

# Spackenkill High School

## Course Directory

2017 – 2018



## TABLE OF CONTENTS

<i>How To Use This Directory</i> .....	5
<i>Counseling Center</i> .....	6
<i>College Preparation</i> .....	9
<i>Course Selection</i> .....	9
<i>Standardized Tests</i> .....	9
<i>Testing Schedule</i> .....	10
<i>College Courses</i> .....	10
<i>Dutchess Community College</i> .....	10
<i>School to Life Programs</i> .....	11
<i>Work Experience Program</i> .....	11
<i>Course Information</i> .....	12
<b>ART</b> .....	14
<i>Studio In Art</i> .....	14
<i>Studio In Drawing &amp; Painting</i> .....	14
<i>Studio In Ceramics</i> .....	14
<i>Studio In Graphic Arts 1</i> .....	15
<i>Independent Study Art 1</i> .....	15
<i>Independent Study Art 2</i> .....	15
<i>Advanced Painting (Honors)</i> .....	15
<i>AP Studio in Drawing (Advanced Placement)</i> .....	16
<i>Design and Drawing for Production</i> .....	16
<i>Architectural Drawing</i> .....	16
<b>COMPUTER</b> .....	17
<i>Computer Studies</i> .....	17
<i>Programming 1</i> .....	17
<i>Programming 2</i> .....	17
<i>AP Computer Science A</i> .....	18
<b>ENGLISH</b> .....	19
<i>English as a Second Language</i> .....	20
<i>Common Core English 9 (Honors)</i> .....	20
<i>Common Core English 9 (Regents)</i> .....	21
<i>Common Core English 10 (Honors)</i> .....	21
<i>Common Core English 10 (Regents)</i> .....	21
<i>AP English Language and Composition (Advanced Placement)</i> .....	22
<i>Common Core English 11 (Regents)</i> .....	22
<i>Common Core English 11 (Honors)</i> .....	22
<i>AP English Literature and Composition (Advanced Placement)</i> .....	23
<i>World Literature (Regents)</i> .....	23
<i>World Literature (Honors)</i> .....	23
<i>English 12 (Honors) - DCC</i> .....	24
<i>Communications 1 (Elective)</i> .....	24
<i>Communications 2 (Elective)</i> .....	24
<i>Public Speaking (Elective)</i> .....	24

<i>Theater Production (Elective)</i> .....	24
<i>World of Sports Through Its Literature (Elective)</i> .....	25
<i>SAT Prep (Elective)</i> .....	25
<i>English AIS</i> .....	25
<b>FOREIGN LANGUAGE</b> .....	26
<i>French 1</i> .....	26
<i>French 2</i> .....	26
<i>French 3</i> .....	27
<i>French 4 (Honors)</i> .....	27
<i>French 5 (Honors)</i> .....	27
<i>AP French Language (Advanced Placement)</i> .....	27
<i>Spanish 1</i> .....	28
<i>Spanish 2</i> .....	28
<i>Spanish 3</i> .....	28
<i>Spanish 4 (Honors)</i> .....	29
<i>Spanish 5 (Honors)</i> .....	29
<i>AP Spanish Language (Advanced Placement)</i> .....	29
<b>HEALTH EDUCATION</b> .....	30
<i>Health</i> .....	30
<b>MATHEMATICS</b> .....	31
<i>Common Core Algebra I</i> .....	31
<i>Common Core Algebra XT-1</i> .....	31
<i>Common Core Algebra XT-2</i> .....	31
<i>Common Core Geometry Honors</i> .....	32
<i>Common Core Geometry</i> .....	32
<i>Common Core Geometry with Lab</i> .....	32
<i>Common Core Algebra II Honors</i> .....	33
<i>Common Core Algebra II</i> .....	33
<i>Precalculus Honors</i> .....	33
<i>Precalculus</i> .....	34
<i>AP Calculus BC (Advanced Placement)</i> .....	34
<i>AP Calculus AB (Advanced Placement)</i> .....	34
<i>Applied Financial Mathematics</i> .....	35
<i>Elementary Statistics</i> .....	35
<i>Intermediate Algebra</i> .....	35
<i>Geometry in Action</i> .....	36
<i>Trigonometry</i> .....	36
<i>Math AIS</i> .....	36
<i>SAT Prep</i> .....	37
<b>MUSIC EDUCATION</b> .....	38
<i>Band</i> .....	38
<i>Chorus</i> .....	39
<i>Chamber Orchestra</i> .....	39
<i>String Ensemble Honors</i> .....	40
<b>PHYSICAL EDUCATION</b> .....	42

SCIENCE .....	43
<i>The Physical Setting: Earth Science (Regents)</i> .....	44
<i>The Living Environment: Biology (Regents)</i> .....	44
<i>The Living Environment: Biology Honors (Regents)</i> .....	44
<i>The Physical Setting: Chemistry (Regents)</i> .....	45
<i>The Physical Setting: Chemistry Honors (Regents)</i> .....	45
<i>The Physical Setting: Physics Honors (Regents)</i> .....	45
<i>Forensic Science</i> .....	46
<i>Math, Science and Technology (MST) 1 and 2</i> .....	46
<i>Principles of Physical Science 1and 2</i> .....	46
<i>Science Research Class 10</i> .....	47
<i>Science Research Class 11</i> .....	47
<i>Science Research Class 12</i> .....	47
<i>Science AIS</i> .....	47
<i>AP Biology (Advanced Placement)</i> .....	48
<i>AP Chemistry (Advanced Placement)</i> .....	48
<i>AP Physics C: Mechanics, and Electricity and Magnetism (Advanced Placement)</i> .....	48
PROJECT LEAD THE WAY.....	50
<i>Introduction to Engineering Design</i> .....	50
<i>Principles of Engineering</i> .....	51
<i>Environmental Sustainability</i> .....	51
SOCIAL STUDIES .....	52
<i>Global History and Geography 9</i> .....	52
<i>Global History and Geography 10</i> .....	52
<i>United States History and Government 11</i> .....	53
<i>AP United States History and Government (Advanced Placement)</i> .....	53
<i>AP European History (Advanced Placement)</i> .....	53
<i>Participation in Government</i> .....	54
<i>Participation in Government (Honors)</i> .....	54
<i>Economics</i> .....	55
<i>Economics (Honors)</i> .....	55
<i>Psychology (Elective)</i> .....	55
<i>Sociology (Elective)</i> .....	55
<i>Nazi Germany and the Holocaust (Elective)</i> .....	56
<i>Social Studies AIS</i> .....	56
SPECIAL PROGRAM OPPORTUNITIES.....	57
<i>Career and Technical Institute</i> .....	57
<i>Auto Body</i> .....	57
<i>Auto Mechanics</i> .....	57
<i>Small Engines/Turf Equipment &amp; ATV Maintenance</i> .....	57
<i>Electrical Construction Technology</i> .....	57
<i>Finish Carpentry</i> .....	57
<i>Plumbing and Heating</i> .....	57
<i>Residential Construction</i> .....	57
<i>Welding and Fabrication</i> .....	58

<i>Intro to Health</i> .....	58
<i>Practical Nurse I</i> .....	58
<i>A+ Computer Training</i> .....	58
<i>Cosmetology</i> .....	58
<i>Culinary Arts &amp; Restaurant Management</i> .....	58
<i>Early Childhood Education</i> .....	58
<i>Security &amp; Law Enforcement</i> .....	58
<i>Learning Options</i> .....	58
<i>Study Skills</i> .....	59
<i>Resource Program</i> .....	59
<i>Modified Class Programs</i> .....	59
<i>6 1/2 Credit Option</i> .....	59

# How To Use This Directory

Each year at the beginning of the second semester, you will select courses for the following year. Your selection will be based on graduation and college entrance requirements and on your own special needs and interests. At a conference with your counselor, you will discuss the courses needed to complete next year's program and to develop a general plan of studies for your years at the high school.

**READ** the requirements for graduation and for college preparation.

**EXAMINE** the Special Program Opportunities so that you will be aware of the ways by which you can earn credits.

**USE** the course selection worksheet provided by the counseling center. Write your courses for next year with the number of periods they meet for the week and the credit units they carry.

**TOTAL** the number of assigned and unassigned periods, and you will get a picture of your weekly workload.

**WRITE** in your tentative courses for the years ahead, keeping in mind whatever college major or career choice you are considering. You should also make plans to explore and pursue courses in subjects or areas that interest you. You may not have this opportunity after high school.

**BRING** the Course Directory intact with you to the conference with your counselor.

# Counseling Center

Counseling at Spackenkill High School encompasses a number of activities and commitments, all of which are designed to help the Spackenkill High School student. In its simplest form counselors perform a service function, dedicated to the student and their life at the high school and after.

The counseling relationship starts at the time students are assigned to a counselor. The counselor is committed not only to orienting the student to a new academic environment, but also to establishing a relationship with the student. Students learn procedures and the processes of "what to do" and "how to do" as they go through their daily lives at SHS. By learning the techniques of dealing with responsibilities and commitments undertaken in their high school lives they become more effective students and better prepared for life after high school.

Students are encouraged to keep in close contact with their counselors who play a key role in their daily lives. It is the counselor who advises and counsels students about concerns and questions which arise during those years. Pressures and tensions encountered by a student as well as issues of a social nature, relationships with others, substance abuse, and personal or family problems can also be brought to the counselor.

Although much of the counseling at Spackenkill High School is done on an "as needed" basis, there are times when a structured contact between the counselor and student accomplishes the established objectives of the counseling program. Course planning and college selection are two examples of the structured contact. Students and their parents can also expect to meet with the counselor to review matters of mutual concern, to effect decisions related to a program of studies, and, ultimately, to decide on a list of colleges to which the student will apply. The calendar for these activities is:

Orientation to the high school and review of graduation requirements - 8th and 9th grades

Program planning conferences - 9th, 10th, and 11th grades

Career awareness activities - 10th grade

College research and/or post high school planning activities - 11th grade

College selection conferences - 11th and 12th grades

# Diploma Requirements

To satisfy graduation requirements, all regular education students must earn either a Regents Diploma or a Regents Diploma with Advanced Designation and must accrue **22 units of credit**. All regular education students must also pass 5 Regents exams.

<u>COURSE</u>	<u>Course Requirements</u>		<u>Exam Requirements</u>	
	<u>MINIMUM CREDITS</u>	<u>REGENTS DIPLOMA</u>	<u>REGENTS DIPLOMA w/Advanced Designation</u>	
English	4	Comprehensive English Exam	Comprehensive English Exam	
Social Studies				
Global History 1 & 2	2	Global History Exam*	Global History Exam*	
US History	1	US History Exam	US History Exam	
Part in Gov't	½			
Economics	½			
Mathematics	3	Algebra I	Algebra I, Geometry, Algebra II	
Science	3	1 Science Regents Exam	2 Science Regents Exams	
Foreign Language	1 3	1 credit	3 credits of the same language	
Fine Arts	1			
Physical Ed	2			
Health	½			
Computer Literacy	½			

Note: All students must take physical education every semester they attend school. Failure to attend physical education class could result in failure to graduate. Students must earn the equivalent of ¼ credit each semester while in attendance.

\*As per the 4+1 graduation requirements, this exam may be replaced by a state approved alternate exam. All state approved exams can be found on the high school website.



# State Competency Requirements

The New York State Education Department requires that all students demonstrate competency in English, Mathematics, Science, and Social Studies (Global History\* and US History) before receiving a high school diploma. For this purpose, Regents exams are used.

- All students will take Regents examinations in English, Mathematics, Global History\*, US History and Science.
- Students wishing to receive a Regents Diploma with Advanced Designation will take two additional mathematics Regents exams and one additional science Regents exam.

All students will earn a Regents diploma. Five\* Regents exams must be passed for students to earn a high school diploma.

A limited number of January examinations may be available if requested by the student by the end of the first week of October. Requests for January testing should be made to the counselor after verification has been obtained from the appropriate teacher. Students should listen for announcements regarding this.

\*As per the 4+1 graduation requirements, this exam may be replaced by a state approved alternate exam. All state approved exams can be found on the high school website.

# College Preparation

## Course Selection

In addition to meeting the requirements for graduation, students preparing for college need to consider college entrance requirements when choosing courses in high school. Due to the wide range of academic requirements among colleges, course choices may be diverse and highly individualized. The particular institution, and the specific major or program the student wants, will determine the courses selected over the four years. A basic college preparatory program of courses and units is:

<u>Course</u>	<u>Units</u>
English	4
Social Studies	4
Science	3 - 4
Math	3 - 4
Second Language	3 - 4

Students preparing for college should also consider Advanced Placement courses offered in high school. These courses can provide students with college credits. Refer to description of level in the *Course Information* section of this guide for more information on Advanced Placement courses.

## Standardized Tests

Most colleges require students to take one or more standardized tests and consider these scores in their admissions processes. These tests are not part of any high school course. They are offered outside of the normal school day and each test is offered only on specific dates and at specific locations each year. Students should discuss these tests with their counselors to learn which tests they should take, when they will be offered, and how to enroll. The following standardized tests are the most common:

### Preliminary Scholastic Assessment Test (PSAT) / National Merit Scholarship Qualifying Test

This test is similar in content to the SAT Test. It is generally taken in the fall of the junior year. Students register for the test through Guidance, typically in late September. The results are used in the National Merit Scholarship competition. Students who take the PSAT as 11th graders are automatically considered for the Merit competition.

### Scholastic Assessment Test I (SAT I): Reasoning Test

The test is intended to assess a student's preparation for college by measuring their verbal and mathematical reasoning. This test is generally taken in the Junior year or early in the Senior year. A student may take this test as frequently as they desire. Most colleges require this test. Register online at [www.collegeboard.com](http://www.collegeboard.com).

### SAT Subject Tests

The SAT Subject Tests assess a student's preparation in a particular subject such as Biology, American History, Social Studies, French, etc. A student can take some of these tests as early as the end of Grade 9 after completing a course such as Biology Honors. Some colleges require one or more of these tests.

### American College Test (ACT)

The ACT Assessment is designed to assess high school students general education development and their ability to complete college level work. This test covers four skill areas: English, Mathematics, Reading, and Science reasoning. Register on line at [www.actstudent.org](http://www.actstudent.org).

## **Testing Schedule**

The following is a general guide to when the standardized tests may be taken:

Grade 11 - PSAT/NMSQT  
SAT and SAT Subject Tests  
ACT

Grade 12 - SAT and SAT Subject Tests  
ACT

SATs and ACTs can be repeated as frequently as the student desires.

## **College Courses**

Many of the area's colleges make their courses available to qualified high school students. Some of our students, particularly seniors, may wish to pursue this opportunity and they can do so with the recognition and support of the high school. Taking a college course can be a way of easing the transition from high school to college, a way of taking a course which is difficult to schedule, or a way of diversifying the student's program. Specific programs are offered through Marist College and Dutchess Community College.

## **Dutchess Community College**

Students may participate in the early admission program at Dutchess Community College. There are two options for students wishing to attend Dutchess.

1) Students enroll Full Time (12 + Credits) including English 101 and 102, Economics (ECO 105), American National Experience (GOV 121), and Wellness and Fitness Education (WFE 101). Students do not attend classes at the high school.

2) Students enroll part time, up to 9 credits. Students must take World Literature, Economics, Participation in Government, and P.E. at the high school. Students may not take English 101, 102, ECO 105, GOV 121 or WFE 101 in lieu of high school courses. Students will receive college credit from Dutchess and school credit from the high school. See your counselor for details.

## **School to Life Programs**

These programs are intended to enhance the existing curriculum in order to better prepare Spackenkill High School students for continued education and/or meaningful employment upon graduation from high school. The purpose of these programs is to connect all students with the real world, where they can participate in experiences that reinforce concepts learned in the classroom. There are a variety of programs including the Work Experience Program for seniors and job shadow opportunities for juniors and seniors.

### **Work Experience Program**

This program is a component of the School-to-Life Programs.

#### Academic Requirements

- A. Student's grades will be reviewed every quarter and if he or she is failing one (1) or more courses they can be withdrawn from the program.
- B. Students can be withdrawn from the program due to excessive school absences, tardiness, and/or class cuts.
- C. No School - No Work. Students are expected to attend classes and if they do not attend classes they will not be given credit for those hours of work.
- D. Every student must successfully complete 150 - 300 hours of part-time work during the school year. (150 hours = 0.5 credits, 300 hours = 1.0 credits)

#### Appraisals

- A. In addition to employer appraisals, the student will be required to meet with the School-to-Life Coordinator a minimum of once every five (5) weeks and a log must be kept by the Coordinator on the student.
- B. The Coordinator will visit the student's jobsite and meet with the student's supervisor.
- C. Students will receive an evaluation at the end of the school year by the Coordinator.
- D. A Work Experience Agreement will be completed for the student outlining job training as well as job responsibilities that will be provided by the employer.

# Course Information

This course directory contains information about every course offered to students in Spackenkill High School. In addition to a brief description of the course, other important information is provided about each course to help you plan your high school curriculum. This section explains the additional information you will see for each course.

## Grade

Many courses are restricted by grade. For example, *Pre-Calculus* is offered to students in Grades 11 and 12 only. The Grade requirement is listed below the course title. Be sure you meet the Grade requirement before selecting the course.

## Length and When Offered

Most courses meet every school day throughout the school year. Some courses, however, meet on Odd days only or Even days only. Other courses meet every school day but only for one semester. (A semester is one-half of a school year.) You will see just below the course title the length of the course (1 year or 1/2 year). If the course does not meet every school day, you will see what days it meets. If there is no indication how often the course meets, then it meets every school day. Finally, a few courses are offered only once every two years. Be sure to watch for these special cases.

## Credits

For each course you complete successfully, you receive credit towards the requirements for graduation. Generally, a course which is conducted over the entire school year provides one credit; a course conducted for just half of the school year provides ½ credit; a course that meets every other day for the entire school year provides ½ credit. Some courses provide no credits. The credits you receive for completing the course successfully are listed below the course title. Be sure to read the section *Graduation Requirements* in this guide to understand the number of credits you must accumulate for graduation.

## Factor

Each course has been assigned a "Factor". The Factor is a number - 0, 7, 8, 9, or 10 - which approximately describes the relative difficulty of the course. The Factor is used when calculating your "class rank." Your class rank is determined by your grade average for each course you take as well the Factors for these courses. For example, achieving an 85 average in a course that has a Factor 9 will improve your class rank more than achieving an 85 average in a course that has a Factor 8. Rank will be determined by the following formula:

$$\frac{\text{Grade} \times \text{weighted factor} \times \text{credit}}{\text{Total credits attempted}}$$

## Level

The courses offered at Spackenkill High School are classified by "level". The level of a course indicates how the course contributes towards graduation requirements. You will find the level for each course in parentheses next to the course title. The levels and their meanings are as follows:

- **General**  
These courses provide a general education in the subject, but they provide no "Regents" credit for graduation. Be sure to read the *Diploma Requirements* section in this guide to understand what you must do to earn a Regents diploma or Advanced Designation.
- **Regents**  
These courses provide a more challenging education in the subject than the corresponding General course and can contribute units towards the Regents diploma.
- **Modified**  
These courses generally follow a curriculum similar to the corresponding Regents course, but the students are provided with additional support. The support may consist of additional classroom time, a variety of hands-on activities, or modified assessments.
- **Honors**  
These course are intended for the more mature and capable student who has demonstrated competency above the grade level.
- **Advanced Placement**  
These courses are high school courses for which students may earn college credits and/or college course exemption, or course placement. Advanced Placement (AP) courses are offered in Art, Computer Science, English, Foreign Language, Mathematics, Science, and Social Studies, and are described in detail in the departmental sections of this catalog. Students in AP courses are required to take an AP examination administered and rated by the Educational Testing Service in May. All AP exam scores must be posted on the permanent record card and transcript. The cost per subject examination is approximately \$86.00. (2 tests are required for AP Physics C.) Also, a school final exam is required of all students in June.
- **Academic Intervention Services**  
These courses provide individualized instruction in small groups to help students improve basic skills. Students who do not meet requirements on the 8<sup>th</sup> grade assessments and or fail a required Regents exam may be enrolled in these courses.

### Course Number

Each course has been assigned a course number. This number identifies the course in the computer programs that are used to create your personalized schedule.

# ART

## **Studio In Art**

*Grade 9-12, 1 year, 1 credit, Factor 8, Course #6101*

This course fulfills the New York State Regents requirement for one credit of Art or Music. It is usually taken in the Freshman year and is the prerequisite for most other Art courses. *Studio in Art* is a foundation course that explores a wide variety of two dimensional and three dimensional media as well as basic art principles and modes of expression. It is the aim of the course to develop a genuine appreciation and sensitivity toward beauty, through the student's own experiments in this multimedia program. Students will develop a portfolio of work and must pass a comprehensive final exam. Students headed toward a Regents sequence in Art should declare their intentions while enrolled in *Studio in Art*.

**NOTE:** *Studio In Art* must be taken for one full year before enrolling in another art course except *Design and Drawing for Production*.

## **Studio In Drawing & Painting**

*Grade 9-12, 1 year, 1 credit, Factor 8, Course #6102*

This is an advanced course that may be elected by a student who has completed *Studio in Art or Design & Drawing for Production* and desires to participate in advanced study in the area of drawing and painting. This course introduces the student to a wide variety of experiences in these medias before he/she selects a particular medium for concentrated effort. The course that follows this course is Advanced Painting.

*Prerequisite: Studio in Art / Design and Drawing for Production*

## **Studio In Ceramics**

*Grade 9-12, 1 year, 1 credit, Factor 8, Course #6506*

This class is designed for students who are interested in learning all the basic aspects of creating with clay. Students will build functional and sculptural pieces using a variety of techniques. Hand building, the potter's wheel and slip casting will be learned along with glazing and surface decoration.

*Prerequisite: Studio in Art / Design and Drawing for Production*

## **Studio In Graphic Arts**

*Grade 9-12, 1 year, 1 credit, Factor 8, Course #6505 Prerequisite: Studio in Art / Design and Drawing for Production*

This course is designed for students that are interested in all visual media. Good design is good design whether you are designing a web page, print ad or movie graphics, if you want to get a viewers attention and keep it you need to know how to design effectively and creatively. Students will learn the magic of Photoshop and how this program can be a powerful creative tool. Students will be learning how to incorporate, type, color, and use visual imagery to find creative solutions and to communicate meaningful ideas. Students are encouraged to incorporate their own art or areas of interest into the class. During the course, students will build a portfolio of diverse, two dimensional and digital artworks and will be prepared for college level graphic design classes.

## **Independent Study Art 1**

*Grade 11-12, 1/2 year, 1/2 credit, Factor 8, Course #63011*

## **Independent Study Art 2**

*Grade 11-12, 1/2 year, 1/2 credit, Factor 8, Course #63012*

Only students who have exhausted our regularly scheduled art courses can select this option. Please note that this option can be exercised only with the combined consent of the Art department and the Guidance department.

## **Advanced Painting (Honors)**

*Grade 11-12, 1 year, 1 credit, Factor 9, Course #6103*

This honors level course is designed for students who have a strong interest in continuing to refine their drawing and painting technical and creative skills. Students will explore a variety of drawing and painting media, applicable art historical and cultural study, art theory, and aesthetic inquiry. It is considered a pre-AP course because some of the work created in this course may be used toward their AP exam the following year.

*Prerequisite: Studio in Drawing & Painting with an 85 minimum average, and/or permission of the instructor. Art sequence students, then seniors receive first preference.*



## **AP Studio in Drawing (Advanced Placement)**

*Grade 11-12, 1 year, 1 credit, Factor 10, Course #6605*

\*Course offered on a yearly basis if enough potential candidates are available.

This AP level course in drawing and painting is designed for students who are able to move on to college level drawing and painting expectations. Students will develop and explore their own individual creative directions and styles. This is achieved through an intense and highly independent work process. In addition to the regular classroom studio time, the student will be involved with considerable outside work. There will also be some moderate material investment beyond what the school normally supplies.

Note: Students will need to document their work digitally on a regular basis in order to be able to submit their work to the College Board. Also, the AP exam in May must be taken in order to satisfy the AP factor requirements.

*Prerequisite: Advanced Painting*

## **Design and Drawing for Production**

*Grade 9-12, 1 year, 1 credit, Factor 8, Course #6515*

This course is an introduction to technical drawing and model building. Students will learn how to solve some interesting design problems and then communicate their designs into technical drawings. Students will be learning how to create prototypes of their designs using foam core and cardboard. Students will use AutoCad as their main drawing tool but also learn cutting, measuring and building skills along with isometric and orthographic drawing. Part of the year will be an introduction to Architectural drawing and design where students will learn how to design a house and create a three dimensional model.

This class is a prerequisite to *Graphic Design, Painting and Drawing, and Studio in Ceramics*.

Note: Any student may use this course to satisfy the Art/Music requirement. It may also be used for local credit, for Art credit, or for Technology credit.

## **Architectural Drawing**

*Grade 10-12, 1 year, 1 credit, Factor 8, Course #6520*

Architectural design and construction had its beginning when humans first modified their habitat to provide for shelter. Almost from the beginning Paleolithic caves were made more comfortable and even included wall painting. This creative need to both engineer shelter and apply art has made architecture one of the signature cultural barometers of civilization. Today, new examples of architectural expression, from trends in home design, new public projects, and especially exciting art museum designs are heralding changes and directions in modern art.

The purpose of this course is to give the novice architecture student an understanding of basic architectural design and drawing. They will study past and present building styles, architectural technical drawing, codes, and house plans. They will be able to read and understand basic house plans and begin using computer-aided drawing, CAD, in our new technical drawing lab.

*Prerequisite: Design and Drawing for Production*

# COMPUTER

## **Computer Studies**

*Grades 9-12, 1/2 year, 1/2 credit, Factor 8, Course # 3830*

This online course is offered to address the National Educational Technology Standards for Students. Unit topics include digital citizenship, research and information fluency, communication and collaboration, creativity and innovation and critical thinking. In the digital citizenship unit students explore their digital footprint, online privacy and security, cyberbullying and creative credit and copyright. In the research and information fluency unit students apply digital tools to gather, evaluate, and use electronic information.

*Students can elect to be assigned a period in the computer lab during the school day, or they may select to do the coursework as an independent study program. A reliable computer and Internet connection is necessary if the student elects to take the course as independent study.*

## **Programming 1**

*Grade 9-12, 1/2 year, 1/2 credit, Factor 8, Course #3810*

This course is an introduction to programming using a visual programming language called Scratch. The emphasis is on improving problem solving and computational thinking skills. The Scratch programming environment provides immediate feedback which allows the programmer to quickly and easily check logic. Topics covered include: procedures, variables, decision making, debugging, loops, string processing and lists. Some out of class time at home or in the computer lab(s) is required.

## **Programming 2**

*Grades 9-12, 1/2 year, 1/2 credit, Factor 8, Course #3820*

This course will build upon the concepts presented in Programming 1. The innovative 3D programming language Alice will be used to create videos and interactive animations. Alice is an object oriented programming language. It is a powerful, modern programming environment that supports methods, functions, variables, parameters, recursion, arrays, and events. Substantial out of class time at home or in the computer lab(s) is needed.

*Prerequisite: Successful Completion of Programming 1*

## **AP Computer Science A**

*Grades 10-12, 1 year, 1 credit, Factor 10, Course #3605C*

The AP Computer Science A course is an introductory course in computer science. The course will cover fundamentals of programming syntax and methodology using the Java programming language. Java is a modern, object-oriented programming language used to create professional software. In addition to gaining fluency in Java, students will develop general computer skills and consider the social and ethical implications of computing. The course will explore systematic problem-solving strategies that can be applied to real world problems. The focus will be first on programming basics and then on writing full classes and the logic and structures around building them.

*Prerequisite: Successful completion of Common Core Algebra I, Programming 1 & 2 and teacher recommendation.*

# ENGLISH

## Goals:

- To provide each student with a program that will ensure the maximum individual level of achievement in English.
- To provide a comprehensive study of English and prepare all students for Common Core Regents examination in English.
- To provide the reading, writing, listening and speaking skills students need to be college and career ready.

In order to accomplish these goals, the English Department provides leveled course work in grades 9 through 12. To preserve and maintain the integrity of Honors and Advanced Placement offerings and to attempt to ensure the success of the students, the teachers in the department will evaluate candidates based on specific criteria including independence, responsibility, reading and writing ability and prior grades in English classes. Students selected for these courses will experience challenging and demanding classes reflective of their weighted rank.

## Selections:

- Students will register for courses and levels based on the recommendations of teachers and counselors.
- After the first marking period, students will be able to change levels **only** after consultation with guidance counselor, teacher, student and parent. Conferences concerning level changes may be advised or initiated prior to the end of the first marking period.
- Electives in English may not fulfill the four year English requirement.
- The guidance office will monitor students who concurrently take more than one course in the required English sequence (i.e. English 9,10,11,12). If a student is failing one of those English courses at the end of the first marking period, the student will be required to drop one of the courses, usually the higher level.

## Type and Amount of Work:

- The basic components of all English courses are reading, writing, grammar, research, academic vocabulary and class presentation.
- Specific accommodations are made for students with IEPs and 504s.

- Regents classes read rigorous fiction and nonfiction texts, master academic vocabulary, compose essays, prepare for the Common Core Regents examination in English and improve writing through grammar.
- All students complete research projects using MLA format.
- Honors classes engage in a deeper and broader study of literature and author's craft, write analytic compositions with less scaffolding, study more sophisticated grammatical structures to apply to their writing, engage in more frequent research projects and prepare for high stakes examinations.
- Dutchess Community College classes *may occasionally* be combined with AP classes.

## **Homework and Assessments:**

Regular homework is required for ALL classes. All students have periodic vocabulary, writing, reading assignments and assessments. Teachers' grading systems are explained on their course syllabi.

## **English as a Second Language**

*Grade 9-12, 1 credit, Factor 7, Course #1550*

English as a Second Language classes are offered to students with limited English proficiency because their first language is not English. This class may serve in lieu of only **ONE COURSE** in the four-year English sequence; however, to become proficient in English, students may need additional years of instruction without credit. Students are tested with the LAB-R to determine placement. The class concentrates on reading, writing, speaking and listening skills in English.

## **Common Core English 9 (Honors)**

*Grade 9, 1 year, 1 credit, Factor 9, Course #1101H*

Honors students are expected to read above grade level and to have outstanding work habits. Honors students read rigorous selections of literature and nonfiction to sharpen analytical and critical thinking skills. Close reading, using textual evidence in writing, and developing academic vocabulary are stressed. Clarity and organization in writing are emphasized. Texts covered in class are used as springboards for research.

Less time is spent reviewing the basics of grammar and more emphasis is placed on application of grammatical principles to students' own writing. Academic vocabulary study is emphasized and generated by reading experience. Skills necessary for the Common Core Regents examination in English are introduced.

*Required:* Student must meet criteria in the Board of Education approved rubric.

## **Common Core English 9 (Regents)**

*Grade 9, 1 year, 1 credit, Factor 8, Course #1101*

This course aims to improve interpretive skill in reading and introduce students to various genres of literature and nonfiction. Close reading and the use of textual evidence in writing and discussion is emphasized. Written work and research projects are connected to the reading. Additionally, students develop the thinking and organizational skills they will need to succeed in the English strand of the high school curriculum. Students must meet established standards for reading, writing and analysis. Skills necessary for the Common Core Regents examination in English are introduced.

## **Common Core English 10 (Honors)**

*Grade 10, 1 year, 1 credit, Factor 9, Course #1102H*

This course is designed for students who have demonstrated competency above grade level in English 9. To improve student writing, grammar and composition, lessons are based on student work and professional exemplars. Academic vocabulary is based on the works studied.

Rigorous reading selections from genres including short story, novel, essay, biography, drama and poetry are presented. The student compares the techniques of writers who develop the same theme in two or more genres. The basic anthologies are supplemented by a variety of paperback selections and other readings.

Written work, including research, is closely allied to reading and emphasizes textual evidence. Clarity and organization are emphasized in all forms of writing.

*Required: Successful completion of CC English 9*

*Consideration: Common Core English 9 teacher's recommendation, high grades in Common Core English 9.*

## **Common Core English 10 (Regents)**

*Grade 10, 1 year, 1 credit, Factor 8, Course #1102*

Rigorous fiction and nonfiction including the short story, novel, essay, biography, drama and poetry are studied. Students will identify literary devices and their significance in the text. The basic anthologies are supplemented with additional selections.

Written work is based on close reading of text. Students are taught to recognize various genres and are encouraged to develop an academic style of writing. Clarity, organization and evidence based writing are emphasized. Composition assignments require the application of the rules of standard English grammar and usage. Both developmental vocabulary and academic vocabulary are emphasized. Preparation for the Common Core Regents examination in English is continued.

## **AP English Language and Composition (Advanced Placement)**

*Grade 11, 1 year, 1 credit, Factor 10, Course #1603*

The course provides the more mature and capable English student with a comprehensive study of American literature, its themes, archetypes, and major movements, with an emphasis on analyzing literary technique and developing interpretive skills. This course focuses on an increasingly refined level of both reading and writing in the various modes of discourse, enabling "students to read complex texts with understanding and to write prose of sufficient richness and complexity to communicate with mature readers" (AP course description). The course assumes that students already understand and use Standard English grammar. Both reading and writing assignments develop students' understanding and use of various rhetorical strategies. The research project requires analysis of two major works of American literature. Extensive reading and writing are required.

The required AP Language and Composition Exam is given in early May. The AP exam in May **must** be taken in order to satisfy AP factor requirements. Additionally, students are required to take the Common Core Regents examination in English.

This course **may qualify** for Dutchess Community College credit. If the class is offered with Dutchess Community College credit, students must pass a placement examination at the end of 10<sup>th</sup> grade and take an **additional** Dutchess Community College final examination in May.

*Required:* Successful completion of *Common Core English 10* and completion of a summer assignment.

*Consideration:* Teacher's recommendation, grades in *Common Core English 10*, score on the DCC placement exam if offered.

## **Common Core English 11 (Regents)**

*Grade 11, 1 year, 1 credit, Factor 8, Course #1103*

## **Common Core English 11 (Honors)**

*Grade 11, 1 year, 1 credit, Factor 9, Course #1103H*

Students study American fiction and nonfiction. Literature and nonfiction focus on the overarching theme of the American Dream. The course continues the department's emphasis on reading on an analytical and evaluative level, producing evidence based writing, conducting authentic research and developing academic vocabulary. Grammar is taught through composition.

Students learn to analyze author's style, trace the continuity of ideas reflected in American literature and develop sound composition skills. Academic vocabulary study is continued.

**NOTE:** Regents and Honors level students meet together. Students electing to pursue the Honors level (1103H) will fulfill a contract requiring additional reading, composition and presentation assignments. They are sometimes asked to present the results of this study to their classmates.

*Required:* Successful completion of *Common Core English 10*.

*Consideration:* Teacher's recommendation and grades in *Common Core English 10*.

## **AP English Literature and Composition (Advanced Placement)**

*Grade 12, 1 year, 1 credit, Factor 10, Course #1604*

This course is designed to meet the needs of the more advanced English student who wishes to explore in depth composition and classic literature at the college level. The emphasis of the course is on experiencing, interpreting and evaluating works of recognized literary merit from the sixteenth century to the present, including poetry, drama, speeches, essays, journals, and fiction, both long and short. According to the AP catalogue, "the students' reading should be both wide and deep." Students will continue to develop their writing skills through short analytical pieces, essay exams, literary criticisms, and research projects. An understanding of the workings of English grammar and an ever-growing vocabulary are essential.

The required AP Literature and Composition Exam is given in May. The AP exam in May must be taken in order to satisfy AP factor requirements.

*Required:* Successful completion of *English 11 CC* or *AP English Language and Composition (Advanced Placement)* Completion of a summer assignment is required prior to the start of the class.

*Consideration:* *English 11* teacher's recommendation. Grade in *AP English Language and Composition (Advanced Placement)/ English 11 (Honors)*.

## **World Literature (Regents)**

*Grade 12, 1 year, 1 credit, Factor 8, Course #1104*

## **World Literature (Honors)**

*Grade 12, 1 year, 1 credit, Factor 9, Course #1104H*

The literature in this course focuses on the individual and his/her role in society—past, present and future. Students read rigorous texts, conduct research and practice skills necessary for college and career readiness. Students are encouraged to actively engage with the text and respond to the literature in writing. The exit exam requires mastery and application of all high school English skills.

**NOTE:** Regents and Honors level students meet together. Students electing to pursue the Honors level (1104H) will fulfill a contract requiring additional reading, composition and presentation assignments. They are sometimes asked to present the results of this study to their classmates.

*Consideration:* Teacher's recommendation, grades in *Common Core English*



## **English 12 (Honors) – DCC**

*Grade 12, 1 year, 1 credit, Factor 9, Course # 1104DCC*

English 102 is a continuation of English 101 with further study of the resources of the language through a critical analysis of imaginative forms of writing. Emphasis will be placed upon a well-organized written composition, factually-supported conclusions, and awareness of language variety. Effectiveness of expression and validity of judgment in the student's writing are stressed. Genre reading will include fiction, poetry, and drama. Additionally, students will demonstrate knowledge of the conventions and methods of literary study, including the ability to develop persuasive arguments about works of literature and organize support by drawing evidence from texts and analysis of literary devices.

## **Communications 1 (Elective)**

*Grade 10-12, 1/2 year, 1/2 credit, Factor 8, Course #15101*

This course is designed as an elective. If the student so wishes, this course may be used, in part, to fulfill a fifth English credit for a 5-credit sequence for a Regents diploma. Communications 1 explores communication in written English. Study includes creative writing, writing for the workplace, advertising and journalism. Creative writing assignments include character sketches, short stories, poems, and various creative exercises. Writing for the workplace assignments include resumes, memos and interviews. During the journalism and advertising segments of the course, students write a news story, feature story, column and editorial. Papers are read aloud in class and discussed during the various stages of composition. Students create a portfolio as a final exam.

## **Communications 2 (Elective)**

*Grade 10-12, 1/2 year, 1/2 credit, Factor 8, Course #15102*

Communications 2 develops visual literacy through the study of film, television and online communication. The video production segment of the class includes the "grammar" of video, lighting and camera techniques and the production and shooting of a video script. Students are required to do one research project as well as a final project.

## **Public Speaking (Elective)**

*Grade 11-12, 1/2 year, 1/2 unit, Factor 8, Course # 1520*

This course is designed to improve students' public speaking skills. Students present 1-2 speeches per week. Speeches are evaluated by classmates as well as the teacher and specific feedback is given. Students are evaluated on the basis of the growth of their skills. Students are introduced to the language of public speaking.

## **Theater Production (Elective)**

*Grade 10-12, 1/2 year, 1/2 unit, Factor 8, Course # 15301*

This course addresses various aspects of the theatre including acting, marketing, and set and lighting design. Additionally, students study the history of theatre. Students experience and develop skill in a variety of theatrical techniques including improvisation, expression, voice, diction, costuming, make-up, set design, lighting design, program design, producing, and acting. Students will expand their knowledge and appreciation of theatre through literature study, class discussions, guest speakers, hands-on activities, production observations and assignments.

### **The World of Sports through its Literature (Elective)**

*Grade 10-12, 1/2 year, 1/2 credit, Factor 8, Course # 1535*

This course is an examination of sports, both amateur and professional, from the perspectives of sports columnists, commentators and contemporary authors. Readings will cover fiction and non-fiction, including biographies and commentaries, through which students will develop an awareness of sports as a source of literary thought and artistic writing as well as a chronicle and reflection of society. Writing will be descriptive, critical and personal. The course will require assigned readings and writing and may include a research project and/or a presentation and will have a final assessment.

### **SAT Prep English (Elective)**

*Grade 11, 1/2 year (1/4 credit English, 1/4credit Math) Must be taken with course #3565. Factor 0, Course # 1565*

SAT Prep English (Elective) Grade 11, 1/2 year, 1/4 credit, Factor 0, Course # 1565

This credit bearing course is the official commercial course offered by The Princeton Review. It is designed to teach the students techniques to improve their SAT scores. Math and verbal instruction is offered on alternate days. Students MUST enroll in both the Math and English strands of the course (Course #1565 and Course #3565). This course should be taken the semester immediately before the student expects to take the actual SAT. (For fall, the target SAT is January, for spring the target SAT is June.) IT IS HIGHLY RECOMMENDED THAT STUDENTS WHO WILL BE TAKING PRECALCULUS TAKE THE COURSE IN THE FALL SEMESTER AND STUDENTS WHO WILL BE TAKING COMMON CORE ALGEBRA II OR INTERMEDIATE ALGEBRA/TRIGONOMETRY TAKE THE COURSE IN THE SPRING SEMESTER. Grading is done on a Pass/Fail basis. Three in-house administrations of practice SAT exams are required throughout the course to assess student progress.

### **English AIS**

*Grade 9-12, 1 year, 0 credits, Factor 0, Course #1705*

This course identifies and remediates deficiencies in reading and writing that hamper students' success in English class and/or on the English Regents examination. Instruction is individualized in small classes to help students improve basic skills. Students are enrolled in AIS on the basis of the 8<sup>th</sup> grade ELA, teacher recommendation, or a failing grade on the Comprehensive Regents Examination in English taken in 11<sup>th</sup> grade and required for graduation. Students who fail the Regents exam are required to continue in AIS.

# FOREIGN LANGUAGE

The Foreign Language Department offers courses in French and Spanish. Five grade levels are offered in each language. Students whose skills are weak may be recommended to repeat the current course before advancing to the next level.

The courses are conducted in French/Spanish, and students are expected to speak almost exclusively in the language.

In all courses, the emphasis is on aural and reading comprehension and oral and written expression. All courses also include a study of geography, history and the culture of the countries where the language is spoken. Audiovisual aids such as audio tapes, videos, films and filmstrips are used for enrichment and to provide students with the experience of hearing and understanding different native speakers. Homework will be assigned in all of the courses. Supplementary help is available from the staff of the Foreign Language Department. Advanced Placement exam opportunities are available to students in upper level courses, when recommended by the teacher.

Candidates for a Regents diploma must have one credit of Foreign Language credit. Beginning with the class of 2005, candidates for an Advanced Regents diploma must have 3 units of Foreign Language credit. (For certain exceptions, see your Guidance Counselor.)

## **French 1**

*Grade 9-12, 1 year, 1 credit, Factor 8, Course #5101*

The introductory course in French encompasses the four basic skills of listening, speaking, reading and writing. Oral skills are emphasized and the class is largely conducted in French. A basic text is used, along with corresponding audio tapes, and videos for additional language exposure. Vocabulary, grammatical structure and aural/oral practice are the basis of the course, with culture and civilization integrated throughout the year. Homework assignments are given regularly and a final exam is given at the end of the year.

## **French 2**

*Grade 9-12, 1 year, 1 credit, Factor 8, Course #5102*

Students in this course have already satisfactorily completed two years of French 1 in the middle school or 1 year of French in the high school.

Level 2 continues the four-skill approach to language learning (listening, speaking, reading and writing). The pace is accelerated as more advanced grammatical structures and idiomatic expressions are introduced. Cultural readings and activities continue to be integrated into the curriculum. The text is supplemented by corresponding audio cassettes and videos. A final exam is given at the end of the year.

### **French 3**

*Grade 10-12, 1 year, 1 credit, Factor 8, Course #5103*

Grammar principles presented in French 2 are reviewed and more advanced grammatical constructions are introduced. In addition, students increase their vocabulary and cultural awareness through the use of reading selections and other authentic materials which are featured in the textbook. Emphasis is also placed on writing of letters and compositions, as well as speaking and reading comprehension in preparation for the Comprehensive exam in June.

### **French 4 (Honors)**

*Grade 11-12, 1 year, 1 credit, Factor 9, Course #5104H*

French 4 is an Honors course which is conducted almost entirely in French. Students are expected to participate in class discussions every day and are judged on their individual level of improvement. Readings include authentic texts drawn from newspapers, magazines, on-line periodicals and literature in French. These readings provide students with colloquial vocabulary and a variety of practical, up-to-date topics for class discussions, creative writing and compositions. Grammar instruction includes the compound tenses as well as the subjunctive tense. Other grammatical topics are tailored to the needs of the students as determined by their composition work and communicative skills. A variety of French films are incorporated throughout the year to enhance cultural awareness and vocabulary building. There is a final school exam at the end of the year.

*Required:* Teacher's recommendation

### **French 5 (Honors)**

*Grade 11-12, 1 year, 1 credit, Factor 9, Course #5105H*

### **AP French Language (Advanced Placement)**

*Grade 11-12, 1 year, 1 credit, Factor 10, Course #5105*

AP French (level 5) may be taken for AP (factor 10) or Honors (factor 9) designation. Students who choose to take this course at the AP level must take the French Language and Culture AP examination in May. Students must have the recommendation of their teacher to take the course for the Advanced Placement or Honors designation.

French 5H/AP is a college-level course conducted almost entirely in French. The course material is organized by themes identified by the College Board. Students are required to read authentic texts from a variety of real-world sources including non-fiction and fiction, listen to broadcasts and watch videos in French, write well-organized essays, and do several oral presentations in class. As part of the coursework, students are expected to participate fully in class discussions; seek out and report on articles from French-language periodicals and web-sites, as well as prepare for regular in-class quizzes and examinations. Vocabulary enrichment and grammar accuracy are stressed throughout the year as necessary tools for correct expression in French. Students are exposed to the culture of French-speaking areas and countries around the world.

## **Spanish 1**

*Grade 9-12, 1 year, 1 credit, Factor 8, Course #5201*

This is an introductory course designed to accustom the student to both the oral and written language, emphasizing listening and speaking skills, as well as developing reading and writing skills. The primary goal is to have students achieve functional communication in the second language. Students will also learn elementary grammatical and syntactical structures. Tapes are used in conjunction with the text, along with other authentic materials, to vary and expand the students' exposure.

All of the above is taught with frequent reference to the arts, history, lifestyles and traditions of Spain and Hispanic America.

## **Spanish 2**

*Grade 9-12, 1 year, 1 credit, Factor 8, Course #5202*

Students in this course have satisfactorily completed two years of Spanish 1 in the middle school or one year of Spanish 1 in the high school. The emphasis is on continued oral proficiency, grammar fundamentals and reading skill. Many more verb tenses are added to those learned in Spanish 1 while vocabulary is increased to augment conversational and reading ability. The student's listening comprehension is enhanced by the use of tapes which accompany the text. Hispanic culture is an integral part of the curriculum.

There are daily homework assignments, frequent quizzes and chapter tests. The final exam is a school exam.

## **Spanish 3**

*Grade 10-12, 1 year, 1 credit, Factor 8, Course #5203*

Grammar principles presented in Spanish 2 are reviewed and more advanced grammatical constructions are introduced. In addition, students increase their vocabulary and cultural awareness through the use of reading selections and other authentic materials which are featured in the textbook. Emphasis is also placed on writing of letters and compositions, as well as speaking and reading comprehension in preparation for the Comprehensive exam in June.

## **Spanish 4 (Honors)**

*Grade 11-12, 1 year, 1 credit, Factor 9, Course #5204H*

Spanish 4 is an Honors course which is conducted almost entirely in Spanish. Students are expected to participate in class discussions every day and are judged on their individual level of improvement. Reading includes authentic texts drawn from newspapers, magazines, online periodicals and literature in Spanish. These readings provide students with colloquial vocabulary and a variety of practical, up-to-date topics for class discussions and creative writing and compositions. Other grammatical topics are tailored to the needs of the students as determined by their composition work and communicative skills. A variety of Spanish films are incorporated throughout the year to enhance cultural awareness and vocabulary building. There is a final examination at the end of the year.

*Required:* Teacher's recommendation

## **Spanish 5 (Honors)**

*Grade 11-12, 1 year, 1 credit, Factor 9, Course #5205H*

## **AP Spanish Language (Advanced Placement)**

*Grade 11-12, 1 year, 1 credit, Factor 10, Course #5205*

AP Spanish (level 5) may be taken for AP (factor 10) or Honors (factor 9) designation. Students who choose to take this course at the AP level must take the Spanish Language and Culture AP Examination in May. Students must have the recommendation of their teacher to take the course for the Advanced Placement or Honors designation.

Spanish 5H/AP is a college-level course conducted almost entirely in Spanish. The course material is organized by themes identified by the College Board. Students are required to read authentic texts from a variety of real-world sources including non-fiction and fiction, listen to broadcasts and watch videos in Spanish, write well-organized essays, and do several oral presentations in class. As part of the coursework, students are expected to participate fully in class discussions, seek out and report on articles from Spanish-language periodicals and websites, as well as prepare for regular in-class quizzes and examinations. Vocabulary enrichment and grammar accuracy are stressed throughout the year as necessary tools for correct expression in Spanish. Students are exposed to the culture of Spanish-speaking areas and countries around the world.

# HEALTH EDUCATION

## **Health**

*Grade 9-12, 1/2 year or 1 year, 1/2 credit, Factor 8, Course #7032*

The Senior High School Health Education Program continues that of the middle school through the teaching of health areas with increased scope, depth and complexity. The instructional content in this grade is directed toward factors concerning mental, physical and social health as they influence the healthful living practices of the individual, the family, local and world communities.

**THIS COURSE IS MANDATED BY THE STATE.** The Board of Education has established a policy concerning exclusion from that part of the Health curriculum pertaining to aspects of the Family Life, Human Development strand. This policy is available upon request. Depending on students' needs and staffing availability, health may be offered every other day for a full year.

# MATHEMATICS

## **Common Core Algebra I**

*Grade 9 generally, 1 year, 1 credit, Factor 8, Course #3101*

This course prepares students for the Common Core Algebra exam, a requirement for a diploma. It will assist students in developing and choosing the appropriate skills and strategies that can be used to successfully solve problems in a variety of settings. Topics covered include the relationship between quantities, reasoning with equations and their graphs, descriptive statistics, linear and exponential functions, polynomial and quadratic expressions, equations and functions and modeling with equations and functions. This course culminates in June with the Regents examination. Graphing calculators will be integrated into the curriculum and will be available for in-class use. The recommended calculator is any member of the TI-84 graphing calculator family. The state does not allow the use of the TI-89 calculator or any calculator with symbolic manipulation on the Regents examination.

## **Common Core Algebra XT-1**

*Grade 9 generally, 1 year, 1 credit, Factor 7, Course #3101A*

## **Common Core Algebra XT-2**

*Grade 10 generally, 1 year, 1 credit, Factor 8, Course #3101B*

This course is a 2-year program that prepares students for the Common Core Algebra exam, a requirement for a diploma. It will assist students in developing and choosing the appropriate skills and strategies that can be used to successfully solve problems in a variety of settings. Topics covered include the relationship between quantities, reasoning with equations and their graphs, descriptive statistics, linear and exponential functions, polynomial and quadratic expressions, equations and functions and modeling with equations and functions. A school-generated final exam will be given after the first year. This course culminates in June with a Regents examination administered at the end of Common Core Algebra XT-2. Students must meet established criteria in order to be eligible for the 2-year program. Graphing calculators will be integrated into the curriculum and will be available for in-class use. The recommended calculator is any member of the TI-84 graphing calculator family. The state does not allow the use of the TI-89 calculator or any calculator with symbolic manipulation on the Regents examination.



## **Common Core Geometry Honors**

*Grade 9 generally, 1 year, 1 credit, Factor 9, Course #3102H*

This course prepares students for the Common Core Geometry Regents exam which is required for an Advanced Regents diploma. Students will study congruence, proof and constructions, right triangles and trigonometry, circles, expressing geometric properties with equations, geometric measurement and dimension and modeling with geometry. They will be expected to present valid arguments justified by axioms, definitions and theorems. Additionally, this honors level course deals with some topics in greater depth of study and includes additional topics.

Graphing calculators will be integrated into the curriculum and will be available for in-class use. The recommended calculator is any member of the TI-84 graphing calculator family. The state does not allow the use of the TI-89 calculator or any calculator with symbolic manipulation on the Regents examination.

*Prerequisite: Successful completion of Common Core Algebra I with a final average of at least 85 and/or teacher recommendation.*

## **Common Core Geometry**

*Grade 10 generally, 1 year, 1 credit, Factor 8, Course #3102*

This course prepares students for the Common Core Geometry Regents exam which is required for an Advanced Regents diploma. Students will study congruence, proof and constructions, right triangles and trigonometry, circles, expressing geometric properties with equations, geometric measurement and dimension and modeling with geometry. They will be expected to present valid arguments justified by axioms, definitions and theorems.

Graphing calculators will be integrated into the curriculum and will be available for in-class use. The recommended calculator is any member of the TI-84 graphing calculator family. The state does not allow the use of the TI-89 calculator or any calculator with symbolic manipulation on the Regents examination.

*Prerequisite: Successful completion of Common Core Algebra I*

## **Common Core Geometry with Lab**

*Grade 10 generally, 1 year, 1 credit, Factor 8, Course #3102S*

This course prepares students for the Common Core Geometry Regents exam which is required for an Advanced Regents diploma. An attached lab period allows students additional time to explore/discover concepts through labs and hands-on activities. Students will study congruence, proof and constructions, right triangles and trigonometry, circles, expressing geometric properties with equations, geometric measurement and dimension and model with geometry. They will be expected to present valid arguments justified by axioms, definitions and theorems.

## **Common Core Algebra II Honors**

*Grade 10 generally, 1 year, 1 credit, Factor 9, Course #3103H*

This course is designed to provide in-depth coverage of the NYS Math curriculum in preparation for the Regents exam, which is required for an Advanced Regents diploma. The course focuses on polynomial, rational and radical relationships, complex numbers, trigonometric functions, exponential and logarithmic functions, and statistical inferences. Additionally, this honors level course deals with some topics in greater depth of study and includes additional topics. The course culminates in June with the Regents examination. Graphing calculators will be integrated into the curriculum and will be available for in-class use. The recommended calculator is any member of the TI-84 graphing calculator family. The state does not allow the use of the TI-89 calculator or any calculator with symbolic manipulation on the Regents examination.

*Prerequisite:* Successful completion of *Common Core Geometry Honors* with a final average of at least 85 and/or teacher recommendation.

## **Common Core Algebra II**

*Grade 11 generally, 1 year, 1 credit, Factor 8, Course #3103*

This course is designed to provide in-depth coverage of the NYS Math curriculum in preparation for the Regents exam, which is required for an Advanced Regents diploma. The course focuses on polynomial, rational and radical relationships, complex numbers, trigonometric functions, exponential and logarithmic functions, and statistical inferences. The course culminates in June with the Regents examination. Graphing calculators will be integrated into the curriculum and will be available for in-class use. The recommended calculator is any member of the TI-84 graphing calculator family. The state does not allow the use of the TI-89 calculator or any calculator with symbolic manipulation on the Regents examination.

*Prerequisite:* Successful completion of *Common Core Geometry Honors* or *Common Core Geometry*.

## **Precalculus Honors**

*Grade 11-12, 1 year, 1 credit, Factor 9, Course #3104H*

This course covers Precalculus and introductory Calculus topics. The majority of the course focuses on the concept of functions - including the study of linear, exponential, logarithmic, power, trigonometric and polynomial functions - and how they allow us to model the world around us. Students will learn to choose a combination of algebraic, graphical, and numerical methods, depending on which of these tools best fits the situation. They will also develop the algebraic and graphing calculator skills prerequisite for success in Calculus. Calculus topics include limits, definition of the derivative and rules of differentiation. A graphing calculator is required for use in this course. The recommended calculator is the TI-89 which may be signed out by students. This course qualifies for Dutchess Community College credit.

*Prerequisite:* Successful completion of *Algebra2/Trig Honors* with a final average of at least an 80 and a minimum score of an 85 on the *Algebra2/Trig* Regents exam and/or teacher recommendation.

## **Precalculus**

*Grade 11-12, 1 year, 1 credit, Factor 8, Course #3104*

This course is designed for any student who will enroll in future math courses for professional preparation. It combines the previous three years of mathematics in a unified study of rational functions, properties of complex numbers, sequences, series, analytic geometry, trigonometry, polar coordinates, and some applications of these topics that involve the use of the graphing calculator. A graphing calculator is required for this course. The recommended calculator is the TI-89 which may be signed out by students.

*Prerequisite: Successful completion of Algebra2/Trig or Algebra2/Trig Honors*

## **AP Calculus BC (Advanced Placement)**

*Grade 12 generally, 1 year, 1 credit, Factor 10, Course #3605BC*

This course covers the material of Calculus AB and additional topics needed for Calculus BC such as parametric, polar and vector functions, Euler's Method, L'Hopital's Rule, improper integrals, and modeling with logistic differential equations. The AP portion concludes with an extensive study of sequences and series that includes the concepts of series, types of series, tests for convergence and divergence, Taylor and Maclaurin series, power series, radius and interval of convergence and the Lagrange error bound for Taylor polynomials. Topics covered following the AP exam may vary. Course credit will be awarded for either AB Calculus or BC Calculus, but not both. A graphing calculator is required for use in this course and on the AP exam. The recommended calculator is the TI-89 which may be signed out by students.

The AP exam in May is required. The AP exam in May must be taken in order to satisfy AP factor requirements.

*Prerequisite: Precalculus Honors with at least an 85 average, and/or teacher recommendation.*

## **AP Calculus AB (Advanced Placement)**

*Grade 12 generally, 1 year, 1 credit, Factor 10, Course #3605AB*

This course covers the syllabus outlined by the College Entrance Examination Board for Advanced Placement Calculus AB and prepares students for the exam. It covers topics included in a typical first semester college level course such as limits, continuity, the concept of a derivative, techniques of differentiation, the Fundamental Theorem of Calculus, techniques of integration, applications of antidifferentiation, numerical approximation and slope fields. Topics after the AP exam may vary. Course credit will be awarded for either AB Calculus or BC Calculus, but not both. A graphing calculator is required for use in this course and on the AP exam. The recommended calculator is the TI-89 which may be signed out by the students.

The AP exam in May is required. The AP exam in May must be taken in order to satisfy AP factor requirements.

*Prerequisite: Precalculus with at least an 85 average, and /or teacher recommendation.*

## **Applied Financial Mathematics**

*Grade 11-12, ½ year, ½ credit, Factor 8, Course #3525*

This course is an alternative for those students who have completed *Integrated Algebra* or *Common Core Algebra I* and is not intended to be a college prep course. The focal point of the course is the application of mathematics to real world settings. Students will develop problem solving and reasoning skills through their study of math in its "practical" use. Technology will be used throughout the course.

*Prerequisite:* Successful completion of *Integrated Algebra*, *Integrated Algebra XT2* or *Common Core Algebra I*

## **Elementary Statistics**

*Grade 11-12, ½ year, ½ credit, Factor 8, Course #3510*

In our data-driven society, an understanding of statistics is an important element of a well-rounded education. Statistics involves the collection, organization and interpretation of data. Students will gather, organize, display and summarize data. They will analyze the results, make predictions and study how to use data to make informed decisions.

Topics covered will include: sampling techniques and designs, appropriate graphical representation of data, analysis of center and spread, normal distributions, z-scores, and analysis of bivariate data.

*Prerequisite:* Successful completion of *Integrated Algebra*, *Integrated Algebra XT2* or *Common Core Algebra I*

## **Intermediate Algebra**

*Grade 11-12, ½ year, ½ credit, Factor 8, Course #3515*

This course is intended for students who are not taking Algebra2/Trigonometry but need a third year of study to prepare them for basic college mathematics requirements. Topics will include factoring and solving algebraic equations, functions, rational expressions, radicals, complex numbers, and quadratics. There will be an emphasis on applications of these topics to real life situations. Technology will be used extensively throughout the course. The course will conclude at the end of the semester with a comprehensive final exam. Graphing calculators will be integrated into the curriculum and will be available for in-class use. The recommended calculator is any member of the TI-84 graphing calculator family. The state does not allow the use of the TI-89 calculator or any calculator with symbolic manipulation.

*Prerequisite:* Successful completion of *Integrated Algebra*, *Integrated Algebra XT2* or *Common Core Algebra I*

## **Geometry in Action**

*Grade 11-12, ½ year, ½ credit, Factor 8, Course #3530*

This project-based course consists of two 10-week modules. The Geometry unit will cover applications of surface area and volume as well as applications of coordinate geometry. Students will create 3-dimensional shapes, design a package to fit a specific object, study tessellations, read and interpret a variety of maps, and demonstrate an understanding of how to use road maps, GPS and scaling. In the second unit, Math Outside the Classroom, students will investigate the mathematics of a variety of topics such as sports, art, architecture, music, nature and photography. Each unit concludes with a rubric-based final project.

*Prerequisite: Successful completion of Integrated Algebra, Integrated Algebra XT2 or Common Core Algebra I*

## **Trigonometry**

*Grade 11-12, ½ year, ½ credit, Factor 8, Course #3520*

This course is an alternative to Common Core Algebra II or Common Core Geometry for those students who have completed Integrated Algebra or Common Core Algebra I. It is recommended that the college-bound student choose this course as part of their third year of study to prepare them for basic college math requirements. Topics will include right triangle trigonometry, the unit circle, radians, trigonometric functions and notation, identities, solving trigonometric equations, graphing trigonometric functions, and the Laws of Sines and Cosines. There will be an emphasis on applications of these topics to real life situations. Technology will be used extensively throughout the course. The course will conclude at the end of the semester with a comprehensive final exam. Graphing calculators will be integrated into the curriculum and will be available for in-class use. The recommended calculator is any member of the TI-84 graphing calculator family. The state does not allow the use of the TI-89 calculator or any calculator with symbolic manipulation.

*Prerequisite: Successful completion of Integrated Algebra, Integrated Algebra XT2 or Common Core Algebra I*

## **Math AIS**

*Grade 9-12, 1 year, 0 credit, Factor 0, Course #3705*

This course is a required course for students who have not met established criteria on State Assessments.

## **SAT Prep Math**

*Grade 11, 1/2 year (1/4 credit Math, 1/4 credit English) Must be taken with course #3565  
Factor 0, Course 1565*

This credit bearing course is the official commercial course offered by The Princeton Review. It is designed to teach the students techniques to improve their SAT scores. Math and verbal instruction are offered on alternate days. Students MUST enroll in both the Math and English strands of the course (Course #1565 and Course #3565). This course should be taken the semester immediately before the student expects to take the actual SAT. (For fall, the target is January, for spring the target SAT is June.) IT IS HIGHLY RECOMMENDED THAT STUDENTS WHO WILL BE TAKING PRECALCULUS TAKE THE COURSE IN THE FALL SEMESTER AND STUDENTS WHO WILL BE TAKING COMMON CORE ALGEBRA II OR INTERMEDIATE ALGEBRA/TRIGONOMETRY TAKE THE COURSE IN THE SPRING SEMESTER. Grading is done on a Pass/Fail basis. Three in-house administrations of practice SAT exams are required throughout the course to assess student progress.

# MUSIC EDUCATION

Band, Chorus, Chamber Orchestra, and String Ensemble are elective musical organizations which provide opportunities for students to utilize and apply performance skills which have been developed through participation and musical study at the elementary and middle school levels.

## **ENROLLMENT IN THESE ENSEMBLES MUST BE BY MUSIC TEACHER RECOMMENDATION AND/OR STUDENT AUDITION.**

Woodwind, Brass and Percussion instrumentalists may register for Band only. String instrumentalists may register for Chamber Orchestra or String Ensemble only. Weekly music lessons beyond the assigned class period occur on a rotating schedule, i.e. other academic classes could be missed. Students are responsible for assigned work during the excused/missed class.

### **Band**

*Grade 9-12, 1 year, 1 credit, Factor 8, Course #6720*

*Meets every day*

Concert band is offered for students who wish to develop their playing, reading and theory skills. Students in concert band will meet every day first period. All students involved in this course will increase their level of musicianship by paying attention to the areas of pitch, intonation, melody, harmony and rhythm. Besides learning musical concepts, this class also focuses on performing. Mandatory performances are the winter and spring concerts and PRISMS. Students will also have the opportunity to perform and be graded as a solo performer at the NYSSMA solo festival. Students who score high at this festival could possibly have the opportunity to perform at Area All-State and Conference All-State.

All students involved in this course are required to have their own instrument except in the case of large brass and woodwind instruments such as tuba or euphonium.

In class students will also be taught music theory skills, and musical terms that they will apply to their performances.

Any students who wish to participate in this course need to have previous instrumental experience either through our district feeder program or transfer from another music program. This course will culminate in a locally developed exam.

Students who show a high degree of proficiency on their instrument will have the opportunity to take part in other performing ensembles. The ensembles include Percussion Ensemble, Jazz Band, Pep Band and Drum Line. These groups are not credit courses but do give students an even more in depth musical experience.

## **Chorus**

*Grade 9-12, 1 year, 1 credit, Factor 8, Course #6710*

*Meets every day*

Chorus is for students who desire to develop their vocal, music reading and theory skills, and who also understand that choral singing is a group effort that relies on each person working to his/her greatest potential. Students in chorus will have the opportunity to develop as a singer by increasing tone quality, intonation, breathing and sight-singing skills. They will have the opportunity to improve as a solo singer through lessons and participation at NYSSMA solo festival. They will grow as a team player, working with others in their class and vocal section to improve their own voice. They will be expected to perform in several concerts throughout the year as a member of the chorus.

In addition, students will be taught music reading and theory skills. Homework/class work will be assigned on a regular basis. It will also be expected that students practice their music, vocal techniques taught in class or lesson, and theory skills at home. Vocal skills develop through regular practice. Weekly music lessons beyond the assigned class period occur on a rotating schedule, i.e. other academic classes could be missed. Students are responsible for assigned work during the excused/missed class. This course will culminate in a locally developed exam.

Also available, by audition, is a position for an accompanist. Excellent pianists who need to earn a music credit may do so by being the regular accompanist, both in class and at concerts, for the chorus. Students interested in this position should have the following skills: strong sight-reading, ability to play SATB parts separately and together, ability to follow the choir director, strong independent practice habits, and flexibility in playing rubato style. See the choral teacher to schedule an audition.

## **Chamber Orchestra**

*Grade 9-12, 1 year, 1 credit, Factor 8, Course #6730*

*Meets every day*

Students will continue to develop more advanced playing skills through the performance of literature suggested by New York State School Music Association.

Emphasis will be on introducing advanced scales, vibrato, shifting into upper registers, multi meters / complex rhythms, improvisation, professionalism, basic music theory and will meet music standards through the use of NYSSMA-rated repertoire.

This is a course for experienced players who have mastered the basic fundamental musical skills of playing a stringed instrument.

Students will be assessed based on the demonstration of proper technique and performance on their instrument, including written tests and playing exams. This course will culminate in a locally developed exam.



## **String Ensemble Honors**

*Grade 10-12, 1 year, 1 credit, Factor 9, Course #6735H*

*Meets every day*

*Students are required to complete a successful audition for entry into this ensemble.*

Students will meet music standards by performing music literature of the most advanced level, as suggested by New York State School Music Association

In addition to performance, emphasis will be on learning modes, advanced scales in all octaves, improvisation, composition, advanced music theory and chamber music.

This is a course for highly advanced players who have mastered the basic fundamental musical skills of playing a stringed instrument. Students should be performing at a NYSSMA solo level 5-6.

Students will be assessed based on the demonstration of proper technique and performance on their instrument, including written tests and playing exams. This course will culminate in a locally developed exam.

### **Spackenkill High School String Ensemble** **Entrance Requirements**

1. Students will be expected to play their instrument demonstrating all the elements of good position with regard to their specific instrument.
2. Students will be expected to know all 15 major scales and be comfortable reading and sight-reading in all major and minor key signatures. Students will be expected to understand interval relationships between notes, especially half steps and whole steps. Students will also be expected to understand minor scales, including both how to compute the relative minor from the major key and the three types of minor scales (natural, melodic, and harmonic minor).
3. Students will be expected to have a thorough understanding of reading and comprehending rhythms in all standard time signatures. Students should be able to play with a metronome and with a solidly developed sense of rhythmic independence.
4. Students will be expected to demonstrate substantial competency using all parts of the bow. Students must be able to apply this knowledge to the specific needs of the music. This includes playing with a wide range of dynamics as well as all the basic articulations (legato, staccato, martele, spiccato). Students must be able to produce a mature tone.
5. Students will be expected to demonstrate fluency in shifting through 5<sup>th</sup> position.
6. Students will be expected to demonstrate a highly developed sense of intonation and ease and comfort in the use of vibrato.

### **String Ensemble Audition Requirements\*\***

All students are required to audition for entrance into the Spackenkill String Ensemble. Each student is responsible for signing up for a live audition for Mrs. Kaczynski. The HS audition dates will be announced. Please sign up for a time slot on those days.

\*\*Auditions for the Spackenkill String Ensemble are open to students in grades 10-12.

1. Students must prepare a solo piece from the standard repertoire (approximately NYSSMA level 5 or 6).
2. Students must prepare orchestral excerpts that will be assigned by the teacher that demonstrate the skills listed in the entrance requirements.
3. Students must be prepared to play all 15 major scales in 2 octaves (violin, viola, cello). For bass players, students will play 3 scales in 2 octaves and the remainder in 1 octave. (you will perform 3 major scales)
4. Students must be prepared to sight-read.

# PHYSICAL EDUCATION

State mandated physical education is a semester course which meets every other day. Students earn two units of study after passing eight semesters of participation. These two units are required for graduation.

Students in Physical Education are given a numeric grade. For the 2015-2016 school year Physical Education grades will factor in student's overall academic average for Grades 9, 10 and 11. The grade is based on the four equally weighted components: skill demonstration/skill improvement, effort, participation and cognitive test average.

## **Grades 9 and 10**

*Grade 9-10, 1/2 year, 1/4 credit, Factor 8, Course #7009 and #7010*

*Meets every other day*

Physical wellness and psychomotor skills are developed through a variety of activities. The curriculum focuses on maintaining a healthy lifestyle through the use of our Fitness Center and through various lifetime and team sport activities. This course will culminate in a locally developed department-wide exam.

## **Grade 11 and 12**

*Grade 11-12, 1/2 year, 1/4 credit, Factor 8, Course #7011 and #7012*

*Meets every other day*

The program places heavy emphasis on lifetime activities. It includes units that will assist students in gaining a greater sense of community. Cooperative activities and CPR/AED certification are two of these units. Students develop personal fitness goals based on data from their fitness assessments. This course will culminate in a locally developed department-wide exam.

# SCIENCE

Science courses are offered at several levels to meet the needs of our students. Students are strongly encouraged to take a course in each of the major science areas: Earth Science, Biology, Chemistry and Physics. All students must take a minimum of three years of science, one of which must be Regents Biology. Students who are completing this course sequence on a Regents level may elect to take Advance Placement Science courses.

All science courses are designed to provoke critical thinking and provide students with a better understanding of the world and universe. To attain these goals all students can expect an appropriate amount of written, reading, or study homework each night.

Laboratory experience is also an integral part of all science courses.

## **Regents Lab Reports**

New York State Regents courses require at least 1200 minutes of “hands on” laboratory investigations with written reports. After each lab activity, the students are expected to submit a lab report as required by the teacher. The minimum requirements for each lab report are to be neat, complete, well written and include the purpose of the lab, a description of what occurred and a conclusion based on observed results.

## **Late Labs**

Any lab report not submitted on time will be penalized as specified in the course expectations.

If a lab report is not received by the end of a quarter, the report will receive a grade of zero and an acceptable lab report must be turned in as required by NYS Regents policy.

A letter informing the parents of a student’s failure to fulfill the lab requirements for the Regents Exam will be sent home prior to the Regents exam.

As stated by State Education Department Policy, any student not fulfilling the lab requirement will **NOT** be permitted to take the Regents Exam and will receive a grade of zero for that final test. This grade of zero will be averaged with the four quarters to obtain a course grade.

## **The Physical Setting: Earth Science (Regents)**

*Grade 9-12, 1 year, 1 credit, Factor 8, Course #4102*

This course is designed for students to fulfill a regents science requirement. Through laboratory inquiry the student will have a basic understanding of the earth processes, learn to think critically, and be ready to make intelligent, informed decisions about scientific and environmental problems. Students will be required to produce written lab reports which are necessary in order to take the Regents exam

*Considerations:* Completion of 1 year of *Common Core Algebra 1*.

## **The Living Environment: Biology (Regents)**

*Grade 9-12, 1 year, 1 credit, Factor 8, Course #4101*

This course fulfills the NYS requirements for Regents Science credit in the Living Environment area. Students will learn unity and diversity, physiology, genetics, ecology, and evolution. Students will be required to produce written lab reports which are necessary in order to take the Regents exam.

*Considerations:* 9th graders should be currently enrolled in *Common Core Algebra 1*.

## **The Living Environment: Biology Honors (Regents)**

*Grade 10-12, 1 year, 1 credit, Factor 9, Course #4101H*

This course is faster and more in depth than Regents Biology. The course will better prepare the students for an A.P. Biology course. This course will cover all of the topics of Regents Biology and fulfill the NYS requirement for Regents science credit in the Living Environment. This course should be selected by highly motivated science students who are planning to continue in the study of the sciences, including taking the A.P. course in Biology or preparing to be science majors in college.

*Required:* Successful completion of Regents Earth Science and student must meet criteria the Board of Education approved rubric.

*Considerations:* 9th graders should be currently enrolled in *Common Core Algebra 1*.

## **The Physical Setting: Chemistry (Regents)**

*Grade 9-12, 1 year, 1 credit, Factor 8, Course #4103*

This course is designed for all college bound students who have completed Regents Biology or are concurrently taking Regents Biology. It is an integral part of the four year science program and satisfies one of the sequence requirements for a Regents diploma. Students will be required to produce written lab reports which are necessary in order to take the Regents exam

*Required:* Successful completion of *Living Environment* and *Earth Science*.

*Considerations:*

Successful completion of Geometry or currently enrolled in Geometry.

Completed 1 year of *Common Core Algebra 1*.

Teacher Recommendation.

## **The Physical Setting: Chemistry Honors (Regents)**

*Grade 10-12, 1 year, 1 credit, Factor 9, Course #4103H*

This course is faster-paced and more in-depth than Regents Chemistry. The course will better prepare the student for an A.P. Chemistry course. Topics are generally treated more mathematically than in Regents Chemistry. This course satisfies one of the sequence requirements for an Advanced Regents Diploma. This course should be selected by highly motivated science students who are planning to continue in the study of the sciences, including taking the A.P. course in Chemistry, or preparing to be science majors in college. Students will be required to produce written lab reports which are necessary in order to take the Regents exam

*Considerations:*

Successful completion of Common Core Geometry or currently enrolled in Common Core Geometry.

Completed 1 year of *Common Core Algebra 1*.

## **The Physical Setting: Physics Honors (Regents)**

*Grade 11-12, 1 year, 1 credit, Factor 9, Course #4104H*

This course is designed for college bound students who have completed Regents Biology and Regents Chemistry. It is an integral part of the four year science program and satisfies one of the sequence requirements for a Regents Diploma. Students will be required to produce written lab reports which are necessary in order to take the Regents exam

*Required:* Enrolled in *Common Core Algebra2* concurrently or successful completion of *Algebra2*.

*Considerations:*

Enrolled in *Regents Chemistry* concurrently or successful completion of *Regents Chemistry*

## **Forensic Science**

*Grade 10 – 12, 1 year, 1 credit, Factor 8, Course #4540*

This course is designed to be taken as an elective for students who have fulfilled their regent's science requirements for graduation.

The class meets for one 40-minute period a day, and will consist primarily of lecture and crime scene based labs. In addition to magazine articles and various books, the students will complete independent reading and reports using the Internet and PowerPoint.

*Required:*

- (1) Successful completion of the *Living Environment* Course and the *Living Environment Regents*
- (2) Successful completion of *Regents Earth Science* or *Regents Chemistry*.

## **Environmental Sustainability**

*Grades 11-12, 1 year, 1 Credit, Factor 8, Course #4803*

Environmental Sustainability is a course that is designed to integrate content from Chemistry, Biology, Earth Science and Environmental Science. It is designed to follow one of the introductory engineering courses in the Project Lead the Way curriculum. The course involves finding solutions to real-world problems including: pollution, genetically modified organisms, alternate forms of energy and water quality. Students who maintain an 85 average and achieve mastery on the Project Lead the Way Final Examination are eligible for college credit. Typically, students enrolled in this course will have successfully completed an introductory course in engineering, biology and chemistry.

## **Math, Science and Technology (MST) I and II**

*Grade 10-12, ½ year each, ½ credit each, Course # 45501 and Course # 45502*

This is a full year course. It is a hands-on, project based course that incorporates all areas of science (biology, chemistry, environmental science, earth science, and physics) with math applications (Course 1) and technology. Some of the projects may include model home building, catapults, DNA studies, water quality, and community service. Students will receive one science credit (elective, non-Regents) for the course.

## **Principals of Physical Science I and II**

*Grade 10 -12, 1/2 year each, 1/2 credit each, Factor 7, Course #45551 and Course #45552*

Principals of Physical Science is a two-semester survey course that considers current topics in Chemistry, Physics, Earth Science and Environmental Science. Students will develop presentation skills when reporting their findings for research and laboratory activities. Principles of Physical Science is a “hands-on” course designed for students who have successfully completed Regents Biology and/or Earth Science.

## **Science Research Class 10**

*Grade 10, 1 year, 1/2 credit, Factor 9, Course #4510*

## **Science Research Class 11**

*Grade 11, 1 year, 1/2 credit, Factor 9, Course #4511*

## **Science Research Class 12**

*Grade 11, 1 year, 1/2 credit, Factor 10, Course #4512*

Science research is a three year program for students who are willing to work hard and are interested in exploring a topic that is relevant to them. In addition to biological science and physical science students can study behavioral, computer, earth and space science, mathematics and engineering.

Students selecting this course should be self-motivated, curious and independent learners.

Students enrolled in this program will receive 0.5 credit (factor 9). The second year student will receive 0.5 credit (factor 9). Third year students will receive 0.5 credit (factor 10). This multi year program will allow the student to choose a topic of study, develop connections to the real world of science and to produce a final project.

*Required:* Successful completion of grade 9 and teacher recommendation

## **Science AIS**

*Grade 9-12, 1 year, 0 credit, Factor 0, Course #4705*

This remedial level course is aimed at correctly defining deficiencies and preparing students for the Regents Examinations in Science. Instruction is individualized in small classes to help students improve basic skills. Students who fail the exam are required to repeat the course until they pass it. Students are scheduled into these classes by teacher recommendation.

## **Advanced Placement Sciences**

These courses are offered as an elective for students who have a keen interest in a special science subject area. These courses will delve deeply into aspects of topics encountered in Regents level science courses. Students who take these courses should include those students who will major in science or math in college and those students who will pursue careers in medicine or technical fields. Most concepts will be presented in a lecture format. Since college level texts are used, a superior reading skill will be essential for success in these courses. Laboratory work will include independent projects. Supplemental reading formal reports, oral presentations, etc., may be used to broaden the academic experience.



Students enrolled in these courses must take the appropriate Advanced Placement examination administered by the College Entrance Examination Board. The AP exam in May must be taken in order to satisfy AP factor requirements.

The level of these courses mandates high standards for admissions.

### **AP Biology (Advanced Placement)**

*Grade 11-12, 1 year, 1 credit, Factor 10, Course #4601*

This course of study will pursue in greater depth the major units of biology encountered in the college introductory course *Biology (Regents)*. The approach in presenting the main concepts will be through lecture presentation, laboratory investigations and required supplemental readings. Superior reading skills are required. Students will receive 8 Dutchess Community College Credits upon successful completion of the course.

*Considerations:*

- (1) Successfully pass the course and the Regents exam of Regents Earth Science, Regents Biology, and Regents Chemistry.
- (2) Successful completion of Common Core Algebra I and Common Core Geometry or concurrently taking Common Core Geometry.
- (3) Teacher Recommendation.

### **AP Chemistry (Advanced Placement)**

*Grade 11-12, 1 year, 1 credit, Factor 10, Course #4602*

Areas of study in this course are: atomic structure; stoichiometry; chemical bonding; properties; oxidation-reduction reactions; kinetics; descriptive chemistry of elements; introduction to organic chemistry.

Solving problems and conducting laboratory experiments relating to these topics are integral parts of the course.

*Considerations:*

- (1) Successfully pass the course and the Regents exam for *Regents Earth Science, Regents Biology, Regents Chemistry, and Regents Physics* or concurrently taking *Regents Physics*.
- (2) Successful completion of *Common Core Algebra II* or concurrently taking *Common Core Algebra II*.
- (3) Teacher Recommendation.

### **AP Physics C: Mechanics, and Electricity and Magnetism (Advanced Placement)**

*Grade 12, 1 year, 1 credit, Factor 10, Course #4603*

This is a standard two semester university physics course in mechanics, electricity and magnetism. Students will be required to solve problems relating to the topics above using

calculus. Laboratory work will include standard labs for a course of this level. Formal lab reports will be required.

*Considerations:*

- (1) Successfully pass the course and the Regents exam for Regents Earth Science, Regents Biology, Regents Chemistry and Regents Physics.
- (2) Successful completion of Calculus or concurrently taking Calculus.
- (3) Concurrently taking Pre-Calculus; with permission of instructor.
- (4) Teacher Recommendation.

# Project Lead the Way

## Introduction to Engineering Design

*Grades 9-12, 1 year, 1 credit, Factor 8, Course #4801*

Introduction to Engineering Design (IED) is a course that is appropriate for all high school students who are interested in design and engineering. The major focus of the course is to expose students to design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards, and technical documentation. The course applies and develops secondary level knowledge in mathematics, science, and technology. IED gives students the opportunity to develop skills through activities, projects, and problem-based (APPB) learning. APPB-learning challenges students to continually hone their interpersonal skills, creative abilities and understanding of the design process. In addition, students use a state of art 3D solid modeling design software package to help them design solutions to solve proposed problems. Students will also learn how to document their work, and communicate their solutions to their peers and members of the professional community. Introduction to Engineering Design™ is the prerequisite for other pre-engineering courses which may be offered in the future.

The course of study includes:

- Design Process
- Modeling
- Sketching
- Measurement, Statistics, and Applied Geometry
- Presentation Design and Delivery
- Engineering Drawing Standards
- CAD Solid Modeling
- Reverse Engineering
- Consumer Product Design Innovation
- Marketing
- Graphic Design
- Engineering Ethics
- Virtual Design Teams

*Required:*

- (1) Successful completion or concurrently enrolled in *The Living Environment*
- (2) Successful completion or concurrently enrolled in *Common Core Algebra I*

## **Principles of Engineering**

*Grades 10-12, 1 year, 1 Credit, Factor 9, Course #4802*

This is an honors level course that explores many aspects of engineering principles to expose students to the different possibilities available to them in the engineering field. Successful completion of this course could qualify for college credit in some cases. Topics include mechanics, material properties, electronics, automation, and computer programming.

Students will develop skills in problem solving, research, and design through hands on experiences, collaboration, and presentation.

Required:

- (1) Successful completion of Introduction to Engineering Design OR
- (2) Successful completion or concurrently enrolled in *Common Core Algebra2*

# SOCIAL STUDIES

Students must complete four units of study. The program for Grades 9 and 10 is a two-year global history course organized around major historical periods of the world. The curriculum for each time period contains sections on geographic settings, dynamics of political change, economic development, cultural achievement, and global relationships.

**Juniors** - Juniors may choose from a program of elective courses. Juniors may participate in an Advanced Placement United States History course.

**Seniors** - The fourth credit consists of two mandated one-semester courses, Participation in Government and Economics. Seniors may enroll in Honors Economics and Honors Participation in Government.

**AP and Honors** - To preserve and maintain the integrity of Advanced Placement and Honors social studies offerings, and to ensure the success of students in these courses, candidates will be evaluated based on specific criteria including, but not limited to, teacher recommendations and performance in prerequisite courses. Students selected to take these courses will experience a challenging and demanding course that emulates college level instruction reflective of the weighted rank of the course.

## **Global History and Geography 9**

*Grade 9, 1 year, 1 credit, Factor 8, Course #2101*

Global History 9 covers the first half of a two year study of world history and geography. Grade 9 includes units on basic terms and concepts of social studies and a chronological study of global history from prehistoric humans through the age of absolutism in Europe. The Global History 9 course will conclude with a locally developed department wide examination.

## **Global History and Geography 10**

*Grade 10, 1 year, 1 credit, Factor 8, Course #2102*

The Grade 10 course continues the chronological study of history. It focuses on more recent historical periods beginning with the French Revolution and concluding with the events of the contemporary world. For a diploma, students are required to pass the Regents Examination at the conclusion of this 2-year course in Global History.

## **United States History and Government 11**

*Grade 11, 1 year, 1 credit, Factor 8, Course #2103*

Grade 11 is a chronologically organized course in United States History and Government. The course begins with the Reconstruction Period and concludes with contemporary events and issues. Constitutional and legal issues are developed as well as issues of international involvement.

Students are required to pass the Regents exam in US History and Government.

## **AP United States History and Government (Advanced Placement)**

*Grade 11-12, 1 year, 1 credit, Factor 10, Course #2603*

The Advanced Placement course in United States History is designed to provide students with the analytical skills and factual knowledge necessary to deal critically with the problems and materials in United States History. The course prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses in United States History.

This course differs from other United States History courses in its depth and difficulty. Students who select this course should be willing to express their ideas in class, be interested in history, like to read, and be good students in English Composition. An average of one hour of homework a night is required. The course is offered to those students in grade eleven who are interested in an advanced course in United States History leading to a Regents diploma and potential college credit for successfully completing the required Advanced Placement Exam.

Students are required to pass the Regents exam in US History and Government.

The AP exam in May must be taken in order to satisfy AP factor requirements.

Qualified eleventh and twelfth grade students will be evaluated based on specific criteria including, but not limited to, teacher recommendations and performance in prerequisite courses to this program with the approval of the instructor and if room in the class exists.

## **AP European History (Advanced Placement)**

*Grade 12, 1 year, 1 credit, Factor 10, Course #2605*

This course offers an opportunity to learn the ideas and events that shaped the European experiences from the Renaissance to the late 20th century (1450 - the present). Students are expected to be familiar with the general ideas and topics of modern European history. They should be able to express more detailed knowledge in oral and written discussions. The course focuses on social and economic change, political and military themes, and cultural and intellectual ideas. Emphasis is placed on student discussions, college text readings, primary source readings and several short position papers.

Students who select this course should be willing to express their ideas in class, be interested in history, like to read, and be good students in English Composition.

Qualified eleventh and twelfth grade students will be evaluated based on specific criteria including, but not limited to, teacher recommendations and performance in prerequisite courses to this program with the approval of the instructor and if room in the class exists.

The AP exam in May must be taken in order to satisfy AP factor requirements.

### **Participation in Government**

*Grade 12, 1/2 year, 1/2 credit, Factor 8, Course #2124*

*This is a required course.*

One semester of the grade twelve programs is a course in Participation in Government. This course emphasizes the interaction between citizens and government at all levels: local, state and federal. The development of student participation in the process of government is encouraged. The Participation in Government course will conclude with a locally developed department wide examination.

### **Participation in Government (Honors)**

*Grade 12, 1/2 year, 1/2 credit, Factor 9, Course #2124H*

This course deals with the philosophy, structure, functions and processes of our national government. Topics include the methods of political and historical analysis, the machinery of government, the political process and political behavior. Historical events and personalities in American politics will be used to illustrate the issues and processes of American government. The Participation in Government course will conclude with a locally developed department wide examination.

Qualified twelfth grade students will be evaluated based on criteria including, but not limited to, teacher recommendations and performance in prerequisite courses to this program with the approval of the instructor and if room in the class exists.

This course qualifies for Dutchess Community College credit for Government 121.

## **Economics**

*Grade 12, 1/2 year, 1/2 credit, Factor 8, Course #2114*

*This is a required course.*

One semester of the grade twelve programs is a course in economics and economic decision making. This course includes the basic economic concepts and understanding which all persons need to function effectively and intelligently as citizens and participants in the economy of the United States and the world. The Economics course will conclude with a locally developed department wide examination.

## **Economics (Honors)**

*Grade 12, 1/2 year, 1/2 credit, Factor 9, Course #2114H*

This course conducts an in-depth analysis of a variety of economic issues and institutions. Examples include analyzing the budget deficit, social policy, and the role of the Federal Reserve in combating inflation and recession. The course also examines how the globalization of the economy will bring competitive pressures and new opportunities. Term papers, projects and reports are part of the requirements. The Economics course will conclude with a locally developed department wide examination.

Qualified twelfth grade students will be evaluated based on criteria including, but not limited to, teacher recommendations and performance in prerequisite courses to this program with the approval of the instructor and if room in the class exists.

## **Psychology (Elective)**

*Grade 11-12, 1/2 year, 1/2 credit, Factor 8, Course #2510*

This course is a study of some of the basic principles of psychology. This course will also include an examination of current applications in contemporary psychology. The Psychology course will conclude with a locally developed department wide examination.

## **Sociology (Elective)**

*Grade 11-12, 1/2 year, 1/2 credit, Factor 8, Course #2505*

Analysis and discussion of relevant findings about human behavior, including such topics as peer pressure, family, marriage, society and other institutions.



## **Nazi Germany and the Holocaust (Elective)**

*Grade 11-12, 1/2 year, 1/2 credit, Factor 8, Course #2520*

This course seeks to examine the genocide that took place during the Second World War within the larger context of anti-Semitism and racism in Europe. We will trace the origins of anti-Semitism, the National Socialist movement and the rise of Adolf Hitler to supreme power in Germany. In addition, we will study the social and political structure of Nazi Germany as it increasingly excluded "undesirable" elements from society. The eventual establishment of a Jewish homeland, the search for Nazi war criminals, and the post-war Nuremberg Trials will also be considered. Lastly, the class will embark on an analysis of Neo-Nazism in modern society.

## **Social Studies AIS**

*1/2 year, 0 credit, Factor 0, Course #2705*

This course will be required for students who fail or are at risk of failing the Global History or the US History Regents Exam.

# **SPECIAL PROGRAM OPPORTUNITIES**

## **Career and Technical Institute**

Students enrolled in the Career and Technical Institute may satisfy their senior English requirement if they are enrolled for two years at the Technical Center. Each year, students may earn ½ a high school credit in English. Students may also enroll in MST, and receive integrated math, science or health credit depending on their technical course of studies.

### **ENGINEERING TECHNOLOGY**

#### **Auto Body**

Auto Body is a program instructing students in repairing, refinishing and painting damaged vehicles. "Hands-on" experience prepares the student for an entry level position in the Auto Body field. Auto Body Collision & Refinishing is a one year, entry level program in collision theory and repairs, as well as auto refinishing, for juniors or seniors. Auto Body Exploration is also a one year program for juniors or seniors, involving a rotation through various segments of the automotive field.

#### **Auto Mechanics**

Auto Mechanics is a "1 plus 1" program which trains students to repair and maintain a variety of vehicles. Juniors or seniors may choose among these one year programs: Automotive Service Bay Technician, Basic Auto Technician A, Exploratory Automotive Trades, and Advanced Auto Mechanic and Technician Training.

#### **Small Engines/Turf Equipment & ATV Maintenance**

These one year programs for juniors or seniors are designed to develop the basic entry level skills in small engine operation, maintenance, & repair and/or the operation, maintenance & repair of lawn & garden equipment & recreational vehicles.

#### **Electrical Construction Technology**

Electrical Construction Technology is a program providing classroom instruction and on-site activities in the installation, troubleshooting and repair of residential and commercial electrical wiring systems. One year programs available to juniors or seniors include Construction Electricity and Residential Wiring.

#### **Finish Carpentry**

This one year course for juniors or seniors will introduce students to the tools, methods, and skills used in finish carpentry.

#### **Plumbing and Heating**

Plumbing Mechanic & Service Technician, a one year program for juniors or seniors, is designed to develop the basic skills necessary to gain entry level employment as a plumbing apprentice. Heating Basics, another one year program for juniors or seniors, is designed to develop the basic entry level skills needed to gain employment in the heating industry.

#### **Residential Construction**

Residential Construction is a program which provides students with the basic knowledge of tools, methods and materials used in the building trades.

### **Welding and Fabrication**

Welding & Fabrication, a one year program for juniors or seniors, is designed to develop entry level skills needed for careers in the welding and steel fabrication industry.

## **HEALTH OCCUPATIONS**

### **Intro to Health**

This one year course introduces the student to the foundation skills necessary for the study of Nursing. Successful students qualify to take the CNA exam. Successful completion satisfies health requirement for high school graduation

### **Practical Nurse I**

Open to seniors who have completed 3 Regents science courses, including Living Environment. An admission test is required. There are no academic pullouts for this course.

## **BUSINESS AND INDUSTRY**

### **A+ Computer Training**

This one year program is designed to provide the student with the technical knowledge and skills required for an entry-level position in the information and computer technology career field. Additionally, students will be prepared to take the A+ Industry Certification Exam.

## **HUMAN SERVICES**

### **Cosmetology**

Cosmetology is a two year program. Students learn the care of hair, nails, and skin in preparation for the New York State Licensing Exam. [1,000 hours]

### **Culinary Arts & Restaurant Management**

Culinary Arts is a one year program for juniors or seniors, introducing the student to skills in food preparation, baking & pastry arts, safety, and sanitation.

Restaurant Management, also a one year program for juniors or seniors, prepares the student for entry level employment skills as a culinary/hospitality professional.

### **Early Childhood Education**

This one or two year program provides students with an understanding of the physical, social, and mental development of children. Eligible students may receive 2 college credits at DCC or 4 at SUNY Cobleskill.

### **Security & Law Enforcement**

This one or two year program is designed to provide training to 11th and 12th grade students in the fields of Security, Corrections, and Law Enforcement.

## **Learning Options**

These programs enable students to use part of their course of studies to obtain an experience outside the usual classroom bounds, but with the support and supervision of the school.

## **Study Skills**

*0 credit, Course #8065*

This program is designed to meet the needs of certain students who need supportive services in order to successfully complete their high school career. A student may be referred by parents, teachers, guidance counselors, or administrative staff for entrance into this program.

## **Resource Program**

*0 credit, Course #8061*

Resource room programs are designed to supplement the regular or special classroom instruction of students with disabilities who are recommended for such a program.

## **Modified Class Programs**

Due to changes in New York state requirements, sections of many required course offerings will be provided with additional support systems for students with disabilities. The supports may require additional coordination of curriculum activities with modified classroom teachers. Courses are taught with an emphasis on differentiated instruction. Supports may include a variety of hands on activities and modified assessment experiences.

## **6 1/2 Credit Option**

A student enrolled in grades 9-12 may earn a maximum of 6 1/2 units of credit for either a Regents or Local diploma without completing units of study for such units of credit if:

- 1) The high school principal, as the superintendent's designee, determines that the student will benefit educationally by exercising this alternative.
- 2) Students must make a written request for consideration to exercise this alternative to the building principal not earlier than March 20th or later than May 20th. This should occur in the school year prior to the year of the alternate program. At the time of this request, the student should be maintaining at least an 80-85% average as stated in number 3 and be attending school regularly.
- 3) Certain grade criteria must be met to qualify said student. For non-regents or low-ability students, he/she must have earned a cumulative average of 80% or better in that discipline as well as in a majority of his/her final tests and courses. For the regents or high-ability students, he/she must have earned a cumulative average of 85% or better in the aforementioned areas. In the absence of cumulative grade average records, an equivalent assessment may be made by other means.
- 4) The student will successfully complete a special project (subject to departmental standards) to demonstrate proficiency consistent with the goals and objectives of that course. This would be the equivalent to course work covered by multi-unit comprehensive examinations. He/she should be prepared to present and orally defend his program of study. An oral examination may be

substituted for a special project when unique circumstances warrant this approach: e.g. foreign language. Proficiency will conform to grade standards established in #3. In the case of a state developed or state approved examination, the student must achieve a score of at least 85%.

- 5) Minimum guidelines for science and other academic departments exist and must be reviewed with the appropriate counselor.

*Revised 8/31/16*

## 2015 - 2016 Course Selection Worksheet

### BOCES

90001 Per 1-6 BOCES  
90002 Per 6-9 BOCES

### HEALTH

7032 Health Ed.

### SENIOR PRIVILEGE

8040 Late Arrival  
8059 Early Release

### LEARNING OPTIONS

8061 Resource Room  
8065 Study Skills

### LUNCH

8087 Lunch  
8088 No Lunch  
8096 Alt Lunch

### ART

6101 Studio in Art  
6102 St.Drw&Paint  
6103 Adv Studio Paint  
6605 AP Adv St Paint  
6505 St. Graphics  
6506 St. Ceramics  
6515 Design & Dr Prod  
6520 Arch. Drawing

### COMPUTER

3810 Programming1 **S**  
3820 Programming2 **S**  
3830 ComputerStudies **S**  
3605C AP Computer Principles

### ENGLISH

1101H CC English 9 H  
1101 CC English 9 R  
1101M CC English 9RM  
1102H CC English 10 H  
1102 CC English 10 R  
1102M CC English 10RM  
1103H English 11 Honor  
1103 English 11 Regent  
1103M English 11RM  
1104 World Lit.12 R  
1104H World Lit.12 H  
1565 SAT Prep English  
1550 ESL English  
1520 PublicSpeaking **S**  
15301 Theater Prod **S**  
15101 Communications1**S**  
15102 Communications2**S**  
1705 English AIS  
1603 AP Eng Lang& Comp  
1604 AP Eng Lit & Comp

### FOREIGN LANGUAGE

5101 French 1

5102 French 2  
5103 French 3  
5104H French 4 H  
5105 AP French Lang  
5105H French 5 H  
5201 Spanish 1  
5202 Spanish 2  
5203 Spanish 3  
5204H Spanish 4 H  
5205 AP Span Lang  
5205H Spanish 5 H

### PHYSICAL EDUCATION

7009 Grade 9&10 Sem.1  
7010 Grade 9&10 Sem.2  
7011 Grade 11&12 Sem.1  
7012 Grade 11&12 Sem.2

### MATH

3101 CC Alg 1  
3101A CC Alg XT1  
3101B CC Alg XT2  
3102 CC Geometry  
3102S CC Geometry w Lab  
3102H CC Geometry H  
3103 Algebra 2 & Trig  
3103H Algebra 2 & Trig  
3510 Elem Statistics **S**  
3515 Int. Algebra **S**  
3520 Trigonometry **S**  
3525 App Financ Math **S**  
3530 Geometry in Action  
3565 SAT Prep Math  
3104H Pre-Calculus H  
3104 Pre-Calculus  
3705 Math AIS  
3605BC AP Calculus BC  
3605AB AP Calculus AB

### MUSIC

6720 Band  
6735H String En Honors  
6710 Chorus  
6730 ChamberOrch

### SCIENCE

4520 Envir Science **S**  
4510 Sci Research 10  
4511 Sci Research 11  
4512 Sci Research 12  
4102 Earth Science R  
4530 Oceanography **S**  
4550 MST  
4101 Biology R  
4101H Biology H  
4103 Chemistry R

4103H Chemistry H  
4103G Chemistry Gen  
4104H Physics Honors  
4540 Forensic Science  
4705 Science AIS  
4601 AP Biology  
4602 AP Chemistry  
4603 AP Physics C  
4801 Pre Engineering  
4802 Principles of Engineering

### SOCIAL STUDIES

2101 Global History 9R  
2102 Global History 10  
2103 US History& Govt  
2103M US History Gov M  
2114 Economic **S**  
2114H EconomicsHonor **S**  
2124 Part. in Gov't **S**  
2124H Part In Govt H **S**  
2505 Sociology **S**  
2510 Psychology **S**  
2520 NaziGermany **S**  
2705 Soc St. AIS  
2603 AP US Hist & Govt  
2605 AP European Hist

Mod Modified  
Orch Orchestra  
Prod Production  
R Regents level  
**S** Semester course  
St Studio  
\*\* Permission of teacher

### Key

Alt Alternate Days  
AP Advanced Placement  
Comp Computer  
Dr Drawing  
Elem Elementary  
ESL English as Second language  
Gen General level  
H Honors level  
Info Information