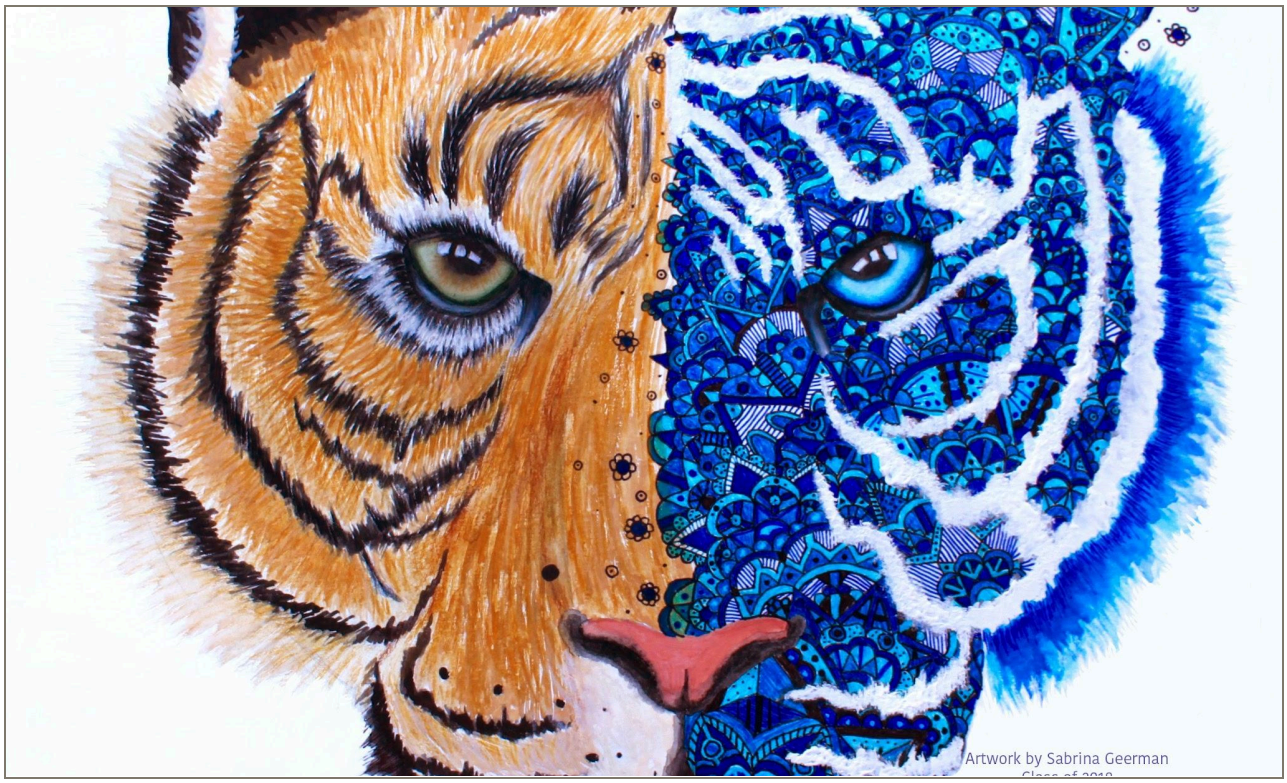
PUTNAM VALLEY HIGH SCHOOL

146 Peekskill Hollow Road, Putnam Valley, N.Y. 10579

Course Selection Guide



2018-2019

Ms. Sandra K. Intrieri
Principal

Mr. David Campion
Guidance Counselor

Ms. Paige Davino
Guidance Counselor

Ms. Laura Kilduff
Guidance Counselor

Mr. Christopher P. O'Connor
Assistant Principal

Ms. Gina Noto
School Psychologist

Ms. Eva Wayne
School Psychologist

Updated 9/18/17

Putnam Valley High School

"Home of the Tigers"

Dear Parents and Guardians,

The Putnam Valley High School Course Selection Guide has been updated for your review. The Guide will provide you with all of the academic information, graduation requirements, and course descriptions that your child will need to fill out a course of study for next year.

Putnam Valley High School offers a wide variety of courses that include many Advanced Placement options and valuable elective courses, such as, Science Research, and several Arts and Humanities electives. Please take time to read through the course catalogue to familiarize yourself with our course offerings so that you can assist your child in the scheduling process for this year. Your child's guidance counselor will meet with your child this spring to design his/her academic program. We strongly encourage your child to take the most challenging academic courses available to them, which include the opportunity to take four years of math, and science courses.

The high school has a new weighted system that was adopted in 2014. Please review the guidelines on the following pages, and use the information as one of the considerations when choosing the best course of study for your child.

At Putnam Valley High School, we pride ourselves on providing our students with a supportive and caring environment that is focused on developing a well-rounded program for all of our students. If you have any questions about the new weighted system or the scheduling process, please don't hesitate to contact your child's guidance counselor with your inquiry.

Sincerely,

Sandra Intrieri
Principal

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GRADUATION REQUIREMENTS

Students must meet course and testing requirements to receive a Regents diploma or a Regents diploma with an Advanced Designation. Students must successfully complete the following **minimum requirements:**

Regents Diploma

COURSE	CREDITS
English	4 Credits
• *ELA (Common Core)*	
Social Studies	4 Credits
• *Global History & Geography Regents*	
• *US History & Govt. Regents*	
Math	3 Credits
One Math Regents Examination	
• *Algebra (Common Core)*	
• *Geometry (Common Core)*	
• *Algebra II (Common Core)*	
Science	3 Credits
One Science Regents Examination	
• *Living Environment*	
• *Chemistry*	
• *Earth Science*	
• *Physics*	
LOTE (Languages other than English)	1 Credit
Art or Music	1 Credit
Health	½ Credit
Physical Education (all 4 years)	2 Credits
Electives	3.5 Credits
Total Credits	**22 Credits**

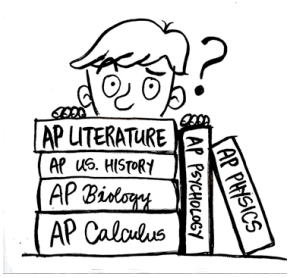
Regents Diploma with an Advanced Designation

COURSE	CREDITS
English	4 Credits
• *ELA (Common Core)*	
Social Studies	4 Credits
• *Global History & Geography Regents*	
• *US History & Govt. Regents*	
Math	3 Credits
All 3 Math Regents Examinations	
• *Algebra (Common Core)*	
• *Geometry (Common Core)*	
• *Algebra II (Common Core)*	
Science	3 Credits
2 *Science Regents Examinations (1 must be Living Env.)*	
• ***Living Environment***	
• *Chemistry*	
• *Earth Science*	
• *Physics*	
LOTE (Languages other than English)	3 Credits
Comprehensive Language examination	
Art or Music	1 Credit
Health	½ Credit
Physical Education (all 4 years)	2 Credits
Electives	1.5 Credits
Total Credits	**22 Credits**

A student may be awarded a Regents diploma with *Honors* or a Regents diploma with *Advanced Designation with Honors* by achieving an average of 90 percent on all Regents examinations required for the diploma.

Under the new “4+1” pathway assessment option, students must take and pass four required Regents Exams or Department-approved alternative assessments (one in each of the following subjects: English, math, science, and social studies) and a comparably rigorous assessment for the fifth required exam to graduate.

Please see your child’s guidance counselor for other options and pathways to graduation or for information regarding requirements for local diplomas for students with an IEP or 504.



Advanced Placement Courses

Advanced Placement courses follow the guidelines recommended by the College Board's Advanced Placement program (AP). Students enrolled in an AP course at Putnam Valley High School are required to take the Advanced Placement examination in May. Students pay a fee to take the AP examination (for the past school year, 2016-2017, it was $93). Depending on a student's score on the AP exam, he/she may receive college credit at the college or university she/he attends after high school graduation.

Dutchess Community College and Pace University

The High School offers several courses under the direction of Dutchess Community College (DCC) and Pace University. After successful completion of the course, students receive college credits, which may be transferred to many colleges and universities. The following courses offer the potential to earn Dutchess County Community College (DCC), Albany or Pace University credits:

Course Name	Credits	Department
AP Calculus A/B - DCC	4	Mathematics
College Calculus - DCC	4	Mathematics
College Pre-AP Calculus - DCC	4	Mathematics
College Precalculus - DCC	4	Mathematics
College Statistics - DCC	3	Mathematics
AP Biology - DCC	8	Science
College Spanish IV/V	6	LOTE
Authentic Science Research – Albany	up to 12	Science

Community Service Requirement

All Students must complete 40 hours of ***approved*** community service to meet graduation requirements. Please see the website for more information.

Program and Schedule Changes

Student schedule changes will be considered for the following reasons ONLY:

- Unassigned Periods
- Course Conflicts
- Fundamental shifts in curriculum choice (i.e. vocational to college prep program)
- Adjustment of course level as recommended by teacher and after discussion with counselor and parent

Student schedule changes will NOT be considered for the following reasons:

- Teacher change requests
- Accommodating work schedules
- Accommodating early dismissal and/or late arrival for seniors

Students will be able to drop and add courses within the first two weeks of school.

After the drop/add period, as determined by the teacher and parent, a semester course can be dropped by the end of the first five weeks of the quarter, and a year-long course dropped by the end of 10 weeks without record of drop on their transcript. Dropping a course is a LAST RESORT and is discouraged. All course changes after the drop/add period require parent, teacher, and administrator permission before action can be taken. Situations requiring medical and/or extenuating circumstances will be reviewed case by case.

Seniors who drop a course after their transcript is sent to colleges may be in jeopardy of having their acceptance withdrawn by the college. Students are required to notify colleges before they drop a course to assess the impact of doing so.

Minimum Credit Policy

Students in grade 9 through 12 are to maintain a course load of 5.5 credits throughout the school year.

The Master Schedule

The school's master schedule is built around student choice. It is extremely important that students select their courses with a great deal of care. Classes are organized on the basis of student enrollment at the time of program planning. Because we are a small school with numerous, competing single course offerings, unavoidable conflicts can occur in the master schedule and occasionally students may be unable to enroll in all of the courses they have selected.

Grade Weighting

Honors courses are 1.05 and AP classes are 1.1

Putnam Valley High School

COURSE OFFERINGS GUIDE

New Courses

Course name: **AP Computer Science A**
Credit: **1**
Prerequisite: **Recommended AP Computer Principles**
Grades: **10-12**

The AP Computer Science A course is an introductory course in computer science. The major theme of the course is problem solving. You will be solving problems through the design and implementation of computer programming. The entire course is focused solely on proper programming in the *Java* language. This course covers the philosophy of Java, the Java language, objects and classes, applications in Java, packages and interfaces, exceptions, and threads. AP is offered in May, which is optional.

Course name: **Horror, Supernatural, and Stephen King**
Credit: **½**
Grades: **10-12**

Ever wonder what scary creatures creep through the night? In this course, we will read literary texts which seek to answer that question and many more. We will explore the horror and supernatural genre focusing our attention on the master of fear, Stephen King. In this course, we will study gothic, horror, and supernatural literature. In addition to reading scary stories, we will examine how the film industry has taken some of King's best works and adapted them for film.
Writers may include but are not limited to: Stephen King, Richard Bachman, Ray Bradbury, Edgar Allan Poe, William Blake, Emily Dickinson, W.B. Yeats

Course name: **How Do You Know?**
Credit: **½**
Grades: **11-12**

How do you know? This course explores the concept, uses, and applications of knowledge. What qualifies as knowledge? How does it increase? What are its limits? Who owns it? What is the value of knowledge? What are the implications of having...or not having, knowledge? This course encourages critical thinking about knowledge itself, uniting all academic areas and encouraging appreciation of other cultural perspectives.

Course activities and discussions are designed to help discover and express views on knowledge issues, share ideas, and to listen/learn from what others think. Connections will be made between knowledge encountered in other subject areas and across cultural domains. Students will be challenged and encouraged to discover fascination

with the richness of knowledge as a human endeavor, and realize the empowerment that follows from reflecting upon it.

Course name: **Introduction to Innovation & Design Process**
Credit: **½**
Grades: **9-12**
Introduction to Manufacturing and Design Process Is a brand new course designed for students of the 21st century. The course will be multifaceted and students choose a project to work on that is interesting to them. Some students will look at today's market to see what is lacking, draft up a design of a new product to fill that void, and ultimately create a prototype. Others may wish to rebuild, revise, or retrofit an existing design or system.

Course name: **Introduction to Piano**
Credit: **½**
Grades: **10-12**
Piano Lab is designed to foster skills and knowledge in piano through the use of performance, basic music theory, listening to piano performance, and the history of piano performance. Individualized instruction will cater to previous levels of experience. In addition to performing alone and with others, elements of instruction will include: proper technique, reading music notation, composing and improvising, evaluating music performance, and understanding relationships between music and culture.

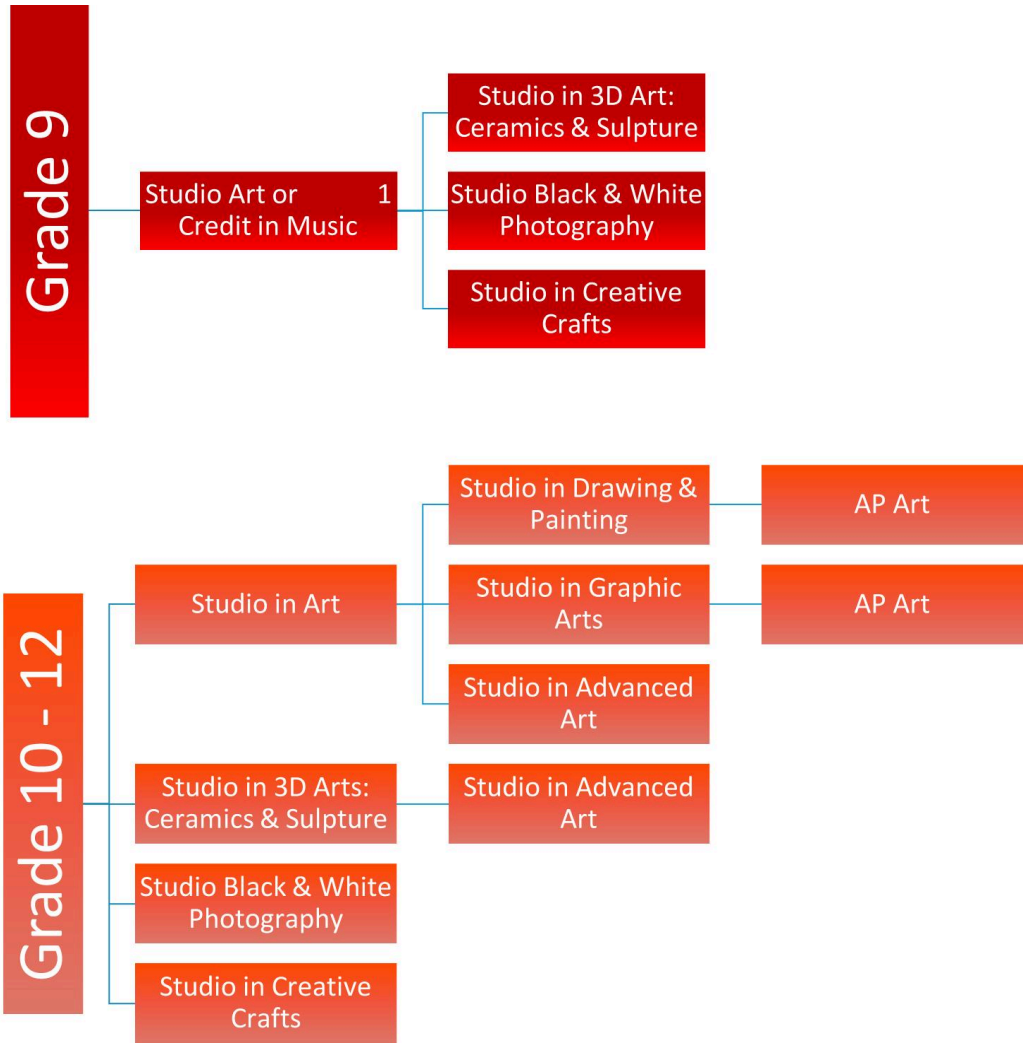
Course name: **Introduction to Film**
Credit: **½**
Grades: **10-12**
Famed director Martin Scorsese said that film "is a matter of what's in the frame and what's out." Why did the director take that angle? How in the world did the writer come up that hilarious dialogue? Why end the movie on that note? In this course you will have a chance to answer these and other questions while watching and making your own films. In this course you will study classic and modern films in order to understand the workings of these films and you will learn to write and create your own. The class welcomes all range of ability and experience from students who have never picked up a camera to those with several films in their portfolio.

Course name: **Meteorology Elective**
Credit: **½**
Grades: **10-12**
This 1/2 year course will teach students the basics of how weather works and what goes into determining the forecasts they see online or on TV everyday. Students will learn the basic properties of the atmosphere and how those factors come together to produce our weather. Students will also learn how to use the free operational forecast models to make their own forecasts.

Course name: **Studio in Advanced Art**
Credit: **1**
Prerequisite: **Studio in Art, Studio in Drawing & Painting or Studio in 3D Arts**
Grades: **10-12**

In this class students will take Art to a new level. This is your opportunity to advance in whatever type of media you enjoy, painting, drawing, sculpture, printmaking, collage, mixed media, ceramics, etc. You can also explore new Art techniques and materials. Through an exploration of ideas and media, students will generate Artwork that represents their individual interests. Throughout the year-long class, students will self-select to work individually or in groups on small or large scale projects.

ART



Course name: **Studio in Art**
Credit: **1**
Grades: **9-12**

This course is designed for students who are planning to major in art as well as those taking a non-art sequence and fulfills the NYS art requirement for graduation. It is an introduction to a variety of media and techniques in such areas as drawing, printmaking, glass, painting, photography, sculpture, ceramics, and/or mosaics. This full year foundational course is required for some advanced art electives.

Course name: **Studio in Drawing and Painting**
Credit: **1**
Prerequisite: **Studio in Art or permission of the instructor**
Grades: **10-12**

The techniques learned in this course will help both the novice and skilled artist improve their abilities to draw and paint. Throughout the year students will learn the five observational perceptions in learning how to draw accurately. As students progress

throughout the year, their work will focus on self-expression and experimentation using a wide variety of drawing and painting media. This course is excellent for building a college portfolio. This full year course is a **required** foundation course for all art majors.

Course name: **Studio in 3-D Arts: Ceramics & Sculpture**
Credit: **1**
Prerequisite: **None**
Grades: **9-12**

Explore the world three-dimensionally! This hand-on full-year course is designed for any student who enjoys working in a variety of sculptural materials. Students will spend half the year constructing original and creative designs using various clay techniques associated with hand-built ceramics: pinch, coil, and slab, along with a variety of glazing techniques. Additionally, students will learn to use a potter's wheel and practice creating hand thrown pieces, such as bowls, plates, vases, etc. The other half of the year will be spent exploring building three-dimensional objects using a wide variety of media. Students will gain the opportunity to increase both their aesthetic awareness and technical skill. This course is excellent for building a portfolio.

Course name: **Studio in Creative Crafts**
Credit: **½**
Prerequisite: **None**
Grades: **9-12**

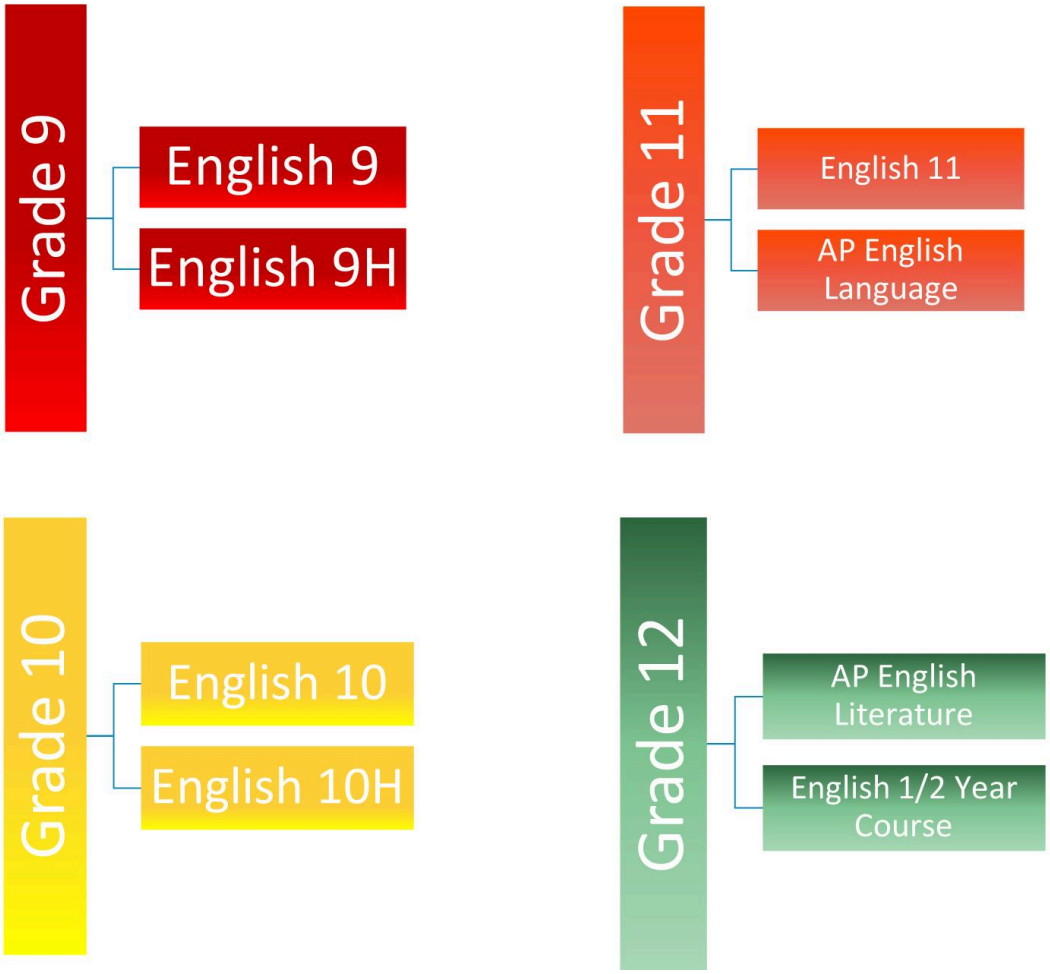
Have you always been a little crafty? Have you seen something in a store and thought you could make it for yourself? Maybe…beaded jewelry pieces, wearable accessories (such as hats, scarves, pocketbooks and wallets), handmade soaps, candles, lip balm, and lotions. What about tie dying, Batik (painting with wax), and fabric printing or paper-making, scrapbooking, and book making? The crafting possibilities are limitless! Studio in Creative Crafts focuses on the creation of functional art; art that is not only beautiful but also has a purpose.

Course name: **Studio in Advanced Art**
Credit: **1**
Prerequisite: **Studio in Art, Studio in Drawing & Painting or Studio in 3D Arts**
Grades: **10-12**

In this class students will take Art to a new level. This is your opportunity to advance in whatever type of media you enjoy, painting, drawing, sculpture, printmaking, collage, mixed media, ceramics, etc. You can also explore new Art techniques and materials. Through an exploration of ideas and media, students will generate Artwork that represents their individual interests. Throughout the year-long class, students will self-select to work individually or in groups on small or large scale projects.

ENGLISH LANGUAGE ARTS

All students must successfully complete four units of English.



Course name: **English 9**
Credit: **1**
Prerequisite: **None**
Grade: **9**

English 9 centers on students developing in-depth approaches to reading and responding to literature. Readings explore such themes as self-discovery, challenges, and mystery. In a focus on four literary genres—short stories, novels, plays, and poems—students express their own personal reactions to literature and topics relating to values and morals developed by various authors. They are required to write extensively in journals and to participate actively in class discussions. Outside of class, students are assigned novels and other literary works in a variety of creative, descriptive, narrative, persuasive, and expository modes. Grammar and punctuation skills are reinforced in the students' writing and speaking. The emphasis is on the

writing process through journal writing as well as prewriting (drafting), revising, and final editing of compositions on computers.
Speaking is also a key part of the English program for the ninth grade. Students are asked to participate in discussions in small groups as well as in the class as a whole. Besides understanding the meaning and structure of the four literary genres, mastering vocabulary is stressed. In short, students work on developing a sound academic basis for high school and college. It is a course that strives to address academic and personal needs in a challenging and thoughtful manner.

Course name: **English 9 Honors**
Credit: **1**
Grade: **9**
The Honors class follows the same syllabus as the Regents-level course. Students will be asked to read additional literature. There is a greater emphasis on student demonstration of the depth of their understanding and knowledge.

Course name: **English 10**
Credit: **1**
Prerequisite: **None**
Grade: **10**
Students will continue to refine their knowledge of literature by reading novels, short stories, plays and poetry. The literature read in and out of class will be used as a basis for writing assignments. This course continues to emphasize work in vocabulary, grammar skills and research. Students will continue to write extensively in journals. Students will be expected to participate in class discussions.

Course name: **English 10 Honors**
Credit: **1**
Grade: **10**
The Honors class follows the same syllabus as the Regents-level course. Students will be asked to read additional literature. There is a greater emphasis on student demonstration of the depth of their understanding and knowledge.

Course name: **English 11**
Credit: **1**
Prerequisite: **None**
Grade: **11**
Students will be required to read a variety of literature in this course. Critical thinking skills are expanded as students interpret the literature. Writing assignments will address reflective, narrative, expository and creative modes. Students will take the New York State Regents examination during this course.

Course name: **Advanced Placement English Language and Composition**
Credit: **1**
Grade: **11**

Intensive reading, writing, and critical discussions are fundamental to this course. Students should be prepared to write analytical and persuasive essays. Students enrolled in AP Language and Composition will take the New York State Regents exam as well as the Advanced Placement examination.

Course name: **Advanced Placement English Literature and Composition**
Credit: **1**
Grade: **12**

The Advanced Placement English Literature and Composition course is a rigorous class created to challenge and engage motivated students. The course requires a strong work ethic and a desire to learn. Creative and analytical thinkers will thrive. The curriculum for the course aims to prepare students for success in a college English class and the English Literature and Composition Advanced Placement Examination. This class is an opportunity for students to explore imaginative texts from critical perspectives. Students may be granted credit by colleges depending on their score and college policies.

Course name: **English 12: Presentation and Public Speaking**
Credit: **½**
Prerequisite: **None**
Grade: **12**

This course focuses on the art of the presentation and of conquering the feeling of "stage fright". The course is writing intensive and requires students to write and present formal speeches as well as delve into the future of this genre including using Powerpoints, videos, Podcasts, and other media. Students will be provided with models in the form of guest speakers, sample presentations, and historical examples.

Course Name: **English 12: Psychology & Literature**
Credit: **½**
Prerequisite: **None**
Grade: **12**

Are you interested in what makes people behave the way they do? This interdisciplinary course examines novels, plays, short stories, fairy tales and poems through the lens of Psychology. Students will become familiar with psychological theories as well as different aspects of mental health in the context of history, literature, film, art, and contemporary issues. Works by authors: Khaled Hosseini, Ann Tyler, Susanna Kaysen, and Joyce Carol Oates may be studied from the perspective of psychologists: Sigmund Freud, Eric Erickson, and Carl Jung.

Course name: **English 12: Humanities**
Credit: **1 (½ credit in English 12, ½ credit Participation in Government requirement)**
Prerequisite: **None**
Grade: **12**

This interdisciplinary course studies some of the fascinating aspects that make up "American Ideals." This unique class is team taught by an English teacher and a Social Studies teacher and examines major events in history in an attempt to unweave the fabric of American System to gain a better understanding. Starting with American Revolution and our founding documents, the course make stops at the Civil War, the Industrial Revolution before jumping into the 1950s and 1960s where we will examine the Cold War, the Cuban Missile Crisis, the Vietnam War, and the Civil Rights Movement. These key events that we study revolutionized the way our society functions. This course is designed to encourage the development of civic-minded individuals by making connections between history and current events. We read a variety of literary texts, music, documentaries, film and historical texts in order to illuminate the intriguing subjects we study. Students will engage in various debates, mock legislation, round table discussions and many other fun activities.

Course name: **English 12: The Hero's Journey in Literature and Film**
Credit: **½**
Prerequisite: **None**
Grade: **12**

This course seeks to create an awareness of the role of the hero in our lives. An exploration of the common experiences every hero must endure in order to become a central character is key to understanding the connections between television and movies to the great works of literature to the experiences in our own lives. According to Joseph Campbell, the Hero's Journey is not just a pattern from myth--it is pattern of life that *all* humans experience. To understand this pattern, a study will be made of Campbell's *The Hero With a Thousand Faces* and Carl Jung's *Hero Archetype and the Collective Unconscious, The Epic of Gilgamesh, Jason and the Golden Fleece, Beowulf, King Arthur and films such as Star Wars, The Wizard of Oz, Spiderman, Batman, and Finding Nemo. Major questions to be addressed in the course are:*
Why do we need heroes? How do heroes reflect the values of his/her society?
What are the patterns present in the hero's journey? What is the meaning of "the journey"?

Course name: **English 12: The Journey Program**
Credit: **1 (½ credit in English 12 and ½ credit in Economics)**
Grade: **12**

Application and approval necessary for admittance into program. This course is open to all seniors.

The Journey Program is directed by two teachers and fellow Journey Program classmates and is designed to give students the opportunity to gain real-world experience by interning at a site of their choice or for completing a project of their

design. Seniors can spend their time and energy working in a field that might be a possible career path, or a deeply valued interest.

The Journey Program will be scheduled during the school day to allow students to partake in their internships or work on their individual projects. In addition to weekly meetings, students will be allowed to leave school during the time of these scheduled classes to attend their internship, or work on their project for approximately 10 hours per week. Amongst other work, students will record their work in journals, manage their schedules, meet with professionals in the field, research their interest, collaborate with classmates, study civic material, and demonstrate their understandings in a final presentation.

The Journey Program will prepare students of all ability levels to be successful in an ever-changing world. Students will be empowered to direct their own learning experience by pursuing an interest that may influence future aspirations. Students successfully completing the course will receive ½ credit for Participation in Government and ½ credit for English 12.

Course Name: **English 12: Women's Literature**
Credit: **½**
Prerequisite: **None**
Grade: **12**

The purpose of this course is to examine the lives of women through their contributions to literature and society. Additionally, students will explore the perception of the female role through history to present day. Through this process, students will examine their own self-image, character and goals. Students should expect thoughtful class discussions, in-class journal writing, oral reports and presentations, weekly precept papers, interviews with prominent female figures in their lives, quizzes, tests, an ongoing collection of media artifacts concerning women, and at least one formal paper and a culminating senior project.

The following courses are elective classes and <u>cannot</u> be used to meet the graduation requirement of four years of English.

Course name: **Creative Writing**
Credit: **½**
Prerequisite: **None**
Grade: **10-12**

This course will be comprised of the reading and writing of creative fiction. Students will read and write short stories, poetry, screenplays, and creative essays. Students will analyze longer works of fiction and film in order to understand how writers create their craft. The course will work to expand and improve the imagination and writing skills of the students in the class. This is a course for students who love to read and write, and a course for those who hope to one day love to read and write.

Course name: **Critical Thinking: Literacy & Math**
Credit: **½**
Prerequisite: **None**
Grade: **11**

This course meets every other day to study mathematics and every other day to study English. A major emphasis will be placed on skills to help improve student performance on all parts of the SAT examination. Students will improve on their critical thinking skills while familiarizing themselves with strategies that will assist them in the SAT examination. A portion of the course will be focused on independent studies in literature for the English component and real world financial applications for the math component.

Course name: **Horror, Supernatural, and Stephen King**
Credit: **½**
Grades: **10-12**

Ever wonder what scary creatures creep through the night? In this course, we will read literary texts which seek to answer that question and many more. We will explore the horror and supernatural genre focusing our attention on the master of fear, Stephen King. In this course, we will study gothic, horror, and supernatural literature. In addition to reading scary stories, we will examine how the film industry has taken some of King's best works and adapted them for film.
Writers may include but are not limited to: Stephen King, Richard Bachman, Ray Bradbury, Edgar Allan Poe, William Blake, Emily Dickinson, W.B. Yeats

Course name: **How Do You Know?**
Credit: **½**
Grades: **11-12**

How do you know? This course explores the concept, uses, and applications of knowledge. What qualifies as knowledge? How does it increase? What are its limits? Who owns it? What is the value of knowledge? What are the implications of having...or not having, knowledge? This course encourages critical thinking about knowledge itself, uniting all academic areas and encouraging appreciation of other cultural perspectives.

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Course name: **Introduction to Film**
Credit: **½**
Grades: **10-12**

Famed director Martin Scorsese said that film "is a matter of what's in the frame and what's out." Why did the director take that angle? How in the world did the writer come up that hilarious dialogue? Why end the movie on that note? In this course you will have

a chance to answer these and other questions while watching and making your own films. In this course you will study classic and modern films in order to understand the workings of these films and you will learn to write and create your own. The class welcomes all range of ability and experience from students who have never picked up a camera to those with several films in their portfolio.

Course name: **Mythology and Fairy Tales- An Introduction**
Credit: **½**
Prerequisite: **None**
Grade: **10-12**
This course will be broken up into two parts: The first quarter will be a study of Greek and Roman Myths and the second quarter will focus on Fairy Tales.

Part 1: Mythology: Myths played an important role in the lives of ancient people and they continue to affect our own lives, as the themes present in mythology are timeless. This class attempts to answer the questions:

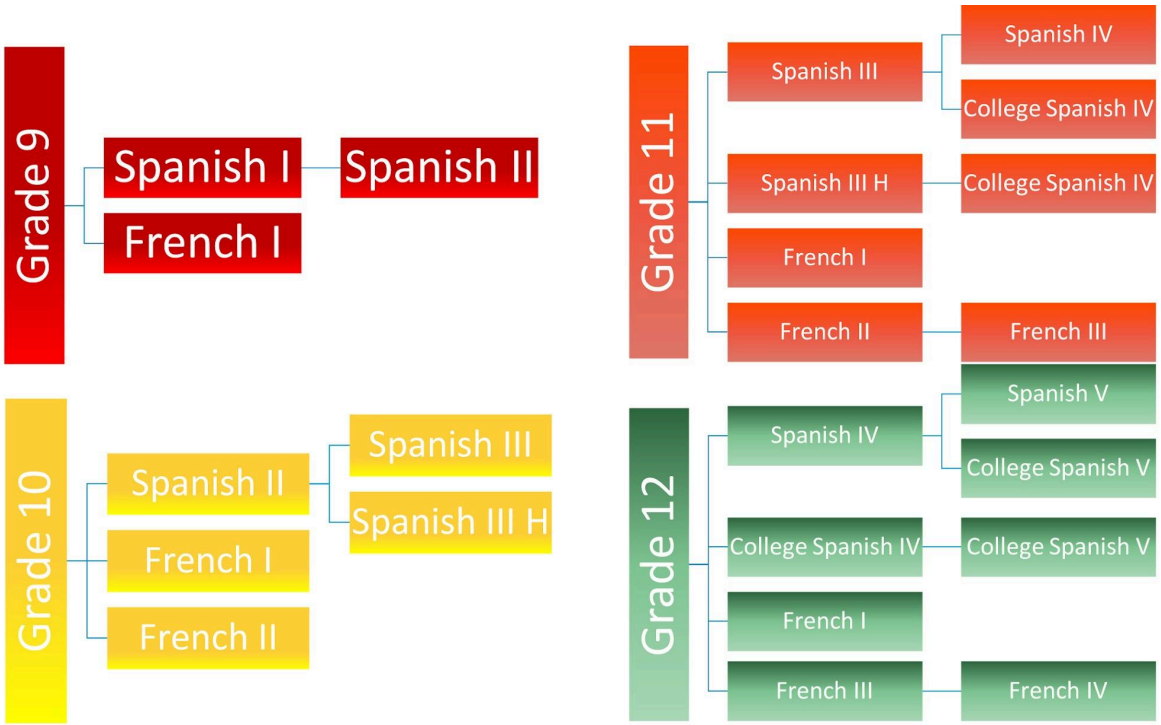
Part 2: Fairy Tales - "Once Upon a Time": Many of us remember the fairy tales that we heard when we were children, or remember seeing the film versions of these beloved tales come to life in Disney movies. However, do we know the history and meaning behind these tales? This course will take a psychological approach to the fairy tales we have come to know and love as well as a cultural perspective to offer a newer, deeper meaning.

Course name: **Writing 9**
Credit: **½**
Prerequisite: **None**
Grade: **9**
In this writing intensive course students will meet to develop and to improve the basic foundations of writing. Grammar and usage will be a focus as students build upon previous knowledge. The course will function as both a source of Academic Intervention Service as well as class for students to bolster their writing and reading skills. The class will work to help students succeed as writers in all of their learning. Students will earn a ½ credit for successfully passing the graded course.

LOTE

LANGUAGES OTHER THAN ENGLISH

All students must successfully complete a minimum of 1 unit of Languages other than English.



Course name: **French 1**
Credit: **1**

Students may choose this course in order to satisfy the New York State requirement of 1 unit of language study OR as a way to explore an additional language if they have already studied Spanish. Students will begin to develop basic vocabulary and communication skills (listening, reading, writing, speaking) in the target language. Students will also have an introduction to the culture and traditions of Francophone countries, including French foods during special celebrations. **Students who are eligible for Spanish language honor society induction can maintain their eligibility AND also be admitted into the French Honor Society for DUAL honor society status.**

Course name: **French II**
Credit: **1**

Students continue the development of the four skills (listening, speaking, reading and writing) with new structures and vocabulary added throughout the year. Students also gain more of an understanding of the culture and customs of different French-speaking countries. A final exam is administered at the end of the year. **Students who are**

eligible for Spanish language honor society induction can maintain their eligibility AND also be admitted into the French Honor Society for DUAL honor society status.

Course name: French III
Credit: 1
Students continue the development of skills in oral comprehension, speaking, reading and writing. More extensive use of French is encouraged through more complex communication activities. Conversation skills are continually emphasized during the year as the class is conducted mostly in French. Writing activities become more complex as the students' knowledge of grammar increases. The course culminates in the New York State Regents Equivalent Exam. **Students who are eligible for Spanish language honor society induction can maintain their eligibility AND also be admitted into the French Honor Society for DUAL honor society status.**

Course name: French IV
Credit: 1
This course is designed to improve students' skills and to increase their vocabulary and cultural understanding of Francophone countries. Topics may include studies of New Orleans and the francophone countries in the Caribbean, the history of France up until the present day as well as the art history of France to the present day. Students will also pay particular attention to literature of the 19th and 20th centuries, including children's literature and the novel *Les Misérables*. Skills are developed through class discussions, reading selections, viewing films and writing. This course is conducted in French. The course will culminate in a final project. **Students who are eligible for Spanish language honor society induction can maintain their eligibility AND also be admitted into the French Honor Society for DUAL honor society status.**

Course name: Spanish 1
Credit: 1
Students will begin to develop basic vocabulary and communication skills (listening, reading, writing, speaking) in the target language. Students will also have an introduction to the culture and traditions of Spanish-speaking countries.

Course name: Spanish II
Credit: 1
Students continue the development of the four skills (listening, reading, writing, speaking) with new structures and vocabulary added throughout the year. Students also gain more of an understanding of the culture and traditions of different Spanish-speaking countries. A midterm may be administered in January. In addition, a final exam is administered at the end of the year.

Course name: **Spanish III**
Credit: **1**
Students continue the development of skills in listening, reading, writing and speaking. Students read additional authentic literature selections. Customs and geography of the Spanish-speaking countries are studied. Conversation skills are continually emphasized during the year as the class is conducted mostly in Spanish. Writing activities become more complex as the student's knowledge of grammar increases. The course culminates in a final exam, which assesses all four skills in order to meet the *Advanced Regents* diploma requirement.

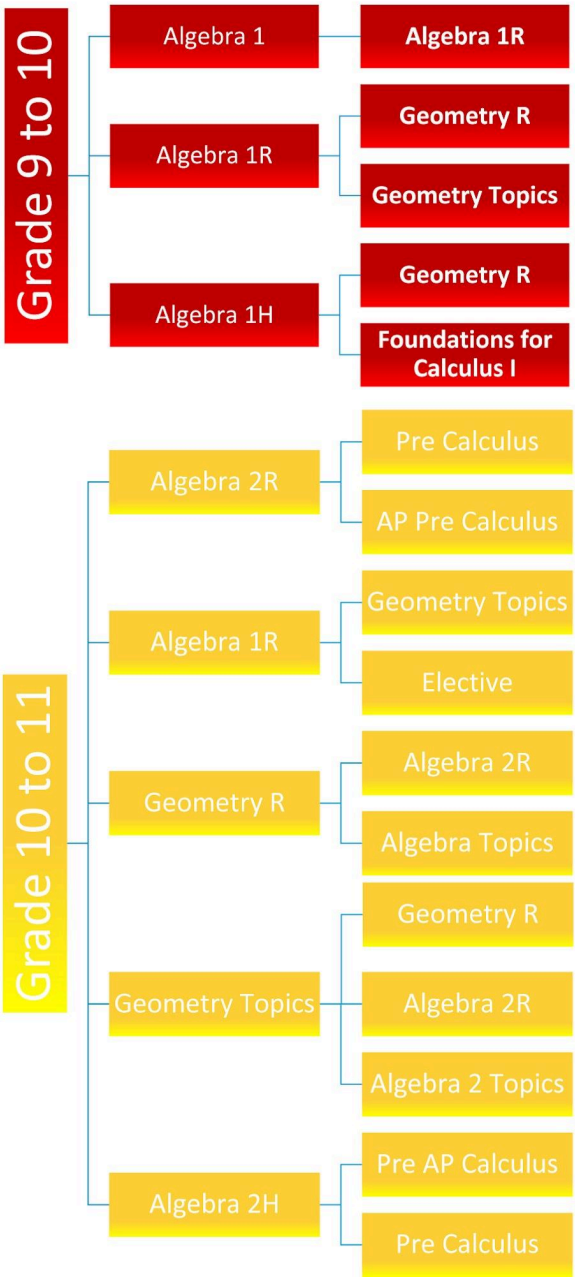
Course name: **Spanish III Honors**
Credit: **1**
The Spanish III Honors class follows the basic curriculum of the Regents-level class but it has a greater breadth of coverage. The entire class is conducted mostly in Spanish. Conversation and writing are emphasized, and there are frequent discussions on a variety of topics that deal with contemporary life in the Spanish-speaking world. Students read additional authentic literature selections and discuss them more in-depth. The course culminates in a final exam, which assesses all the four skills in order to meet the *Advanced Regents* diploma requirement.

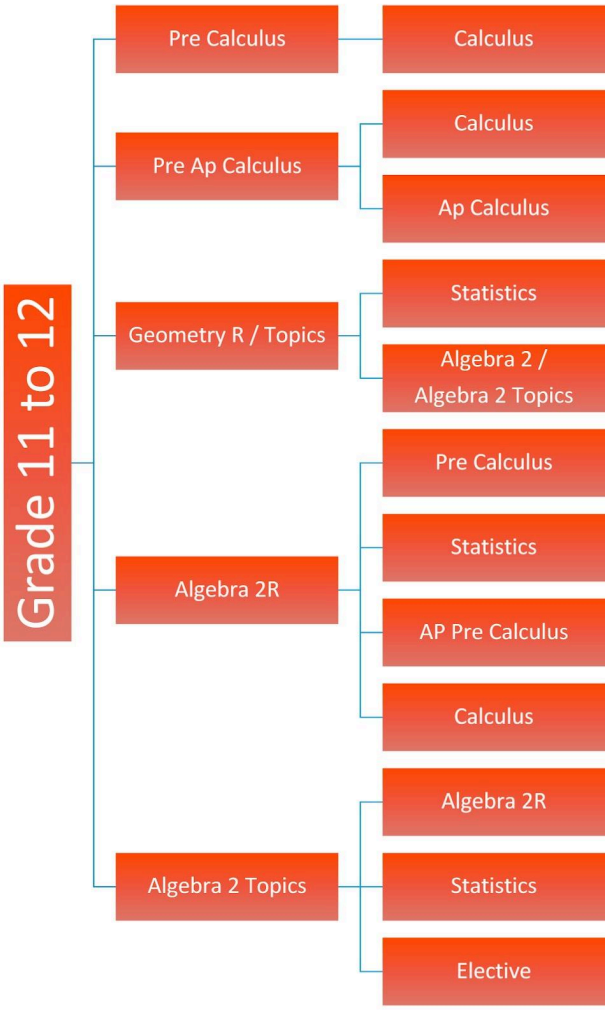
Course name: **Spanish IV Honors**
Credit: **1**
Prerequisite: **Spanish III H or Spanish III**
This course, a preparation for Spanish V or Spanish V Honors, incorporates language skills in the enhancement of critical thinking used in oral expression, written composition and in the reading of literature. Fluency of listening, reading, writing and speaking is strengthened through the interpretation of topics from cultural, historical and literary texts, journals, periodicals and films. The course is conducted in Spanish. The course will culminate in a final exam. Students who successfully complete this course may receive college credits.

Course name: **Spanish V Honors**
Credit: **1**
Prerequisite: **Spanish IV H or Spanish IV**
This course is the continuation of the course Spanish IV Honors. Students will continue to strengthen their listening, speaking, reading and writing skills and improve their fluency. The course is conducted in Spanish. The course will be evaluated with a midterm exam and a final project. Students who successfully complete this course may receive college credits.

MATHEMATICS

All students must successfully complete a minimum of 3 units of Mathematics.





Course Name: **Algebra 1**
Credit: **1**

This course focuses on basic algebra skills. Topics will include numeration, operations of monomials and polynomials, solving equations, and the real number system. Students will take a department exam in June. Upon successful completion of this course, students will enroll in Algebra 1R.

Course Name: **Algebra 1R**
Credit: **1**
The principle strand of this course is algebra and its applications. Topics include solving first and second-degree equations, linear, exponential and quadratic functions and their applications, systems of equations, statistics and data, and operations on polynomials. Students who successfully complete this course will enroll in Geometry H or Geometry R. The NYS Algebra 1 Regents will be administered in June.

Course Name: **Geometry R**
Credit: **1**
Prerequisite: **Completion of Algebra 1R**
The principle strand of this course is geometry and its applications. Topics include Euclidean and coordinate geometry, similarity, right triangle relationships, geometry of quadrilaterals, transformations, locus, and geometry of the circle. Students will take the Geometry Regents at the end of this course.

Course Name: **Geometry Topics**
Credit: **1**
Prerequisite: **Passing Algebra 1**
This Geometry course is a hands-on course where students investigate geometric concepts using manipulative and software, justify their findings to develop reasoning skills, and apply their reasoning in problem solving situations. Students will explore congruence and similarity properties of triangles, quadrilaterals, and circles using transformations, inductive and deductive reasoning, and coordinate geometry. Students will determine areas of figures and volumes of solids in a real-world context. Projects and assessments will be used to measure student learning.

Course Name: **Algebra II R**
Credit: **1**
Prerequisite: **Completion of Geometry R and teacher recommendation**
The principle strand of this course is advanced algebra and its applications. Topics include polynomial, rational, exponential, and logarithmic and trigonometric functions. An emphasis will be placed on modeling functions and making inferences based on data. The NYS Algebra 2 Regents exam will be administered in June.

Course Name: **Algebra 2 Topics**
Credit: **1**
Prerequisite: **Completion of Geometry**
The principle strand of this course is intermediate algebra and its applications. Topics include operations on polynomials, exponential and logarithmic functions, and probability and statistics. An emphasis is placed upon the use of these functions in real life situations. A departmental examination will be given in June.

Course Name: **College Precalculus**
Credit: **1**
Prerequisite: **Completion of Algebra 2 and Trigonometry R and passing the NYS Algebra 2/Trigonometry Regents examination**

This course continues the integration of topics studied in earlier math courses. Topics include polynomial, rational, exponential, logarithmic, trigonometric, polar, and parametric functions, matrices, sequences and series, probability and statistics, and conic sections. Mathematical modeling is then used to apply these topics to real life experiences. A departmental examination will be given in June. Students who successfully complete this course will receive 3 credits from Dutchess Community College.

Course Name: **College Pre-Advanced Placement Calculus**
Credit: **1**

An honors course in **Precalculus and Calculus** that is comparable to calculus courses in colleges and universities. The curriculum includes a rigorous study of functions, graphs, limits, derivatives, integrals and their applications. Graphing utility technology is an important component of the course. Students who successfully complete this course will also receive 4 credits from Dutchess Community College. Students enrolled in this class will challenge an Advanced Placement Calculus examination in 12th grade.

Course Name: **Math Applications**
Credit: **½**
Prerequisite: **One credit in Algebra 1 & one credit (or enrolled) in Geometry**

This course continues the integration of algebra into higher-level mathematics. The course will prepare students for real-world financial matters for college and beyond. Topics to be studied include payroll, budget, savings, credit/debit, identity theft, car buying/leasing, loans/mortgages, insurance, and various forms of investments such as stocks and bonds.

Course Name: **College Statistics**
Credit: **1**
Prerequisite: **Successful completion of the NYS Algebra Examination and three credits of high school mathematics**

Statistics is a college level introductory statistics course. Students will learn how to collect, analyze, interpret, and draw conclusions from data. The topics presented include exploring data describing patterns and departure from patterns, sampling and experimentation, exploring random phenomena using probability and simulation, and estimating population parameters and testing hypotheses. Students who successfully complete this course will receive 3 credits from Dutchess Community College.

Course Name: **College Calculus**
Credit: **1**
Prerequisite: **Successful completion of Pre-Calculus course**

This Calculus class is comparable to calculus courses in colleges and universities. The Calculus curriculum includes a rigorous study of functions, graphs, limits, derivatives,

integrals, and their applications. Graphing utility technology is an important component of the course. Students who successfully complete this course will receive 4 credits from Dutchess Community College.

Course Name: **Advanced Placement Calculus A/B**
Credit: **1**
Prerequisite: **Successful completion of Pre-Advanced Placement Calculus**
An Advanced Placement course in Calculus AB consists of a full year of schoolwork that is comparable to calculus courses in colleges and universities. Students who take an AP course may receive college credit, preferential college placement, or both, from institutions of higher learning. The Calculus AB curriculum includes a rigorous study of functions, graphs, limits, derivatives, integrals, and their applications. Graphing utility technology is an important component of the course. **Students are required to take the Advanced Placement exam which is given in early May.** Students who successfully complete this course will also receive 4 credits from Dutchess Community College.

Course Name: **Mathematics for Personal Finance**
Credit: **1**
Prerequisite: **2 credits of HS mathematics and successful completion of the Algebra Examination**
This course will prepare students for real-world situations both in financial matters for college and beyond. Topics to be studied include payroll, budget, savings, credit/debit, identity theft, car buying/leasing, loans/mortgages, insurance, and various forms of investments such as stocks and bonds. This course is an elective for seniors.

Course name: **Foundations for Calculus I**
Credit: **1**
Grade: **10**
This course will address all of Next Generation Content Standards for Geometry and Mathematical Practices including the supplemental standards identified with a **+** symbol that are not tested on a Regents or PARCC assessment.
This course will formalize and extend students' geometric experiences from the middle grades. Students explore more complex geometric situations and deepen their explanations of geometric relationships, moving towards formal mathematical arguments and use of transformations as well as develop a collective body of knowledge that results from reasoning from a cohesive set of principles.
The Mathematical Practice Standards apply throughout the course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.
The Major Emphasis Clusters include:

1. **Congruence** - Understand congruence in terms of rigid motions and prove geometric theorems

2. **Similarity, Right Triangles, and Trigonometry** - Understand similarity in terms of similarity transformations; prove theorems using similarity; define trigonometric ratios and solve problems involving right triangles
3. **Expressing Geometric Properties with Equations** - Use coordinates to prove simple geometric theorems algebraically
4. **Modeling with Geometry** - Apply geometric concepts in modeling situations

Students are prepared for the Geometry Regents if the district so chooses.

The following courses are elective classes and <u>cannot</u> be used to meet the graduation requirement of three years of Mathematics.

Course name: **Critical Thinking: Literacy & Math**
Credit: **½**
Prerequisite: **None**
Grade: **11**

This course meets every other day to study mathematics and every other day to study English. A major emphasis will be placed on skills to help improve student performance on all parts of the SAT examination. Students will improve on their critical thinking skills while familiarizing themselves with strategies that will assist them in the SAT examination. A portion of the course will be focused on independent studies in literature for the English component and real world financial applications for the math component.

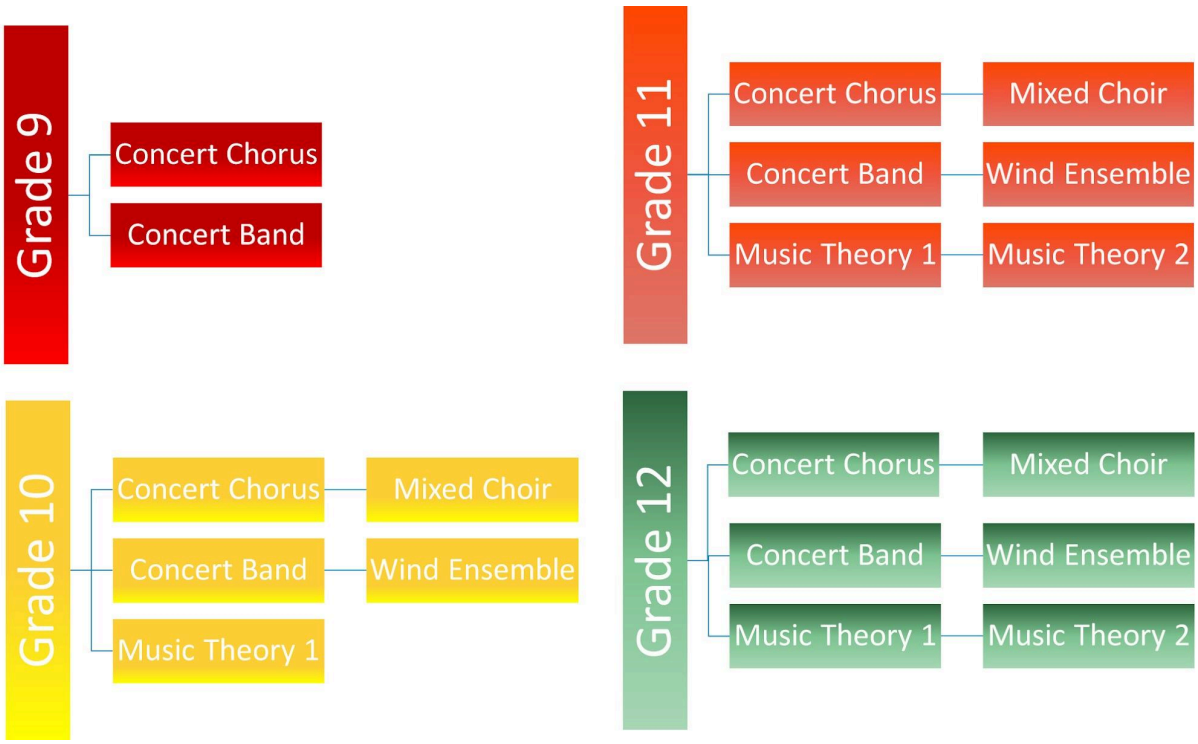
Course Name: **Fundamentals of Engineering**
Credit: **1**
Prerequisite: **2 credits of HS mathematics and successful completion of the NYS Algebra Examination**

Principles of Engineering is a hands-on course demonstrating how different forms of engineering exists in our world. Themes covered in this course include but are not limited to energy, robotics, structures and shelters, and motion and flight. Assessments will be through projects, presentations, reports, and competitions. Working cooperatively with different people is a must. This course is an elective for seniors.

Name: **Math Lab (All Math Courses)**
Credit: **none**
Grades: **9-12**

In order to support student success, students may be assigned to a math lab. If a student is assigned a math lab, it becomes a mandatory part of their daily schedule. The lab will focus on support for Algebra, Geometry and Algebra II. The class will give students the opportunity to review curriculum, prepare for upcoming topics and learn alternative approaches to solving a problem.

MUSIC



Course name: **Concert Band**
Credit: **1**
Prerequisite: **Previous ensemble experience & formal/school instrumental instruction**
Grade: **9-12**

This ensemble offers musical opportunities to students who play woodwind, brass, and percussion instruments. This ensemble accommodates all students who seek an ensemble that both studies and performs moderately difficult literature encompassing diverse musical styles and periods. There are two public performances per year, in addition to various performances at other venues and music festivals.

Course name: **Wind Ensemble**
Credit: **1**
Prerequisite: **NYSSMA solo rating (level V-VI) and/or permission of the instructor**
Grade: **10-12**

This ensemble offers more advanced performing opportunities to students who play woodwind, brass, and percussion instruments. The ensemble accommodates all students who seek a more advanced and challenging ensemble that both studies and performs difficult literature encompassing diverse musical styles and periods. There are two public performances per year, in addition to various performances at other venues and music festivals.

Course name: **Mixed Choir**
Credit: **1**
Prerequisite for Audition: **One year of chorus & permission from instructor**
Grade: **10-12**

This ensemble is an auditioned choir open to sophomores, juniors and seniors who have previously taken at least one full year of chorus within the last three years and wish to explore and/or advance their skills as choral participants. Auditions for this ensemble will take place in the second semester of previous year. As the select ensemble in the choral sequence, members will be exposed to music in 4-8 parts, more advanced repertoire, and increasingly varied choral performance styles. There are three public performances per year, various performances at other venues, as well as participation in choral festivals and/or competitions.

Course name: **Concert Chorus**
Credit: **1**
Grade: **9-12**

This non-auditioned ensemble is open to any student, freshman through senior, interested in advancing skills as an individual vocalist and a vocal ensemble member. There are three public performances each year, in addition to various performances at other venues.

Course name: **Music Theory 1**
Credit: **1**
Prerequisite: **Music Theory 1 (or permission from the instructor)**
Grade: **11-12**

Music theory is discovery and learning of basic aural (auditory) and notational (written) elements in music. Topics will include the five basic elements of music, ear training, 4-part harmony, voice leading, composition and musical analysis. Throughout the course, music selections from various periods of music history will be presented to support the theoretical learning. In addition, aural skills will be explored through the use of rhythmic, melodic and harmonic dictations.

Course name: **Introduction to Piano**
Credit: **½**
Grades: **10-12**

Piano Lab is designed to foster skills and knowledge in piano through the use of performance, basic music theory, listening to piano performance, and the history of piano performance. Individualized instruction will cater to previous levels of experience. In addition to performing alone and with others, elements of instruction will include: proper technique, reading music notation, composing and improvising, evaluating music performance, and understanding relationships between music and culture.

PHYSICAL EDUCATION & HEALTH

All students must successfully complete 2 units of Physical Education and 1/2 units of Health.

Course name: **Physical Education or Adapted Physical Education**
Credit: **½**
Grade: **9-12**

All students are required to take and satisfactorily complete Physical Education in order to meet New York State Education Department's requirements. A student must earn two credits in Physical Education to satisfy graduation requirements. This is accomplished by taking Physical Education for each semester of the four years of high school. Each semester, a student must attend Physical Education and/or Adapted Physical Education and/or be entered into a medical contract. A written medical contract must exist any time a student cannot perform in the regular or adapted program. Specific details may be secured from the Physical Education Department.

Course name: **Heartsaver First Aid / CPR / AED**
Credit: **½**
Grade: **10-12**

This course is designed to allow students the opportunity to learn the information and skills necessary to become certified in Heartsaver First Aid / CPR / AED. The course teaches students critical skills and knowledge needed to respond to and manage a first aid or sudden cardiac arrest emergency in the first few minutes until emergency medical services (EMS) arrives. Content includes how to treat bleeding, sprains, broken bones, shock and other first aid emergencies, as well as perform CPR and use an AED. This course is for anyone with limited or no medical training who needs or wants a course completion card in first aid, CPR and AED use. Successful completion of this course will result in the student being CERTIFIED in Heartsaver First Aid/CPR/AED.
This course is an elective and does not satisfy the graduation requirement for Physical Education or Health.

Course name: **Outdoor Education**
Credit: **½**
Grade: **10-12**

This course will give our students the opportunity to learn more about the various skills needed to safely enjoy adventures in the outdoors. They will learn how to use a compass, read a topographic map, water filtration techniques and basic first aid measures. Another goal of this course is to learn about the proper response techniques in emergency situations that may present themselves in certain occupations. Fire service, police officers, corrections officers, EMS, lifeguards, coaches and military personnel are just a few occupations that could be faced with emergency situations at a moments notice. The students in this class will learn how to respond to emergencies before the ambulance arrives. We will reach out to local hospitals, police forces, and ambulance corps for presentations as well as possible community service opportunities in order to expand the knowledge gained within the course. There will also be at least

one field trip where students will go to a local trail (possibly Breakneck Ridge in Cold Spring) and learn how to read and follow the trail markers.
This course is an elective and does not satisfy the graduation requirement for Physical Education or Health.

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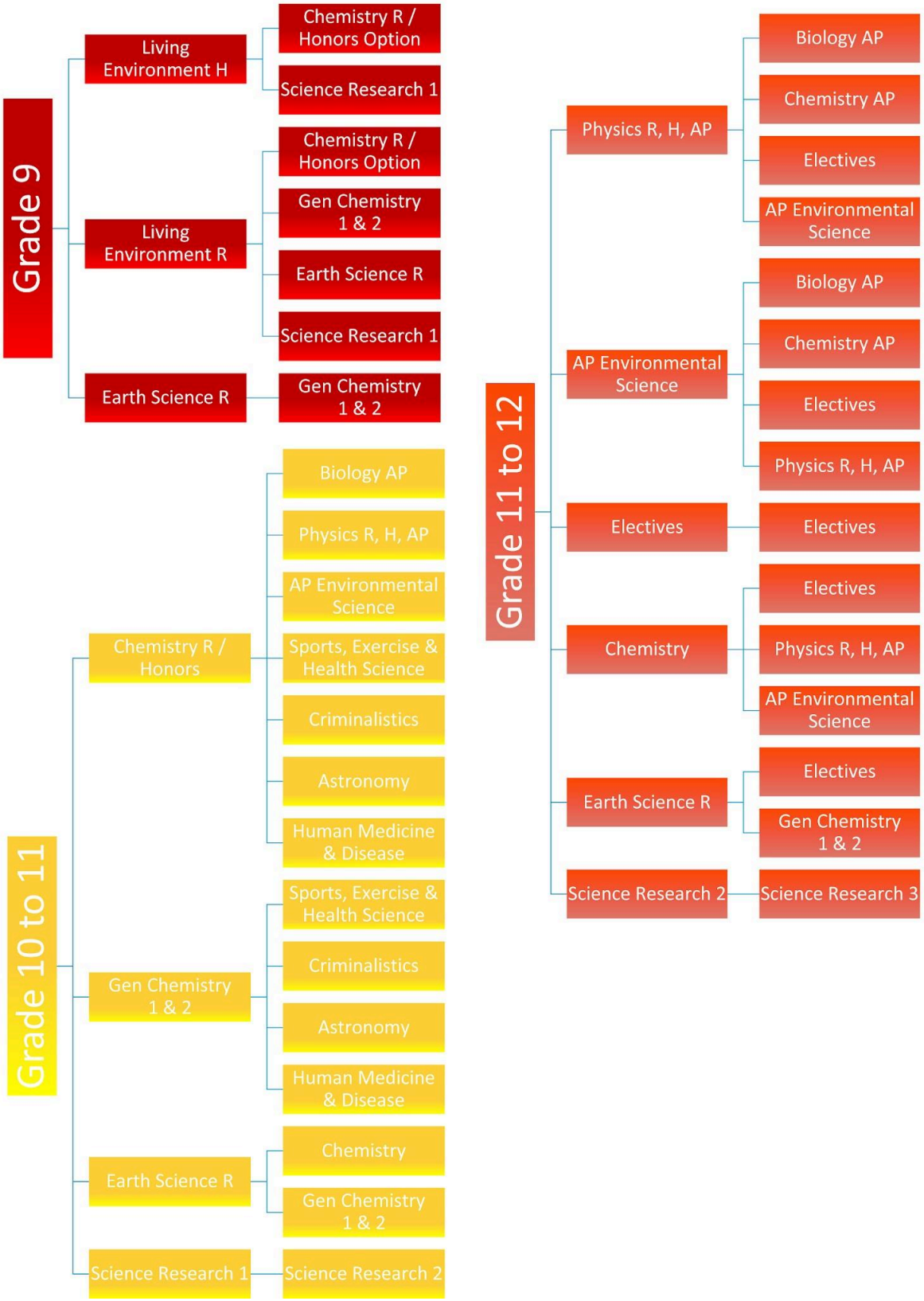
Course name: **Online Health Education**
Credit: **Independent Study ½**
Prerequisite: **Recommended by counselor and Permission of Principal**
Students must be recommended by guidance counselor to consider this course. This course is designed to foster the development of lasting attitudes and behaviors regarding areas of life that impact personal wellness. There are 16 units of study that include: nutrition, fitness, stress management, human development, healthy relationships, and substance use. This course will be offered online using GRADPOINT courseware and supervised by a certified teacher. This course meets the New York State mandated requirement for high school graduation. This course is for the independently motivated student and is subject to approval by the Principal.

SCIENCE

All students must successfully complete a minimum of three units of science.



Course name: **Living Environment: Biology**
Credit: **1**
Prerequisite: **None**

The program of studies is outlined in the New York State Regents Core Guide for Biology. Major topics include: scientific attitudes and methods of experimental techniques, living and nonliving things, the organization of living things, animal and plant physiology, reproduction, genetics, the chemistry of living things, comparative anatomy, and ecological relationships. Students will learn to draw conclusions from inquiry-based laboratory experience, and will also grow to appreciate the environment from direct study and research. It should be noted that students must successfully complete a minimum of 1200 minutes of laboratory activities, with satisfactory reports submitted, in order to meet the requirement for the Regents examination. At the conclusion of the course, the students will be required to take the New York State Regents examination in Biology.

Course name: **Living Environment: Biology Honors**
Credit: **1**

The Honors class follows the same syllabus as the Regents-level class but with greater breadth of coverage. There is a greater emphasis on student demonstration of the depth of their knowledge.

Course name: **Advanced Placement Biology**
Credit: **1**
Grade: **11-12**
Prerequisite: **Biology, Chemistry, and Physics or AP Environmental Science**

This course is the equivalent of a college biology course. Laboratory work is extensive and students utilize the techniques used at the college level. Primary emphasis is on developing an understanding of concepts. Topics include cellular biology, biochemistry, genetics, and ecology. **Students enrolled in this course must take the Advanced Placement Biology examination in May.**

Course name: **Human Medicine and Disease**
Credit: **½**
Grade: **11-12**
Prerequisite: **Regents Biology**

If you enjoy life sciences and particularly the human body, here's your chance to learn more about your own body and the different diseases that can affect people. In Regents biology, the human body was only touched upon while this course will go into further detail about each human system and some diseases that affect those systems. There will be plenty of opportunities to research diseases you are specifically interested in learning. Whether you are interested in a medical career or just curious about the human body, this course will be perfect for you.

Course name: **Authentic Science Research I, II, III**
Credit: **1 (per year for 3 years)**
Grade: **10-12**
Prerequisite: **10th graders: Biology**
11th graders: Took ASR in the 10th grade
12th graders: Took ASR in the 11th grade

Authentic Science Research is a three-year program that follows the University of Albany Science Research in the High School program. It provides students in their sophomore through senior years with the opportunity to conduct original research in the natural sciences. The course is directed to those students who wish to pursue excellence and progress into advanced areas of original research. Emphasis is on laboratory, field and bibliographic research. Students will enroll in this course at the start of their sophomore year, and research a topic of interest. In their junior year students create and complete research in conjunction with a scientist/mentor involved in their research area. As seniors, students write a research paper and enter a variety of science research competitions.

Juniors and Seniors enrolled in Authentic Science Research may earn college credit through SUNY Albany: Intermediate Methods of Research (6 Credits – Junior Year) and Advanced Methods of Research (6 Credits – Senior Year).

Course name: **Regents Chemistry with Honors Option**
Credit: **1**
Grade: **10-12**

This program of studies is outlined in the New York State Regents Core Guide for Chemistry. Students who opt to sign up for the Honors Option will also be responsible for the SAT II Chemistry material that is presented in class on quizzes and tests. Major topics include: atomic structure, the Periodic Table, chemical bonding, stoichiometry, physical and chemical properties, gas laws, acids and bases, chemical kinetics, electrochemistry, organic chemistry, and nuclear chemistry. Through the lectures and hands-on laboratory experiments, students will learn to use the principles of chemistry to think more intelligently about current issues on science and technology. The program also includes a variety of inquiry-based activities to develop and enhance the students' critical thinking skills. For successful completion of the course, students must accomplish stated learning objectives, complete approved laboratory assignments and take the Regents examination which serves as the final examination for the course. It should be noted that students must successfully complete a minimum of 1,200 minutes of laboratory activities with satisfactory reports submitted, in order to meet the requirement for the Regents examination. All students are also strongly encouraged to take the SAT II examination in May.

Course name: **General Chemistry**
Credit: **1**
Grade: **10-12**

General Chemistry 1 generally follows the first half of the Regents level Chemistry syllabus. Students do not take a Regents examination at the end of the course. Topics include, but are not limited to: measurement, matter and energy, atomic structure,

nuclear chemistry, chemical bonding, nomenclature, and the periodic table.

Course name: **Advanced Placement Chemistry**
Credit: **1**
Prerequisite: **Biology, Chemistry, Physics**
This is the equivalent of a college-level chemistry course. This course includes both lecture and extensive laboratory work. Topics include structure of matter, kinetic theory of gases, chemical equilibria, chemical kinetics, and the basic concepts of thermodynamics. **Students enrolled in AP Chemistry must take the AP examination in May.**

Course name: **Earth Science**
Credit: **1**
Grade: **10-12**
Earth Science will follow the New York State Core Guide with strong emphasis upon conceptual understanding of terrestrial systems and mathematical models. The course is divided into three content areas: earth materials and processes, dynamics of the atmosphere, and planet Earth in the universe. These topics will be conveyed through laboratory experiences, student activities, lecture demonstrations, and audio-visual presentations. The syllabus encourages a student-centered problem solving approach to earth science. Throughout the course of the year, students will grow to understand their dependence upon the earth, its finite resources and limited ability to recover from abuse. It should be noted that students must successfully complete a minimum of 1,200 minutes of laboratory activities with satisfactory reports submitted, in order to meet the requirement for the State Regents examination. At the conclusion of the course, the students will be required to take the New York State Regents examination in Earth Science.

Course name: **Astronomy**
Credit: **½**
Grade: **11-12**
This course is designed to introduce students to the study of astronomy. Students will study the structure of our solar system. Topics will include star classification, constellations and galaxies. Students do not take a Regents exam at the end of the course.

Course name: **Advanced Placement Environmental Science**
Credit: **1**
Prerequisite: **Biology, Chemistry**
Grade: **11-12**
If you like science and you have an interest in the environment, whether it is in conservation or the interaction between living organisms and their natural world, this course is for you! AP Environmental is an interdisciplinary course, which means we'll be including many different areas of science like geology, biology, environmental science, chemistry and geography. We'll cover topics such as the interrelationships of the natural world, analysis of natural and human made environmental problems, risk

analysis of environmental problems, and we'll explore alternative solutions for resolving or preventing environmental problems. This course is equivalent to one semester introductory level college course. **Students must take the AP Environmental Science Exam at the end of the year.**

Course name: **Physics Honors**
Credit: **1**
Grade: **11-12**
Prerequisite: **Chemistry R or H**

The program of studies is outlined in the New York State Regents Core Guide for Physics. This is a rigorous, mathematically oriented, laboratory science course designed for students who are interested in careers in science, engineering, and computers. Major topics include: mechanics, work and energy, electricity and magnetism, wave phenomena, and modern physics. This course will contribute to the development of the students' ability to think critically through classroom lectures, hands-on and inquiry-based laboratory experiments, and student research. For successful completion of the course, students must accomplish stated learning objectives, complete approved laboratory assignments and take the Regents examination which serves as the final examination for the course. It should be noted that students must successfully complete a minimum of 1,200 minutes of laboratory activities with satisfactory reports submitted, in order to meet the requirement for the Regents examination.

Course name: **Advanced Placement Physics**
Credit: **1**
Grade: **11-12**
Prerequisite: **Chemistry R or H**

College Physics is a collaborative program with PACE University. Students will undertake the equivalent of a two-semester college algebra based Physics course. Instructors from Pace University will take part in delivery of instruction through on-line videos as well as providing opportunities for campus visits to take part in laboratory experiments. Students who enroll will be eligible for up to 8 credits from Pace University, and may sit for the AP Physics B exams part 1 & 2.

Course name: **Criminalistics: An Introduction to Forensic Science**
Credit: **1**
Grade: **11-12**
Prerequisite: **Biology and Chemistry**

This full-year course will challenge students to problem solve criminal cases using background knowledge in physical and life sciences, while utilizing new knowledge in forensic science and law enforcement. Major topics include: fingerprinting, DNA analysis, blood analysis, soil analysis, ballistics, fiber analysis, crime scene search methods, and causes of death. Student knowledge will also be enriched by field trip experiences and guest speakers.

Course Name: **Sports, Exercise, and Health Science**
Credit: **1**
Grade: **11-12**

The attainment of excellence in sport is the result of innate ability or skill and the dedicated pursuit of a program of physical and mental training accompanied by appropriate nutrition. Training program design should not be left to chance. Rather, it should be designed thoughtfully and analytically after careful consideration of the physiological, biomechanical and psychological demands of the activity. This is the role of the sport and exercise scientist who, regardless of the athletic event, should be equipped with the necessary knowledge to be able to perform this task competently. Furthermore, in a world where many millions of people are physically inactive and afflicted by chronic disease and ill health, the sport and exercise scientist should be equally proficient when prescribing exercise for the promotion of health and wellbeing.

This course in sports, exercise and health science involves the study of the science that underpins physical performance and provides the opportunity to apply these principles.

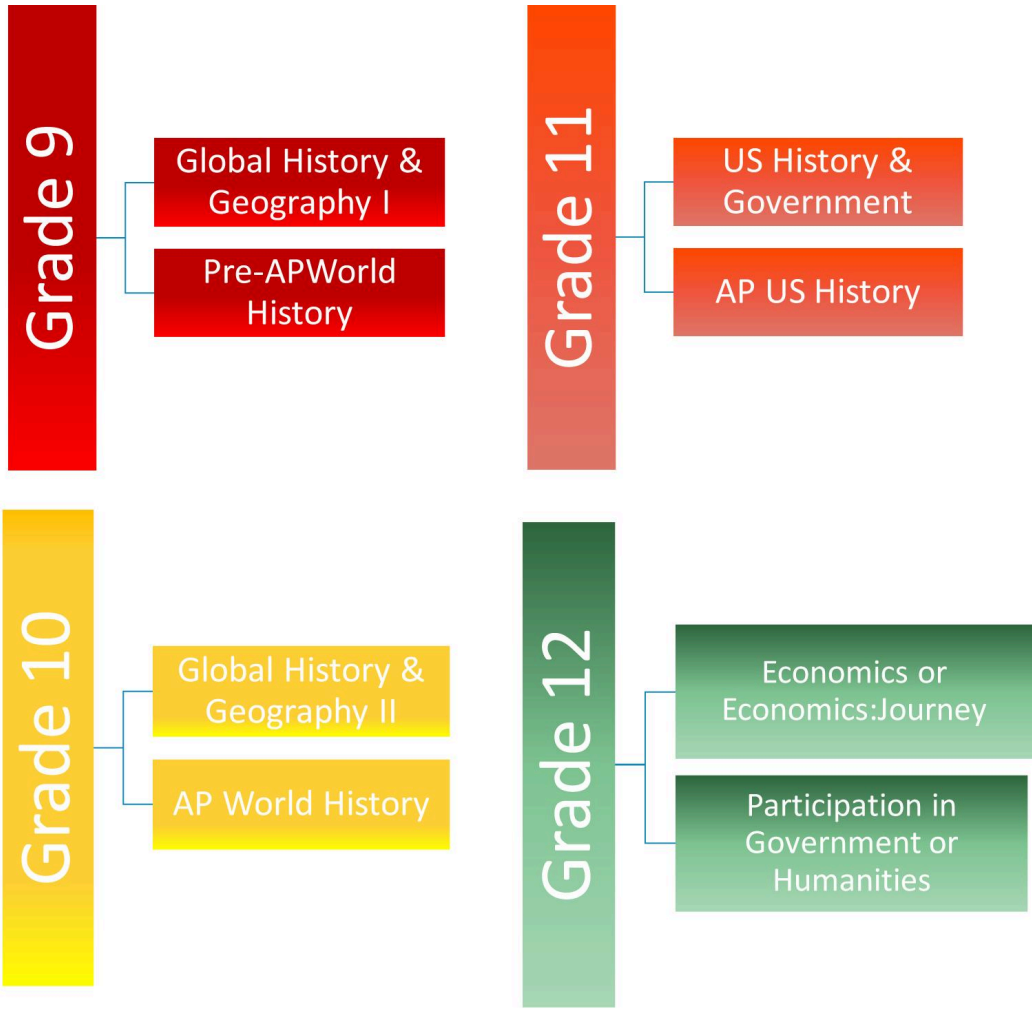
The course incorporates the traditional disciplines of anatomy and physiology, biomechanics, psychology and nutrition, which are studied in the context of sport, exercise and health. Students will cover a range of topics and carry out practical (experimental) investigations in both laboratory and field settings. This will provide an opportunity to acquire the knowledge and understanding necessary to apply scientific principles and critically analyze human performance.

Course name: **Meteorology Elective**
Credit: **½**
Grade: **10-12**

This 1/2 year course will teach students the basics of how weather works and what goes into determining the forecasts they see online or on TV everyday. Students will learn the basic properties of the atmosphere and how those factors come together to produce our weather. Students will also learn how to use the free operational forecast models to make their own forecasts.

SOCIAL STUDIES

All students must successfully complete four units of Social Studies.



Course name: **Global History & Geography I**
Credit: **1**

The first semester covers a cultural approach to the following World Culture Areas: Africa (sub-Saharan), China, Japan, India, and the Middle East. The geography, history, anthropology, political science, and economics of the areas will provide the main strands for developing each of the regions studied. The second semester will coverworld history from the ancient world until the early modern world. The focus will be on Europe while integrating the areas studied in the first semester into a global approach to world history.

Course name: **Global History & Geography I Pre-AP**
Credit: **1**
The Pre-AP class meets the requirements of the Regents level course as well as following Pre-AP guidelines. There is greater emphasis on student demonstration of the depth of their knowledge and understanding. Students take a Regents examination after Global History and Geography II. Students are preparing to take the Advanced Placement World History exam in the spring of 10th grade.

Course name: **Global History & Geography II**
Credit: **1**
Prerequisite: **Global History & Geography I**
Grade: **10**
This course follows the curriculum of Global History & Geography I and concludes with the Regents exam. The emphasis is on cultural development throughout the history of the world. The course uses a chronological format organized around themes and concepts. The New York State Regents is a two-year cumulative exam that tests the content and skills learned over the two-year program.

Course Name: **Advanced Placement World History**
Credit: **1**
Prerequisite: **Global 1 H Pre-AP or Global History & Geography I**
Grade: **10**
This Advanced Placement course is offered to sophomores in the honors program in Social Studies. AP World History is a reading and writing intensive course. The course focuses on six themes to help students understand specific time periods and societies within the large framework of world history. These themes provide ways of making comparisons over time. The course builds on an understanding of cultural, institutional, and technological precedents along with geography. Areas of study include Africa, Asia, Europe and the Americas. **Students enrolled in the course must take the AP World History exam in May, as well as the Global History & Geography Regents in June.**

Course Name: **United States History and Government**
Credit: **1**
Grade: **11**
A survey of American history, this course examines the political, economic, and social development of the U.S. The role of government and its operations are emphasized. Students will take the Regents examination in U. S. History and Government at the end of the course. This course is the third year of the Social Studies requirement for graduation.

Course name: **Advanced Placement United States History**
Credit: **1**
Prerequisite: **AP World History or Global History II**
Grade: **11**

AP American History is the chronological history of the United States, emphasizing pivotal issues and forces that have shaped the development of the nation. It requires students to do extensive reading, document based questions and honors-level research papers. **Students must take the Regents examination in U.S. History and Government as well as the Advanced Placement test in American History.**

Course name: **Economics**
Credit: **½**
Grade: **12**
Economics is a required one-semester course for 12th grade students. Students will gain an understanding of the United States economy, the role of the consumer and personal finance, the types of economic systems, and international trade issues.

Course name: **Participation in Government**
Credit: **½**
Grade: **12**
This course is a required one-semester course for 12th grade students. The course is designed to encourage the development of civic-minded individuals. Topics include the nature of government, public policy issues, and the role of the individual in creating and affecting change in policy.

Course name: **Advanced Placement Economics**
Credit: **1**
Grade: **12**
Advanced Placement Macroeconomics is a full year course designed to give students a thorough understanding of the principles of economics as it applies to the economic system in its entirety. Students will analyze classical economic philosophies and explore current themes as they prepare for the AP exam in the spring. In addition to the AP curriculum practical finance content will be included throughout the year. **Students must take the AP exam in Macroeconomics in May.**

Course name: **Advanced Placement U.S. Government and Politics**
Credit: **1**
Grade: **12**
This Advanced Placement course will give students an analytical perspective on politics and government in the U.S. Students will examine the kind of government established by the Constitution, with attention to federalism, the separation of powers, and checks and balances. They will study political processes and political effects on governmental structures and procedures. Study includes examination of public policy, interest groups, and the mass media. This course meets the graduation requirement of Participation in Government. **Students must take the AP exam in U.S. Government & Politics in May.**

Course name: **Humanities**
Credit: **1 (½ credit in English 12 and ½ credit in Social Studies)**
Meets Participation in Government graduation requirement
Grade: **12**

This interdisciplinary course studies some of the fascinating aspects that make up "American Ideals." This unique class is team taught by an English teacher and a Social Studies teacher and examines major events in history in an attempt to unweave the fabric of American System to gain a better understanding. Starting with American Revolution and our founding documents, the course make stops at the Civil War, the Industrial Revolution before jumping into the 1950s and 1960s where we will examine the Cold War, the Cuban Missile Crisis, the Vietnam War, and the Civil Rights Movement. These key events that we study revolutionized the way our society functions. This course is designed to encourage the development of civic-minded individuals by making connections between history and current events. We read a variety of literary music, documentaries, film and historical texts in order to illuminate the intriguing subjects we study. Students will engage in various debates, mock legislation, round table discussions and many other fun activities

Course name: **Economics: The Journey Program**
Credit: **1 (½ credit in English 12 and ½ credit in Economics)**
Grade: **12**

Application and approval necessary for admittance into program. This course is open to all seniors.

The Journey Program is directed by two teachers and fellow Journey Program classmates and is designed to give students the opportunity to gain real-world experience by interning at a site of their choice or for completing a project of their design. Seniors can spend their time and energy working in a field that might be a possible career path, or a deeply valued interest.

The Journey Program will be scheduled during the school day to allow students to partake in their internships or work on their individual projects. In addition to weekly meetings, students will be allowed to leave school during the time of these scheduled classes to attend their internship, or work on their project for approximately 10 hours per week. Amongst other work, students will record their work in journals, manage their schedules, meet with professionals in the field, research their interest, collaborate with classmates, study civic material, and demonstrate their understandings in a final presentation.

The Journey Program will prepare students of all ability levels to be successful in an ever-changing world. Students will be empowered to direct their own learning experience by pursuing an interest that may influence future aspirations. Students successfully completing the course will receive ½ credit for Participation in Government and ½ credit for English 12.

The following courses are elective classes and <u>cannot</u> be used to meet the graduation requirement of four years of Social Studies.

Course name: **Advanced Placement Psychology**
Credit: **1**
Grade: **11-12**
The AP Psychology course introduces students to the study of behavior and mental processes of animals and human beings. Students learn psychological facts and ideas, along with the ethics and methods psychologists use in their science and practice. This course is equivalent to a college-level introductory psychology course. Students enrolled in the course are required to take the AP exam in May.

Course Name: **People, Crises, and Conflicts in 20th Century U.S. History**
Credit: **½**
Grade: **11-12**
This Social Studies course focuses on the causes and effects of World War II as well as other defining events in "modern" U.S. History. We will also be delving deeply into the role that the "individual" has played throughout the 20th Century. This course is designed for students who want to gain an in-depth understanding of 20th century events and make connections to contemporary America. We will use various primary and secondary sources as well as documentary. The course structure will provide individual freedom for students to explore, discuss and present. **ONLY OPEN TO JUNIORS AND SENIORS**

Course Name: **Belief Systems and Philosophical Tenets**
Credit: **½**
Grade: **10-12**
This course will examine the major religions and philosophies of the world. That study will include Judaism, Christianity, Islam, Hinduism, Buddhism, Confucian, Tao, Shinto, various indigenous beliefs and a mixture of new religions. The course will analyze the history, beliefs, practices and rituals of these religions and philosophies.

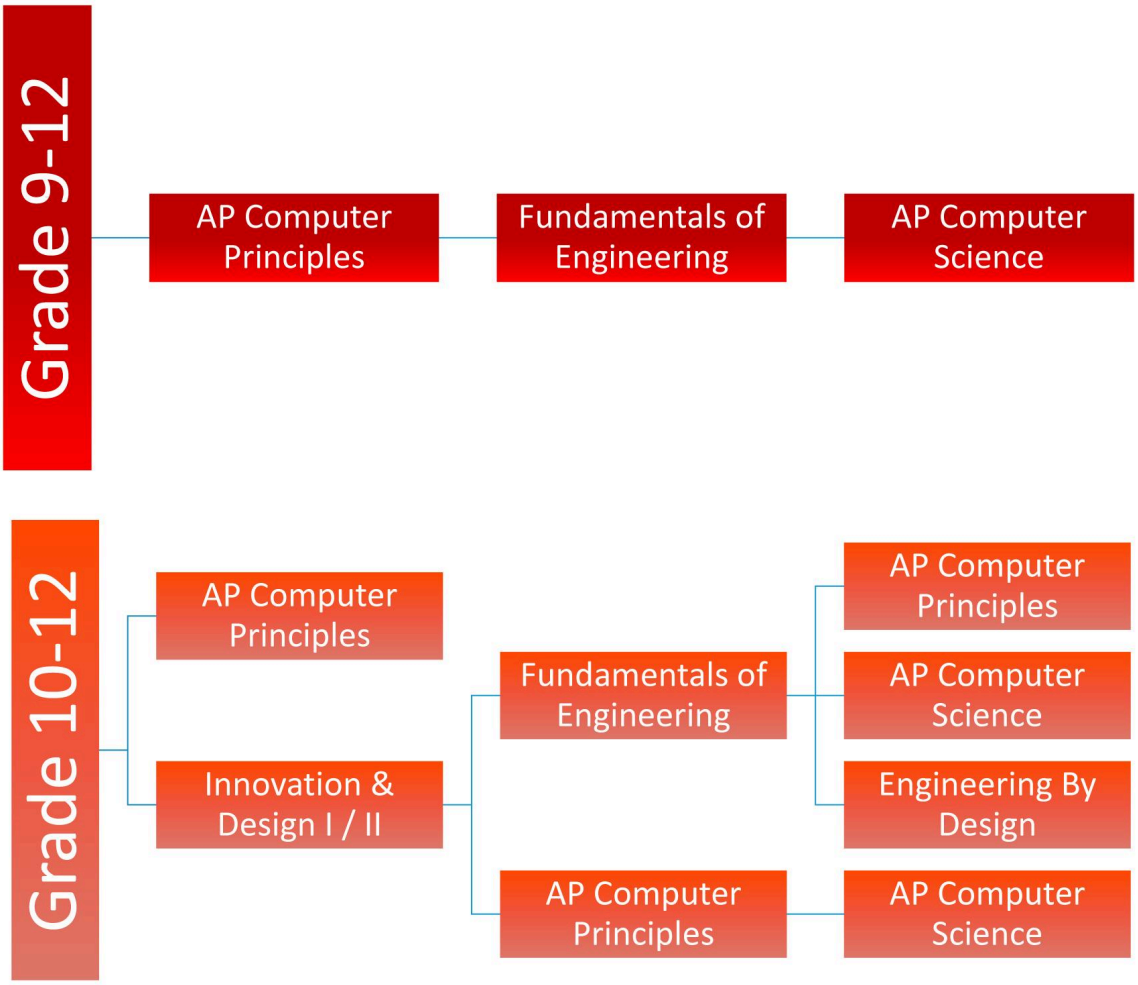
Course name: **History Through Film**
Credit: **½**
Prerequisite: **Global History and Geography 9**
Grades: **10-12**
This one-semester elective will present students who love History and film a chance to analyze famous historical events that have been made into Hollywood movies. History through film will look at various films dealing with U.S. and World History and attempt to analyze "*what is History, and what is Hollywood?"* In addition to watching many great movies, students will be asked to participate in seminar discussions about historical topics, complete writing assignments comparing film evidence to information in more traditional sources, and identify historical bias and inaccuracies in the various films/topics studied.

Course name: **Introduction to Law**
Credit: **½**
Grade: **11-12**
This one-semester Introduction to Law course provides an overview of the criminal, civil and business legal systems. Students will explore constitutional issues; learn legal terminology and research current law related topics.

Course name: **Psychology**
Credit: **½**
Grade: **10-12**
This one-semester elective introduces students to human development and human behavior. Areas of study include theories of psychology, child and adolescent behavior, mental health and mental illness, and related topics.

Course name: **Sociology**
Credit: **½**
Grade: **10-12**
This one-semester course introduces students to theories of social behaviors and cultures. Areas of study include cultural variation and change, the effects of socialization on the individual, social norms, and related topics.

TECHNOLOGY



Course name: **AP Computer Science Principles**
Credit: **1**
Grade: **11-12**

The AP Computer Science Principles course is designed to be equivalent to a first-semester introductory college computing course. In this course, students will develop computational thinking skills vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. Students are encouraged to apply creative processes when developing computational artifacts and to think creatively while using computer software and other technology to explore questions that interest them.

Course name: **AP Computer Science A**
Credit:
Grade:

The AP Computer Science A course is an introductory course in computer science. The major theme of the course is problem solving. You will be solving problems through the

design and implementation of computer programming. The entire course is focused solely on proper programming in the *Java* language. This course covers the philosophy of Java, the Java language, objects and classes, applications in Java, packages and interfaces, exceptions, and threads. AP is offered in May, which is optional.

Course name: **Engineering by Design**
Credit: **½**
Grades: **10-12**

Do you like to build and design? Are you interested in learning how to program and use tools like 3D printers and microcontrollers? If so, Engineering by Design is the class for you. This class will help students develop skills covering a variety of design processes and apply those skills toward engineering principles. Students will complete projects that will require them to research, design, and create through hands on activities. Students will be exposed to programming, basic circuits, microcontrollers, 3D printing and wearables.

Course name: **Technology Innovation and Design**
Credit: **½**
Grades: **10-12**

Innovation and Design is a new course, designed for 21st century learners, that will ask students to identify a potential societal problem or need and apply design thinking to produce an innovative solution. The course will be multifaceted and will allow students the flexibility to design and create solutions using a variety of materials and platforms. Some students may look at today's market to see what is lacking, draft up a design of a new product to fill that void, and ultimately create a prototype. Others may wish to rebuild, revise, or retrofit an existing design or system. Each student will be provided the opportunity to "pitch" their project to their peers.

The Mission of the Achievement Center

The Achievement Center was created to increase individual instruction for students who need greater academic support for course work or Regents exams. This space will allow students to be more connected to PVHS and make the time they have in high school worthwhile. Not only will we work on individual weaknesses and turn them into strengths, but we will incorporate getting involved in the school and local community. Modeling, monitoring and support are a few key components to foster drive for learning, which will be infused daily.

THE TECH CENTER

Credit: **3**
Grade: **9-12**

The BOCES Tech Center offers an opportunity to receive a technical education in a number of occupational areas. Students attend the Tech Center in Yorktown for part of the school day and take their academic courses at PVHS. The two-hour blocks at Tech may be scheduled in the morning, midday, or afternoon sessions depending on the program a student takes. Students receive three credits for each year of the occupational education program. Some of the programs at the Tech Center will allow students to accumulate college credits during 12th grade. Students must complete an application to the Tech Center and be accepted into a particular program. Applications are available from your school counselor.

Programs at the Tech Center include:

Advertising Art & Digital Design
Animation/Motion Graphics
Auto Body
Auto Mechanics I & II
Baking & Pastry Arts*
Carpenter's Assistant Trainee
Carpentry
Certified Nurse Aide/HHA
Childcare Aide
Child Development & Education I & II
Computer Graphics
Construction Electricity
Construction Technology
Cosmetology I & II
Culinary Arts
Law Enforcement
Masonry
Medical Assistant
Microcomputer Technology
New Visions Health *
New Visions Engineering*
New Visions Environmental Science & Sustainability*
New Visions Walkabout @ Briarcliff HS*
Plumbing/Pipe Fitting
Preservation/Restoration/ Commercial Masonry
Retail Services
Small Engine Repair

Digital Media
Fashion Design & Merchandising
Fashion Merchandising & Marketing
Food Prep Assistant
Food Service Transition to Work
Heating/Ventilation/Air Conditioning
Horse Science & Management
Introduction to Health Occupations**
Introduction to Pre-Engineering**
Small Engine/Motorcycle Technology
Sports Medicine
Telecommunications Technology
The Architectural & Design Lab
TV Production & Digital Film
Urban Forestry
Urban Forestry/Arboriculture
Veterinarian Technician
Welding

**** 12th grade only***
***** 9th and 10th grade only***