homework and research papers; writing can be fun and done on their own terms. Since students realize that they are free to create their own worlds, characters and events, they continue to explore the genre of writing and expand their knowledge of the workings of the craft.

## **English Composition 101 (Full Year/5 credits)**

### **Prerequisites: None**

#### **Bergen Community College Dual Enrollment Eligible Course (3 credits)**

**\*\*This course can be used in place of English IV\*\***

This is a dual- enrollment course with Bergen Community College. It gives students the opportunity for extensive practice in expository writing. The course emphasizes the writing process, and concentrates on the organization and development of ideas in written work and on student responses to reading. Attention is devoted to correct language usage and on research and the basic techniques of MLA documentation.

## **English Skills 12 –**

### **Journalism (Half Year/2.5 credits)**

**Prerequisites:** None

Journalism explores the specialized skills necessary for research, regulations, compositions and production of newspapers and news media. Beginning with such basic skills as the ability to determine who, what, where, when, how, and why and processing through the inverted pyramid, composite and chronological structure, photography, layout, and advertising; touching the tools of proof and copy reader, this course allows for an introductory overview of all phases in journalism while utilizing student skills of reading, writing, speaking, and listening

### **Public Speaking (Half Year/2.5 credits)**

**Prerequisites:** None

Public Speaking is a course designed for freshmen, sophomores, juniors and seniors. After defining Public Speaking, its benefits and risks, students examine the five levels of communication and create a Public Speaking Mode. Next, students select topics and present the following speeches: a speech to inform, a speech to persuade and a speech to entertain. Students examine the effective use of language, including dialects, style and tone. Nonverbal delivery and voice production are studied with an emphasis on self improvement.

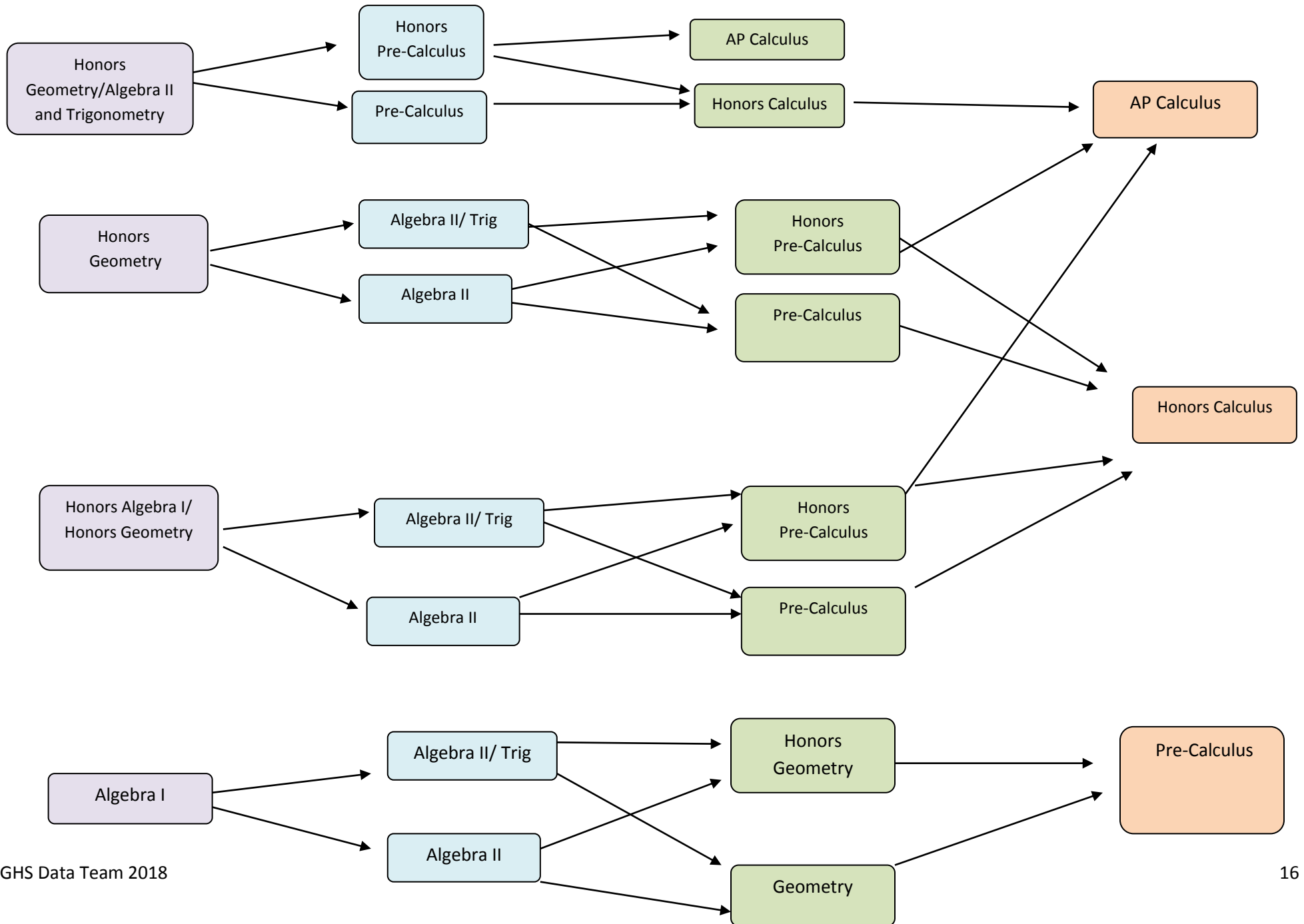
### **Success 101(Half Year/2.5 credits)**

**Prerequisites:** Seniors Only

#### **Bergen Community College Dual Enrollment Eligible Course (3 credits)**

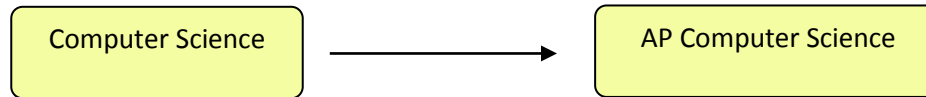
This course is offered as a dual enrollment course with Bergen Community College. The subject of this class is SUCCESS...what success is for you personally and how you can achieve it. Students will learn many proven strategies for creating greater academic, professional, and personal success. Emphasis will be placed on self-assessment and goal setting, written and oral communication skills, critical thinking, time management and study skills.

# Mathematics Department – Mapping





# Mathematics Department - Electives



Probability and Financial  
Literacy

SAT Prep Math

Math Skill 12\*

# Mathematics Department – Course Descriptions

## **Algebra I - (Full year/10 credits)**

### **Prerequisites: Math grade 8**

Algebra I is designed to give students a foundation for all future mathematics courses. Modeling and problem solving are at the heart of the curriculum. Mathematical modeling consists of recognizing and clarifying mathematical structures that are embedded in other contexts, formulating a problem in mathematical terms, using mathematical strategies to reach a solution and interpreting the solution in the context of the original problem. Students will explore: foundations of algebra, solving equations and inequalities, introduction to functions, linear functions, systems of equations and inequalities, exponents and exponential functions, polynomials and factoring, quadratic functions and equations, and radical expressions and equations. Students must be able to solve practical problems, representing and analyzing the situation using symbols, graphs, tables or diagrams. Throughout this course, New Jersey Student Learning Standards are taught and reinforced as the student learns how to apply the concepts in real-life situations.

## **Honors Algebra I/Honors Geometry– (Full Year/10 credits)**

### **Prerequisites: 90 or higher in math grade 8 and Teacher Recommendation**

This course is broken down into two semester-long sessions, consisting of Algebra I and Honors Geometry. Algebra I is designed to give students a foundation for all future mathematics courses and to provide students with an in-depth level of instruction, an accelerated pace and a cooperative learning environment. The course guides students in the development of critical thinking skills and algebraic problems-solving skills which provide the foundation for real world problem-solving. They must effectively distinguish relevant from irrelevant information, identifying missing information, acquire needed information and decide whether an exact or approximate answer is called for, with attention paid to the appropriate level of precision. The Geometry portion of this course is meant to introduce students to geometric relationships and develop methods of inductive and deductive reasoning by which these relationships are discovered and mastered. Students will gain an understanding and mastery of the meaning and nature of formal proofs. Topics to be explored in depth include transformations, classifying quadrilaterals, triangle relationships, measuring plane figures, reasoning in parallel lines, proving triangles congruent, similarity and properties of circles. Throughout this course, New Jersey Student Learning Standards are taught and reinforced as the student learns how to apply the concepts in real-life situations.

### **Honors Geometry/Algebra II and Trigonometry (Full Year/10 credits)**

#### **Prerequisites: 90 or better in Algebra II and Teacher Recommendation**

This course is broken down into two semester-long sessions, consisting of Honors Geometry and Algebra II. Geometry is a branch of mathematics that places an emphasis the study of the properties and applications of common geometric figures in two and three dimensions. The study of geometry also encompasses its close relationship with algebra by using coordinate and algebraic means to verify the relationships. There is a progressive development of both inductive and deductive reasoning. Throughout this course there is a strong emphasis on logical reasoning, problem solving, and communication skills. The Algebra II and Trigonometry portion of this course is meant further a student's understanding of linear functions and equations, quadratic and polynomial equations with real and complex solutions, exponential and logarithmic equations, systems of equations, and trigonometric identities. Throughout this course, New Jersey Student Learning Standards are taught and reinforced as the student learns how to apply the concepts in real-life situations.

### **Honors Algebra II and Trigonometry (Full year/5 credits)**

#### **Prerequisites: Teacher recommendation and a 90 or better in Algebra I**

Algebra is the language through which most of mathematics is communicated and therefore is a fundamental lifetime skill. Since the emphasis is on problem solving, we integrate this in each of the areas covered throughout the course. Algebra II extends the fundamental concepts and skills of elementary algebra to a higher level and while introducing new concepts, draws upon the same basic notions previously studied. Calculators and computer activities are also integrated into the curriculum as a tool for processing data and performing calculations to investigate and solve problems where appropriate. Open-ended questions are given to students throughout the year to expose students to these types of problems in preparation for the PARCC test. Algebra II and Trigonometry addresses the same topics as those introduced in Algebra II in more rigorous manner. Additionally, topics of trigonometry are included. The basic Algebra II topics are expanded to prepare students for the study of calculus. Technology is effectively and efficiently used throughout this course.

### **Algebra II (Full Year/5 credits)**

#### **Prerequisites: Completion of Algebra I**

This course is designed to build on algebraic concepts. Throughout the year, topics studied in Algebra I will be taken to more advanced level of understanding. Emphasis is placed on problem solving and developing critical thinking skills. Course content will include the study of the quadratic, rational, and radical functions. Students will also gain knowledge in the real and imaginary number systems. In addition, students will study polynomial operations, systems of equations, data analysis and probability, and will be introduced to exponential and logarithmic functions. The content of this course is important for students' success on both the ACT and college mathematics entrance exams. Graphing calculators will be utilized when applicable. This course is not a review of Algebra I and students should enter this course with a level of proficiency in the skills taught in previous classes.

### **Honors Geometry (Full Year/5 credits)**

#### **Prerequisites: Algebra I and Algebra II**

Honors Geometry is a course intended for students who excel in math and who intend to continue their study of higher level of mathematics in high school and college. This honors level course will take an in-depth look at creating geometric constructions for many of the geometric concepts covered in this course. Examples include but are not limited to constructing lines for the points of concurrency creating a circumcenter, incenter, centroid and orthocenter. An increased emphasis will be placed on writing formal geometric proofs using deductive reasoning. This course will require students to be highly motivated, as the instruction will be faster paced with an expectation of a higher level of understanding of all geometric postulates and theorems.

### **Geometry (Full year/5 credits)**

#### **Prerequisites: Algebra I and Algebra II**

Geometry is a branch of mathematics that places an emphasis the study of the properties and applications of common geometric figures in two and three dimensions. Students will investigate concepts concerning points, lines, planes, angles, triangles, polygons, circles and solids through logical structure and inductive and deductive reasoning, constructions, and numerical problems. Real world applications are explored on a regular basis. Topics to be explored in depth include transformations, classifying quadrilaterals, triangles relationships, measuring plane figures, reasoning in parallel lines, proving triangles congruent, similarity, right triangle trigonometry and properties of circles. Students will be required to use different technological tools and manipulatives to discover and explain much of the course content. Throughout this course, New Jersey Student Learning Standards are taught and reinforced as the student learns how to apply the concepts in real-life situations.

### **Honors Pre-Calculus (Full Year/5 credits)**

#### **Prerequisites: Algebra II and Trigonometry**

The purpose and goals of this course is to encourage students to appreciate mathematics as a logical science, while providing them with the tools necessary for a foundation for the study of calculus, or any higher-level math course. An appreciation and understanding of the language and notation of math, as it appears in the related texts of this higher-level course, is also encouraged. Technology will be effectively and efficiently utilized throughout this course, including use of the TI Graphing Calculator. The core topics relate to trigonometry, transcendental functions, and function analysis.

### **Pre-Calculus (Full Year/5 credits)**

#### **Prerequisites: Algebra I, Algebra II, Geometry**

The purpose and goals of this course is to encourage students to appreciate mathematics as a logical science, while providing them with the tools necessary for a foundation for the study of calculus, or any higher-level math course. An appreciation and understanding of the language and notation of math, as it appears in the related texts of this higher-level course, is also encouraged. Technology will be effectively and efficiently utilized throughout this course, including use of the TI Graphing Calculator. The core topics relate to trigonometry, transcendental functions, and function analysis.

### **AP Calculus (Full Year/5 credits)**

#### **Prerequisites: Algebra II and Trigonometry**

The study of calculus represents the culmination of high school mathematics. It calls upon the skills and information acquired in previous years and applies them to problems that are inherently more interesting and complicated than most previously encountered by the student of mathematics. The study of AP Calculus is of significance to students who are prospective mathematics majors, engineering students or some students who wish to pursue physical or social sciences. It is assumed that the student taking AP Calculus has successfully completed study in basic algebra, geometry, advanced algebra and some trigonometry. The rigor with which material is presented and developed throughout AP Calculus is significantly above the average ability and motivation compared to other areas of mathematics. Students will directly relate many of the problems encountered in the study of any calculus course to careers, which may be under consideration. Applications to engineering, medical as well as economic careers are included throughout and help to justify and clarify the importance studying calculus. The students will learn skills necessary to better understand and function in technological society. They are able to utilize mathematical technology more effectively and efficiently.

### **Honors Calculus (Full Year/5 credits)**

#### **Prerequisites: Algebra II and Trigonometry**

The study of calculus represents the culmination of high school mathematics. It calls upon the skills and information acquired in previous years and applies them to problems that are inherently more interesting and complicated than most previously encountered by the student of mathematics. The study of Calculus is of significance to students who are prospective mathematics majors, engineering students or some students who wish to pursue physical or social sciences. It is assumed that the student taking Calculus has successfully completed study in basic algebra, geometry, advanced algebra and some trigonometry. The rigor with which material is presented and developed throughout Calculus is significantly above the average ability and motivation compared to other areas of mathematics. Students will directly relate many of the problems encountered in the study of any calculus course to careers, which may be under consideration. Applications to engineering, medical as well as economic careers are included throughout and help to justify and clarify the importance studying calculus. The students will learn skills necessary to better understand and function in technological society. They are able to utilize mathematical technology more effectively and efficiently.

### **Probability & Financial Literacy (Full Year/5 credits)**

#### **Prerequisites: Algebra I, Algebra II, Geometry**

This course will prepare students for the choices and challenges of today's financial markets. A better understanding of personal finance will help students move into adulthood making more informed monetary decision, realizing a greater potential for personal wealth, and fostering a stronger state and national economy. The class will focus on income, money management, spending and credit, saving and investing, consumer protection and risk management. In the probability portion of the course students will be introduced to major concepts and tools for collecting, analyzing, and drawing conclusions from data, including exploring data, statistical inference, planning a study, and using probability and simulation to anticipate patterns.

### **Computer Science (Full Year/5 credits)**

#### **Prerequisites: Algebra I**

Computer Science is a beginning course designed as a broad survey of the computer science discipline designed for the student who is genuinely interested in computer programming. The course will allow the students to become familiar with the Windows OS while exploring the computer's role in representing, storing, manipulating, and organizing information. The BASIC programming language will act as the instrument to implement these concepts with the focus of the course centered around software design, the use of the computer in problem solving and the ability to write and understand computer algorithms.

### **AP Computer Science (Full Year/5 credits)**

#### **Prerequisites: Computer Science**

The AP Computer Science course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), and the analysis of potential solutions. Applications of computing provide the context in which these subjects are treated with the Java programming language acting as the vehicle for implementing computer-based solutions. The course emphasizes both object-oriented and imperative problem solving and design. Treatments of computer systems and social implications of computing are also integrated throughout the course.

### **SAT Prep (Half Year/2.5 credits)**

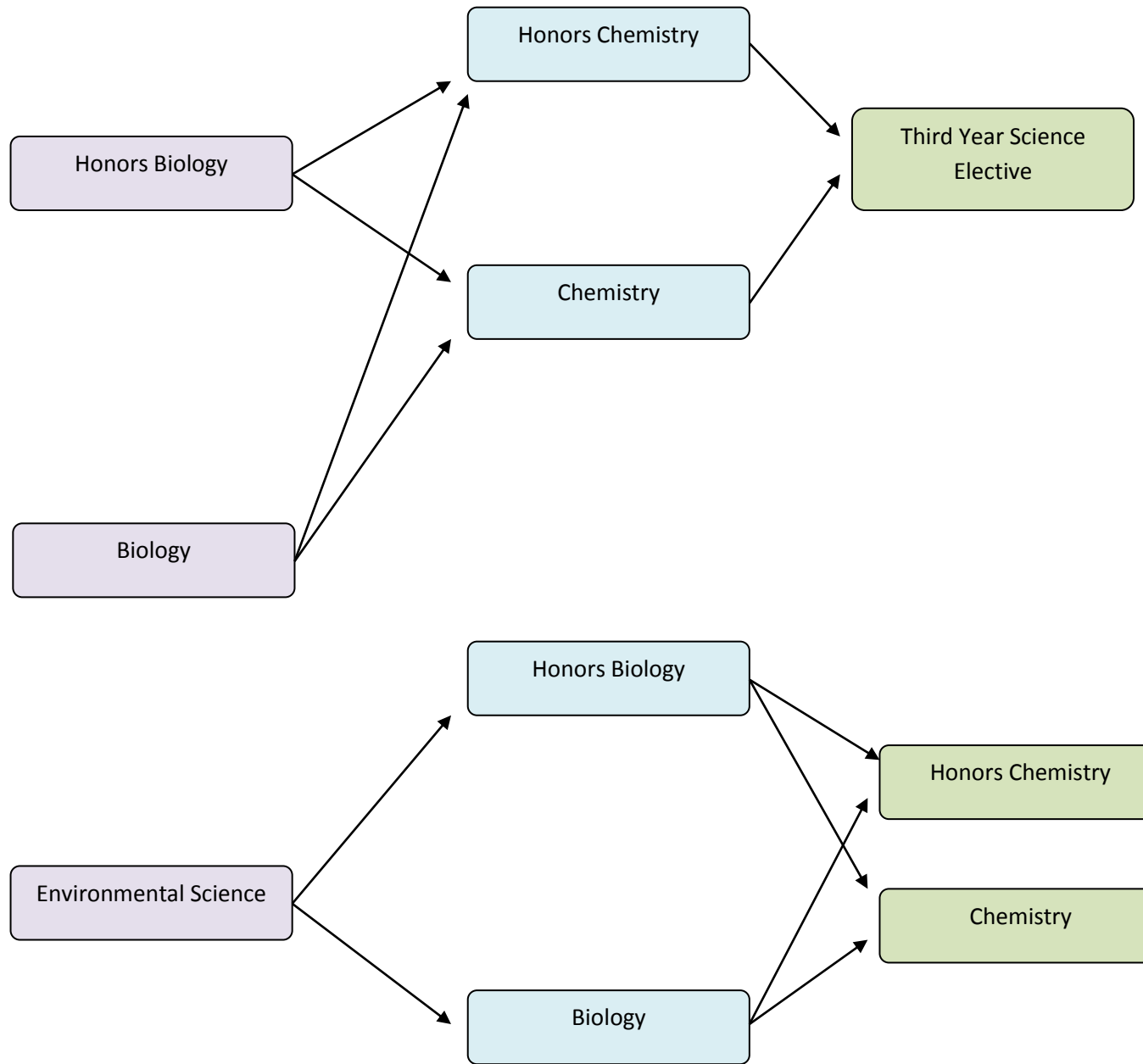
#### **This class must be taken with its English Component**

Our SAT course provides thorough preparation for the mathematical portion of the SAT exam. It covers content reviews to promote content mastery and teaches students the most dynamic and updated strategy and methods available. Students build their skills each week and increase their confidence level over the span of the course.

**Math Skills 12(5 credits)**

Math Skills 12 is designed to help students fulfill the mathematics assessment component of New Jersey high school graduation requirements. A student may exhibit mastery in Mathematics by completing alternative classroom work demonstrating the mathematical practices aligned to the high school mathematics content areas- Number and Quantity, Functions, Algebra, Statistics and Probability, and Geometry. This course encompasses knowledge and skills within in the New Jersey Student Learning Standards for Mathematics. Through the Portfolio Appeal process, evidence is gathered of a student's ability to demonstrate the mathematical practices through reasoning and modeling within the high school content areas listed above

# Science Department – Mapping



- Third and Fourth Year Electives**
- AP Biology
  - Chemistry Theories
  - Marine Biology
  - Anatomy and Physiology
  - Physics
  - Bio Ethics **(Seniors Only)**
  - Forensics
  - Research and Lab Techniques **(Seniors Only)**



# Science Department – Course Descriptions

## **Honors Biology (Full year/5 credits)**

**Prerequisites: Environmental Science or Teacher recommendation from grade 8 Science**

Biology introduces the concepts necessary for the students to have understanding of biological principles aligned with the Next Generation Science Standards. This course serves as an introduction to the molecular and cellular biology, stressing a relationship between chemical and biotic activities. Major environmental influences and their effects on ecological balance as well as individual and species survival are considered in terms of contemporary information. The presentation of genetics includes current trends in gene manipulations and genetic mutations. Other topics included in this class include, taxonomy, diversity, systematics, and evolution. Laboratory experiments are correlated to the subject matter. The Advanced Biology course will follow the same curriculum as the Biology classes, but it will be adapted in order to make the course more rigorous.

## **Biology (Full year/5 credits)**

**Prerequisites: Environmental Science or Teacher recommendation from grade 8 Science**

Biology introduces the concepts necessary for the students to have understanding of biological principles aligned with the Next Generation Science Standards. This course serves as an introduction to the molecular and cellular biology, stressing a relationship between chemical and biotic activities. Major environmental influences and their effects on ecological balance as well as individual and species survival are considered in terms of contemporary information. The presentation of genetics includes current trends in gene manipulations and genetic mutations. Other topics included in this class include, taxonomy, diversity, systematics, and evolution. Laboratory experiments are correlated to the subject matter.

## **Environmental Science (Full year/5 credits)**

**Prerequisites: Grade 8 science**

This course is designed to introduce students to major ecological concepts and the environmental problems, which affect the world in which they live. Students will learn about technological developments which have created environmental problems as well as technology which is helping to solve them. This program also provides one way in which students can become more aware of their interactions of people and their environment. It relates important environmental issues to the lives of the students and their families. It promotes awareness and understanding of practical everyday problems which affect their lives as they become citizens of the world. Major topics include general science skills, the earth, energy resources, land and water resources, and limiting human impact. Laboratory investigations are utilized to allow students to further investigate course concepts.

### **Honors Chemistry (Full year/5 credits)**

#### **Prerequisites: Honors Biology and a B or higher in Algebra I**

Chemistry introduces the students to the study of matter and the changes it undergoes. Both the traditional methods of instruction and inquiry based learning will be used to investigate key concepts of the course. This course of study is aligned with the Next Generation Science Standards and designed to provide the students all the necessary principles and lab activities consistent with college requirements. The study of chemistry include: atoms, elements, chemical bonding, and the behavior of matter. Further information is provided on the nature of elements and chemical reactions as related to the study of the Periodic Table. States of matter, including physical, chemical, and nuclear changes are also addresses. Laboratory experiences are designed to allows the student to observe the application of chemistry principles in real life. The Advanced Chemistry course follows the same basic curriculum with the addition of several additional unites which are noted as the Advanced Chemistry units in the Unit Map. Lessons will be differentiated for the Advanced classes to adjust to the increased pace and higher level activities.

### **Chemistry (Full year/5 credits)**

#### **Prerequisites: Biology**

Chemistry introduces the students to the study of matter and the changes it undergoes. Both the traditional methods of instruction and inquiry based learning will be used to investigate key concepts of the course. This course of study is aligned with the Next Generation Science Standards and designed to provide the students all the necessary principles and lab activities consistent with college requirements. The study of chemistry include: atoms, elements, chemical bonding, and the behavior of matter. Further information is provided on the nature of elements and chemical reactions as related to the study of the Periodic Table. States of matter, including physical, chemical, and nuclear changes are also addresses. Laboratory experiences are designed to allows the student to observe the application of chemistry principles in real life.

### **AP Biology (Full year elective/10 credits)**

#### **Prerequisites: Biology and Chemistry**

The AP Biology course is designed to be taken by students after the successful completion of a first year Biology and Chemistry. It aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of Biology. The AP course is designed to be the equivalent of a two-semester college introductory Biology course usually taken by Biology majors during their first year. After showing themselves to be qualified on the AP exam, some students in their freshman year may be permitted to undertake upper level course in Biology or to register for course which Biology is a prerequisite. Other students may have fulfilled a basic requirement for a laboratory science course and will be able to undertake other course to pursue their majors.

### **Chemistry Theories(Full year elective/5 credits)**

#### **Prerequisites: Chemistry and Teacher Recommendation**

Chemistry Theories is a second year chemistry course designed to provide science-oriented students with an in-depth understanding of fundamental chemical concepts and build strong computational skills. The presentation of basic themes and mathematical formulation of principles encourage students to reason through chemical problems, formulate opinions, and express their ideas. This course is roughly equivalent to college freshman general chemistry courses. This course provides rigorous study in four major areas: structure of matter, states of matter, reaction and descriptive chemistry. The student will demonstrate a basic understanding of the ability to apply mathematical solution to problems involving atomic theory and structures, chemical bonding, nuclear chemistry, kinetic theory, solutions, reaction types, stoichiometry, equilibrium, kinetics, thermodynamics, and descriptive chemistry.

### **Marine Biology (Half year elective/2.5 credits)**

#### **Prerequisites: Biology and Chemistry**

This course is designed for students with an interest in marine biology and oceanography. This course provides an excellent background for students who are interested in further study of the oceans and the organisms that inhabit it. Major concepts include the study of: the interrelationship of marine and terrestrial environments, the geology of the oceans, marine organisms, and the ecology of coral reefs. Laboratory activities, including the examination of marine specimens are utilized throughout this course to build upon student knowledge.

### **Anatomy and Physiology (Full year elective/5 credits)**

#### **Prerequisites: Biology and Chemistry**

#### **Bergen Community College Dual Enrollment Eligible Course (3 credits)**

This is a Dual Enrollment Course through Bergen Community College. In order to earn college credit for this course through BCC, students must maintain a C average. This rigorous college-level elective science course includes a detailed study of many human body systems. Homeostatic balance, the relationship between structure and function, and the interrelationships between body systems are a focus throughout the course. This course is recommended for students interested in a health-related career, especially those students who plan to study medicine, nursing, physical therapy, and athletic training. The course may also be helpful for those students who plan to enter education as either a life-science or physical education teacher. Laboratory activities will include several microscopic analyses of tissue specimens as well as several dissections to accompany the subject matter.

### **Physics (Full year elective/5 credits)**

#### **Prerequisites: Biology and Chemistry**

Physics is an understanding of the physical world that leads to new discoveries and improve human conditions. Physics involves conceptual understanding and quantitative applications covering mechanics, properties of matter, waves, electricity and magnetism which relate students' every day experiences to the real world. Much emphasis is placed on laboratory activities, observations, and reporting. A working knowledge of mathematics is needed as a clear relationship between mathematics and physics is stressed. Laboratory activities are included and build upon concepts covered in this course.

### **Bioethics (Half year elective/2.5 credits)**

#### **Prerequisites: Biology**

This general education elective science course includes case studies of genetic testing, human gene therapy, genetic counseling, cloning, animal use in research, prenatal screening for diseases, needle exchange programs, taxing SUVs, clean energy sources, organ donation, selective fertility and other relevant topics. Emphasis will be placed on expressing opinions verbally and in writing. This course is recommended for students interested in a health-related, legal, business, education or financial career. The course may also be helpful for those students who would simply like to learn more about some of the issues facing our society today. Group activities will include analysis and reenactment of case studies examining a wide range of biological, environmental and medical issues.

### **Forensics (Half year elective/2.5 credits)**

#### **Prerequisites: Biology and Chemistry**

Forensic Science is the application of science to those criminal and civil laws that are enforced by police agencies in a criminal justice system. It has become a comprehensive subject incorporating Biology, Chemistry, Physics, Entomology, Earth Science, Anatomy and Physiology as well as other aspects of Science. Major topics include processing a crime scene, collecting and preserving evidence, identifying types of physical evidence, organic and inorganic analysis of evidence, hair, fibers, and paint, toxicology, arson and explosion investigations, serology, DNA, fingerprints, firearms, and document analysis. The main focus of this course will be to emphasize the evidential value of crime scene and related evidence and the services of what has become known as the crime laboratory. This course combines basic theory and real laboratory experiments, creating an experiment based situation for the better understanding of the students. The experiments used reinforce previously learned scientific principles rooted in Biology, Chemistry and physics. Each unit has its own experiments, which can be modified depending on class size and exterior circumstances such as climate.

### **Research and Lab Techniques (Half year elective/2.5 credits)**

**Prerequisites: Biology and Chemistry**

#### **Bergen Community College Dual Enrollment Eligible Course (3 credits)**

This is a Dual Enrollment Course through Bergen Community College. In order to earn college credit for this course through BCC, students must maintain a C average. This elective science course will introduce students to the use of various equipment and methods in the laboratory. Students completing this course will be better equipped than their counterparts to function in a college laboratory environment. Throughout the course, students will gain a better understanding of physical and chemical properties in biological organisms as they learn more about microscopy and slide preparation, solution preparation, preparing and running experiments on DNA using gel electrophoresis equipment, in vitro cell growth and more. During each activity, proper data collection techniques will be taught and reinforced.

### **Physical Science (Full year elective/5 credits)**

**Prerequisites: Biology and Chemistry**

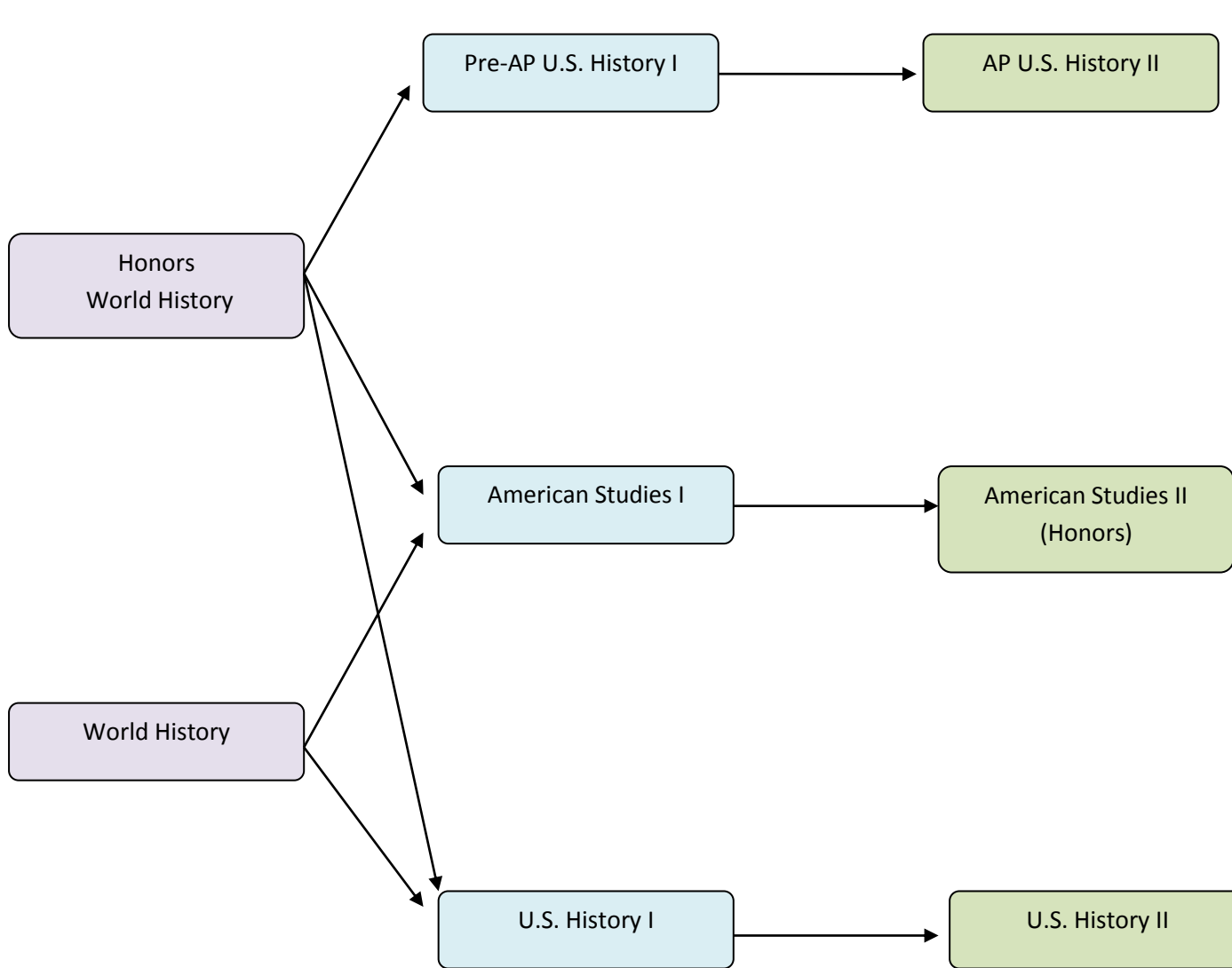
This is an introductory course based on the concepts of chemistry and physics. The course focuses on the structure and bonding of atoms and molecules, the use of information provided by the Periodic Table, the phases of matter, chemical reactions, energy, mechanics, electricity, and magnetism. A variety of activity-based investigations are included in this course to further expand on the student's grasp of the concepts.

### **Earth Science (Full year Elective/5 credits)**

**Prerequisites: Biology**

Earth Science emphasizes the interrelationship of Astronomy, Geology, Meteorology, and Oceanography by focusing on cycles, interactions, and common themes. Current science, environmental, and technological issues have been included in order to prepare students to be responsible citizens of the 21<sup>st</sup> century. Activity-based investigations are utilized to allow students to further investigate course concepts.

# History Department – Mapping



- Third and Fourth Year  
Electives**
- Criminal Justice
  - Economics
  - Sociology
  - Holocaust/Genocide Studies
  - AP U.S. History II
  - U.S. History III
  - Psychology
  - Tomorrow's Teachers

# History Department – Course Descriptions

## **World History (Full Year/5 credits)**

### **Prerequisites: World History grade 8**

The World History course is the second part of the district's world History program. Entering freshman will have completed the study of World History from the Paleolithic Period, through antiquity, to the beginning of the First Global Age at the eighth grade level. Therefore, this part of the course will commence with an in-depth study of global interactions among Asia, Africa, Europe, and the Americas. Following the Renaissance, the Enlightenment and the Age of Revolutions in Europe and the Americas will be explored. Students will analyze historical documents and examine the development of individual and human rights across places and throughout time. The course will commence with a study of the Age of Imperialism, World Wars I and II and the Modern Era. Throughout the course, students will consider the impact of the individual on social and political movements. Furthermore, they will evaluate the roles that various political, economic, social and religious systems, as well as technological and artistic developments, played in shaping the course of the world's history. The course will emphasize the development of critical thinking skills via activities that stress writing, historical interpretation and analysis skills.

## **Honors World History (Full Year/5 credits)**

### **Prerequisites: World History grade 8 and teacher recommendation**

Advanced World History is an accelerated level of World History. The advanced curriculum, in addition to including topics of study, emphasizes higher level critical thinking skills. Therefore, this course will include a variety of reading and writing intensive activities geared at developing students' analytical and writing skills.

## **U.S. History I (Full Year/5 credits)**

### **Prerequisites: World History**

The United States History I course analyzes the origins of the American nation in the Founding Era through Reconstruction. Students will be prepared to respond to the fundamental questions concerning the history of the United States from the proper role of government in a representative democracy to the role of major events in shaping the character of the American experience. Students will determine how decisions made by government leaders, economics and technology, and geography impacted the events of these time periods. Much emphasis will be placed on interpreting primary and secondary source documents, the perspectives of the authors, and the reasoning behind the specific reading. Learning how to weigh historical evidence while grappling with differing interpretations prepares students for the complexities they will face in college and career. Finally, students will be expected to determine how the events that shaped the formation of the United States impact their lives today.

### **American Studies I (Full Year)**

**Prerequisites: Recommendation from both English I and World History teachers.**

The American Studies program uses an interdisciplinary approach to American History and Literature as its vehicle to historical and literacy awareness. Parallel language arts and social studies units from the historic political literature of our Founding Fathers to the critical influential themes of Reconstruction will be featured and treated in an analytical and critical manner. Activities will heavily rely on student writing and historical interpretation skills. Much emphasis will be placed on the ability of the student to reflect on and analyze historical documents. Knowledge of literacy techniques to advance the student's concept of theme, characterization, conflict and plot will be taught in order to further the students' appreciation of the historical relevance of literary works. The emphasis of projects will reflect the role of literature with regard to values and lessons relevant to important events in American history. In all cases, communication skills that allow for clear, analytical thinking and historical interpretation through both the written and spoken word will be highlighted as a primary goal of American Studies.

### **U.S. History II (Full Year)**

**Prerequisites: U.S. History I**

The United States History II course analyzes the turn of the 19<sup>th</sup> century through the present day. Students will be prepared to respond to the fundamental questions concerning the history of the United States from the proper role of government in the representative democracy to the role of major events in shaping the character of the American experience. Students will determine how decisions made by government leaders, economics, and technology, and geography impacted the events of these time periods. Throughout the course students will examine the intersection of economic, political, and ideological concerns at different points in America's history. Emphasis will be placed on interpreting primary and secondary source documents, the perspectives of the authors, and the reasoning behind the specific reading. Learning how to weigh historical evidence while grappling with differing interpretations prepares students for the complexities they will face in college and career. Finally, students will be expected to determine how the events that led to the United States becoming the superpower in the world impact their lives today.

### **American Studies II (Full year/5 credits)**

**Prerequisites: American Studies I**

The American Studies II program is the second part of the American studies curriculum. The basis of this course is a furtherance of the interdisciplinary approach to American History and Literature as its vehicle to historical and literary awareness. Parallel language arts and social studies units from the historic political literature of the Reconstruction Era through the critical influential themes of twentieth century will be featured and treated in an analytical and critical manner. Students will be expected to improve on their prior knowledge of literary techniques and analysis of historical events within the context of literature. Students will be expected to make connections and draw conclusions as they progress through the historical events studied. Much emphasis will be placed on the students' ability to develop arguments and support those arguments with factual details. In addition, students will be expected to connect the events of America's past to contemporary issues today. In all cases, communication skills that allow for clear, analytical thinking and historical interpretation through both the written and spoken word will be highlighted as a primary goal for American Studies II.



### **Criminal Justice (Half Year Elective/2.5 credits)**

**Prerequisites:** None

#### **Bergen Community College Dual Enrollment Eligible Course (3 credits)**

Criminal Justice is an academic elective which focuses on the study of legal issues which affect our everyday lives. The topics cover various aspects of the legal spectrum including legal procedure and evidence drawn from cases throughout history. Special attention is given to criminal, civil, and juvenile law. Students will first be exposed to the proper procedures of the court process, which will include criminal procedures, appeals procedures, and the role of the Supreme Court in shaping jurisprudence. In addition, students will examine court cases throughout US history to analyze the impact of precedence in current cases. Finally, the topic of contract law will be examined as it relates to issues such as marriage and family issues. At the completion of the course, the student will possess a board understanding of the American legal system and how everyday citizens participate in it.

### **Economics (Half Year Elective/2.5 credits)**

**Prerequisites:** None

Economics introduces students to the world of business, finance, global markets, and banking. The curriculum begins with a description of different economic theories and real world examples of how the system of economics affects people's everyday lives. Next students will examine the difference between microeconomics and macroeconomics through real world situations and scenarios. Throughout each of these broad topics concepts such as investing, money management, supply and demand, business operation, the history and overview of money, and global economics will be analyzed. Students will continually be expected to relate these concepts to the effects that economics decisions and issues have on the everyday lives of people.

### **Sociology (Half Year Elective/2.5 credits)**

**Prerequisites:** None

Sociology focuses on the study of society. The course encompasses a variety of topics. One of the main focuses will be culture and social structure. In addition, students will examine the individual in society. Conflicts such as social inequality, gender difference, aging and health will be examined. The course will also examine how perceptions of mental disabilities have changed over time. This course will address the ever changing norms of culture and society. At the end of this course students will be able to identify their place in society.

### **Holocaust/Genocide Studies (Full Year Elective/5 credits)**

**Prerequisites:** None

#### **Bergen Community College Dual Enrollment Eligible Course (3 credits)**

The purpose of this course will be to introduce, examine, and analyze genocides of the 20<sup>th</sup> century and today in order to gain an understanding of the causes and effects of genocide. The ultimate goal will be for the students to trace the various stages of genocide and to comprehend the link between acts of hatred and prejudice and mass murder. Students will understand the history of genocide through literature and other media. This course will encourage tolerance, acceptance, and appreciation for cultural differences and the important contributions they have to offer to humanity.

### **AP U.S. History II (Full Year/5 credits)**

#### **Prerequisites: US History I Honors**

The AP course is designed to provide students with an intensive survey of United States History along with the analytical skills and enduring understandings necessary to deal critically with the problems and materials in our nation's history. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college course. Students will learn to assess historical materials, their relevance to a given interpretive problem, their reliability, and to weigh the evidence and interpretations presented in historical scholarship. An AP United States History course will this develop the skills necessary to arrive at historical conclusions on the basis of an informed judgment, lectures, assigned readings and to present reasons and evidence clearly and persuasively in an essay format.

### **U.S. History III (Full Year/5 credits )**

#### **Prerequisites: Teacher recommendation**

#### **Bergen Community College Dual Enrollment Eligible Course (3 credits)**

This Bergen Community College course conducted at Garfield High School is a study of the United States from the Second World War to the present. Topics covered include World War II diplomacy, the Cold War both domestic and foreign policy, Economic prosperity, Containment, and Vietnam era, Detents, Domestic Reforms including Civil Rights, Great Society, 1960's counterculture movement, Watergate, and other political, social, economic, and cultural developments in the United States from the 1940's to the present.

### **Psychology (Half Year Elective/2.5 Credits)**

#### **Prerequisites: None**

The purpose of this course is to introduce students to core concepts and content areas in the field of psychology including the use of the scientific method in research, mind/body debate, the physiological bases for behavior and mental processes in humans primarily and other animals. Topics in the first semester may include personality theory and key psychologists of the 20th century, self-understanding, motivation, family constellation, self-confidence, body image, social psychology with focus on key experiments including Asch Conformity Studies, Milgram Obedience Studies, and Stanford Prison Experiment, gender studies, relationships, stress, sleep, the psychology of religion, the psychology of "space", and learning. During the second semester topics may include human growth and development with an emphasis on adolescent psychology, memory, perception, abnormal behavior, and variations in counseling methods. The course introduces students to the methods of inquiry and evaluation used by psychologists and provides students with information about issues that individuals encounter in themselves and in their relationships with friends, family, acquaintances, employers, etc. Studying psychology should lead students to an appreciation of and understanding individual differences. Students should acquire insight into the complex determinants underlying individual and group behavior. Students will also be able to synthesize the connection of psychology with other sciences and disciplines and the use of psychology in many careers.

## **Tomorrow's Teachers (Full Year/5 credits)**

### **Prerequisites:Teacher recommendation**

### **Fairleigh Dickson University Dual Enrollment Eligible Course (3 credits)**

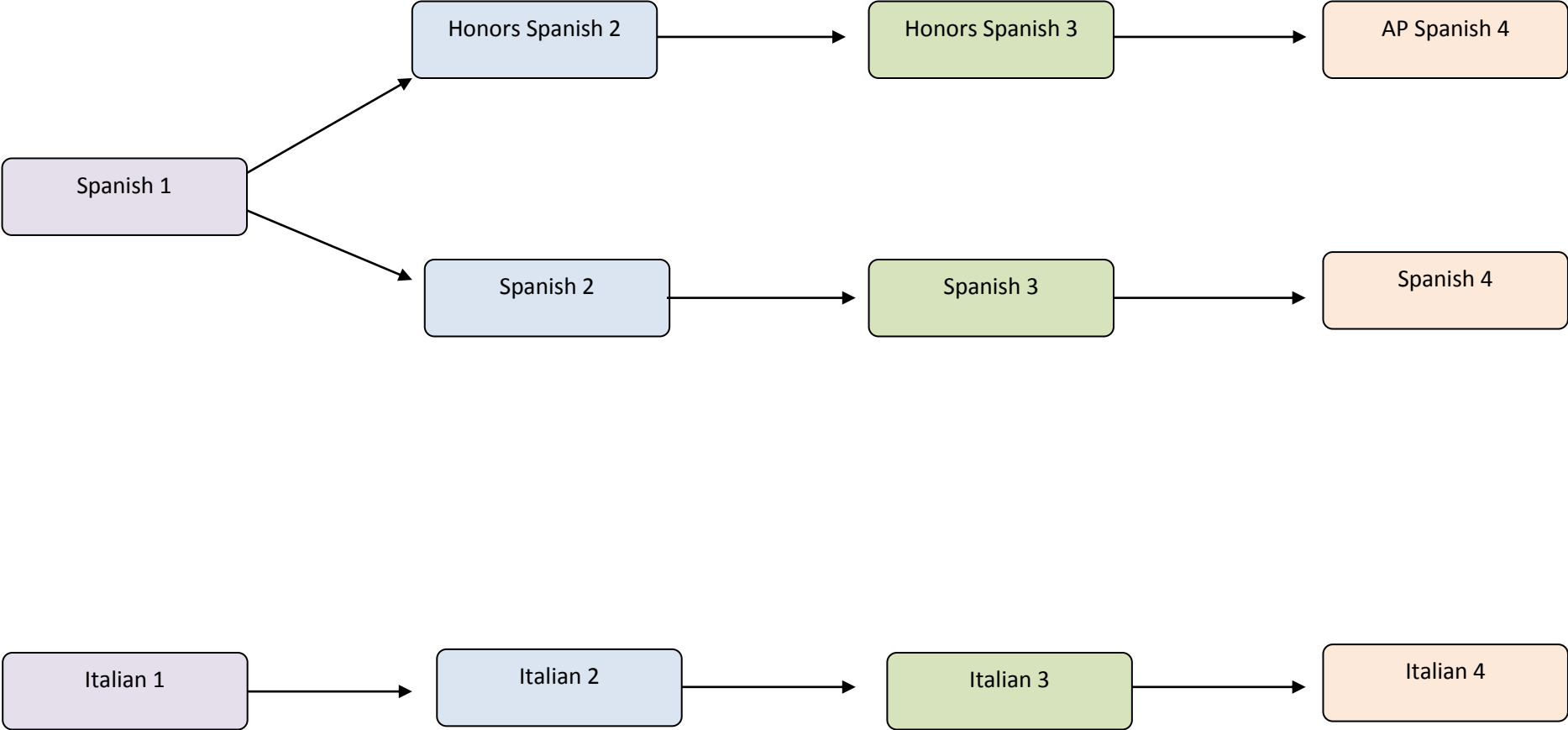
The primary goal of the Tomorrow's Teachers program is to encourage academically able students who possess exemplary interpersonal and leadership skills to consider teaching as a career. An important secondary goal of the program is to provide these talented future community leaders with insights about teachers and schools so that they will be civic advocates of education. The Tomorrow's Teachers program is an innovative approach designed to attract talented young people to the teaching profession through a challenging introduction to teaching. The program seeks to provide high school students insight into the nature of teaching, the problems of schooling, and the critical issues affecting the quality of education in America's schools. Tomorrow's Teachers is taught for a minimum of one class period a day for a year or the equivalent of that amount of time in contact hours. It includes four themes: Experiencing Learning; Experiencing the Profession; Experiencing the Classroom; and, Experiencing Education. A variety of hands-on activities and a strong emphasis on observations, and field experiences are provided. Emphasis is also placed on teaching critical shortage subject areas.

Fairleigh Dickinson University's Middle College Program (MCP) is a concurrent enrollment program that provides an opportunity for qualified high school students to get an early start on college education by earning college credits while still in high school. Participating students may attain advanced standing. These college-level courses are taken in high school and may be used to fulfill college and university requirements with minimal expense as compared to most university programs. The credits earned are recognized as high school credits toward graduation but are also entered onto the student's permanent FDU transcript. Most MCP courses are transferable to four-year colleges and universities. These challenging college-level courses are offered to high school students in their Junior and Senior.

## **Civics and Government (Full year/5 credits)**

### **Prerequisites:**

# World Language Department- Mapping



# World Language Department – Course Descriptions

## **Spanish I (Full year/5 credits)**

**Prerequisites:** None

Students will learn the four language skills: listening, reading, writing, and speaking. Students will engage in meaningful activities in order to comprehend and respond appropriately to oral and written messages. Vocabulary, grammatical structures, and cultures emphasize the main objective: to communicate meaningfully with others in Spanish.

## **Spanish II (Full year/5 credits)**

**Prerequisites:** Spanish I; Teacher Recommendation

The purpose of the course is to strive for fluency in oral expression through the study of more advanced grammar structures and vocabulary acquisition. The culture and history of the Spanish - speaking world continues to be an integral part of the course. Spanish II Advanced reflects the same goals, objective and proficiencies as Spanish II. It differs from Spanish II in that the students are expected to perform at a quicker pace and to cover a greater range of structure and vocabulary.

## **Honors Spanish II (Full year/5 credits)**

**Prerequisites:** 90 or better in Spanish I and Teacher Recommendation

This is an accelerated and enriched class in comparison to the regular Spanish II course. The purpose of the course is to strive for fluency in oral expression through the study of more advanced grammar structures and vocabulary acquisition. The culture and history of the Spanish - speaking world continues to be an integral part of the course. Spanish II Advanced reflects the same goals, objective and proficiencies as Spanish II. It differs from Spanish II in that the students are expected to perform at a quicker pace and to cover a greater range of structure and vocabulary.

## **Spanish III (Full year/5 credits)**

**Prerequisites:** Spanish II

This is a course designed for the student with a genuine appreciation for the language. The course deals with attention to the fine points of grammar in Spanish with a strong emphasis on the development of oral and written expression. Students will also gain knowledge in advanced conversation and composition, improvement of language skills and an understanding of grammar with a special emphasis on the development of writing skills. In addition, students will read advanced selections in Spanish and will be expected to react to them both orally and in writing.

### **Honors Spanish III (Full Year/5 credits)**

#### **Prerequisites: Honors Spanish II; Teacher recommendation**

This is a course designed for the student with a genuine appreciation for the language. The course deals with attention to the fine points of grammar in Spanish with a strong emphasis on the development of oral and written expression. Students will also gain knowledge in advanced conversation and composition, improvement of language skills and an understanding of grammar with a special emphasis on the development of writing skills. In addition, students will read advanced selections in Spanish and will be expected to react to them both orally and in writing. The course deals with a concentration of literature from early 20th century to present. This course prepares students for AP Spanish IV

### **Spanish IV (Full year/5 credits)**

#### **Prerequisites: Spanish III**

Spanish IV is a course designed for the student with a genuine appreciation for the language. The course deals increasingly with geographical, historical, and cultural components of the Spanish world. Basic grammar is reviewed and more advanced structures are presented. Reading, writing, listening, and speaking skills are refined during the course.

### **AP Spanish IV(Full Year/5 credits)**

#### **Prerequisites: Spanish III and Teacher Recommendation**

AP Spanish is a course designed for the student with a genuine appreciation for the language. The course deals increasingly with geographical, historical, and cultural components of the Spanish world. Basic grammar is reviewed and more advanced structures are presented. Reading, writing, listening, and speaking skills are refined during the course. This course also prepares students for the AP exam.

### **Italian I (Full year /5 credits)**

#### **Prerequisites: None**

Students will learn skills in grammar, vocabulary, composition, and reading so that a student may communicate in a clear and effective style. The class will provide a comprehensive, developmental program in order to achieve competence in listening, reading, speaking, and writing Italian. There is an emphasis on culture and culture-related activities. While some project work is completed as it relates to the skills and knowledge being acquired. Students are assessed through tests and participation.

**Italian II(Full year/5 credits)**

**Prerequisites: Italian I**

Students will develop skills in grammar, vocabulary, composition, and reading so that the student may communicate in a clear and effective style. The class will provide a comprehensive developmental program in order to achieve competence in listening, reading, speaking, and writing the Italian language.

**Italian III(Full year/5 credits)**

**Prerequisites: Italian II**

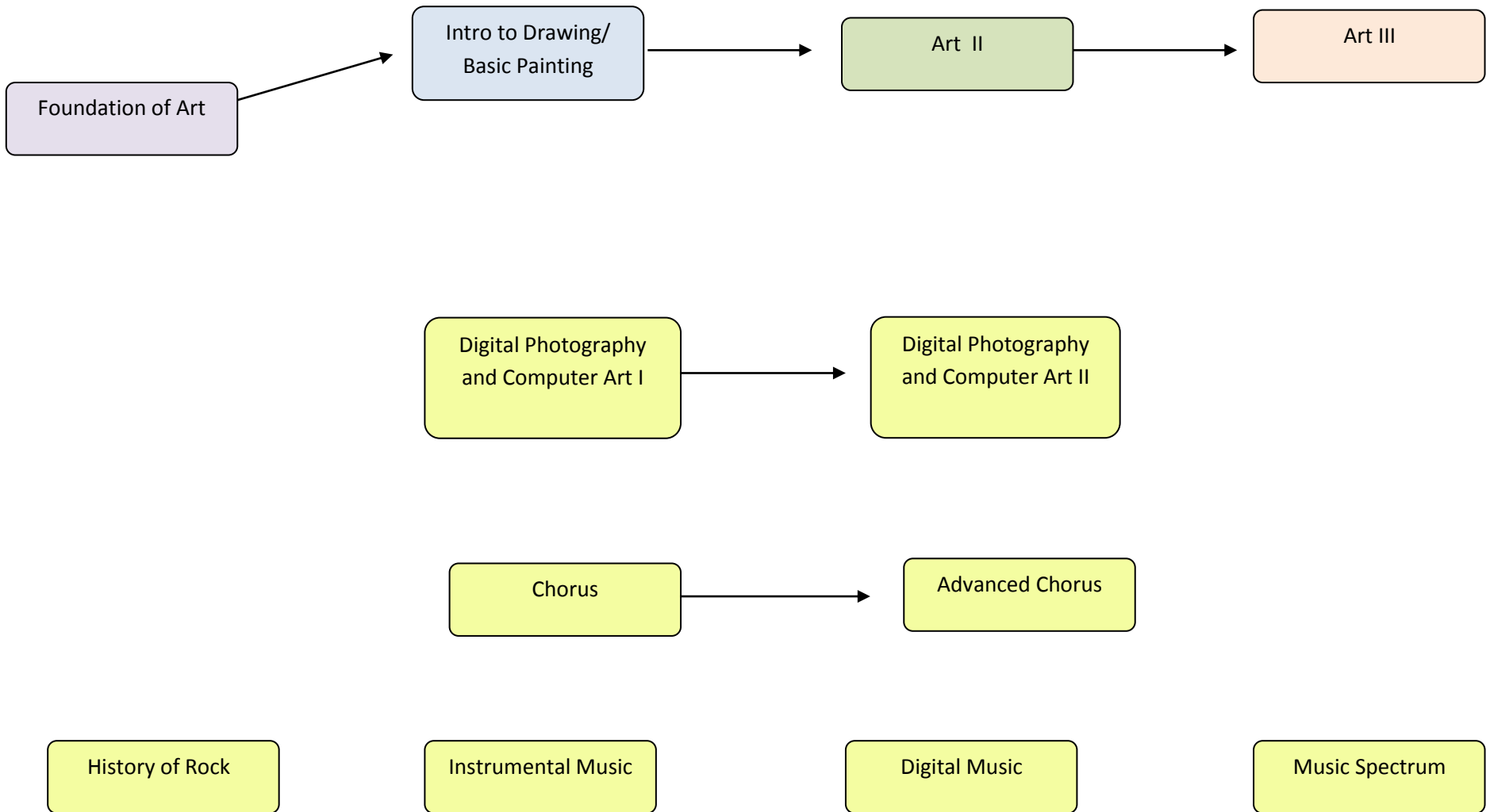
This course develops the four basic skills introduced in Italian level one and two. Students will become more comfortable expressing themselves in all methods of communication. Real life communication is the goal and the class will be taught primarily in Italian.

**Italian IV (Full year/5 credits)**

**Prerequisites: Italian III**

**Bergen Community College Dual Enrollment Eligible Course (3 credits)**

# Fine and Performing Arts – Mapping





# Fine and Performing Arts – Course Descriptions

## **Foundations of Art (Half year/2.5 credits)**

**Prerequisites:** None

This is an entry-level course designed for ALL students to help increase their creative abilities through artistic expression. The students will concentrate on various elements of art and the many different forms art can take, while developing an appreciation for artworks and the masters who created them. Students are required to do exercises, drawings, collages and paintings while simultaneously being exposed to several types of media such as, paint, pencil, charcoal, pastel, and pen and ink and how they relate to the elements of art and the principles of design. Throughout the semester, the many careers and countless job opportunities that art can offer are presented and discussed.

## **Introductory Drawing/Basic Painting (2 Half Year courses/2.5 credits each)**

**Prerequisites:** Foundations of Art and Teacher Recommendation

Together these introductory art courses (otherwise known as Art I) are chosen by those students who have developed an interest in the arts. The intent of this course is to develop an appreciation of drawing and to introduce or enhance drawing skills, as well as, learn the basics of using paint as a coloring medium. This course will demonstrate various drawing techniques including perspective and portraiture. Students will become familiar with the proper use of tempera, watercolor and acrylic paints while working in the different painting styles such as Impressionism. In addition to the use of paint, students will also be required to create artworks that include printmaking. An intense concentration on color theory is applied to the required assignments of this course of study. The course's activities will teach basic concepts: design elements and principles, composition, media and perception. Students will also gain a background in art history while study numerous artists and styles.

## **Art II (Full year/5 credits)**

**Prerequisites:** Art I

This is an advanced art course chosen by those students who have developed an above average interest in the arts and have completed both of the introductory courses (Introductory Drawing / Basic Painting). Students build upon the skills learned from those courses and are also introduced to and instructed in more complex and advanced media techniques. At this level, students work with varied 2D and 3D media such as, acrylic paint, clay, papermache' and collage. Students are asked to keep a sketchbook throughout the year. They will discuss poster design and enter various design contests during the course. There is a greater emphasis on creativity, skill development and a broader appreciation of the arts. Students will further study the many careers in art and the various job opportunities available in the art field.

### **Art III (Full year/5 credits)**

#### **Prerequisites: Art II**

An advanced art course geared to the serious art student who has completed Art II. Students are given the opportunity to develop independent approaches in style, development, and artistic problem solving. Emphasis is on refinement of previously learned techniques, skills, values and theories. Students will do oil paintings, mixed media, mosaics, mask making and sculptures, as well as a focus on advertising. Professionalism and sophistication are encouraged in project approach and development. Students will maintain a sketchbook throughout the course. There will be a concentration on developing a portfolio which should encompass the many artworks from their years in Garfield High School.

### **Digital Photography and Computer Art I (Half year/2.5 credits)**

#### **Prerequisites:None**

This is an introductory-level course for the use of digital cameras and the programs associated with them. Students will learn how to shoot pictures and utilize the software programs, Adobe Photoshop™ and the now popular general image manipulation program (GIMP™). Enhancement of the knowledge of composition, the elements of art, and principles of design is an integral part of the course. There will be exploration of careers in Media Art such as, portraiture, photojournalism, sports photography, newspaper photography, freelance photography, as well as, fine art photography, etc. Exploration of the entire career choices associated with the field of digital photography will occur. The creation of a digital portfolio is required. Students work cooperatively in a studio and field setting in order to produce visual art that is displayed within the school and shown on MSG Varsity.

**Participation in some after school projects is a required part of this course.**

### **Digital Photography and Computer Art II(Half year/2.5 credits)**

#### **Prerequisites: Digital Photography and Computer Art I**

In this course students will have the opportunity to further enhance their knowledge of digital cameras and photographic equipment. In addition, students will learn one of the top professional software programs, Adobe Photoshop™ and the now popular general image manipulation program (GIMP™). They will complete projects creating real-life examples. Students will practice and improve skills in their career choice of Media Art such as, portraiture, photojournalism, sports photography, newspaper photography, freelance photography, as well as, fine art photography, etc. The attributes of proper conduct of a professional photographer will be taught and expected. Students will focus on a career in photography and complete a web portfolio that will prepare them for acceptance into an institute of advanced learning. Cooperative work in studio and field settings is a vital component of the course resulting in the production of visual art that is displayed in school and shown on MSG Varsity. **Participation in some after school projects is a required part of this course.**

### **Chorus (Full year/5 credits)**

**Prerequisites:** None

This course will allow students to grow and develop as an ensemble as well as to grow as individual singers. Students will learn and perform wide range of music repertoire as they gain further knowledge and understanding of basic music skills. Students will attend and participate in after-school combined rehearsals, seasonal concerts with solo opportunities, and field trips with many performance and technique-improving opportunities. Students will be graded on attendance, participation and overall effort. There are no prerequisites for this course. All students with a passion for singing are invited and welcome to join the GHS Concert Choir.

### **Advanced Chorus (Full year/5 credits)**

**Prerequisites:** Chorus and Teacher Recommendation

This course is the advanced level of choir. Students must audition and be accepted into the ensemble in order to enroll in this course. One year of concert choir is recommended before enrolling in this course, but it is not required. Students will learn and perform a wide range of challenging music repertoire as they gain a more advanced knowledge and understanding of basic music skills. Students will learn concert choir repertoire in addition to their own more advanced music repertoire. Attendance and participation in weekly after-school rehearsals, seasonal concerts, and field trips is expected. Students will be graded on attendance, participation, dedication, and overall effort.

### **History of Rock (Half year/2.5 credits)**

**Prerequisites:** None

This course begins with a brief overview of the ancestors of Rock and Roll: Pop Music, Country and Western Music, and Rhythm and Blues, leading us into the emergence of Rock in the 1950's. The transition into the 1960's will help us to understand how society can be reflected and influenced by music. We will discuss Elvis Presley, the Beatles, the British Invasion, Folk Rock, Soul, the musical developments in San Francisco, Jazz and Art Rock. The 1970's will introduce us to Disco and Soft Rock and the 1980's will bring Heavy Metal and Rap. When we reach the 1990's and the turn of the century the class will talk over to help discuss the current trends of the day. Extensive listening and video examples will be analyzed to uncover the make-up of the music. Finally, we will discuss how Rock and Roll has influenced other cultures and even how other cultures have influenced the development of Rock and Roll. The ultimate goal of this course is to help you understand the music that you are listening to: where it comes from, what it is made of, where it is going, and to help make you an educated consumer of music.

### **Instrumental Music(Full year/5 credits)**

**Prerequisites:** Previous band experience or teacher recommendation)

Band is a one-year elective that is a planned progression from the elementary and middle school bands. The course includes the study and performance of varied repertoire of standard concert band literature. Sound rehearsal techniques and procedures are continually stressed and individual improvement of each student's performance is encouraged. Emphasis is placed on good tone production, balance, intonation, technical flexibility and musicianship. Participation in the winter and spring concert programs is part of the required curriculum. **All band members are required to attend a weekly band rehearsal after school.**

**Music Spectrum (Half year/2.5 credits)**

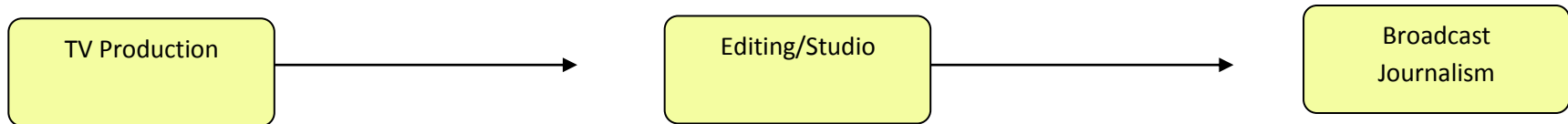
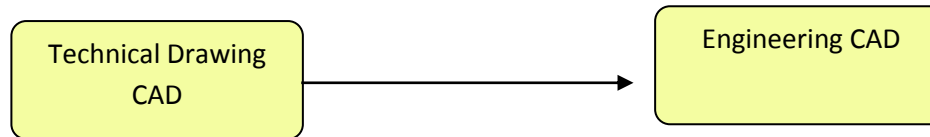
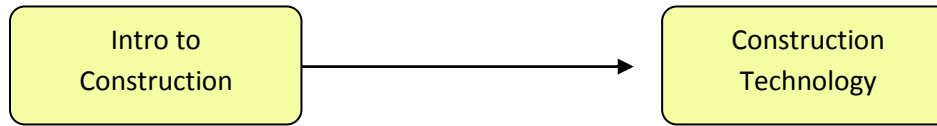
**Prerequisites: None**

This course is designed as a music appreciation class. Students gain an appreciation of the broad spectrum of music through listening, creating, evaluating, understanding and performing music. The course is very project and activity-based and students will often be working in groups or teams. Students will also be given opportunities to work individually. Students are encouraged to learn by doing and exploring using creativity and individuality. Students will be expected to participate in all activities and to keep a listening journal in which they will respond emotionally and critically.

**Digital Music (Half year/2.5 credits)**

**Prerequisites: None**

# 21<sup>st</sup> Century Life and Career/Technical Education (Practical Arts) – Mapping



Tech Inventions and Innovations

Cooperative Education

Computer Applications I

Computer Applications II

Robotics

Web Design

# **21<sup>st</sup> Century Life and Career/Technical Education (Practical Arts) – Course Descriptions**

## **Intro to Construction (Full year/5 credits)**

**Prerequisites:** None

**\*\*Elective for students in grades 10-12\*\***

This introductory-level course is presented in two phases and provides students with the opportunity to develop basic knowledge and skills in the area of residential construction technology. The initial phase is accomplished through a woodworking technology medium with time devoted to the proficiency and the proper application of basic hand tools, machines, and techniques as well as following given safety guidelines that are stressed throughout the course. The secondary phase allows students to continue developing their newly acquired abilities and introduces students to new construction processes and skills; including interpreting basic construction drawings; applying construction math; identifying building materials and structural parts of a house; exploring construction systems, as well as reviewing the planning and managing stages of the construction of a residential building. Upon successful completion of this course, the student will have developed the basic knowledge and skills that can be applied to a career pathway related to construction. Additionally, they will be able to work safely and effectively on basic tasks in a home shop situation.

## **Construction Technology (Full year/5 credits)**

**Prerequisites:** Intro to Construction and Teacher Recommendation)

**\*\*Elective for students in grades 11-12\*\***

This course surveys the major procedures involved with the on-site construction of residential buildings. It is designed for students who desire to attain greater knowledge and skills regarding various facets of construction technology. This hands-on course begins by allowing students to continue to become proficient at utilizing tools, machines, and techniques safely at a more advanced level through a woodworking medium. It then focuses on various construction processes that include: interpreting construction blueprints, applying construction math, building layout and concrete construction processes; as well as residential framing and finishing techniques. Students will gain hands-on experience by actually constructing a scaled-down model house section. This course is structured to better prepare students for a smooth transition from school to meaningful employment or post secondary training. A segment of this course will be dedicated to career education where students will explore various careers related to the construction industry, review career decision-making techniques and job-training requirements, examine research and job searching strategies, as well as learn to prepare a resume, a cover letter, and know what to expect during an interview process.

### **Technical Drawing CAD (Full year/5 credits)**

**Prerequisites:**None

**\*\*Elective for students in grades 10-12\*\***

#### **Bergen Community College Dual Enrollment Eligible Course (3 credits)**

This course provides students with an understanding of the basic concepts related to communicating technical information and design ideas. Communication through drawings and sketches generated by hand and/or computers are essential to many careers in business and industry. Through a series of hands-on experiences, students will become familiar with freehand sketching, scale drawing, print reading, visualizations, mechanical drawing, and computer-aided drafting (CAD). One, two and three-view drawings are used to explain designs graphically. Additionally, through the use of TLA's (Technology Learning Activities), students will learn to apply problem solving design techniques that are used by drafters, design engineers, interior designers, and the building trades. Other various careers related to this area will also be explored.

### **Engineering CAD (Full year/5 credits)**

**Prerequisites:** Technical Drawing CAD

**\*\*Elective for students in grades 10-12\*\***

#### **Bergen Community College Dual Enrollment Eligible Course (3 credits)**

This course serves as a capstone of our Drafting/CAD program focusing on concepts and techniques used for the design, production, and promotion of various products. Students will employ some manual drafting applications, but there will be an emphasis on computer-aided drafting skills to create working drawings and computer simulations for a variety of applications. Topics will include specification interpretation, orthographic projection, sectional views, threads, fasteners, and tolerancing, assembly drawings, perspectives, and advanced isometrics. There will be projects undertaken in which students will produce all necessary drawings for the manufacture of products through the implementation of "Reverse Engineering." This course will also provide students with an understanding of concepts related to interpreting and communicating engineering-related technical design areas in which CAD is commonly implemented. These specialized fields include, - civil drafting, HVAC/sheet metal drafting, electrical and electronics drafting, as well as structural drafting with architectural applications. The skills, knowledge, and problem-solving design techniques that students will continue to develop will be essential to many careers relevant to architecture, industrial and interior design, manufacturing and construction, commercial and graphic arts, as well as many other professions in the engineering, trade, and technical fields.

### **Tech Inventions and Innovations (Full year/5 credits)**

**Prerequisites:** None

**\*\*Elective for students in grades 10-12\*\***

This course is designed to emphasize the nature of inventing and innovating while allowing students to explore various areas of technology. Students will be given the opportunity to design, experiment, develop, and construct projects that serve as solutions for given design problems as they learn about various common technologies and apply basic engineering processes. They will follow a logical step-by-step problem-solving model as they apply basic design and engineering principles that are used in industry. The goal is to develop student knowledge and appreciation of technology in addition to building confidence in their own problem solving skills. The areas that will be explored include, but are not limited to, communication, construction, manufacturing, transportation, and energy/power technologies. Computers, tools, machines and various types of materials are used for prototyping and project development. Applying math, science and communication skills will be a necessity to find the best solutions. Careers are also explored giving students a better understanding of future career opportunities within the technology spectrum.

### **Cooperative Marketing Education (Full year/5 credits)**

**Prerequisites:** None

Cooperative Education is a 5-credit class that provides students with an introduction to the world of work. The course is designed so that students spend one half of the school day in academic classes and the remainder of the school day at an approved work site. The course has a complimentary class in which students learn about career opportunities, job searching, interviewing, resume and correspondence writing, workers rights, work safety and basic first aid, and personal finance. Available to seniors only the prerequisites for this class are as follows: must be a senior in good standing, i.e. academic credits to support senior status, completed application for acceptance into the program, and teacher recommendation.

### **TV Production (Half year/2.5 credits)**

**Prerequisites:** None

This course introduces students to the fundamentals of television production. Students will be introduced to the basic concepts of television production through a multitude of assignments. The first half of the course will be spent teaching these concepts to students; the second half will be project-oriented, which enables students to learn about and use equipment used in the video production field. They work cooperatively in a TV studio and field setting to produce content that is shown on MSG Varsity and GTV. **Participation in some after school projects is a required part of the course.**



### **Editing/Studio(Full year/5 credits)**

#### **Prerequisites:TV Production**

This course is a continuation of Television Production. It is intended to enhance the skills previously taught, as well as introduce students to the postproduction process of video editing. Students will be responsible for editing videos that are filmed throughout the year as well as creating in-house videos through the use of a live switcher. **As in Television Production, the creation of programming for GTV involves some required after school participation.**

### **Broadcast Journalism (Full year/5 credits)**

#### **Prerequisites: TV Production and Editing/Studio**

In this course, experienced Television Production and Editing students apply the skills they have learned to produce programs that are used throughout the school and district. The purpose of this course is to fully enhance their skills in television production. They will be further introduced to the laws, regulations and ethics that personnel in television production may face. Students will also be responsible for producing a morning announcement/news show for GHS, which will both be informative and entertaining. This will require basic public speaking and interviewing skills, which students will improve upon throughout the course. Due to the advanced nature of this course, much of the work is completed independently. **This course is writing and filming intensive, and requires after school participation.**

### **Computer Applications I (Half year/2.5 credits)**

#### **Prerequisite: None**

This entry-level course introduces the student to Microsoft Office 2007. Students will complete projects with real-life examples to develop skills they will need in everyday computing. The student will be introduced to Word Documents, Excel Work Sheets and Power Point Presentations. They will have the opportunity to enhance their skills in these programs that are a necessity in college and many careers.

### **Computer Applications II (Half Year/2.5 credits)**

#### **Prerequisite: Computer Applications I**

Students will have the opportunity to further enhance their knowledge of Microsoft Office 2007. They will be exposed to new concepts that are more advanced than those learned in Computer Applications I. They will complete projects with real-life examples to develop skills they will need for professional and personal use. They will have the opportunity to discover special interests in computer fields such as Web Design, Advertisement, Accounting, Data Entry and Graphic Design that may become possible career choices.

**Web Design (Half year/2.5 credits)****Prerequisites: None**

This course provides students with basic knowledge of HTML and also basic skills for designing and creating websites. Using Microsoft Front Page, students will use these skills and knowledge to create personal fully functional websites that display their interests. Students will have the opportunity to discover a special interest in web design as a possible future career.

**Robotics (Half Year/2.5 credits)****Prerequisites: None**

Students will use the VEX IQ platform and curriculum to provide a fun and engaging vehicle to begin the journey toward becoming the type of problem solver our world needs the most. No matter what you see in your future, the VEX IQ platform and curriculum can help you build the kinds of skills expected of a 21st century innovator. Students will also learn the Python programming language, Raspberry Pi and Arduino as a way to program robots.