

Hastings High School

Program of Studies

2020-2021

Program of Studies

January, 2020

Dear Students:

We hope you find the “Program of Studies” booklet useful as you begin to think about the courses you would like to take next year. We suggest that you discuss the various course offerings with your parents. Please note some offerings may be subject to change.

Each year, during the early spring, you will select courses with your counselor for the following year. Your selections will be based on graduation requirements and on your own special needs and interests. You should develop a general plan of studies for four years at the High School.

This booklet has been updated to include projected courses and graduation requirements.

We urge you to plan a challenging course of study.

Sincerely,

Ms. Jeanette Kocur, Director of Guidance

Mr. Joseph Grosso

Ms. Sharon Quigley

Ms. Randie Shaw

The Hastings-on-Hudson School District does not discriminate on the basis of age, color, religion, creed, disability, national origin, race, or sexual orientation in the educational programs and activities which it operates.

The Hastings-on-Hudson Board of Education and Administration believe that all students should have access to our most difficult Honors and Advanced Placement courses.

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Graduation Requirements

A minimum of 22 credits are needed for graduation; the required credits are listed below.

Students are also required to take and pass a number of different High School Regents exams. These are listed on the next page.

- 4 English Credits

English 9

English 10

English 11 or English 11 Honors

1 credit of English 12, SUPA or AP

- 4 Social Studies Credits

World History 1

World History 2

American History, AP American History, SUPA U.S. History

.5 Economics

.5 Participation in Government

- 3 Math Credits

Students must pass one regents exam and complete three mathematics courses. This requirement can be satisfied in many different ways. Work with your counselor to determine the best sequence of classes for you.

- 3 Science Credits

Students must complete a minimum of one course in physical science and one course in life science, the third credit can be a physical or life science. Generally students will complete Earth Science, Biology and Chemistry but speak to your counselor regarding the sequence that is right for you.

- 1 Credit of Visual Art, Music and/or Theatre

- .5 Health Credits

- Language other than English Credits (L.O.T.E.) One credit for Regents

Three credits for Advanced Regents diploma (no longer available for Class of 2022 and beyond)

Students who pass the 8th grade Language Proficiency exam receive one High School credit for L.O.T.E.

- 2 Physical Education Credits

This is completed by taking .5 credits of Physical Education every year.

- 1.5 Elective Credits

Students must take a minimum of 6.5 credits per year.

DIPLOMA AND CREDENTIAL OPTIONS

REGENTS DIPLOMA

Earn 22 credits: 4 ELA, 4 social studies, 3 science, 3 mathematics, ½ health, 1 arts, 1 language other than English (LOTE), 2 physical education, 3 ½ electives as well as fulfill attendance requirements and any other district requirements.

Assessment:

- Pass 5 required Regents exams with a score of 65 or higher on each exam, or
- Pass 4 required Regents exams (including *one* social studies) and either a Pathway Assessment or CDOS Commencement Credential

Appeal: One Regents exam (score between 60-64) may be appealed at the district level. Eligibility requirements include:

- Regents exam taken 2 times
- Student has taken advantage of school-provided academic intervention
- Have a passing course average in subject under appeal
- Recommendation by teacher or department chairperson

A Regents or Local diploma is proof that a student has met the standards for graduation from high school in New York. Once the student earns a diploma he or she is no longer eligible to attend high school.

LOCAL DIPLOMA

Earn 22 credits: 4 ELA, 4 social studies, 3 science, 3 mathematics, ½ health, 1 arts, 1 language other than English (LOTE), 2 physical education, 3 ½ electives as well as fulfill attendance requirements and any other district requirements.

General Education Students and Students with IEPs or 504 Plans

Local Diploma Through Appeal:

- 3 Required Exams with scores of 65 or higher *and*
- 2 Required Regents Exams with scores 60-64, successfully appealed

Students with IEPs and 504 plans

Low Pass Safety Net

- 5 required Exams with scores of 55 or better

Low Pass Safety Net and Appeal

- 3 required exams with scores of 55 or better and two Regents exams with scores of 52-54, successfully appealed

Compensatory Safety Net/Appeal

- Must score a 55 on math and ELA exams. (Note: Appeal may apply allowing students to score 52.)
- If Student scores a 65 or higher on any required exam, the score may compensate for another exam score between 45-54.

Multiple Pathways Options and the CSOS Commencement Credential may be used

ADVANCED REGENTS DIPLOMA

Same requirements as Regents Diploma with the addition of two (2) required Regents exams (no longer available for the Class of 2022 and beyond.)

Multiple Pathways (4+1) To Earn Regents and Local Diplomas

Students must pass Regents exams in all four areas listed below:

- ELA
- Math
- Science
- Social Studies (Either Global Studies or US History). PLUS...

Students choose one Multiple Pathway option from below:

Math (Different from Math exam above)
Science (Different from Science exam above)
Career and Technical Education (CTE)
(Approved programs and assessments)
Languages Other Than English (LOTE)
Arts
CDOS Commencement Credential

The Multiple Pathway option replaces one Social Studies exam.

ENGLISH LANGUAGE LEARNERS

General Education Students and Students with IEPs or 504 Plans
Local Diploma (Through Appeal):

- 3 Required exams with score of 65 or higher
- 1 Required exam with a score of 60-64 and
- ELA exam score of 55-59

**Superintendent Determination and
Amendment
 Local Diploma – Students with IEP’s only
 Local Diploma**

Upon written request from the parent or guardian, the superintendent may conduct a review of the student’s coursework to determine whether he or she has achieved graduation level proficiency in the subject area where the student was not able to obtain a passing score using Safety Net Options.

Safety Net Options

In order to qualify students must: Earn 22 credits

- Participate in 4 required Regents exams and either 1 Pathway Assessment or earn the CDOS Commencement Credential
- Score a 55 or higher in math and ELA (Note: Scores of 52-54 may be appealed.)
- Or (amendment)
- Earn 22 credits
- Participate in 4 Required Regents exams (this may include a Pathway Assessment) and earn the CDOS Commencement Credential.

Non-Diploma Credentials

There are existing certificates available that document students' levels of work-readiness. These credentials are aligned with the NYS learning standards for Career Development and Occupational Studies, which are State standards focusing on vocational preparation.

Career Development and Occupational Studies (CDOS) Commencement Credential
Available to all students except those who take the NYS Alternate Assessment

Option 1:

- Master Commencement Level CDOS standards
- Complete 216 hours of CTE coursework and/or work-based learning activities (minimum of 54 hours of work-based learning required)
- Complete Career Plan documenting student vocational goals and preparation
- Complete Employability Profile documenting student skills and experiences

Or

Option 2:

- Student must pass a NYS Commission-approved National Work-Readiness Exam
- Skills and Achievement
- Commencement Credential

Available to students with severe disabilities who take the NYS Alternate Assessment

- Students must attend school for at least 12 years, excluding kindergarten
- Documentation of the student's skills, strengths and levels of independence needed for post-school living, learning and working

A non-diploma credential is not a high school diploma. Most colleges, the military and many jobs, including union and civil service, require high school diplomas.

English

Facility with language enriches life. It sparks and shapes relationships among people. It enables us to enjoy the arts, the inventions of culture; to participate in them; and even to create our own. It is, most importantly, the rudimentary skill for all learning. Consequently, all required courses in our English program include the essentials for mastery of language: reading, writing, speaking, listening; fundamentals of grammar and usage; and exposure to the literatures of our and other cultures.

To immerse students in language, they must take a full year of English during each of their four years of study. Although the program offers a variety of courses for completing this four-year requirement, all students must take English 9, 10, and 11 (or 11 Honors). They can then choose from a combination of advanced and elective courses to fulfill their fourth year of English.

Electives are divided into two categories. The Category A electives demand three kinds of essential writings that prepare students for post high school work. These are: Object Analysis, Documented Argument, and Discourse Analysis. The Category B electives, in addition to various kinds of writing activities, require a culminating project that demands a demonstration of both creative and analytical skills.

To satisfy a five-unit sequence for graduation, students can take additional elective and advanced courses to complete 5 units or more of English.

Summary of Courses

Core Courses

English 9
English 10
English 11: American Literature
English 12

Advanced Courses

English 11 Honors: American Literature
English 12 AP
English 12 Honors: Advanced Writing and Literary Theory (SUPA)

Elective Courses

Film Studies I	Film Studies II
Creative Writing	Facing Ourselves: Reading the "Other"
Theatre Arts	Revealing Women
Journalism	Watching the Detectives
Communications: TV Broadcasting	
Tune In, Turn On, Drop Out: The Music, Literature, and Culture of the 1960's	

Core Courses

English 9

This required course examines the major literary genres: the novel, the short story, poetry, drama, and non-fiction. There is regular work in the organization of composition and in the techniques of writing, as well as the regular study of vocabulary and spelling. Students also do guided supplementary reading and close analysis of what they read.

Full Year-1 Unit

English 10

Full Year-1 Unit

This required course continues the study of the major literary genres and the many strands of language arts with attention to the complexity of language and human experience. Composition and functional grammar are an integral part of the program, as are the study of vocabulary and spelling.

English 11: American Literature

Full Year-1 Unit

This comprehensive course in American literature is intended to familiarize students with the breadth and variety of the American experience as reflected in its literature.

The course may be taught chronologically, thematically, or by genre, at the discretion of the instructor, but the essential materials remain the same. In addition, analytical writing with an emphasis on the rhetoric of writing is taught.

English 12 - An Introduction to College Level Reading and Writing

½ semester – ½ Unit

English 12 – a half year, elective course open only to seniors, is meant to provide an introduction to college level reading and writing activities and a culminating English experience for Hastings students. Units will include: Thinking about Voice or Personally Persuasive Writing, Expository Writing, Document Argument and Presentation and Public Speaking Skills. All seniors who are NOT taking one of the senior honors options – AP Literature or SUPA – **will be required** to take this course

Advanced Courses

The English Department believes that students should have the opportunity to create a program of studies that brings them the greatest intellectual challenge. In light of this it will not exclude students from its advanced courses.

Because Honors and AP courses are neither workshops nor tutorials, the Department considers certain qualities essential to success in these classes. These are:

- The motivation to complete extensive reading,
- The ability to write expository papers,
- The industry to keep pace with all course requirements, and
- The completion of summer reading assignments.

Students whose achievement falls below a B average may be asked to consider more appropriate placement.

All advanced classes are full-year courses and may not be taken for half-year credit.

English 11 Honors: American Literature

Full Year-1 Unit

This course provides both an intensive study of masterpieces of American Literature and a college-level freshman composition course. Readings are plentiful and varied, covering works included in the traditional sense of American Masterpiece as well as works outside of this definition. Students will be taught the conventions of advanced literary analysis, and will be expected to use these tools in frequent reading and writing assignments. The composition component covers standard rhetorical modes, personal writing and some creative writing. Successful completion of summer reading is a prerequisite for starting the class.

****Please note that all students are required by the State of NY to take the Regents Comprehensive Examination in English.**

English 12 AP (Advanced Placement)

Full Year-1 Unit

This course is a rigorous inquiry into literature. The focus is classic and contemporary literature. It offers a college-level reading and writing experience with the study of traditional and modern literature in the context of post-modern critical theory. Required writing for the

course is primarily analytical. All students are required to sit for the Advanced Placement Examination in English Literature and Composition.

**English 12 Honors: Advanced Writing and Literary Theory, Syracuse University
at Hastings High School Full Year-1Unit**

This class is a two-course sequence in writing and reading. Upon successful completion of both courses, students receive six college credits from Syracuse University. Both courses must be successfully completed to receive college credit, and the credit is usually transferable.

To be eligible to enroll in the program, students must be in their 12th year, should have gotten 85% or better on their English Regents examination, and must have the recommendation of their 11th grade English teacher. Students must pay a fee of about \$600 to cover the administrative costs and charges of Syracuse University. Financial aid dependent on need is available.

This class, in effect, allows seniors to complete six credits of college work in English. Because most colleges require students to take a year of introductory courses in writing and literature, it also allows them to fulfill one of the most common and sometimes most difficult of their requirements for their BA. (Note that some colleges do not accept transfers of credit under any conditions.)

Semester 1: Writing Studio is the first course in this sequence. It is designed to nurture writers as part of a community of writers rather than as students in a course presided over by a teacher who has experience in writing. Writers are expected to help fellow writers become better in their craft by reading and criticizing each other's work as well as their own.

Semester 2: English Textual Studies is the second course in this sequence. It introduces students to a variety of intellectual discourses current in the study of language and literature. Through close reading of texts and writing about their reading, students develop a basis for understanding postmodernism and the intellectual currents that shape our understanding of literature, language, and culture.

Elective Courses

All English electives are open to all students in grades 10-12; a few are also open to students in grade 9. Seniors may use these classes to complete their 12th grade English requirement after successfully completing English 9, 10 and 11 (or 11 Honors).

Creative Writing (Grades 9-12)

One Semester – ½ Unit

Students write their own short stories, plays, and poetry. The course offers ways to develop a creative voice and to experiment in technique. It provides opportunities for writers to share material with others. Professional models and student work comprise the texts.

Journalism (Grades 9-12)

**One Semester- ½ Unit
Full Year-1 - Unit**

This course gives students an overview of the role of print, broadcast, and photojournalism in a democratic society and introduces them to the principles of responsible journalism. Students put theory into practice by interviewing, writing, editing, and preparing material for publication.

Introduction to Theater: First Semester

One Semester- ½ Unit

This course will trace the development of theater production and performance through acting from scripts and improvisation. We will also examine theater from Asia, Latin America, and Africa, as well as Europe and the US. Various styles of acting will be studied and performed,

as well as various methods of staging and technology. This is the “who, how, what, when, and why” of theater.

Theater Arts: Second Semester (1st semester Intro class is NOT required):

Acting and Writing for the Stage

One Semester- ½ Unit

This course takes some of the practical ideas from the Intro course and focuses on 1. Acting and Writing for the Stage, along with 2. Directing and Designing a production for the Stage. Parts or all of an actual production will be part of our work, in ensemble and individually.

Film Studies I: Reading Hollywood Movies (Grades 10-12)

One Semester- ½ Unit

Students are introduced to the art of film by examining the works of great film directors and by learning how film expresses meaning through image and sound. The course examines a variety of theories on the art of film and shows students the difference between seeing a movie and reading one. The course explores why great films lend themselves to careful study, and we will write often about how an aesthetic appreciation of many films can be had by understanding their design and realizing the various ways that films make meaning.

Film Studies II: The Making of Film (Grades 10-12)

One Semester- ½ Unit

[NOT OFFERED IN 2020-2021 SCHOOL YEAR]

Students often know the various ways that films record things in the world around them, but they often miss the truth of the things they want to record. To discover their voices, students will study films and the art of storytelling to explore how to create the narratives they see. The technical elements of filmmaking will be stressed—from camera work to lighting to editing—as well as the process required for pulling together a complex work that balances equipment, personnel, schedules, and locations. This will create the opportunity to learn how films manipulate their audiences, playing with the viewers’ conscious and unconscious emotions. Students storyboard, videotape, and edit their own short films. (Film I is not a prerequisite for this class.)

Facing Ourselves: Reading the “Other” (Grades 10-12)

One Semester- ½ Unit

This course approaches the controversial issues of how we “read” race and gender in modern culture. We study novels, poetry, film, and television, as well as read a series of essays on the topics of race and gender in America. One requirement of the class will be for students to produce a presentation or project to be presented to the greater community designed to raise awareness of how we read race and gender. Students will also be required to keep an academic journal on what they read, in addition to producing a series of formal papers.

This course supplements the critical work we do on the topics of race and gender in 9th, 10th, and 11th grade English. Like Film Studies and the second half of 12 Honors (SUPA), the curriculum for “Facing Ourselves” reflects changes in the English curriculum in colleges across the country: students will be expected to look critically at both written and visual texts in order to consider how their perspective literally colors their experience of the world. The goal of this course is a student better equipped for “reading” and thus “constructing” his/her world.

Revealing Women (Grades 10-12)

One Semester- ½ Unit

Ever wondered why women seem to pose differently than men in advertisements? What’s behind the lack of female leaders in the US? How does fashion reflect our cultural attitudes towards femininity? This class will give you the opportunity to investigate and discuss what you’ve been noticing. You will examine television, print media, plays, fashion trends, short stories and do your own original research.

Tune In, Turn on, Drop Out: The Music, Literature, and Culture of the 1960s (Grades 10-12)

One Semester- ½ Unit

This course examines the extraordinary explosion of creativity that occurred between the monumental events beginning with the assassination of President Kennedy in 1963 and ending with the resignation of Nixon in 1973. Students will look at the powerful relationship between rock n' roll and politics and between the women's movement and the sudden awareness of gender as it relates to equality. We will also consider the civil rights movement as a struggle played out in poetry, theater, and music. Possible authors include: Burrows, Ginsberg, Gitlin, Dylan, Morrison, Hoffman, Cleaver, and Jones, Lennon, and McCartney. Frequent expository and creative writing is required.

Watching the Detectives: An Exploration of the Detective Story in Film and Fiction (Grades 10-12) One Semester- ½ Unit

"Down these mean streets a man must go who is not himself mean, who is neither tarnished nor afraid." - Raymond Chandler

Welcome to the world of the murder mystery, filled with sleazy criminals, corrupt cops, dangerously beautiful women and, of course, the detective: tough-talking, fastthinking, convinced of the world's ugliness and determined to do something about it. "Watching the Detectives" traces the origins and development of the detective story from its beginnings in the 19th century through the heyday of the "hard-boiled" detective in the middle of the 20th century and up through the present. In this class, we will consider a number of full length films and a wide variety of written texts, including children's books, graphic novels, magazine articles, song lyrics, short stories and novels. Over the course of the semester, we will discuss the conventions of the detective genre, the workings of the detective story in film and on the page, and the ways in which this now familiar form has made its way into other aspects of popular American culture.

Communications: TV Broadcasting I (Grades 9-12) One Semester- ½ Unit

When we watch television, we are often ignorant of the enormous number of factors that shape what we see: the camera position and movement, the impact of the lighting, the editing decisions, the set, etc. These are all important technical considerations that must be made to complement the story itself and the way it's reported. This course explores those issues by introducing students to the technological, philosophical, and practical aspects of TV production. Through hands on training in video software, editing techniques, camera operation, and lighting decisions to work with interview skills, the exploration of narrative structures, and audience impact, we will investigate the physical operation of a TV studio and the creative process required to develop news-based programming.

**Communications: TV Broadcasting II (Grades 9-12) One Semester- ½ Unit
[NOT OFFERED IN 2020-2021 SCHOOL YEAR]**

As an upper-level television studio class, the goal is to explore more of the challenging aspects of TV broadcasting. From refining the different types of stories told (and the interview techniques needed for each) to capturing live events as they unfold, the class will explore advanced-level TV journalism. Whereas in TV Broadcasting I students experimented with a variety of roles, this class will focus more on honing skills for one or two distinct areas within the studio, ensuring each student can achieve personal mastery with the technical requirements essential for show production within their field of interest.

Social Studies

Students are required to take four full units of Social Studies in high school. The overall purpose of the Social Studies program is to prepare students for life by helping them understand the past, the modern tools of social analysis, and the major features of their environment. Within our classes, we stress content and skills and try to formulate class rules and procedures that foster self-respect and respect for others as well as a sense of responsibility.

Social Studies Sequence

All students take World History 1 and World History 2 in heterogeneous classes. In grade 11, students may choose different courses, but selecting a particular class in grade 11 does not, in any way, restrict their choices in their senior year. The fourth year requirement entails a semester of Economics and a semester of Participation in Government.

Typical Sequence

Grades 9-10	World History 1 and World History 2 with an optional elective
Grade 11	US History Regents or AP US History or SUPA American History with an optional elective
Grade 12	Economics (1/2 year) AND Participation in Government (1/2 year)
	or
	Economics (1/2 year) AND AP European History (Full year)
	or
	Economics (1/2 year) AND AP Psychology (Full year)

World History 1 (Required for 9th grade)

Full Year–1 Unit

Grade 9 World History is the first year of a two-year course that traces, chronologically, the history of the world from pre-history to the present. Grade 9 covers pre-history to the 1600s and the Italian Renaissance. The course is structured around themes which demonstrate interactions of peoples around the globe and pose questions as to the extent to which distinct cultural groups developed compared to the emergence of a global culture.

World History 2 (Required for 10th grade)

Full Year-1 Unit

World History 2 is the second year of our survey on World History. We begin with the world in 1750 and end with the study of the contemporary world. The first semester concentrates

on the 18th and 19th centuries while the second semester largely concentrates on the 20th century. The course ends with a Regents examination.

United States History and Government Regents [US History Regents] (11th grade) Full Year-1 Unit

Over the course of the year we will examine the history of the United States through the lens of five American ideals celebrated since the very beginning of this country's formation: equality, rights, liberty, opportunity, and democracy. While many of us think we already know what these concepts represent, a closer look at the political, economic, social and cultural evidence of the past will help you to develop a much deeper and more nuanced understanding of what these ideals actually meant at different points of time and how they changed over time.

Our foremost goal is to help you develop a critical eye for studying history in general and American history in particular. To this end you will have ample opportunity to hone your analytical and interpretive skills through a variety of individual and group activities. There is a Regents exam at the end of the course, required for graduation.

American History Advanced Placement [AP US] (11th grade) Full Year-1 Unit

This is a college-level survey course in American History covering the period from Colonial America through the post-Cold War era.

Prerequisite – Enrollment is conditional upon taking an evaluative essay examination at the beginning of second semester 10th grade.

The approach used will emphasize political, economic and social themes of American history, and will include conflicting historic interpretations of selected issues in the American past.

In addition to the mastery of a college level textbook, students will participate in a number of extensive simulation games and read supplementary primary and secondary sources. The course is open to all juniors who show a willingness to do advanced work in the field of history. Students must take the Advanced Placement test given in May of each year and are prepared for the U.S. History SAT II exam given in June of each year. Students must pass the Regents in United States History and Government to graduate.

Syracuse University Project Advance (SUPA) American History

Full Year – 1 Unit (11th grade)

Prerequisite – Enrollment is conditional upon taking an evaluative essay examination at the beginning of second semester 10th grade.

Syracuse University Project Advance (SUPA) American history 102 and 102 is designed to offer students a thematic approach to American history from early European settlement to today. It is designed to help students make connections between what we “were” to what we “are” and to what we “hope to be.” Focusing on the themes of political democracy, social justice and economic opportunity, students are challenged to garner a better understanding of the American experience and an understanding of how our society came to be what it is today. Another objective of the course is to challenge students to develop critical reading and writing skills. With an emphasis on primary sources and historiography, students will be prompted to think more critically from different historical perspectives.

Similar to the current AP US course offered in the High School, SUPA American History will require students to do college-level reading and writing. Unlike AP however, SUPA American does not culminate in an exam. Students who successfully complete the course will receive six transferable credits directly from Syracuse University. Unlike AP US, SUPA is not a course that follows United States History chronologically, and it does not cover the same amount of vast information as the AP. It will offer students a chance to take a college level course that is focused on a thematic critical approach to American History.

AP Modern European History [AP Euro]

(Open to 12th grade only)

Full Year-1 Unit

Modern European History Advanced Placement is a college-level survey course of European history from the 14th century to the present. It requires extensive reading in primary and secondary sources, essays and critical thinking. We deal with politics, economics, diplomacy and intellectual and cultural movements. This course will be limited to those who have shown a willingness to do advanced work in the field of history. All students are required to take the Advanced Placement examination in May. Students should be able to do substantial reading and respond to analytical questions. This course satisfies the Participation in Government requirement.

Advanced Placement Psychology [AP Psych]

(Open to all 12th grade AND only to 11th grade concurrently enrolled in AP US or SUPA American History)

Full Year – 1 Unit

The Advanced Placement Psychology course will introduce the systematic and scientific study of the behavior and mental processes of human beings at the college level. Included will be the study of the psychological principles, facts, and phenomena associated with each of the major fields within psychology. Students will also learn about the ethics and methods psychologists use in their science and practice. The aim is to provide a learning experience similar to that in a college-level introductory psychology course.

Economics

(12th grade only)

One Semester-½ Unit

The study of economics has a significant and long-term impact on the lives of students. Students will encounter various economic concepts, principles, and issues. From personal income and property taxes to automobile loans to retirement investments, students learn to apply the basic economic concepts, understandings, and skills from the curriculum. An understanding of basic economic concepts such as supply and demand, opportunity costs, recession, the business cycle, resources, scarcity, and economic growth will enable students to analyze local, state, national, and international economic questions and issues.

Participation in Government: Anthropological Perspectives

(Open only to 10th – 12th grades)

One Semester-½ Unit

Anthropology is the study of humans. This course presents the student with a broad introduction to the study of anthropology, exploring physical and cultural anthropology as well as archeology in pursuit of a central question: what does it mean to be human? Some topics to be covered include: the development of the field of anthropology, human origins, hunter-gather groups, comparative religion, cultural sub-groups and ethnography. The course will culminate in the student creation of a short ethnographic film.

Participation in Government: Sociological Perspectives

(Open ONLY to 11th and 12th grades)

One Semester-½ Unit

Sociology is the study of how people behave when they are members of groups. Social issues such as gerontology, human sexuality, crime and homelessness are investigated.

The aim is always to understand the functions of groups, how groups relate to each other, how the members of a group affect the group as a whole, and how the group itself affects its members. Students will read, do research, conduct interviews, and discuss career possibilities in the field.

**Participation in Government: Criminal Justice in America
(Open ONLY to 11th and 12th grades)**

One Semester-½ Unit

The focus of this course is on deviant behavior and the criminal justice system in our country today. Students study all aspects of the system, including causes of crime, incarceration, punishment and rehabilitation. Special attention is given to criminal procedure, police, the trial process and corrections.

Participation in Government: Peer Leadership

Full Year-1 Unit

Prerequisite: Selected into the course by faculty

This course was instituted through the Princeton Center for Leadership Training. A wide range of seniors (24) will be selected and trained in peer counseling to work once a week with ninth graders. The purpose is, through providing a positive role model, to raise the self-esteem level of students, and to help the ninth graders adjust to the high school. Peer Counselors will have to undergo extensive training.

**Participation in Government: Psychology for You
(Open ONLY to 11th and 12th grades)**

One Semester-½ Unit

Psychologists differ about why we behave as we do. Do we learn to be fearful, trusting, insecure, schizophrenic, or are internal psychological factors responsible for such behavior? Are there other explanations? In addition to dealing with these problems, the course will also look at some of the current popular “treatment” vogues. Methods used will be discussion, experiments, research, surveys and interviews.

**Participation in Government: Contemporary Politics
(Preference is given to 9th-11th grades)**

One Semester-½ Unit

This course is geared primarily to grades 9-11. We will study the important United States domestic and foreign policy developments. Students will read a variety of news periodicals including national and local newspapers, online journals and blogs. Weekly student seminars allow students to explore the relationship between power, government, and media representation. Students will also develop skills in participating in government and expressing themselves politically. Students may take this course multiple times for ½ credit each semester.

**Participation in Government: Trial Law
(Open to all grades)**

One Semester-½ Unit

Trial Law helps students gain valuable insight and understanding into the legal mechanisms through which society resolves many of its disputes. While learning the details of the trial process, students will also develop the skills of critical analysis, listening, questioning, oral presentation and extemporaneous speaking. The class will conduct a series of mock trials and the students will participate as lawyers, witness, and judges.

Modern Middle Eastern History

(Open to all grades)

One Semester – ½ Unit

This course examines the history of the Middle East from 1919 to the present. Its geographic focus will be Egypt, the Fertile Crescent, the Arabian Peninsula, Iran and Turkey. We will keep a few broad questions in mind as we follow the political and social developments of the region.

(1) What has been the relationship between Islam and politics in the Middle East since 1919? (2) What impact did western imperialism and the process of decolonization have on society and politics in the Middle East? (3) How did Zionism and the creation of Israel change the political and social landscape of the region? (4) What changes did the discovery of and the increase in worldwide demand for OIL bring and how has it drawn the US into regional affairs? (5) How was September 11, 2001 a product of the events in the Middle East since the collapse of the Ottoman Empire in 1919.

Arts Perspectives

One Semester-½ Unit

(Open to all grades; priority given to 9th and 10th grades)

Human history is reflected in the creativity of its peoples. This course will explore the artistic expressions of several different societies around the world from an historical point of view. Classwork will consist of analyzing cultural artifacts, music, and theater with attention to understanding the societies that inspired them. In addition to student presentations and course lecture, this course will also provide students with an opportunity to express themselves artistically and to visit area museums and cultural institutions.

Syracuse University Project Advance (SUPA) College Learning Strategies

(open ONLY to 11th & 12th Grades)

One Semester-½ Unit

Prerequisite- Because this is an “applied course,” students must be enrolled in another AP or SUPA course prior to enrolling in this course. The course may be in any discipline.

SUPA College Learning Strategies is a course which offers high school upperclassmen the opportunity to study and apply strategic approaches to learning in preparation for their college experience. Students who successfully complete the course will earn 3 college credits from Syracuse University. Strategies are presented in class and practiced in order to maximize students’ learning in the context of lectures, readings, recitation, and independent learning situations. The course content is based on the application of strategies to the learning requirements of the courses that students are currently enrolled in. Course sessions are a series of lectures, discussions, cooperative learning exercises and one-on-one conferences. Major units include time management, note-taking, exam preparation, overcoming procrastination, motivation, stress management and self-assessment.

The primary goal is to have students maximize their learning in college. An awareness of how we individually learn is examined through the development of a variety of learning strategies. Strategies will be explored in the following ways: (1) what they are, (2) how to use them, (3) when to use them, (4) why they are effective and (5) how to adapt them. Students will create their own strategies by defining their goals, selecting strategies, implementing them, and evaluating their effectiveness in their courses.

**The Power of Protest: The History of Social Reform Movements in the US
(NOT OFFERED in 2020-2021) One Semester-½ Unit**

This course addresses in depth the origins, development, and cross-cultural influences of social movements from the early nineteenth century to the present. It also examines the indigenous historical antecedents of social reform movements such as the Second Great Awakening and the Progressive Movements as well as those emanating from countries outside the United States (international labor organizations, social communes, etc.). To a lesser extent, this course will also explore the interplay of social reform movements in- and outside the United States.

**Women, History and the World One Semester-½ Unit
(Recommended for 9th and 10th grades)
[NOT OFFERED IN 2020-2021 SCHOOL YEAR]**

This course will address the question “What role have women played in the development and advancement of society?” Through the exploration of women’s experience throughout history and across the globe, we will analyze the roots of the contemporary women’s movement, the impact of that movement on the global status of women, and the various issues women face in the world today. Because the study of women is an active, ongoing subject, course readings will be a mix of historical analysis and contemporary perspectives. Students will also have the opportunity to pursue an independent research project on a women’s studies topic of their choice. The course will be structured as a seminar, allowing for extensive class discussion. Women, History, and the World is designed as a complement to the World History 2 and US History courses.

**The Two Americas One Semester-½ Unit
(Recommended for 9th and 10th grades)
[NOT OFFERED IN 2020-2021 SCHOOL YEAR]**

This class is designed to illustrate to students the ever-present complexity of the relationship between Latin America and the United States. As the title of the course suggests, there are two Americas: one Latin American, the other North American. The Two Americas are constantly in tandem with one another. The class will further explore the continuing U.S. hegemony in Latin America - how the United States has been involved explicitly and implicitly with Latin American political, social, and economic affairs. This course will provide students with a multicultural perspective of history - learning about the “other” America as they exercise critical thinking and evaluative skills. It will also prepare them for the Regents as we continue to explore the common themes of political systems, world beliefs, geography, power struggles, and social class systems in Latin America. A goal of the class is to demonstrate to students the growing global interdependence in our world today. We will explore the region before Columbus’ arrival, during colonial times, at the height of US influence, and today’s current events.

**Honors Writing Seminar for Social Studies One Semester-½ Unit
(Priority given to 10th grade; also open to 11th grade)
Prerequisite: World History
[NOT OFFERED IN 2020-2021 SCHOOL YEAR]**

This single-semester honors course addresses in depth the process and skills required to perform advanced level research for subjects in the social sciences, particularly history. It

also addresses the mechanics, syntax, writing styles and various scholarly formats employed in formal writing for an academic environment.

The course complements all core content offerings in the Social Studies department (World History I and II, US History Regents) by providing an in-depth examination of source analysis and written expression. Furthermore, it provides students who intend to take upper-level courses (AP US History, SUPA American, AP European History, AP Psychology) with a foundational basis in college-level research and writing.

Mathematics

Mathematics

The mathematics program equips students with a quantitative understanding of their environment. Although the curriculum is developed locally, all of the mathematics classes at Hastings fit within the State learning standards. These standards lay out both content sequences and expectations of practice. Each of our courses emphasizes this set of essential skills, taken from the practice standards:

- Make sense of problems and persevere in solving them
- Reason abstractly and quantitatively
- Construct viable arguments and critique the reasoning of others
- Model with mathematics
- Use appropriate tools strategically
- Attend to precision
- Look for and make use of structure
- Look for and express regularity in repeated reasoning

In general, students need 3 credits in mathematics and a passing score on at least one of the three state regents exams in order to graduate with a regents diploma. Most students will take the Algebra regents exam to satisfy the graduation requirement. Some students will take this exam in middle school, others will take this exam in high school.

Calculators: students need a graphing calculator for all four years of mathematics. This calculator does far more than calculations. It serves as a mobile laboratory for exploring mathematics. The math department uses and supports the TI-Nspire from Texas Instruments. The machine costs about \$150, is durable and rechargeable. This calculator is appropriate for all of our mathematics classes and can be used on the ACT and SAT exams. The expectation is that **students will provide their own calculator**; this ensures that they have one available for homework and study as well as for use in the classroom. Families that cannot provide students with calculators can apply for the loan of a calculator for the school year.

Courses:

Pre-Algebra, Algebra,
Topics in Geometry, Topics in Trigonometry
Geometry, Algebra 2, and Pre-Calculus (offered in both regular and honors versions)
Calculus, AP Calculus AB, AP Calculus BC,
AP Statistics, AP Computer Science*

In addition, we offer semester electives that run depending on student interest and the availability of staff:

The Visual Beauty of Mathematics, Block Coding*, Data Analysis, and Programming*

*Computer science courses are for general credit, not math credit.

Algebra

Full year – 1 math credit

This is a New York State regents course. Students develop fluency in both problem solving and in algebraic procedures. There is a regents exam in June. Students need to provide their own graphing calculator.

Topics in Geometry

Full year – 1 math credit

Prerequisite: Students must pass Algebra AND the Algebra regents exam before enrolling. The topics course is an exploration of high school level geometry through small-group work, projects, and technology. This course is intended as an *alternative* to the regents curriculum.

Topics in Trigonometry **Full Year – 1 Unit**

Prerequisite: Students must have two mathematics credits before enrolling, including both the course and exam in Algebra. It is an exploration of trigonometry, starting with the concept of functions and moving into an analysis of the unit circle and the functions that relate angles to lengths. This course is an *alternative* to the regents curriculum.

Algebra I **Full Year - 1 Unit**

This course is based on the New York State learning standards for Algebra. Topics include the study of functions, including regression analysis, graphical analysis, as well as the manipulation of equations. Students develop fluency in both problem-solving and in algebraic procedures. Students will need a graphing calculator and there a regents exam in June.

Geometry **Full Year - 1 Unit**

Prerequisite: Students must completely pass the Algebra class and regents exam before enrolling. Recommended: A class average of 80 or higher in Algebra and a teacher recommendation.

This course is based on the New York State learning standards for Geometry. Students use visualization and spatial reasoning to analyze the properties and characteristics of geometric shapes, identify and justify geometric relationships, and analyze symmetry. A graphing calculator is required for many of the topics in this class. Students usually enroll in an Algebra II class the following year. Department midterm and final.

Geometry Honors **Full Year - 1 Unit**

Recommended: A grade of 90 or higher in Algebra and a teacher recommendation.

This is the honors level version of the Geometry class described above. It is intended for students who have a keen interest and aptitude in mathematics. Students at the honors level explore additional topics and at a deeper level. A graphing calculator is required for many of the topics in this class. Students usually enroll in an Algebra 2 class the following year. Department midterm and final.

Algebra 2 **Full Year - 1 Unit**

Prerequisite: A class and exam average of 80 or higher in Geometry.

Students extend their study of mathematics to include functions, trigonometry, modeling, and statistics. A graphing calculator is required for this class. There is a department midterm and final.

Algebra 2 Honors **Full Year - 1 Unit**

Recommended: A grade of 90 or higher in Geometry.

This is the Honors level version of the Algebra 2 course described above. It is intended for students who have a keen interest and aptitude in mathematics. Students at the honors level explore additional topics, and at a deeper level. A graphing calculator is required for this class. There is a department midterm and final.

Pre-Calculus **Full Year - 1 Unit**

Pre-requisites: Grades of 80 or higher on all previous mathematics coursework.

This is a full-year elective course for students who want to continue their study of mathematics in high school. Pre-Calculus extends the analysis of functions and their associated characteristics with an emphasis on the interplay between numerical, algebraic, and graphical interpretations of functions. **Students take the Algebra 2 regents exam in January.** This course is excellent preparation for AP Statistics and for Calculus. It is not appropriate preparation for AP Calculus. Students need to provide their own graphing calculator. There is a department final.

Pre-Calculus Honors**Full Year - 1 Unit**

Prerequisite: Grades of 90 or higher on all previous mathematics coursework and a teacher recommendation. Although the same description as above applies, the Honors course diverges substantially from the other course to build a foundation for AP Calculus. Students need their own graphing calculator throughout the year. This course is excellent preparation for AP Calculus and AP Statistics classes and students often enroll in both. Students need to provide their own graphing calculator. **Students take the Algebra 2 regents exam in January.** There is a department midterm and final.

Calculus**Full Year - 1 Unit**

Prerequisite: Pre-Calculus

This class is a natural continuation of the study of functions and their behavior from Pre-Calculus. Topics include the study of derivatives and integrals, the accumulation of area under a curve. This class is intended to provide an introduction to the richness of calculus for students who are interested in continuing their study of mathematics but who are not interested in the rigor of the Advanced Placement program. Students need to provide their own graphing calculator. There is a department midterm and final.

AP Calculus AB**Full Year - 1 Unit**

Prerequisite: Mastery in Pre-Calculus Honors and a teacher recommendation.

This is an introductory course in college level Calculus. Topics include functions, limits, continuity, derivatives and integration of single variable functions, and applications to problem solving. The curriculum follows the College Board guidelines and is intended for students with an avid interest in mathematics. All students take the AP exam in May. A calculator is provided for use during the year. In addition to the AP exam, there is a department midterm and final.

AP Calculus BC**Full Year – 1 unit**

Prerequisite: Mastery in Pre-Calculus Honors and a teacher recommendation.

This course covers the material in two semesters of college calculus. In addition to the topics in the AB course above, it includes additional mathematics, such as the study of parametric, polar, and vector defined motion as well as the Taylor and McLaurin series. This is a challenging course intended for students intent on further study in mathematics. There is a department midterm and final.

AP Statistics**Full Year – 1 Unit**

Prerequisite: Pre-Calc or Pre-Calc H with an average of at least 85 and a teacher recommendation.

This is an introductory course in college level statistics. The course is divided into four major strands, namely, exploratory analysis, planning a study, probability, and statistical inference. All students take the AP examination in May. Technology is used extensively throughout the curriculum. Students need to provide their own graphing calculator.

AP Computer Science Principles**Full Year – 1 Unit**

Prerequisite: Pre-Calc or Pre-Calc H.

This course introduces essential ideas of computer science with a focus on how computing can impact the world. Along with studying the fundamentals of computing, you will create technology that has a practical impact and gain a broader understanding of how computer science impacts people and society. You will learn how to develop apps for Android devices and how to code in Java, with a focus on the latter. In addition to taking the AP exam in May, you will submit a substantial research paper and a computer program directly to the College Board as part of a digital portfolio.

Electives

Data Analysis**Semester – ½ unit**

Recommended: two years of mathematics.

The analysis of data is deeply embedded in our society; it is one of the branches of mathematics that deals explicitly with the real world. The emphasis in this course is on critical thinking; we use a variety of real world activities to understand the role and power of statistical thinking. This course is intended to supplement a student's mathematics journey through high school rather than as a replacement for a traditional course.

The Visual Beauty of Mathematics

Semester – ½ unit

Recommended: two years of regents-level mathematics

From Fibonacci to fractals, mathematics and art are inseparable. This is a hands-on course – we design our own paper tiles, create our own coloring schemes, and make prints of numbers that don't exist. This course is intended for students who are looking for an alternative to traditional mathematics.

Programming (no math credit)

Semester – ½ unit

Students are introduced to the fundamentals of JAVA programming. Students explore a variety of applications for programming, such as data management, exploring mathematics, and creating visual displays.

Coding for Fun (no math credit)

Semester – ½ unit

[NOT OFFERED IN 2019-2020 SCHOOL YEAR]

Students are introduced to the fundamentals of block programming using a variety of software and app-based programs. Students explore how programming lies at the heart of such different applications as video games and robotic movement.

SCIENCE

The Science Department provides the full range of science courses as recommended by the New York State Board of Regents and additional courses for elective or advanced study in science. To obtain a Regents diploma, a minimum of 1 Regents exam must be passed with a grade of 65 or higher (in either a physical or life science). To obtain an Advanced Regents diploma, a minimum of 2 Regents exams must be passed with a grade of 65 or higher (1 in physical science and 1 in life science). In addition, 3 years of science must be successfully completed as part of the graduation requirements (for additional information, see the table on “Diploma Requirements” in the beginning of this booklet). All students will take Earth Science in the 8th grade as a high school course for high school credit. College preparation is best accomplished by a four year sequence of study of core courses that includes Earth Science, Living Environment, Chemistry, and Physics.

General science sequence for high school students

8th grade: Regents Earth Science taken for high school credit

Year 1: Living Environment with Laboratory or Earth Science with Laboratory

Year 2: Chemistry with Laboratory; Advanced Geology

Year 3: Physics *or* AP Biology *or* AP Physics *or* AP Chemistry *or* AP Environmental Science, all with laboratory, or any of the listed electives

Year 4: Physics *or* AP Biology *or* AP Physics *or* AP Chemistry *or* AP Environmental Science, all with laboratory, or any of the listed electives

If the student’s schedule permits, and if the prerequisites have been met, electives may be taken simultaneously with Earth Science, Living Environment, Chemistry, or Physics.

Advanced Placement Courses may be taken once the student completes Chemistry.

CORE COURSES: Earth Science, Living Environment, Chemistry, Physics

The core courses of Earth Science, Living Environment, and Chemistry include project work, laboratory exercises, and computer lab work. Earth Science and Living Environment classes will culminate in a Regents exam. Chemistry students will take a local final examination during final exam week. The New York State Board of Regents requires a minimum of 1200 minutes of laboratory work, and clearly written lab reports, in order for a student to be admitted to the Regents examination. Curriculum Resource Guides can be found at the New York State Education Department website (www.nysed.gov). Physics will end with a final exam during the AP exam period and a final project in June. Students may opt to take the Regents exam in Physics in June.

Earth Science (with Lab)

Full Year - 1 Unit

This course is a study of the earth’s processes and includes a detailed study of the following subjects: geology, astronomy, and meteorology. The curriculum covers the New York State Syllabus, as well as additional enriching topics. Topics covered through the year include:

Density	Minerals	The Rock Cycle	Plate Tectonics
Earthquakes	Volcanoes	The History of the Earth	Weathering and Erosion
Meteorology	Astronomy	Oceanography	

Living Environment (with lab)

Full Year - 1 Unit

This course is designed to provide a broad introduction to the fundamental principles of life science. It is intended that The Living Environment provides an awareness of nature by introducing basic scientific concepts and an understanding of biological processes. It covers the New York State Syllabus, as well as enriching topics. The enriched curriculum covers seven core topics, including:

Unity and diversity among living things	Maintenance in living things
Human Physiology	Genetics
Reproduction and Development	Enrichment Topics
Evolution	Ecology

Chemistry (with lab)**Full Year - 1 Unit***Prerequisite: Earth Science & Living Environment, Algebra exam score: 80% or better*

This course of study presents a modern view of chemistry. The outline of topics provides the unifying principles of chemistry together with their related facts. It covers the New York State Syllabus, as well as enriching topics. The following principles are basic to the understanding of our environment:

Matter and Energy	Atomic Structure	Bonding
Periodic Table	Mathematics of Chemistry	Kinetics and Equilibrium
Acid-base theories	Redox and Electrochemistry	Organic Chemistry
Nuclear Chemistry	Application of Chemical Principles	Enrichment Topics

Physics (with lab)**Full Year - 1 Unit***Prerequisite: Chemistry*

This course presents a modern view of physics with an emphasis placed on the fundamental concepts underlying this science. The New York State-based syllabus is designed to encourage the utilization of such basic concepts as the conservation of energy; conservation of momentum and charge; motion and force in one and two dimensions; universal gravitation; work, power, momentum & energy; waves, sound, and light; circuits and electromagnetism; and modern atomic theory. This approach promotes an appreciation of the unity of physics.

Electives****Please carefully note the requirements for each individual elective.******Science Research****Two Years - 2 Units**

Prerequisite: Earth Science, Living Environment, and Chemistry: grade of 80% or better
Depending on the number of students who sign up for the course, an application may be required.

This elective is a two year course (junior and senior year) with the goal of performing authentic science research. The class will teach the scientific process including such topics as how to perform a literature review, how to read a peer-reviewed scientific article, and how to write a research paper. Students will be required to find a mentor to guide them through an authentic research experience and will be expected to collect data over the summer between their junior and senior years.

In their senior year, students will write a research paper and create a poster presentation based on their research. Students will have the opportunity to submit their research to the major science competitions such as Regeneron STS, Siemen's Competition, Junior Science and Humanities Symposium, and ISWEEEP. All senior students will be required to participate in the Westchester Science and Engineering Fair (WESEF). All junior students will be required to present at the Westlake Science Fair the first weekend in June. Juniors and seniors will present at our annual Science Research Symposium at the beginning of June. Students are required to pay registration fees for JSHS (\$40.00) and WESEF (\$50.00). Financial assistance may be provided on a needs based basis.

Please note: This course requires a two-year commitment during junior and senior years.

Biology Advanced Placement (with lab)**Full Year - 1 Unit***Prerequisite: Chemistry with a grade of 85% or better*

This course is designed to be the equivalent of the first year of college-level introductory biology. It includes those topics regularly covered in such a course: molecules and cells, genetics and evolution, organisms and populations. It aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology.

Chemistry Advanced Placement (with lab)**Full Year - 1 Unit***Prerequisite: One year of Chemistry with a course and Regents exam grade of 85% or better**Recommended: One year of Physics with a grade of 80% or better*

The Chemistry Advanced Placement course is the equivalent of a college introductory course in Chemistry. Topics covered are extensions of concepts in basic chemistry: Thermochemistry, Gas Laws, Electronic Structure of Atoms, Covalent and Ionic Bonding, Liquids and Solids, Solutions, Kinetics, Equilibrium, Acids and Bases, Redox Reactions, Organic Chemistry and Nuclear Chemistry.

Environmental Science Advanced Placement (with lab)**Full Year 1 Unit***Prerequisite: Living Environment and Chemistry Regents exams with a grade of 80%*

The AP Environmental Science course enhances student awareness of their living environment. The material covered is the equivalent of an introductory environmental science course taken in college. Some of the important topics covered will be: water and air pollution, use of fossil fuels, ozone depletion, deforestation and species extinction. This course will address some of these environmental issues and allow students to formulate opinions and ideas concerning causes, prevention and remediation. In addition to providing a global perspective, this course will allow students to make a connection between their local community and its environment.

Physics C-Mechanics Advanced Placement (with lab)**Full Year – 1 Unit***Prerequisite: One year of Chemistry with a grade of 85% or better.**Co-requisite of Pre-Calculus or higher.**No prior course work in physics is necessary.*

The AP Physics C: Mechanics course applies both differential and integral calculus and provides instruction in each of the following six content areas:

- Kinematics
- Newton's laws of motion
- Work, energy and power
- Systems of particles and linear momentum
- Circular motion and rotation
- Oscillations and gravitation

In addition, the following topics from the Physics 1 course will be covered:

- Electrostatics: electric charge and electric force
- DC circuits: resistors only
- Mechanical waves and sound

AP Physics C: Mechanics is equivalent to a one-semester, calculus-based, college-level physics course, especially appropriate for students planning to specialize or major in physical science or engineering. A minimum of 20 percent of instructional time is devoted to hands-on and inquiry-based laboratory investigations. Class participants will prepare for the Physics C-Mechanics Advanced Placement Examination administered in May.

Physics C-Electricity & Magnetism Advanced Placement (with lab)**Full Year–1 Unit***Prerequisite: Successful completion of AP Physics C-Mechanics, or Regents Physics**Co-requisite of Calculus.*

The AP Physics C: Electricity and Magnetism course applies both differential and integral calculus, and builds upon the AP Physics C: Mechanics course by providing instruction in each of the following five content areas:

- Electrostatics
- Conductors, capacitors, and dielectrics
- Electric circuits
- Magnetic fields
- Electromagnetism

In addition, the following topics from the Physics 2 course will be covered:

- Thermodynamics: laws of thermodynamics, ideal gases, and kinetic theory

- Fluid statics and dynamics
- Geometric and physical optics
- Quantum physics, atomic, and nuclear physics

AP Physics C: Electricity and Magnetism is equivalent to a one-semester, calculus-based, college-level physics course, especially appropriate for students planning to specialize or major in physical science or engineering.

A minimum of 20 percent of instructional time is devoted to hands-on and inquiry-based laboratory investigations. Class participants will prepare for the Physics C-Electricity & Magnetism Advanced Placement Examination administered in May.

Advanced Geology—SUNY Oneonta

One Semester (Fall)—½ Unit

Prerequisite: Earth Science

Recommended: Grade of 80% or higher in Earth Science, can be taken concurrently with full year science courses.

Advanced Geology is a **college** course that investigates the geologic story of the United States. It is offered through SUNY Oneonta and taught at Hastings High School. **Students who complete Advanced Geology will earn 4 college credits from SUNY Oneonta** in the form of an official college transcript. Students may opt to pay for these credits (currently \$200) at the beginning of the course (although this is not a course requirement).

The main focus of Advanced Geology is to understand the geologic story of North America through its landscape features. For the first half of the course we will learn about the geologic story of the Lower Hudson Valley, focusing on concepts learned during three field trips to Larchmont, NYC, and the Shawankunk Mountains. The second portion of the course is spent dissecting the formation of the Western US and Hawaii--places that are geologically active. Major concepts and topics covered in a standard introductory geology class in college are incorporated into our study of these diverse regions.

Students will also learn valuable college-level skills such as time management, research methods, studying strategies, presentation techniques and development, and learning how to take effective notes in class and while reading. Students will also learn about themselves as learners which will help them develop strategies for success in upper-level courses in high school and college.

Advanced Geology may culminate in a summer field trip to a location of geologic significance. Since 2002, there have been 14 multi-week summer trips to Joshua Tree National Park, the Pacific Northwest, The Rockies and the Canyon Country of Utah and Arizona, Hawaii, and the major national parks of the Western US and Canada.

Culinary Chemistry

One Semester-½ Unit

In this course, students begin by exploring the science of food, from growing it and preparing it all the way to eating it and digesting it! As scientists, students will have the opportunity to test their own ideas and answer their experimental questions in our classroom kitchen. From there, students will discover the serious dangers we and our planet face due to overpopulation, over-farming, unequal access to resources, pollution, and climate change. You will be able to design and engineer solutions to our global food crisis, working towards feeding the nine billion humans who will share this planet by 2050.

Deep Space Astronomy

One Semester-½ Unit

Prerequisite: Earth Science

One of the contemporary frontiers of science is the examination of the origin, expansion, and composition of the universe. Topics such as Black Holes, Galactic Clusters, Supernovae, Nebulae, Quasars, Pulsars, and theories of interstellar “Dark Matter” capture our curiosity regarding Deep Space Astronomy. Investigation of these topics using definitive information

resources such as textbooks, journals, magazines, and the Internet will help separate fact from fiction. This course will promote individual investigation and teamwork on broad research projects, which will help us answer the question, “where in the world is our world.”

Disease and Society

One Semester-½ Unit

Prerequisite: Living Environment

Whether in time of peace, or time of war, microorganisms have been one of humanity’s greatest of enemies. For eons, these single-celled creatures, from the plague to anthrax, have been manipulating people to be their reproductive hosts who transport them to all inhabited places on the earth. In this course, we will study a wide variety of topics, such as, the history of disease and prevention, attempts at worldwide eradication, bacterial/viral biology, bio-terrorism, and biochemical warfare.

Introduction to Forensic Science

One Semester - ½ Unit

Prerequisite: Living Environment

Forensic science is an ever-changing field that has spurred much interest in popular culture. Recent advances in scientific methods have had an enormous impact on the entire criminal justice system. This course is designed to introduce students to the basics of forensic science including the many scientific concepts, methods and practices used to analyze physical evidence.

Introduction to Forensic Science will help provide an understanding of the science of crime detection. Laboratory experiments will be done including hair analysis, fingerprint analysis, toxicology comparisons, and various crime scene activities. Students will also view several videos from the many investigation shows on television, allowing for a better understanding of the procedures used in analyzing crime scenes.

Climate Change and Weather

One Semester (Spring) -½ Unit

Prerequisite: Earth Science

Throughout geologic history, climate has changed repeatedly, alternating from cold climates where significant portions of the Earth’s surface were covered by glaciers to much warmer periods where glacial ice was nearly non-existent. Currently, we are experiencing a gradual warming period, referred to in the press as “global warming.” Such changes in climate, whether rapid or gradual, can cause greater weather extremes; reduce the amount of fresh water stored in glaciers—thus impacting local water supplies and changing sea level; alter ecosystems—which could impact the habitat range of species; increase the rate of species extinction and cause an overall reduction in biodiversity; exacerbate the devastation caused by invasive species; and impact the ocean’s food chain by destroying coral reefs. When coupled with human population growth (projected to increase from today’s 7 billion to 9 billion in the next 25 years), these changes will increase global tensions and could lead to a greater incidence of war, famine and disease.

To understand this complex phenomenon and the impact it may have on our lives and our planet, we will investigate the answers to a variety of questions including (but not limited to): Is this a normal pattern? How has this happened in geologic history? What is our role in altering climate? What will the consequences be? Will our change in climate be catastrophic (rapid) or gradual? Is the unusually warm weather that we have been experiencing a result of climate change?

Clearly, understanding how our climate works is one of the most important issues facing society today.

***This course will be offered for the Spring Semester only.*

MATERIAL SCIENCE

One Semester-½ Unit

Prerequisite: None.

The great developments that shall be remembered from science in the 21st Century may turn out to be those that involve the discovery, production, and use of new materials. It takes only a moment to brainstorm a variety of applications in this field that affect our everyday life: carbon fiber bicycle frames; powerful neodymium magnets in speakers and electric motors; super-bright L.E.D. lights in traffic; ceramic kitchen knives and artificial hip joints; teflon in a rollerblade bearing or on the surface of a frying pan. These are just a few examples of the many novel appearances of newly developed compounds in daily life. This is a hands-on applied chemistry course, where students will explore the physical and chemical properties of modern substances and mixtures, and conduct research in small-group investigation. We shall also use computer-interfaced probeware to measure physical quantities, and examine the business and manufacturing realms of industry and research.

NANOTECHNOLOGY

One Semester- $\frac{1}{2}$ Unit

Prerequisite: None.

What is Nano-? This prefix means “billionth.” Human hair grows five nanometers per day. The tarnish on a silver tea set gets its color from a layer of atoms several hundred nanometers thick. Nanotechnology is the study of matter on the smallest of scales, and one of the fastest growing branches of science today. In this emerging field, we will study imaging techniques such as electron microscopy; manufacturing techniques that lead to the production of incredibly information-dense computer chips; molecular manipulation techniques that allow you to spell out a word with individual atoms; and molecular design processes that allow us to create such diverse products as stain-resistant khakis, smart materials that respond change their own color and texture, and bullet-proof glass. The day may come when soccer-ball shaped molecules deliver drugs to target tissues in the human body, self-replicating nanobots provide a cure for cancer, and our brains can interface directly with the Internet. We will use molecular modeling and other computer-based research tools to look forward in time!

Engineering and Technology

One Semester- $\frac{1}{2}$ Unit

Prerequisite: None

This course will serve as an introduction to the theories and applications of Engineering and Technology. The intention is to provide some of the basic foundational skills and knowledge needed for future study in Engineering and Technology related fields, fields which consistently provide a wide range of excellent opportunities for individuals with appropriate skills. The major units for the course will include Statistics, Automotive Engineering, Aeronautical Engineering, Architecture, and Energy. Students will complete individual and group projects, including the design and construction of toothpick bridges, solar hot water heaters, wind generators, and paper airplanes. In addition, students will create poster profiles of bridges, jets, buildings, automobiles, and energy generation systems or facilities and use the Google Sketch Up to design a home or building.

Genetics

One Semester – $\frac{1}{2}$ Unit

Prerequisite: Living Environment

The field of genetics is currently being revolutionized and has been brought to the forefront of biology. This course provides a solid understanding of classical and molecular genetics. Topics covered in the course will include the race to discover DNA, DNA replication, gene transcription and translation, regulation of gene expression in prokaryotes and eukaryotes, DNA mutations and repair mechanisms, bacterial genetics, chromosomal structure and function, genome mapping, Mendelian inheritance and exceptions, and population genetics. Laboratory experiments involve isolating and transforming DNA from bacterial cells. Students will analyze transgenic animals to localize gene expression and protein function. Experiments involve breeding mutant *Drosophila* in order to discover Mendel's classic laws of inheritance.

Anatomy and Physiology I and II

Each Semester - $\frac{1}{2}$ Unit

Prerequisite: None

Anatomy and Physiology I and Anatomy and Physiology II are two separate courses and are offered two different semesters. Anatomy I introduces the basic study of anatomical terminology and major body systems such as the skeletal system, the muscular system, the immune system, the circulatory system, and the reproductive system. Anatomy II continues on with the major body systems such as the integumentary system, the nervous system, the endocrine system, the digestive system, the respiratory system, and the excretory system. In both classes students will learn through reading

materials, study guides, videos, worksheets, group work, projects, assessments, and labs. These courses will provide students interested in the medical and health professions an opportunity to learn about the body systems in greater detail. These courses are open to all grades and students do not have to take Anatomy I to take Anatomy II.

Geology and Warfare **One Semester (Spring) – ½ Unit**
[NOT OFFERED IN 2019-2020 SCHOOL YEAR]

Prerequisite: Earth Science.

Geology Society and Warfare is a multidisciplinary approach to understanding how human society has been influenced by geology. To understand this we will first learn how geologic principles are applied to modern world-wide geology. This course will additionally focus on the relationship between the local geology and the growth, development, and maintenance of societies throughout history. Economic geology, including the importance of mining and quarrying, will be discussed. Finally, specific wars and battles, such as the Civil War, the Battle of Normandy, and the current ongoing conflict in the Mid-East, will be connected to the local geologic setting. This will be a unique science course offering in that it will bring in aspects of human history and provide an important cross-disciplinary study of social studies and geology. Field trips may be taken to locations within the Lower Hudson Valley.

Robotics **One Semester – ½ unit**

Prerequisite: None

This course provides an introduction to robotics for students with no programming background using LEGO MINDSTORMS EV3 kits. Students will learn to construct, control and program these robots through investigative and exploration activities. Research projects will expose the students to the engineering process.

Course Objectives:

1. Introduce students to programming mobile robots using LEGO MINDSTORMS EV3:
 - Motors and rotation, and sensors (sound, light, touch and ultrasonic)
 - Programming using the NXT-G graphical programming language
 - Robot navigation and path planning
 - Systems and systems analysis
 - Experimental process
 - Communicating results through formal project documentation
2. Integrate Science, Technology, Engineering & Mathematics using STEM Education concepts:
 - Engineering process
 - Time management
 - Project management
 - Problem solving and teamwork

World Languages

The World Languages Department offers courses in French, Spanish and Latin for beginners as well as for those students who are continuing in their foreign language study from the middle school. The programs are designed to develop the four basic skills: speaking, writing, reading, and auditory comprehension through interpretive, interpersonal and presentational modes. Cultural appreciation is an integral part of each course. The curricula are aligned with both state and national standards as established by the American Council on the Teaching of Foreign Languages (ACTFL).

The program is highly academic in nature and prepares the student for the NYS-approved Checkpoint B benchmark exams at the end of level III and for the opportunity to pursue the New York State Seal of Biliteracy during senior year.

It should be noted that it is important to include a world language in a student's high school program. Most colleges and universities require world language credit for admission. Additionally, individuals with a communicative proficiency in a language other than English have increased opportunities when seeking employment.

Sequences of Courses

French I, Latin I, Spanish I

A first level course for the beginning student who has had little or no prior instruction in the language.

French II, Spanish II, Latin II

Prerequisite: completion of French/Spanish I, IB, or Latin I. Level II courses are designed to further one's skills in the four aspects of language learning: speaking, listening, reading and writing and cultural appreciation.

French III, Spanish III, Latin IIIH

Level III courses provide intensive study in all areas of language skills. The NYS-approved Checkpoint B benchmark exams are given in June.

French IVH, Spanish IVH, Latin IVH

Level IV courses are designed to develop advanced proficiency in all levels of communication and serve as a prerequisite to French V Honors and Spanish V Honors. Students can earn credit through the SUNY Albany University in the High School Program upon successful completion of these courses.

Spanish Conversation and Culture Through Film

Prerequisite: Spanish IV Honors, or taken concurrently with Spanish IV H (May be taken in lieu of Spanish IV Honors with permission from the teacher, but does not count as a prerequisite for Spanish V Honors.)

This course is designed to develop conversational skills and cultural awareness of Spain and Latin America through the medium of film.

Spanish V Honors

Prerequisite: Spanish IV Honors

This course is equivalent to a college level course at the Intermediate High Level of the National ACTFL Standards. Students can earn credit through the SUNY Albany University in the High School Program upon successful completion of this course.

French V Honors

Prerequisite: French IV Honors

This course is equivalent to a college level course at the Intermediate High Level of the National ACTFL Proficiency Standards. Students can earn credit through the SUNY Albany University in the High School Program upon successful completion of this course.

World Language Course Descriptions

French I

[Not Offered in 2020-2021 School Year]

Full Year – 1 Unit

Prerequisite: A desire to learn a world language

This course provides an introduction to the French language and culture. Emphasis is placed on developing audio-lingual skills and building a strong foundation in basic grammatical structures. Reading and writing skills are developed and the cultures of French-speaking areas worldwide are explored. This course prepares students to continue their study of French in Level 2.

French II

Full Year – 1 Unit

Prerequisite: French I or French I B

French II is a comprehensive course designed to further one's skills in the four aspects of language learning: speaking, listening, reading and writing. Emphasis is placed on practical conversation and cultural applications. The course is structured in thematic units based on aspects of everyday life and culture in the French-speaking world. Grammar is studied more in depth and verb study is expanded so that students attain accuracy of expression on a broad range of topics.

French III

Full Year – 1 Unit

Prerequisite: French II

French III is a preparatory course for the NYSAWLA Checkpoint B benchmark exam which is taken in June. This course provides an intensive study of grammar, composition, conversation and the development of auditory and reading comprehension skills. Emphasis is placed on the communicative value of these skills and their application to practical and realistic situations. The incorporation of various aspects of French culture is an integral part of this course and serves as the foundation for the thematic units.

French IV Honors

Full Year – 1 Unit

Prerequisite: French III

French IV emphasizes oral proficiency through *exposés*, debates, production of student made audio/video recordings as well as free conversation. Advanced listening, reading and writing skills are further developed and enhanced with special attention to correct grammatical usage and accuracy of expression. Films from the French-speaking world are incorporated into the program, and students also study original works of French literature. French culture is carefully interwoven into each unit of study. This course is intended to prepare students to continue their study at the French V Honors level. Students will have the opportunity to earn college credit through the SUNY Albany University in the High School program upon successful completion of this course.

French V Honors

Full Year – 1 Unit

Prerequisite: French IV Honors

This course is intended for those students who seek to develop their proficiency and skills at an advanced level. It emphasizes the use of the French language for active communication

with a focus on vocabulary enrichment and self-expression, using interpretive, interpersonal and presentational modes. The course will explore the Francophone world through film and works of modern literature, newspapers, magazine articles and other non-technical writings. Students will enhance their ability to express themselves in French, both orally and in writing, with accuracy and facility according to state and national standards. Students will also have the opportunity to earn college credit through the SUNY Albany University in the High School program upon successful completion of this course.

Latin I

Full Year – 1 Unit

Prerequisite: A desire to learn a classical language

In this introductory course, students will learn basic vocabulary, syntax and inflectional systems orally and in writing. They will also become familiar with classical Roman culture through the study of literature, daily life, myths, architecture, and history. Additionally, they will develop an awareness of Latin roots in English and determine the meanings of words through the study of prefixes, suffixes and specialized vocabulary.

Latin II

Full Year – 1 Unit

Prerequisite: Latin I

Latin II is a continuation of instruction following Latin I. Students will increase their knowledge of vocabulary, syntax and inflectional systems orally and in writing. They will further their ability to read increasingly more difficult texts in Latin and continue their exploration of Roman culture and literature. Additionally, through their knowledge of Latin, they will increase their English vocabulary and understanding of grammar principles.

Latin III Honors

Full Year – 1 Unit

Prerequisite: Latin II

This intermediate course is designed to build upon the skills developed in Latin II. Students will be introduced to extended reading in authentic Latin and deepen their knowledge of vocabulary, syntax, and inflectional systems orally and in writing. They will also discover the broader aspects of the Latin-speaking world, especially the characteristically Roman arts of politics, war, and administration. At the conclusion of this course, students will sit for the CAWNY Checkpoint B benchmark exam. Students will also have the opportunity to earn college credit through the SUNY Albany University in the High School program upon successful completion of this course.

Latin IV Honors

Full Year – 1 Unit

Prerequisite: Latin III Honors

In this course, students will deepen their awareness of cultural, political, and literary history of the “Golden period” of Roman literature. Students will develop their reading proficiency through exploration of literary devices of Latin literature and will further their understanding of the Latin Republic and Early Empire through historical and literary context. Students will also have the opportunity to earn college credit through the SUNY Albany University in the High School program upon successful completion of this course.

Spanish I

Full Year – 1 Unit

Prerequisite: A desire to learn a foreign language

Spanish I provides an accelerated introduction to the Spanish language. Emphasis is placed on developing audio-lingual skills and building a strong foundation in basic grammatical structures. The course includes intensive preparation of all language skills. The cultures of the Spanish-speaking regions are explored and interwoven into each thematic unit. This course prepares students to continue their study of Spanish in Level 2.

Spanish II

Full Year – 1 Unit

Prerequisite: Spanish I from middle school with successful completion of the NYSAWLA Checkpoint A exam, or Spanish I (HS)

Spanish II is a comprehensive course designed to further one's skills in the four aspects of language learning: speaking, listening, reading and writing. Emphasis is placed on practical conversation and cultural applications. Units are based on thematic topics related to everyday life and cultural aspects in the Spanish-speaking world. Grammar is studied more in depth and verb study is expanded so that students attain accuracy of expression on a broad range of topics.

Spanish III

Full Year – 1 Unit

Prerequisite: Spanish II

Spanish III is a preparatory course for the NYSAWLA Checkpoint B benchmark exam which is taken in June. This course provides an intensive study of grammar, composition, conversation and the development of auditory and reading comprehension skills. Emphasis is placed on the communicative value of these skills and their application to practical and realistic situations. The incorporation of various aspects of Hispanic culture is an integral part of this course, and units are based upon those themes.

Spanish IV Honors

Full Year – 1 Unit

Prerequisite: Spanish III

This course emphasizes oral proficiency in Spanish through stories read in class, current news items, Spanish films, as well as free conversation. Advanced listening, reading and writing skills are further developed and enhanced with special attention to correct grammatical usage and accuracy of expression. Students explore original works of Spanish and Spanish American literature, and culture is carefully interwoven into each unit of study. This course is intended to prepare students to continue their study at the Spanish V Honors level. Students will also have the opportunity to earn college credit through the SUNY Albany University in the High School program upon successful completion of this course.

Spanish Conversation and Culture through Film

Full Year – 1 Unit

Prerequisite: Spanish IV Honors, or may be taken concurrently with Spanish IV Honors (May be taken in lieu of level IV with permission from the teacher, but does not count as a prerequisite for Spanish V Honors.)

This course will help students develop cultural awareness and perspective. A variety of historical and contemporary issues related to Spain and Latin America will be explored through Spanish language films. Students will be expected to further develop their interpersonal and presentational speaking proficiency.

Spanish V Honors

Full Year – 1 Unit

Prerequisite: Spanish IV Honors

This course is intended for those students who seek to develop their proficiency and skills at an advanced level. It emphasizes the use of the Spanish language for active communication with a focus on vocabulary enrichment and self-expression, using interpretive, interpersonal and presentational modes. Spanish works of modern literature, newspapers, magazine articles and other non-technical writing will be read and discussed. Students will enhance their ability to express themselves in Spanish, both orally and in writing, with accuracy and facility according to state and national standards. Students will also have the opportunity to earn college credit through the SUNY Albany University in the High School program upon successful completion of this course.

Art

Advanced Art

One Semester- ½ credit

Prerequisite: Studio Art, Drawing & Painting

This class is for students who love art and want to build a portfolio for personal development, AP Art, or college admissions. Students are encouraged to integrate their artistic skills with their individual perspectives to develop their unique visual voices. Student choice is encouraged, but individualized lessons and motivations are available along with the opportunity to work independently.

Advanced Media Arts

One Semester- ½ credit

Prerequisite: Media Arts

This course explores how techniques used in Adobe Illustrator and Photoshop can be applied in a design context. Projects include logo design, app user interface and user experience design, icon design, information design and visual literacy, poster, book jacket, and album cover design. If you can think of something that is followed by the word *design*, then we're probably going to experiment with it. We will build on techniques learned in Media Arts, so taking this class immediately following that prerequisite is a good idea, though not necessary. Samples projects include logo designs, book and album art, user interface and app icon design, data visualization and more.

Class limited to 16 students in the Media Arts lab.

Advanced Placement Photography

Full Year-1 credit

Prerequisite: Photo 1 and Digital Photography 1

(Photo 2 and Digital Photo 2 is also strongly recommended)

In this course, a 2-D Design portfolio is created for submission and adjudication by the College Board at the end of the year. A score of 3 or more may earn students college credit. This class supports students who are creating a 2-D Design portfolio that consists of film and digital photography and computer graphics. These media require special supervision and techniques that separate them from students working in more traditional studio media (see AP Studio Art below). AP Photo students are not limited to film/digital media in their final portfolios, but this class affords students the maximum instructional time and access to the necessary facilities.

Class limited to 16 students in the Media Arts lab.

Advanced Placement Studio Art

Full year- 1 credit

Prerequisite – Studio Art, Drawing & Painting, or 2 Art credits & Portfolio review

(Advanced Art is also strongly recommended)

This advanced course is designed for students who love art, make art regularly, and want to challenge themselves artistically. Students will be required to create a comprehensive and consistent body of work based on a visual investigation of their choice. This portfolio will be submitted for adjudication by the College Board. Mastery of content, technique and process will be developed through independent student work and class assignments. A substantial amount of work is required outside of class to complete the AP Studio Art portfolio.

Animation

One Semester- ½ credit

No Prerequisite

This half-year course introduces students to traditional hands-on animation techniques. Students will learn about character and story design, the narrative arc, and how to create believable character development. Students will use a variety of technology and software, including iPads outfitted with iStopMotion, iMovie, Adobe After Effects and others.

Class limited to 16 students in the Media Arts lab.

Ceramics I

One Semester-½ credit

No Prerequisite

This half year course is designed to teach students the basics of handbuilding techniques in ceramics. In this class we will use, pinch, coil and slab techniques to create both functional and sculptural ceramic pieces. By the end of the course students will be able to work more independently, choosing appropriate clay forming techniques to successfully and creatively express their ideas.

Ceramics II**One Semester-½ credit***Prerequisite: Ceramics I*

In this half year course, students will be introduced to the pottery wheel. Students will learn centering techniques as they begin throwing basic forms. They will also continue the exploration of their hand building and sculpture skills. All students will learn new glazing techniques. Students will work with increasing independence, choosing personalized themes and appropriate clay forming techniques to successfully and creatively express their ideas.

Ceramics III**One Semester-½ credit***Prerequisite: Ceramics I, Ceramics II*

Emphasis is placed on students developing a series of pieces with a distinct personal style demonstrating creativity and refining design skills. Students may work in hand building or wheel throwing techniques, or a combination of both. Much of the learning process is geared through student-designed projects, collaborative projects, and individualized instruction.

Creative Construction**One Semester- ½ credit***No Prerequisite*

In this half year course students will design and build functional art objects like piggy banks, birdhouses, pendulum clocks, working lamps, toys and much more! Students will learn how to use basic power tools like drill, jig saws, circular saws, and sanders. Through product design projects students will explore construction techniques and materials to create three-dimensional work with wood, found objects, recycled metal, wire, clay, and paper mache. This is an excellent course for students interested in a 3-D art sequence.

Class limited to 16 students.**Creative Construction II****One Semester- ½ credit***Creative Construction I*

In this half year course students will expand on the skills and concepts taught in Creative Construction I. Students will continue to explore construction techniques and materials to create three-dimensional work. Students will work with increasing independence, choosing more personalized projects, themes and appropriate materials and tools to successfully and creatively express their ideas. This is an excellent course for students interested in a 3-D art sequence.

Digital Photography**One Semester- ½ credit***No Prerequisite*

Students are introduced to the world of digital photography. We cover basic camera settings and exposure controls, image editing and manipulation in Adobe Photoshop. We will also make a study of master photographers from the past and present. This course is strongly recommended for students who are interested in taking AP Photography.

Class limited to 16 students in the Media Arts lab.**Digital Photography 2****One Semester- ½ credit***Prerequisite: Digital Photography*

Students will build on the core techniques and concepts they learned in Digital Photography and experiment with what is possible within the medium. Advanced image capture and image manipulation in Adobe Photoshop will also be covered. We will also make a study of master photographers from the past and present. This course is strongly recommended for students who are interested in taking AP Photography.

Class limited to 16 students in the Media Arts lab.**Drawing and Painting****Full Year-1 credit***Prerequisite: Studio Art*

If you enjoyed Studio Art and like to work with art materials, and if you want to continue to build a portfolio while learning new art skills and processes, this class is for you. It starts where Studio Art ends, expanding with a greater emphasis on student choice and personal expression. New materials and processes are introduced while familiar techniques and media are revisited and explored in greater depth. This class is a prerequisite for Advanced Art and AP Studio Art.

Illustration**One semester- ½ credit***No Prerequisite*

Students will create images that tell stories, develop new characters and create advertising for real-life events like the HS musical. In this class, students will learn and use traditional media, drawing, painting, collage, printmaking and digital tools to create their images. Composition, color, light and shadow will be explored as elements to create drama and suspense. Sample projects include children's book illustrations, editorial/political art, posters, and wearable graphics. Emphasis is placed on idea development, and visual communication.

Media Arts**Full Year-1 credit fulfills art requirement***No Prerequisite*

If you are interested in learning how to make art on the computer, this foundation course is for you. Students will learn how to use Adobe CS6 programs Illustrator and Photoshop to explore art concepts and techniques while making their own art. Students will explore the elements and principles of design, art history and art theories by making creative vector and bitmap images. Students will learn how to digitally create the illusion of perspective, modeling, color theory, composition and design basics. This class fulfills the one art credit necessary for graduation, and is a prerequisite for Advanced Media Arts.

Class limited to 16 students in the Media Arts lab.**Photography 1****One Semester- ½ credit***No Prerequisite*

Photography 1 introduces students to black and white film photography, concentrating on camera settings and exposure control, and film and paper processing and printing in a darkroom environment.

Class limited to 16 students.**Photography 2****One Semester-½ credit***Prerequisite: Photography 1*

Students will build on their basic film and camera skills from Photography 1 and expand on them through further experimentation with negatives and printing techniques. Assignments focus on developing student's design sensibilities relating to the principles of composition.

Class limited to 16 students.**Sculpture****One Semester- ½ credit***No Prerequisite*

This course introduces students to traditional and contemporary sculptural techniques, concepts, and materials. It is designed for students who like to be creative and build with their hands. Students will gain experience working with a variety of materials such as handmade paper, foam board, wax, plaster, wood, and clay. Students will explore additive and subtractive techniques, assemblage, casting, and modular sculpture to express abstract and representational ideas. Art history and appreciation are used as background and comparison for projects.

Sculpture II**One Semester- ½ credit***Prerequisite: Sculpture I*

This course is for students that have completed the Sculpture 1 elective and would like to continue the 3-D art sequence. In this class you will learn new 3-D art making techniques and use old and new materials to design and build sculptures that explore increasingly personal ideas and visions. Students will be given concepts and some assignments but will also have the opportunity to design and create projects based on their personal goals.

Sewing: Construction & Design

No Prerequisite

In this half year course students will be introduced to sewing and construction with fabric. Students will have the unique opportunity to learn how to use a sewing machine and a needle and thread to create functional/wearable art. Students will create tote/drawstring bags, zipper bags, soft sculptures, throw pillows, laptop sleeves, clothing, and even dye and print their own fabrics. No previous sewing experience is necessary, you will soon learn how to create personal and wearable works of art!

Studio Art

Full Year-1 credit fulfills art requirement

No Prerequisite

If you like to paint, draw, work with clay, and create, this foundation course is for you. In this class you'll learn how to see as an artist sees, and how to create the illusion of three-dimensional space on a flat piece of paper. You'll discover how to make something look real, how to shade, and how to draw accurately. You'll learn how to manipulate color to the best effect in painting, and how to build sculptures. You'll practice creativity in 'Artist Choice' projects at the end of each unit. This course fulfills the 1 art credit requirement necessary for graduation, and is a prerequisite for Drawing & Painting.

Yearbook

One Semester - 1/2 credit

Prerequisite: Media Arts

This is a design course that revolves around the publishing of our high school's yearbook. If you are interested in helping to create the yearbook, you must take this class. Independent studies may not be accepted. We will learn core concepts of good design, photo editing, and typesetting and apply them throughout the 160-page hardcover book.

Class limited to 16 students in the Media Arts lab.

THIS CLASS IS ONLY OFFERED IN THE FALL SEMESTER.

Hastings Alternative School Program (HASP)

The Hastings Alternative School Program (HASP) is an educational program within the traditional high school. Students apply to be part of the program and it is open to ninth, tenth, eleventh and twelfth graders. The following courses are offered as part of the HASP program:

English 9A

Full Year-1 Unit

Ninth grade English immerses students in various literary experiences: the novel, the short story, poetry, drama and non-fiction. Students will engage in different forms of writing skills and develop organizational skills.

Social Studies 9A: World History I

Full Year-1 Unit

Ninth grade Social Studies is World History I. A chronological approach will be developed. This course is the first of a two-year study of world history. A global study will occur by emphasizing world history developments.

English 10A

Full Year-1 Unit

Tenth grade English investigates concepts of self as expressed by American writers, as well as international, contemporary and classic writers. Frequent writing assignments are aimed at improving essay skills. Some creative writing is also part of the class.

Social Studies 10A : World History II

Full Year-1 Unit

This course will teach the state mandated syllabus (see Social Studies 10 course description.) The students will be part of the HASP structure so teaching methods will stress issues of responsibility and decision making. Students take the Regents examination at the end of the year.

American Literature 11A

Full Year-1 Unit

At HASP we believe that English skills develop through student interest and involvement, concentration, hard work, and extensive writing, reading and discussion.

At HASP, we have two key goals for every student:

1. Read critically
2. Write clearly

Both goals are addressed through literature. We read and write about novels (The Things They Carried and Rule of the Bone), plays (A Streetcar Named Desire and Death of a Salesman), and assorted short stories and poems. In the third quarter all students write a research paper. All students take the Regents examination in January.

American History 11A

Full Year-1 Unit

The major goal of the HASP Social Studies curriculum is to help young people develop skills to examine society, make choices about themselves and the world, and to take power to act. Strategies include critical thinking, simulation games, role playing and note-taking skills. Students take the Regents examination at the end of the year.

English 12A**One Semester-½ Unit**

The goal of HASP English 12 is to send the student out into the world prepared to enjoy individual reading, to evaluate the messages of our society, and to write well in a variety of forms and situations.

The emphasis in this course is upon individual reading and writing. Frequent journal writing, student initiated paper topics, individual reading and book reports form an important part of the curriculum. In addition, readings and topics of particular contemporary relevance are stressed. The works read, as a group, are mostly by contemporary American writers who address the problems of our society. An independent project and a graduation speech presented to the HASP community complete the course.

Social Studies 12A**One Semester-½ Unit****Full Year-1 Unit**

This course, open to HASP seniors, covers all of the state-mandated topics for the required units of study in Economics and Participation in Government. The economics course has a large focus on consumer economics and life skills and is offered in the spring semester. The Participation in Government course (Criminal Justice in America) is offered during the fall semester.

Work Study**One Semester-½ Unit****Full Year-1 Unit**

If you have a paying job that consists of a minimum of 15 hours per week (at least 10 must be during the school week), you can earn credit. New York State Education law allows HASP to give you up to one credit per year for your job.

Community Service**One Semester-¼ Unit****Full Year- ½ Unit**

HASP students may decide to engage in community service within our school (i.e., office helper, teacher aide, etc.).

Quantitative Reasoning**Full Year – 1 Unit**

This course is intended for students who have already passed the Algebra class and the Algebra exam.

The course emphasizes the degree to which mathematics provides tools for understanding processes and phenomena in the larger world. This is an interdisciplinary math course focused on the application of mathematics as a tool for analyzing real-world phenomena. Each quarter is centered around a specific field of mathematics, including quantitative reasoning, financial modeling, game theory and economic behavior, and big picture problem-solving. (Please note: running this class is contingent upon staffing.)

Physical Education

Physical Education is mandated by the New York State Department of Education. Students receive one-half unit of credit per year for four years. Each student's grade is included in his/her GPA. The physical education curriculum is designed to provide students with a wide range of activities in which designed lessons reinforce the benefits of physical fitness, improve physical proficiency, promote teamwork, sportsmanship, and to encourage social and emotional growth of the individual student.

Areas of Study:

Adventure/Outdoor Activities

Individual/Dual Activities

Team Sports

Lifetime Fitness

Rhythms & Dance

All activities taught are based on class size and class make-up and are geared whenever possible to meet the individual needs of each student.

Personal Fitness Assessment Highlights

- Students will participate in a Pre and Post assessment which are tentatively scheduled for the first and fourth quarters
- Lessons and activities will be taught throughout the year to address concepts of exercise physiology and lifetime fitness
- The student will be given the opportunity to learn fitness concepts through the comparison of their assessment results and through reflection of the process.

Medicals:

Students who cannot participate in regular physical education classes due to injury or illness will be required to present a note from a physician to excuse them from class activities. Whenever possible, students will engage in an adaptive or modified program of activities under the supervision of a physician.

Being excused from Physical Education:

Students may be excused from Physical Education for the following reasons:

- Short-term illness or injury lasting no more than one week – A note from a parent/guardian or school nurse is sufficient
- Long-term illness or injury lasting more than one week – A letter written by a doctor excusing the student from activity.
- Class Trip or other School Function – A pass or alert must be provided to the teacher before they may be eligible to be absent.

Students who are unable to participate in class activities due to injury or illness will be placed on a modified Physical Education program in which they will be required to complete assignments in order to be eligible to receive credit for the activity, unit and/or quarter.

Sample Units of Study

Introduction to the Fitness Center – Students will be introduced to the school's fitness center and the possibilities it provides. Activities will build upon prior knowledge of the components of fitness, proper technique, planning and goal setting as well as available local resources. Students are taught the proper techniques with an emphasis on safety. This six-week unit starts with basic techniques of exercise and culminate in an exercise program built on student-choice.

Archery – Students are introduced to a new activity through a command teaching style in which proper techniques allow the class to emphasize safety. This unit begins with basic techniques of firing an arrow and progresses into competitive tournaments.

Cooperative games – This program is designed to challenge students to go beyond their perceived boundaries, to work with others to solve problems, and to experience success. An atmosphere that is fun, supportive, and challenging.

Health Education (Grades 10-12)

One Semester-½ Unit

Health Education is a required course for graduation. This course introduces to students some of society's health issues by incorporating the following major topics:

- Physical Health
- Alcohol and Drug Abuse
- Emotional Health
- Health for Survival
- Family Life

Nutrition

One Semester-½ Unit

This course is an introduction to the basic principles of nutrition and wellness. The focus of the course is centered on healthy food and lifestyle choices. Students will learn what the food requirements for different individuals are, the nutritive values of food, and the relation of food and positive health. Students will also explore different diets and nutritional beliefs. The overall goal of the class is to enable students to make proper food choices which are aligned with their needs and goals.

Music

The Music Department desires to make it possible for every pupil to sing, play or listen to music intelligently, to become a more knowledgeable consumer and producer of music according to individual interest and ability, and to make music a pleasurable experience and vital force in the daily lives of our students.

Band

Full Year-1 Unit

Band serves the dual purpose of performing as a symphonic concert band and as a marching band. Band meets two (2) days during the cycle during the school day. The Marching Band plays for home football games, the Memorial Day Parade and occasionally accompanies the Hudsonettes Dance Team. The symphonic band's emphasis is upon literature expressly written for this idiom. The band performs at the winter and spring concerts.

Orchestra

Full Year-1 Unit

The orchestra meets two (2) days during the cycle during the school day. Literature is studied which covers all of the standard classical repertoire, and includes some exploration of other styles of music such as rock, pop, etc. The orchestra performs at the winter and spring concerts.

Chorus

Full Year-1 Unit

Chorus meets two (2) times a cycle during the school day. Membership is open to all students. The literature includes works from many periods, styles, and traditions. The chorus performs at the winter and spring concerts with possible additional performance opportunities.

Music Theory I

Full Year-1 Unit

This course provides a fundamental understanding of music by considering the basics of musical construction, with examples drawn from the history of music. A study of musical notation, interval recognition, elements of pitch and rhythm, scale and chord construction, essential concepts in harmony, and basic musical forms. The student will be able to experience these fundamental concepts using piano and guitar in the music lab

Music Theory II

Full Year-1 Unit

This course is designed for students who have taken Music Theory I or students who have a solid background in music theory. The skills and knowledge reaped by the end of this year long course include:

- The ability to analyze music in terms of melody, harmony, counterpoint, texture and form.
- The ability to write music with control of melodic structure, tonality, harmony, texture and form.
- The ability to harmonize melodies in four parts using triads, seventh chords, secondary dominants, borrowed chords, chord inversions and modulation.
- An introduction to polyphonic writing and analysis: two-voice counterpoint and imitation.
- The ability to define and use musical terms given in reading assignments and lectures.
- A heightened perception of the art of music making.

Madrigals/Select Choir

No Credit

The choir consists of selected singers who successfully audition to become members. The repertoire includes material from a variety of genres, all in 4-part harmony. Both traditional Renaissance madrigals and contemporary Acapella music are studied and performed.

Jazz Band**No Credit**

The high school Jazz Band meets one evening per week. The Jazz Band consists of selected musicians interested in performing contemporary as well as classical jazz. Big band jazz is a primary emphasis. Jazz improvisation is encouraged and all students are given the opportunity to participate in improvisation.

Pep Band**No Credit**

Pep band is open to any band member and meets at least one evening a week during basketball season. The Pep Band plays for home basketball games.

English as a New Language (ENL)

The English as a New Language (ENL) Program is committed to helping English Language Learners (ELLs) meet their language proficiency and content area goals through immersive English instruction. Our specialists support ELLs in the domains of reading, writing, speaking, and listening. The primary goal of the program is to support students' ability to master both the social and academic language skills needed to succeed in mainstream classrooms.

Students who are assessed and placed into the program are entitled to receive services according to proficiency level. To exit the program, students must score Commanding on all four sections--listening, speaking, reading, and writing--of the NY State English as a New Language Achievement Test (NYSESLAT) that is administered each year.

Level 1: Entering

A student at the Entering level has great dependence on supports and structures to advance academic language skills, and has not yet met the linguistic demands necessary to demonstrate English language proficiency in a variety of academic contexts (settings).

Level 2: Emerging

A student at the Emerging level has some dependence on supports and structures to advance academic language skills and has not yet met the linguistic demands necessary to demonstrate English language proficiency in a variety of academic contexts (settings).

Level 3: Transitioning

A student at the Transitioning level shows some independence in advancing academic language skills, but has yet to meet the linguistic demands necessary to demonstrate English language proficiency in a variety of academic contexts (settings).

Level 4: Expanding

A student at the Expanding level shows great independence in advancing academic language skills and is approaching the linguistic demands necessary to demonstrate English language proficiency in a variety of academic contexts (settings).

Level 5: Commanding

A student at the Commanding level has met the linguistic demands necessary to demonstrate English language proficiency in a variety of academic contexts (settings). A student at this level is no longer considered an ELL, but is entitled to receive two years of Former ELL services.

Support Services

Resource Room

Resource Room is a special education service that supports a student with a learning difference by providing specialized supplementary instruction in a small group setting for a portion of the school day. Resource Room is for the purpose of supplementing the general education or special education classroom instruction.

Integrated Co-Teaching

Integrated Co-Teaching services are the provision of specially designed academic instruction provided to students with learning differences alongside non-disabled peers in the general education classroom. In an Integrated Co-Teaching classroom, the general education teacher and special education teacher share responsibility for classroom instruction, assessment, and other aspects of teaching. Curriculum, materials, assignments, and assessments may be modified to meet the individual learning needs of all students.

Special Class Humanities

Special Class means an instructional group consisting of students who have been grouped together because of similarity of individual needs for the purpose of receiving specially designed instruction. Hastings High School provides special class Humanities classes which support the English and History curriculum in a 12:1:1 setting. Lessons focus on improving the writing process (including proofreading and editing skills), reading strategies related to higher level reading materials, as well as test-taking strategies, time management and organizational skills.

Occupational Education

The Center for Career Services, Southern Westchester BOCES

Grades 11-12

The Center for Career Services, located at 65 Grasslands Road, Valhalla, New York, offers a program of occupational education designed to prepare students for gainful employment as skilled technicians. Many students who graduate from these programs continue their education and receive college credit through articulation agreements that have been arranged with several two-year and four-year colleges and technical institutes.

General Information

- High school students from participating school districts in Southern Westchester are eligible to enroll at the Career Center in 11th and 12th grades.
- Secondary Day courses are either one or two-year programs.
- Your home school guidance counselor will help you with the enrollment process.
- Guidance services are available on campus. They are designed to assist you in developing and implementing a career plan.
- You would attend your career education program every day, during either the a.m. or p.m. session. The session you attend depends on your schedule at your home high school.
- Regents' level academic classes in English, Social Studies and Mathematics are available to accommodate scheduling conflicts.
- Students can participate in sports and other after school activities at their home high school.
- All students are eligible to participate in Skills USA-VICA (Vocational Industrial Clubs of America), a national educational association that promotes leadership qualities and citizenship necessary for success.
- Bus transportation is provided to and from the Career Center and your home high school.
- All CCS programs carry up to four sequence credits per year towards graduation.
- All students are encouraged to explore non-traditional career clusters.

Program Facts

- Tuition cost to attend courses at The Center for Career Services is paid by the home school district. Some programs do require the purchase of uniforms, materials and/or equipment. Some certification exams require a registration fee.
- All courses meet industry standards, may lead to New York State and/or national certifications and lead to high paying careers.
- Every program consists of theory and hands-on components to prepare students to work in their chosen field.
- Job Placement Counselors assist in placing students with employers in both paid and unpaid work experiences.
- Integrated academics within the program support Regents standards.
- College credits can be earned through the Centers' articulation agreements with various colleges and trade schools.
- Typically, over 90% of the program completers continue their education or enter the workforce in their field of training.
- Typically, 50% of Career Education Center completers continue their education at a four-year college, two-year college, or a trade school.

- The New York State Education Department has waived the foreign language requirement for Career Education Center students.
- Every Career Education Center student creates a personal work experience portfolio.

Animal Science

Work with live animals as you learn their proper handling and care. You will perform different veterinary procedures, including how to measure heart rate and temperature, how to collect and analyze samples, and how to effectively use a microscope and veterinary tools. This course will provide you with a foundation in veterinary terminology and procedures, which help you succeed in a future career in animal science.

Architecture & Interior Design/3D Art

Have you ever dreamed of becoming an architect or Interior Designer? If so, then this program is for you! You will combine architecture, furniture design, digital photography, drawing and drafting using programs such as Computer Aided Design. As part of your experience, you will complete a comprehensive portfolio that will demonstrate our skills in Architecture and Interior Design.

Automotive Technology

Become certified as an Automotive Technician! You will be able to diagnose, repair and maintain automobile engines, brakes, electrical systems and suspensions as you complete this program and begin your career.

CISCO

Are you an aspiring computer tech? The Cisco Academy curriculum is designed for students who are seeking entry-level information technology jobs or plan to pursue more specialized skills. This course provides comprehensive coverage of networking topics ranging from fundamentals to advanced applications and services.

Collision Technology

A fulfilling career awaits you as a certified technician in auto body repair! Gain experience in restoring accident-damaged vehicles! Learn the latest refinishing and custom painting techniques as well as welding, sheet metal fabrication, fiberglass repair, interior and glass service and many other skills.

Commercial Art/Multimedia

Use your creativity and technology skills to create logos, advertisements, package design, illustrations, animation & page layout with the Adobe Creative Suite. Compose your personal digital portfolio and become a traditional artist, and/or graphic designer/artist with the promise of a career in the world of advertising art and design!

Computer Information Systems and Medical Administrative Assistant

Become an integral, certified member of the medical team while qualifying for a variety of Microsoft Office Suit certifications. As the Medical Administrative Assistant, you will use your new computer skills to help patients to make appointments, fill out insurance claims, track procedures & medications, verify tests and design/revise billing procedures in a simulated office setting. An exciting career in the medical field awaits you upon completion of this program!

Construction/Plumbing

Learn the skills to work in the construction and maintenance industries while earning nationally accredited qualifications and certifications. In cooperation with NCCER (the National Center for Construction Education & Research) and their nationally accepted curriculum, you will be able to produce a transcript that is accepted by colleges, unions and trade schools nationwide.

Cosmetology

Let the world become your canvas as you learn extensive hands-on skills to express your creativity in hair design, hair color, make-up artistry, skin and nail care. Our 2-year Cosmetology program offers you 1,000 hours of training in beauty and wellness giving you the necessary foundation to pass the New York State Cosmetology Licensing Exam and begin your future career in the beauty industry.

Culinary Arts

Specialize in the techniques of cooking as you learn methods of butchering, baking nutrition menu planning and catering. Prepare to enter the culinary world as a specialty cook, chef, pastry chef or caterer – or continue with advanced training. The field is growing and job opportunities are expanding every day!

Electrical Construction

Emerge from the Electrical Construction program as a wiring technician with a working knowledge of its cutting edge, 21st Century green technologies. Through this combination of theory and hands-on activities you will be prepared for apprenticeship in the field, for advanced study, and to receive the NCCER National Center for Construction Education & Research) certification in Electrical and Core.

Emergency Medical Services

Become an Emergency Medical Technician, and learn the many lifesaving skills and techniques such as CPR and treatment of traumatic injuries. These are but a few of the medical skills necessary for certification as a Certified First Responder in medical emergency situations. You also have the opportunity to become a certified Emergency Medical Technician, able to work on 911 and /or private ambulances and in hospital emergency rooms. This EMT train is an excellent foundation on which to build a career in medicine.

Emergency and Protective Services

Welcome to a career in law enforcement as you discover the many aspects of crime scene investigation, including fingerprinting & fingerprint identification and processing. Become certified from Homeland Security in Weapons of Mass Destruction; Awareness; Terrorist/Suicide Bombing & Domestic Anti-Terrorism. Begin your law enforcement service in this course as you gain New York State certification as a Security Guard.

Fashion Design/Merchandising

Enter the dazzling world of high fashion as you draw, cut and sew exotic fashion designs and model them on the runway! At the same time, explore the history of fashion and textiles, gain experience in the technology now used in the fashion industry and design your personal fashion portfolio for admission into this exciting career.

Nursing Assistant

Prepare for a medical career by participating in supervised clinical rotations in an extended care facility with classroom theory and lab practice in the C.N.A. program. This course allows you to work directly with patients while preparing you for the New York State Department of Health Certified Nurse Assistant examination, providing you with the entry level knowledge and skills for a fulfilling lifetime career.

Pre-Engineering/CAD

Experience the world of technology and engineering. This course will provide you the opportunity to apply science, technology, mathematics, and communication skills through project based instruction. Several different aspects of engineering will be explored, such as Mechanical, Civil and Robotics. A team based approach is used to learn and apply the design process, problem solving, creative and analytical-thinking skills.

Security, Law & Policing

Welcome to a career in law enforcement. In this program you will discover the many aspects of crime scene investigation, including fingerprinting & fingerprint identification and fingerprint identification and processing. Become certified from Homeland Security in Weapons of Mass Destruction Awareness; Terrorist/Suiced Bombing & Domestic Anti-Terrorism. Begin your law enforcement service in this course as you gain New York State certification as a Security Guard.

Sound Production

The Sound Production program is focused on the art, science and creative nature of sound recording. We touch upon all aspects of sound in the analog and digital realm but specializing in music, field and post production. With high-end equipment including a state of the art vocal booth, students have the opportunity to learn professional techniques as well as discover and express their own creativity. Not to mention, the program is designed to mimic real world recording and broadcast studios.

TV/Video Production

Have you ever wondered how TV shows produce their special effects? Discover the inner workings of the wonderful, digital world of TV and video, as you participate in camera shoots, and direct and edit scripts. Explore the variety of lighting and recording effects on news, advertising and documentaries, as you begin your preparation for this most exciting and creative career.