

# **PROGRAM of STUDIES**

## **2018-2019**



**Hudson Senior High School**

**Guidance Department**

**Counselors: Mrs. Elizabeth Novine and Mr. Rocky Payne**

**Secretary: Mrs. Shannon Hoose**

# **ACADEMIC INTEGRITY**

**Academic Integrity is a basic guiding principle for all academic activity at the Hudson Senior High School. It allows the pursuit of scholarly activity in an open, honest, and responsible manner.**

**In accordance with the School District's Code of Conduct, all students will practice integrity in regard to all academic assignments. They will not engage in or tolerate acts of falsification, misrepresentation or deception because such acts of dishonesty violate the fundamental ethical principles of the high school community and compromise the worth of work completed by others.**

**Any work you submit without appropriate citation of the work of others is plagiarism and will not be tolerated. If you include ideas, sentences, or other materials that are not yours in your work, you must properly cite your source(s). Your name on any assignment submitted indicates that you understand the rules of plagiarism and academic integrity and that the submitted work is your own.**

**All violations of academic integrity will be subject to the consequences as detailed in the Code of Conduct. Once the violation is determined to be true, the student could lose partial or all credit for the exam and/or assignment in question.**

# GRADUATION REQUIREMENTS

## LOCAL DIPLOMA (for Special Education and 504 Safety Net Students ONLY)

	UNITS	REQUIRED EXAMS (5 needed)
English	4	Regents English Language Arts (must be 55>)
Social Studies	4	1 Social Studies Regents (Global or US)
Math**	3	1 Math Regents (must be 55>)
Science**	3	1 Science Regents (Earth, Living, Chemistry, or Physics)
World Language*	1	Some special education students may be language exempt
Art/Music	1(b)	
Health	½	1 Regents exam must be 65> (which can be ELA or Math) but ELA and Math must be 55> and remaining Regents exams can be 45-54. *SPED – student with a disability may appeal scores between 52-54 on up to two Regents exams for a local diploma.
Physical Education	2	
Electives	3 ½	
<b>TOTAL</b>	<b>22</b>	

## REGENTS DIPLOMA

For all students a Regents Waiver Appeal can be granted for 1 Regents Exam; the exam must have been taken at least twice and one of the scores must be between 62-64 and have a 95% attendance rate the year that they score between 62-64 and/or have a 95% attendance rate the year they receive regents review.

	UNITS	REQUIRED EXAMS (5 needed) Score of 65>
English	4	Regents English Language Arts
Social Studies	4	1 Social Studies Regents (Global or US)
Math**	3	1 Math Regents (Algebra, Geometry, or Trig)
Science**	3	1 Science Regents (Earth, Living, Chemistry, or Physics)
World Language*	1	Some special education students may be language exempt
Art/Music	1(b)	
Health	½	4 Regents exams <u>PLUS</u> 1 extra Math Regents or 1 extra Science Regents or 1 extra Social Studies Regents to =5  4+ option can be used in conjunction with the Regents Waiver Appeal for a Regents Diploma.
Physical Education	2	
Electives	3 ½	
<b>TOTAL</b>	<b>22</b>	

## REGENTS WITH ADVANCED DESIGNATION DIPLOMA

A Regents Waiver Appeal cannot be used to earn a Regents with Advanced Designation Diploma

	UNITS	REQUIRED EXAMS (5 needed) Score of 65>
English	4	Regents English Language Arts
Social Studies	4	Global Regents US Regents
Math**	3	Algebra Regents Geometry Regents Algebra 2/Trigonometry Regents
Science**	3	2 Science Regents (1 living science and 1 physical science)
World Language*	1	Some special education students may be language exempt (a) Comprehensive World Language Exam (given by department)
Art/Music	1(b)	4 Regents exams <u>PLUS</u> 1 extra Math Regents or 1 extra Science Regents or 1 extra Social Studies Regents to =5
Health	½	
Physical Education	2	
Electives	3 ½	
<b>TOTAL</b>	<b>22</b>	

Students who first enter 9th grade in September 2008 must attain a score of 65+ on the (5) required Regent examinations to earn a REGENTS Diploma.

\*Students are required to earn (1) unit of credit in a World Language.

\*\*An integrated course in Mathematics/Science/Technology may be used as the 3rd required unit of credit in mathematics or science.

(a) Students earning (5) units of credit in Art, Music, Business, Technology, or vocational education may be exempt.

(b) Technology Challenge course may be used to satisfy part of the music/art requirement.

## **ALTERNATE WAYS OF EARNING CREDITS**

In addition to completing formal course work at Hudson High School, students may earn up to 6½ credits towards graduation in the following ways:

1. Students may use credits earned at any accredited college/university to meet graduation requirements. In order to receive credit in this manner, the student must work out a plan in advance with his/her counselor. This plan must meet with the approval of the high school principal.
2. Students may earn credits towards graduation from an accredited correspondence high school, provided that the school meets with the approval of the high school principal. The student must work out a plan for acquiring such credit in advance with his/her counselor, and the plan must have the approval of the high school principal.
3. Students may receive course credit by combining an independent study project with successful completion of a state developed or state approved examination. In order to achieve credit in this manner the following guide-lines must be followed:
  - a. the student must demonstrate a pattern of above average final examination and course grades, especially in the subject area for which credit is being sought.
  - b. the student must receive a score of at least 85% on the examination.
  - c. a qualified faculty advisor must oversee the project.
  - d. a written proposal for the project must be approved by the high school principal and the appropriate department chairperson. The proposal must include specific objectives and activities, an approximation of the number of hours, and a time line for completing work.
  - e. a project taking approximately 90 hours will earn ½ units of credit and one taking 180 hours will earn 1 unit of credit.
  - f. if a local examination has to be developed, a period of 6 months must be allowed prior to the administration of the examination in order to provide sufficient time to secure state approval.

# ART DEPARTMENT

## 9121- STUDIO ART

Credit: 1

See what YOU like about art by trying out an extensive variety of hands on art experiences, including silk-screening and learning easy drawing tricks, expressing yourself with color, building a clay pot or sculpture. This course is mandatory for an art sequence and required before taking certain other art classes.

## 9212- CRAFTS

Credit: 1

This is a survey course of historic and contemporary crafts from many different cultures including Navajo spinning and weaving, Mexican punched paper and paper mache, Origami, clay mosaics, pyro engraving, macramé jewelry and handmade books.

## 9241- POTTERY & SCULPTURE

Credit: 1

Prerequisite: Crafts or Studio Art.

This hands-on course combines the craftsmanship of pottery and the versatility of sculpture into a full year course. Enjoy creating projects that are not restricted to a flat surface but expand into 3-D images. Paint, build, carve, mold and shape a variety of materials such as clay, wood, stone, metal, and plaster.

## 9251- DRAWING/PAINTING 1 & 2

Credit: 1

Prerequisite: Studio Art

Draw/Paint 1 students will develop their drawing skills with portraiture, advanced perspective, figure drawing, shading techniques and cross-hatching, and materials such as chalk and oil pastels, India ink, pencil and charcoal. Second semester will concentrate on painting techniques with acrylics and watercolors. The students will build a strong background before moving into an area of concentration.

## 9271- DIGITAL PHOTOGRAPHY

Credit: 1

Prerequisite: Studio Art

This class is photography without chemicals or a darkroom. Learn photography with the computer. Students will use Adobe Photoshop and other computer applications to digitally enhance and change photographs. Access to a digital camera from home is helpful but not mandatory.

## 9310- AP STUDIO ART-2 DIMENSIONAL DESIGN

Credit: 1

Must have an art teacher recommendation before enrolling in this course

This year long course is designed to assist students to prepare for the Studio Art Portfolio established by the College Board. The course is planned to equal a college freshman studio art course either for art majors, graphic design majors or liberal art majors who need studio art experiences. The portfolio resulting from this course must show motivation and serious interest in art.

## 9320- DIGITAL ANIMATION

Credit: 1

Prerequisite: Studio Art

Students will become familiar with "Flash" and other programs within the Adobe Master Collection CS3. They will create their own animated mini-films. Drawing will be required for most animations. In some cases students will scan drawings into the computer or utilize the traditional method of drawing in sequence but with the twist of drawing directly into the computer. Students will develop entry level skills for this dynamic career field.

# CAREER & TECHNICAL EDUCATION PROGRAMS

(also known as VoTec or Questar III)

As an alternative to the academic offerings at the Hudson High School students may wish to pursue a course of study at the Columbia Greene Educational Center, operated by Questar III.

The vocational technology courses are designed to prepare high school students for entry level employment. Emphasis is placed on the development of basic skills of trade, positive work attitudes, and desirable work habits. Students spend ½ day at the high school taking required academic courses and the other ½ at their vocational technology course at Questar III. Each vocational technology course carries a potential of 4 units of credits towards graduation from Hudson High School.

Students who are interested in taking vocational technology courses must sign up during the scheduling process for the following year, this is usually done in February. Also all students are required to visit the course to review the class they are interested in. Because the Hudson City School District must pay a substantial fee to Questar III for each vocational technology course, students and parents/guardians must agree to a full year of attendance. Therefore students and parents are urged to check out courses carefully before making a final commitment.

## ENGLISH DEPARTMENT

### 1111- ENGLISH 9

Credit: 1

This course is implemented using Next Generation Learning Standards' instruction. Students will do work in modules with thematic links. Some of the literature studied includes: The Trial, Worlds Afire, Monster, The Tragedy of Romeo & Juliet, poetry and short stories. Students will do independent reading outside of class. They will also research projects in the library, using MLA format. Group work and oral presentations are also expected.

### 1113- FRESHMAN ACADEMIC WRITING

Credit: ½

This course focuses on preparing all freshmen to meet the writing challenges they will face in the Senior High. The course is designed to address the Next Generation Learning Standards' instruction writing requirements and vocabulary. The course follows a writing workshop model and focuses on advancing student writing and preparing students for a more formal approach to writing. Writing expectations are driven by the Next Generation Learning Standards' instruction and the shift toward writing that emphasizes the use of evidence from sources to inform or make an argument. Freshman Academic Writing addresses this shift in focus and helps to prepare students for the greater rigor of the new assessments.

### 1181- ENGLISH 9 HONORS

Credit: 1

Students **MUST** be approved by an English teacher before entering this class. They must have 90+, a teacher recommendation, and write an essay for admission

This course is similar to English 9 but has higher expectations and a more difficult curriculum. Students will be taught in modules using the Next Generation Learning Standards' instruction. Some of the literature studied includes: The Outsiders, Flowers for Algernon, The Old Man & The Sea, Fried Green Tomatoes at The Whistle Stop Café, Speak, Shades of Simon Gray, Incantation, The Tragedy of Romeo & Juliet, The

Wave, short stories and poetry. They will do research projects in the library, using MLA format. Group work and oral presentations are also expected. Mandatory summer reading assignments must be completed to enter English 9 Honors.

#### **1211- ENGLISH 10**

**Credit: 1**

This Next Generation Learning Standards' instruction aligned course is designed to introduce students to the world of literature and is closely aligned to Global Studies 10. The course is broken into four modules, each with a specific focus. Students will read fiction, non-fiction, informational texts, and poetry. Students will learn how to write informative, argumentative, and narrative essays. Literature may include: Private Peaceful, Animal Farm, Lord of the Flies, Chanda's Secrets, and Othello.

#### **1241- ENGLISH 10 HONORS**

**Credit: 1**

Only students who earned an 87> overall average in the Honors program and those students receiving a 90> in English 9 and a teacher recommendation will be considered for the class

This course is a continuation of the program begun in English 9 Honors. The 10 Honors class requires students to complete a summer reading and writing project. The summer assignments will be counted as the first three grades of the semester. Students must be willing to do the summer work in order to be in the class. Course of study for English 10 Honors includes four modules based on the Next Generation Learning Standards' instruction of Reading, Writing, Speaking & Listening and Language. Literature includes: Oedipus & Antigone, Animal Farm, Lord of the Flies, Night & Othello. If the academic standards are not upheld, the student may be reassigned to the Regents level course.

#### **1311- ENGLISH 11**

**Credit: 1**

This course includes four modules based on the Next Generation Learning Standards' instruction: Reading, Writing, Speaking & Listening, and Language. The primary focus is American Literature that includes: The Crucible, The Great Gatsby, Hamlet, Of Mice & Men, and To Kill a Mockingbird. A Common Core Regents exam will be taken at the end of the course.

#### **1381- ENGLISH 11 HONORS**

**Credit: 1**

Only those students who earned an 87> overall average in the Honors program and those students receiving a 90> in English 10 and a teacher recommendation will be considered for the class  
Students enrolled in this class must successfully complete summer assignments. The focus of this class is an extensive study of American Literature on an advanced level. Students will read fiction, non-fiction, informational texts, drama and poetry. Students will enhance their writing skills by writing informative, narrative, research and argumentative essays. Preparation for the NYS Language Arts Regents will be incorporated into this course. Literature includes: The Crucible, The Great Gatsby, Hamlet, Of Mice and Men, and To Kill a Mockingbird. If the academic standards are not upheld, the student may be reassigned to the Regents' level course.

#### **1401- HUMANITIES HONORS**

**Credit: 1**

Students must have an 85 average in English and a teacher recommendation

This class is an interdisciplinary course that includes works of literature, philosophy, art, architecture, history, and religion. The curriculum takes students through the most important developments in the history of civilization starting with Prehistory and ending with the Twentieth Century. Students will gain an understanding of the historical, social, literary, artistic, and philosophical principles of the humanities. This class is designated for high-achieving students seeking an integrated program of intellectual challenge.

Students are also required to attend field trips that will enhance and support the Humanities curriculum. Works of literature include: *Beowulf*, *Canterbury Tales*, *Beckett*, *Macbeth*, *Amadeus*, *DaVinci Code*, *Death of a Salesman*, and *Streetcar Named Desire*.

**1411- ENGLISH 12**

**Credit: 1**

In this course students will practice speaking, listening, writing, and reading. During the year we work to improve academic skills that include writing a valid argument, conventions of language, literary analysis, grammar, and academic vocabulary. Our main textbook is *Prentice Hall Literature, The British Tradition* and additional works may include: The Catcher in the Rye, Brave New World, Macbeth, Brighton Beach Memoirs, Ellen Foster, short stories, and poetry.

Students who have been in the enriched classes should apply for Composition (1441) and Composition & Literature (1451).

**1441- EN 101-COMPOSITION (Columbia Greene Community College)**

**Credit: ½**

**College Credit: 3**

Admission into 101/102 is based on an 85 average in the Honors program. Those students may be considered who have an 85 > in Regents English classes based on motivation, writing ability, teacher recommendation, and enrollment

This course is an introductory level course emphasizing the process and patterns of college-level expository prose. Since writing is a process made up of stages, extensive practice in composition is given in order to develop the craft of writing. Instruction will focus on teaching the skills of writing, emphasizing organization, coherence, unity and clarity of expression. Students will be expected to produce clear, logical papers using proper grammar and strong writing techniques.

**1451- EN 102-COMPOSITION & LITERATURE (Columbia Greene Community College)**

**Credit: ½**

**College Credit: 3**

Prerequisite: EN 101 Composition. Admission into 101/102 is based on an 85 average in the enriched program. Those students who have an 85 > average in Regents English classes based on motivation, writing ability, teacher recommendation, and enrollment

This course continues the reading and writing of EN 101. Readings range from short stories and poetry to plays and/or novels. Writings include both formal and informal criticism or analysis of the texts.

**NOTE:** for EN101 and EN102, students will need to be admitted to Columbia Greene Community College as Early Admissions candidates and will have to pay tuition to the college.



# **FAMILY & CONSUMER SCIENCE**

Family & Consumer Science utilizes hands-on experiential learning. Students apply and reinforce skills they have learned in other courses such as math, reading, and science. Many students benefit from seeing how their knowledge can be applied to practical everyday situations. Essential job skills like working cooperatively in a group to produce a product and following a set of directions are emphasized.

## **8101- FOOD & NUTRITION CORE**

**Credit: ½**

“Do you have a passion for cooking and all things culinary? If you are ready for the discipline of the kitchen, this course is for you.” The content of this required course includes nutrition awareness, meal management, food preparation and purchasing, and meal service. It is a basic course that is strongly recommended for any student considering a career in the hospitality business or in another food related industry.

## **8111- LIFESPAN STUDIES (a.k.a. Human Development)**

**Credit: ½**

This course focuses on the adolescent and how he/she relates to others, i.e., peers, young children and adults. Students will examine issues important to them as individuals and as members of the community, such as communication, conflict management, decision making and coping with stress. Careers related to human relations and development will be examined. Students who are considering a career in human services will find this course helpful.

## **8121- INTRODUCTION TO SEWING**

**Credit: ½**

This semester class is designed to teach the basic steps necessary to begin the sewing process. Students will learn the fundamentals of sewing and pattern reading. They will learn how to run a sewing machine and stitch some practice pieces. Basic sewing techniques needed for constructing a sewing project such as a seam allowances, backstitch, pivot and miter, seam finishes, casing, attaching a button, and pressing /ironing techniques will be emphasized. Students will have the opportunity to complete several simple sewing projects.

## **8211- FOOD PREPARATION & NUTRITION**

**Credit: ½**

**Prerequisite: Food & Nutrition Core**

This course continues the concepts presented in the Food & Nutrition Core. Laboratory experiences will reinforce the concepts of a healthy diet and preparation of nutritious food products.

## **8213- CUISINE, CULTURE, AND THE ENVIRONMENT (not offered 2017-18)**

**Credit: ½**

In this course students will examine certain cultures and the cuisines they have created. Emphasis will be placed on the relationship between geography, environment, history, religious traditions, and culinary practices. Food preparation will be an integral part of the learning process. This course will relate to many topics covered in global studies and earth science.

**8214- GLOBAL AND GOURMET FOODS****Credit: ½**

This course introduces students to the ways in which the culture and traditions of regions and countries influence food choices. Students will identify and prepare foods from various regions and countries to compare cuisines, ingredients used, and preferred cooking methods. Students will also examine the issues and conditions which affect the availability and quality of food in the global market. Current issues related to global nutrition from production through consumption will be explored. Through this investigation students will understand and appreciate diverse cultures. This course is recommended for students enrolled in Global Studies.

**8322- FOOD ENTREPRENEURSHIP (not offered 2017-18)****Credit: ½**

This course will introduce students to the basic steps to starting a specialty food business. The overall process will be examined, and will include the following. **Product:** Developing a product and testing it out on people. Determining the market form your product will have, calculating batch size, scaling your recipe, adapting your recipe and labels to meet food safety and other regulatory requirements, evaluating your product's ingredients and production costs, labeling and sizing your product for your market. **Business Planning:** Writing a business plan, investigating insurance, incorporation procedures, registering your business, and how to get assistance from business resources, such as mentoring, local, state and federal agencies, etc. **Market Decisions:** Writing a Marketing Plan, conducting marketing research, exploring sales venues for your product, determining a selling price, and developing a distribution method. **Production:** Deciding where you will produce your product, locating appropriate storage space for your ingredients, packaging and final product, learning how and when to order supplies, finding out how to evaluate various production facilities available to you. Instruction will emphasize hands-on activities, and draw on many resources available to actual entrepreneurs to acquire knowledge. Students will be expected to complete a business plan by the end of the course.

# HEALTH DEPARTMENT

## 5361- HEALTH EDUCATION

Credit: ½

Grade 11-12

This course is a graduation requirement for every student.

This course will include a broad range of subject areas. Students will work on essential skills and various functional knowledge or content areas. This information will provide students with the knowledge to make informed decisions regarding their health and lifestyle. The purpose is for students to become healthier now and in their future. Curriculum is aligned with the NYS Learning Standards 1, 2, and 3 for Health Education at the commencement level and *The Guidance Document for Achieving New York State Standards in Health Education*. Skills covered: self-management, planning and goal setting, decision making, stress management, relationship management, communication, and advocacy. Functional Knowledge includes: health and personal wellness, nutrition and physical activity, eating disorders, stress management, depression, suicide prevention, violence prevention, bullying and cyber bullying, alcohol, tobacco, and other drugs, sexual health, HIV/AIDS, STD's, diseases prevention, unintentional injury prevention, etc.

## 5363- HE 103 - Critical Issues in Health (Columbia Greene Community College)

Credit: ½

College Credit: 3

Requirements: acceptance for early enrollment (as determined by the college), and a tuition fee

This is an introductory course dealing with the current critical issues involved in promoting and maintaining a wellness lifestyle. Emphasis is placed on viewing health in a multi-dimensional manner and assuming responsibility for maintaining one's health. Major issues to be addressed include stress, cardiovascular diseases, cancer, drugs, nutrition, and physical conditioning. Students interested in physical education, fitness, or health professions will benefit from taking this course. It is offered jointly by Hudson High School and Columbia Greene Community College. In addition, students must complete or currently be enrolled in the health education course at Hudson High School. This is not a substitute for health education credit.

**NOTE:** for HE103, students will need to be admitted to Columbia Greene Community College as Early Admissions candidates and will have to pay tuition to the college.

## 5366- FAMILY HEALTH AND WELLNESS

Credit: ½

This course is designed to take the NYS Skills and functional knowledge encompassed in health education and apply them to the family and community dynamic. Relationship management, stress management, communication, decision making, and planning and goals setting are Health skills students learn and practice in health. This course will teach ways to apply these skills and functional knowledge to the family unit and the family environment. Some topics will include fitness and nutrition for family, stress and the family, and family communication. This is not a substitute for health education credit.

## 5367- SELF HELP AND PERSONAL ENRICHMENT (SHAPE)

Credit: ½

This course is for students who would like to take part in an intense self-exploration program in a group atmosphere. Students who choose to join SHAPE must be willing to tell their story and be there for and listen to others. Those who are in SHAPE must have a sincere and strong desire to make positive choices in their lives and assist others in doing the same. This may require change! SHAPE also takes you through an "initiation" into adulthood that consists of examining your relationship to power. SHAPE consists of a

status check point system to monitor student progress. This course is for students who wish to take charge of their own choices and behaviors.

## MATHEMATICS DEPARTMENT

### 4131- ALGEBRA

Credit: 1

**Prerequisite:** students must have passed Math 8, received a recommendation from the teacher, and Scored a mid-2 or higher on the 8<sup>th</sup> grade math state assessment or successful completion of Foundations of Algebra

This course is associated with the Common Core Learning Standards (CCLS) for Algebra I and will focus on four *conceptual categories*: Number & Quantity, Algebra, Functions, and Statistics & Probability. Students will analyze relationships between quantities and reason with equations and their graphs. They will explore linear, quadratic, and exponential functions as well as deepen their understanding of statistics and probability concepts. Finally, students will synthesize what they learn by extensively modeling the functions they study. The course will culminate in the students taking the Algebra I (Common Core) Regents Exam.

### 4137- FOUNDATIONS OF ALGEBRA

Credit: 1

The main focus of this course is basic Algebra. The course will cover the following topics: number systems, operations and properties, proportions, expressions, first and second degree equations, literal equations, factoring, word problems and graphing calculator use. There will be a department exam at the end of the year. This course is designed for students who are not ready for the rigors of CC Algebra. Students who score at level one or the lower half of level 2 on the Grade 8 Math Assessment and/or scored less than 74% in Math 8 will be recommended for this course. Students who successfully complete this course will take Algebra CC the following year

### 4135- INTERMEDIATE ALGEBRA

Credit: 1

**Prerequisite:** students must have 2 math credits and taken the Integrated Algebra Regents

This is a one year course for Juniors and Seniors that will prepare students for Algebra II or entry level college algebra. Topics include: Equations and Inequalities, Graphs and functions, Systems of Equations, Exponents and Polynomial functions, Rational Expressions and equations, Radical and Complex numbers, Quadratic Equations and Functions, Exponential and Logarithmic Functions, Series and Sequences.

### 4220- GEOMETRY

Credit: 1

**Prerequisite:** student must have passed the Algebra course

This is a Common Core course. It is comprised of 5 major topics. The first is Congruence, Proof, and Construction which develops the Euclidean foundations of geometry. Similarity, Right Triangles, and Trigonometry is the second topic and it includes similar triangles, proportions and the introduction of the trigonometric ratios. The third topic is a study of 3-dimensional geometry and includes measures such as area, surface area, and volume of solid figures. Topic four investigates Coordinate Geometry and includes distance, midpoint, slope, lines, area and other Cartesian plane concepts. The final topic covers circles, both on the Cartesian plane and in a Euclidean plane without coordinates.

### 4310- STATISTICS

Credit: ½

Grades 11-12 who have passed the Common Core Algebra Regents and have 3 math credits

This semester course is a project based course that focuses on statistics: the practice of collecting and

analyzing numerical data in large quantities. Students will collect and analyze data through investigations of various statistic rich resources and will be required to present a meta-analysis of the collected data.

#### **4311- INTRODUCTION TO ENGINEERING**

**Credit: ½**

**Grades 11-12 who have passed the Common Core Algebra Regents and have 3 math credits**

**This semester course is a project based course that allows students to explore the different fields within the area Engineering. Have students look at how engineering is used in the workplace, research colleges that prepare students for that field, invite professionals from the various fields of engineering in to discuss their jobs and the education they need to be successful, and explore the use of mathematics in each of the different fields of engineering.**

#### **4331- ALGEBRA II (formerly known as Algebra II/Trigonometry)**

**Credit: 1**

**Prerequisite: students must have passed the Algebra and Geometry courses**

**Building on their work with linear, quadratic, and exponential functions, students extend their repertoire of Functions to include polynomial, rational, radical, and trigonometric functions. Students work closely with the expressions that defines the functions and continues to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. It is recommended that students achieve over a 70 on the Algebra Regents Exam and over a 65 on the Geometry Regents Exam.**

#### **4341- ADVANCED TOPICS IN MATHEMATICS (formerly known as Course 4)**

**Credit: 1**

**Prerequisite: Student must have passed the Algebra, Geometry, and Algebra II courses**

**This is a four year college preparation course in advanced mathematical concepts. Topics will include:**

- A review of relations, functions and graphs
- Matrices and linear programming
- Theory of equations (polynomials, rational, exponential, logarithmic)
- Conic sections
- Polar coordinates and complex numbers
- Series and sequences

#### **4351- APPLIED MATHEMATICS**

**Credit: 1**

**Prerequisite: Students must have 2 math credits and taken the Algebra Regents**

**This course for Juniors or Seniors that will satisfy their 3<sup>rd</sup> year of mathematics credit required for graduation. This course is a project based and student centered math class which focuses on modules designed to reflect problems from everyday life. Core modules will include Statistics, Probability, Financial Issues (banking, mortgages, insurance, etc.), Geometry, and Mathematics across the curriculum. Students will investigate the interdisciplinary aspect of the role of mathematics in sports, art, architecture, music, and nature.**

#### **4402- MA 111 - PRE-CALCULUS (Columbia Greene Community College)**

**Credit: 1**

**College credit: 4**

**Prerequisite: students must have passed the Algebra, Geometry, and Algebra II courses with an overall 80% average and have taken all 3 regents exams. Acceptance for early enrollment by Columbia-Greene Community College is also required.**

**This is a reform math course based on the Harvard Consortium method. It is a study of functions that model real world behavior. Topics include linear, exponential, logarithmic, trigonometric, polynomial, and**

rational functions. The course will take a 4 pronged approach to all problems: symbolic, numeric, graphic and verbal. Students will need to read and write in the language of mathematics. A graphing calculator (TI 83/84+) is required.

**4401- MA 122 - CALCULUS (Columbia Greene Community College)**

**Credit: 1**

**College credit: 4**

**Prerequisite: Pre-Calculus and acceptance by Columbia Greene Community College after**

**Recommendations from teacher and an overall average of 85% or better in math courses**

**This course is a reformed math class; topics will be presented geometrically, numerically, and algebraically. Formal definitions and procedures will evolve from investigating practical problems. Topics include a review of functions, the derivative, the definite integral, and the Fundamental Theorem. This course is for math, science, and engineering majors who have strong algebra skills and have completed a pre-calculus course. Students will study limits, differentiation and integration with applications stressed throughout. A (TI 83/84+) graphing calculator is required.**

**NOTE: for MA111 and MA122, students will need to be admitted to Columbia Greene Community College as Early Admissions candidates and will have to pay tuition to the college.**

**6301- BOOKKEEPING/ACCOUNTING**

**Credit: ½**

**This ½ year course is designed to develop occupational competencies in bookkeeping and accounting. This course is also desirable for students aiming for post-secondary training. The content encompasses the complete accounting cycle for sole proprietorship, partnership, service, and merchandising businesses.**

## **MUSIC DEPARTMENT**

**9401- BAND**

**Credit: ½**

**Prerequisite: participation in the band program at the elementary and middle school levels unless waived by director**

**The Band performs a variety of school and community events throughout the year. During concert season students will continue to develop their abilities through experiencing a wide variety of music styles and pieces. The band also performs to support and represent the school at a variety of functions including parades, football games, and other community events. Band members may audition for participation in the Jazz Ensemble.**

**9409- JAZZ ENSEMBLE (Students will be handpicked by Mr. Vorwald)**

**Credit: ½**

**Prerequisite: participation in concert band unless waived by the director**

**In the Jazz Ensemble students perform and learn a variety of Jazz and Contemporary musical styles ranging from the big band music of Duke Ellington and Benny Goodman to modern Funk and Soul music. The Jazz Ensemble performs at a variety of school and community events throughout the year.**

**9411- CONCERT CHOIR**

**Credit: ½**

**This is a year-long non-auditioned choir that meets alternating days first period which explores the joy of choral singing from a wide variety of cultures and time periods through study and performance. The core curriculum emphasizes basic group vocal technique, proper breathing, pronunciation, tone quality, sight-reading, music theory, and music history for a focused interpretation in performance. Students in Concert**

Choir are expected to participate in four concerts outside of the school day: December concert, Reverend Dr. Martin Luther King Jr. Ceremony in January, Music In our Schools concert in March and the June Concert. The final grade is a combination of the Rubric-based Daily Rehearsal and Concert Participation. There may be opportunity for NYSSMA Solo Festival and All-county Choir performances.

#### **9415- SELECT CHOIR**

**Credit: ½**

This is an auditioned vocal ensemble which offers students a variety of enriched musical opportunities. Students will enhance their knowledge of a variety of choral literature, music theory concepts, and will achieve a higher degree of perfection in the performance and understanding. Weekly group lessons are a part of the curriculum for this class. Repertoire is selected to provide sequential, systematic concepts and performance skills associated with varying musical content and style; these may include: madrigals, classical, a cappella jazz and contemporary and show choir numbers (with choreography). Each student in this ensemble will have the opportunity to audition for and participate in festivals sponsored by the Columbia County Music Educators Association, the New York State School Music Association, and the National Association for Music Education. This includes opportunities for scholarships where applicable.

#### **9431- MUSIC THEORY AND TECHNOLOGY**

**Credit: 1**

**Prerequisites:** Student needs to participate in the band and/or choral program and a recommendation from a music teacher.

Music Theory will develop a student's ability to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a score. This course will utilize integrated approaches specifically designed for the development of student's fluency and speed regarding: reading, sight-singing, written, compositional, analytical and listening skills. Students will also have the opportunity to learn about the technology used to create modern music. This will include live sound, recording, and computer applications in music.

#### **9451- MUSIC IN OUR LIVES I (FALL)**

**Credit: ½**

This course is designed to meet the New York State Regents Requirement for one unit of art/music credit for those students who do not participate in a major performing ensemble. Students will develop skills in critical listening elements of music theory and instrumental skills for personal enjoyment. This course also covers the rich history of American popular music along with discussion and analysis of current pop music and industry trends. No prior experience in music is necessary for enrollment in this course.

#### **9452- MUSIC IN OUR LIVES II (SPRING)**

**Credit: ½**

**Prerequisite:** Music In Our Lives I

Using foundations covered in Music in Our Lives, this course will focus on listening to and evaluating music from popular culture. Students will develop, even more deeply, previously acquired skills in critical listening elements of music theory and instrumental skills for personal enjoyment. An in depth study of popular music releases, favorite artists, and music industry developments is an aspect of this course. In addition, American popular music history is explored from the 1960s – onward.

# PHYSICAL EDUCATION DEPARTMENT

All students in New York State are required by law to successfully complete four years of physical education in order to graduate. Physical education units are designed to meet the New York State Learning Standards:

1. **Personal Health and Fitness:** students will have the necessary knowledge and skills to establish and maintain physical fitness, participate in physical activity and maintain personal health.
2. **Safe and Healthy Environment:** students will acquire the knowledge and ability necessary to create and maintain a safe and healthy environment.
3. **Resource Management:** students will understand and be able to manage their personal and community resources.

Students are required to actively participate in all activities while wearing appropriate clothing and footwear. A variety of lifetime fitness sports and activities will be offered. Some of these units include: soccer, touch football, volleyball, badminton, bowling, project adventure games, swimming, racquetball, fitness walking, weight lifting, lacrosse, aerobics, and golf.  $\frac{1}{4}$  (0.25) credit will be earned upon successful completion of each semester.

## SCIENCE DEPARTMENT

All Regents level science courses include approximately 90 laboratory periods in addition to the class. Each student must complete a minimum of 1200 minutes of laboratory work, accompanied by satisfactory and acceptable written reports prior to admission to the Regents exam.

### 5007- GENERAL SCIENCE

Credit: 1

**Prerequisite:** this class is ONLY intended for those students that passed the Living Environment class but failed the regents exam. The first two quarters of this course will review the biological concepts necessary to prepare for the New York State Living Environment Regents. The second half of the course explores the disciplines of chemistry, physics, and earth science and how they relate to everyday life. Upon completion of the course, students will be able to understand and apply basic scientific principles to the technological and physical issues of everyday life.

### 5100- EARTH SCIENCE NON-REGENTS

Credit: 1

This is a non-regents level course that will investigate the processes of change on Earth. Topics include mapping Earth's surface, minerals, the rock cycle, the water cycle, glacial geology, plate tectonics, Earth's geologic history, weather, climate, Earth's motion in space, the formation of the solar system, and deep space studies. Environmental issues will be discussed throughout the year. Even though labs will be conducted throughout the year, there is not an additional lab period with this course. This course is intended for those students who have already passed the Living Environment Regents and not planning on getting an Advanced Regents Diploma. Students will be placed in this course based on teacher/guidance recommendation.

### 5101- EARTH SCIENCE

Credit: 1

**Prerequisite:** 80% or higher in the Living Environment course and a passing grade on the Living Environment Regents or teacher recommendation



This Regents course will investigate the processes of change on Earth. Topics include mapping Earth's surface, minerals, the rock cycle, the water cycle, glacial geology, plate tectonics, Earth's geologic history, weather, climate, Earth's motion in space, the formation of the solar system, and deep space studies. Environmental issues will be discussed throughout the year. A prerequisite for admission to the Regents exam in Earth Science, which is the final exam in this course, is 1200 minutes of laboratory work with satisfactory and acceptable written reports.

#### **5201- LIVING ENVIRONMENT**

**Credit: 1**

This Regents course focuses on understanding important relationships, processes, mechanisms, and the application of biological concepts. This course is designed to prepare the student to explain both accurately and with appropriate depth the most important ideas about our living environment. Major topics include similarities and differences among living organisms, homeostasis in organisms, genetic continuity, reproduction and development, evolution, and ecology. Critical to understanding science concepts is the use of science inquiry to develop explanations of natural phenomena. A prerequisite for admission to the Regents exam in Living Environment, which will represent the final exam, is 1200 minutes of laboratory work accompanied by satisfactory and acceptable written reports. This is to include the core New York State mandated labs.

#### **5202- LIVING ENVIRONMENT HONORS**

**Credit: 1**

Students will be accepted into this program based on standardized test scores, having a grade point average of at least 87%, and teacher recommendations. This course enables Hudson High to provide intensive academic challenges to the students in 9<sup>th</sup> grade. The curriculum will emphasize critical thinking, factual knowledge and independent research as well as preparing the student for the Living Environment Regents and the SAT II test. Students should expect to do well beyond the 1200 minutes of required laboratory work necessary to be admitted to the NYS Living Environment Regents. Students should also be prepared to read independently as well as complete summer reading assignments. If the academic standards are not upheld, the student may be reassigned to the Regents level course.

#### **5301- MARINE SCIENCE**

**Credit: 1**

**Prerequisite:** Successful completion of a physical setting course and Living Environment

This course focuses on the interrelationships that exist between aquatic environments and the organisms that reside in them. This course will examine three main aquatic environments: freshwater, brackish, and marine. Major topics discussed in this course include limnology, oceanography, diversity, ecology, and conservation. Students taking this course should be aware that this is an upper-level science designed to challenge you and further your knowledge of science.

#### **5311- CHEMISTRY**

**Credit: 1**

**Prerequisite:** Successful completion of Living Environment, a physical setting course, and Algebra I. (Exceptions: those students enrolled in Living Environment Honors or are recommended by their Living Environment teacher may take Chemistry in 10<sup>th</sup> grade)

This Regents course introduces many of the important concepts and methods of chemistry. Any student planning on going to a four year college, especially those who are planning on furthering their education in science or a science field (nursing, medicine, physical therapy, sports medicine, science research, or engineering should highly consider taking this course. Classroom emphasis is on the theoretical basis of chemical change. In the laboratory, observation and practical applications are

emphasized. Some topics studied are: matter and energy, the structure of atoms, bonding of atoms, periodic relationships among elements, kinetics, equilibrium, acid-base theories, oxidation-reduction reactions, electro-chemistry, and organic chemistry. A prerequisite for admission into the Regents exam in Chemistry (which will represent the final exam for the course) is a minimum of 1200 minutes of laboratory work accompanied by satisfactory and acceptable written reports.

### **5320- AP (Advanced Placement) ENVIRONMENTAL SCIENCE**

**Credit: 1**

**Prerequisite:** successful completion of at least one year of life science and one year of physical science and teacher recommendation

This course is designed to be the equivalent of a one-semester introductory college course in environmental science. This is a rigorous science course that stresses scientific principles and analysis and includes a laboratory component. Major topics covered in this course include Earth systems and resources, the living world, population biology, land and water use, energy resources and consumption, pollution, and global change. Students should expect to perform detailed environmental science laboratories, including a number that involve going outdoors. This course is intended to enable students to undertake, as first-year college students, a more advanced study of topics in environmental science or alternatively to fulfill a basic requirement for a laboratory science and thus free time for taking other courses. All students enrolled in AP Environmental Science are **REQUIRED** to take the AP exam.

### **5321- FORENSIC SCIENCE**

**Credit: 1**

**Grades 11-12**

**Prerequisite:** successful completion of a physical setting course and Living Environment

This course investigates the application of science to law. It examines the history of forensic science, analysis of physical evidence, forensic toxicology, DNA technology, microscopic analysis, fingerprinting, forensic serology and computer forensics. Students will be expected to analyze and write about case studies. They will also be required to collect evidence from simulated crime scenes, analyze this evidence, and present their findings to the class. This is an upper-level science course that involves advanced biological and physical science concepts.

### **5331- APPLIED PHYSICAL SCIENCE**

**Credit: 1**

**Grade 11-12**

**Prerequisite:** must have successfully completed Earth Science and Living Environment and have passed at least one science regents

This course is designed to teach students to apply the laws, theories, and principles of the physical sciences to everyday phenomena. It will focus on real-world issues to promote understanding of chemistry and physics as it relates to students' experiences. We will discuss the following topics to understand the principles of the physical sciences; scientific method, water, air, atoms, and nuclear science, elements and bonding, food, nanotechnology, petroleum, energy, forces and motion, electricity and magnetism, and mechanical waves and sounds. Organizational, critical thinking, problem solving, and hands on laboratory investigation will be emphasized. This course principles of the physical sciences; scientific method, water, air, atoms and nuclear science, elements and bonding, food, nanotechnology, petroleum, energy, forces and motion, electricity and magnetism, and mechanical waves and sounds. Organizational, critical thinking, problem solving, and hands on laboratory investigation will be emphasized. This course is intended for those students who need a third science credit, but lack the math background to take Regents Chemistry or Physics.

**5401- AP (Advanced Placement) BIOLOGY****Credit: 1**

**Prerequisite:** must have successfully completed Living Environment and a Physical Setting Course and have teacher recommendation

This course is designed to be equivalent of a two-semester college introductory biology course that is usually taken by biology majors during their freshman year. The course will include those topics regularly covered in a college biology course for majors. The course will differ significantly from the Living Environment course with respect to the kind of textbook used, the range and depth of the topics covered the type of laboratory work, and the time and effort required of the students. AP Biology aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. Topics covered include: molecular biology, genetics, evolution, anatomy and physiology, ecology, and biological diversity. Students should expect to perform a detailed anatomical dissection of a fetal pig or a cat as part of this course. Any student considering taking AP Biology must be willing to devote the time, effort and hard work needed to master the challenging course work they will encounter in this class. All students enrolled in AP Biology are required to take the AP exam.

**5421- PHYSICS****Credit: 1**

**Prerequisite:** Successful completion of Algebra II course including a passing grade on the Algebra II Regents exam

This Regents course is an intensive science course that introduces a wide variety of mathematical and scientific concepts in Physics. These include mechanics, work and energy, electricity and magnetism, wave phenomena, nuclear energy and modern physics. This course uses a combination of classroom theory and laboratory application in order to understand physical concepts. A prerequisite for admission to the Regents exam in Physics, which is the final exam for this course, is 1200 minutes of laboratory work accompanied by satisfactory and acceptable written reports.

## **SOCIAL STUDIES DEPARTMENT**

**2102- GLOBAL HISTORY & GEOGRAPHY 9****Credit: 1**

New York State Education Department curriculum in 9<sup>th</sup> and 10<sup>th</sup> grade social studies program is World History/A Chronological Approach. Topics covered in the 9<sup>th</sup> grade are: the development of agriculture, early civilizations, world religions, and the emergence of Europe, early Asian, Latin America and African civilizations, and the age of exploration.

**2103- ADVANCED PLACEMENT WORLD HISTORY 9****Credit: 1**

This course enables Hudson High School to provide an academic challenge to the 9<sup>th</sup> grade enriched level students. This course will be divided into two full-year offerings, beginning in 9<sup>th</sup> grade. The curriculum will begin in pre-history and conclude by 1750. Students will be required to take the AP World History exam in May of their 10<sup>th</sup> grade year. The cost of the exam is the student's responsibility. Students will also take the New York State Regents exam in Global History & Geography in June. The course requirements will include summer assignments and selected readings. Students will be accepted into this program based on academic standardized tests, grade point average, teacher recommendation, and completion of the summer assignments. If the academic standards are not upheld (85 average), the student may be reassigned to the Regents level course.

**2110- GLOBAL HISTORY & GEOGRAPHY 9 HONORS****Credit: 1**

This is an advanced, intensive study of the Global History and Geography curriculum mandated by NYS for grade nine. A focus on deconstructing primary documents, creating analytical historical arguments, and crafting historical thinking will be emphasized. Entrance to the course is reserved for 9<sup>th</sup> graders with positive past performance in social studies classes. Course grades of 80+ and a teacher recommendation are required for entrance.

**2211- GLOBAL HISTORY & GEOGRAPHY 10****Credit: 1**

This is a continuation of the study of the history of the world from grade 9. This course begins with the Enlightenment and Revolution and goes on to explore industrialism, imperialism, two world wars, and the world today. Emphasis on improved essay writing in preparation for the Regents exam covering both 9<sup>th</sup> and 10<sup>th</sup> grades. All students are expected to take the Global History Regents at the end of this year.

**2212- GLOBAL HISTORY & GEOGRAPHY 10 HONORS****Credit: 1**

Criteria: 85 average in Global 9 and an 85 on the final exam

This class is designed for students who are most likely planning on attending college after high school. These students have shown the ability to reach mastery level in social studies in the previous year but need to build further reading comprehension and writing skills in order to be successful in a college level or AP course. These students have achieved an overall GPA of 85 and an 85 or above on their final exam in the preceding year. The goal of the class will be to enrich the standard Regents level curriculum to help them achieve their academic goals for the future. This class will use the Regents textbook supplemented with other materials and more rigorous assignments.

**2213- ADVANCED PLACEMENT (AP) WORLD HISTORY 10****Credit: 1**

This course enables Hudson High School to provide an academic challenge to the enriched level students. This course will be divided into 2 full-year offerings, beginning in 9<sup>th</sup> grade. The curriculum will begin in pre-history and conclude by 1750. Students will be required to take the AP World History exam in May of this year. The cost of the exam is the student's responsibility. Students will also take the NYS Regents exam in Global History & Geography in June. The course requirements will include summer assignments and selected readings. Students will be accepted into this program based on academic standardized tests and grade point average, teacher recommendation, and completion of the summer assignments. If the academic standards are not upheld, 85 > average, the student may be reassigned to the Regents level course.

**2301- AP (Advanced Placement) AMERICAN HISTORY****Credit: 1**

This course focuses on American History from colonial period to the present. This course will provide the student with the analytic skills and the factual knowledge necessary to understand the lessons of American History. This course will require at least 5-6 hours of work and study outside of class each week. There will be **SUMMER ASSIGNMENTS**. Prospective students must have a final average of 90 in Global 10 and a final average of 85 in English 10 and teacher recommendation. In addition, students will be required to do extensive reading, conducts research, and participates in classroom discussions and debates. College credit may be available contingent upon the score results of the AP examination. All students enrolled in AP American History are required to take the AP exam. The cost of the exam is the student's responsibility.

**2311- US HISTORY 11****Credit: 1**

This course focuses on the US constitution and modern American history. This is a college preparatory program which emphasizes writing, note taking, and an analytical approach to historical issues. A Regents examination is required at the completion of this course.

**2312- US HISTORY 11 HONORS****Credit: 1**

Criteria: 85 average in Global 10 and an 85 on the final exam

This class is designed for students who are most likely planning on attending college after high school. These students have shown the ability to reach mastery level in social studies in the previous year but need to build further reading comprehension and writing skills in order to be successful in a college level or AP course. These students have achieved an overall GPA of 85 and an 85 or above on their final exam in the preceding year. The goal of the class will be to enrich the standard Regents level curriculum to help them achieve their academic goals for the future. This class will use the Regents textbook supplemented with other materials and more rigorous assignments.

All students are required to take Economics and Participation in Government. Students who are eligible may substitute SO101-Introduction to Sociology for Participation in Government.

**2401- ECONOMICS****Credit: ½**

This one semester required course includes an introduction to economic theories and systems. Elements include consumer, business, labor and agriculture (micro-economics) as well as national measures of the economy (macro-economics). Both United States' and the worlds' economies are examined.

**2411- EFFECTIVE PARTICIPATION IN GOVERNMENT****Credit: ½**

This one semester course will teach students the skills necessary for them to become effective participants in their own government by having "hands-on experiences". Students will learn to examine public policy issues in a systematic, disciplined manner and to put forth their own positions effectively in public forums. 16 hours of community service will be required.

**Social Studies Electives****2421- PY 101-GENERAL PSYCHOLOGY (Columbia Greene Community College)****Credit: ½****Seniors only****College Credit: 3**

An overview of the field of psychology, including some of the basic concepts of the discipline and major aspects of human behavior, such as emotion, learning, conditioning, motivation, personality, and development. It includes more advanced material than the regular high school course. This course is a joint offering of Hudson High School and Columbia Greene Community College. Acceptance will be determined by the college; therefore, an application for part-time early admission must be completed. Students must have a minimum average of 85% in the academic area in which he/she would like to study. A tuition fee is required.

**2431- SO 101-INTRODUCTION TO SOCIOLOGY (Columbia Greene Community College)****Credit: ½****Seniors only****College Credit: 3**

This is an introduction to and overview of the field of sociology. It gives students a basic working knowledge of the major institutions present in American society and their relationship to power, conflict, and social change. Eligible students may use this course to fulfill ½ unit required in Participation in

Government. It is offered jointly by Hudson High School and Columbia Greene Community College. Acceptance will be determined by the college; therefore, an application for part-time early admission must be completed. Students must have a minimum average of 85% in the academic area in which he/she would like to study. A tuition fee is required.

**NOTE:** for PY101 and SO101, students will need to be admitted to Columbia Greene Community College as Early Admissions candidates and will have to pay tuition to the college.

## **TECHNOLOGY DEPARTMENT**

Technology education is an exploratory program. Methods of instruction are “hands on” and problem based learning. An understanding of technological advancements and their impact on American lifestyle and jobs are emphasized.

Students planning to enter a 2 or 4 year technical or engineering college program are encouraged to select from courses marked with an asterisk (\*).

Courses required for Technology majors are as follows:

### **7110- TECHNOLOGY I**

**Credit: ½**

(combination of Productions Systems & Transportation Systems)

This course explores the worlds of manufacturing and construction and an opportunity to study aerospace, land, and marine transportation systems. This is a hands on course. Students design, build, and test a variety of products, structures, scale model cars, rockets, and boats. Activities may include model, house framing, and mass production projects. The course is recommended for those interested in pursuing careers such as industrial designer, construction worker, and machine or equipment operators

### **7121- BASIC ELECTRICITY\***

**Credit: ½**

Prerequisite: 1 year of math.

This required course provides introductory electrical theory in AC and DC circuits. Bench work, lab work, and house wiring reinforce theory through practical application. This course is highly recommended for the student who plans to pursue further study or a career in electricity/electronics.

### **7114- TECHNOLOGY CHALLENGE\***

**Credit: ½**

(combination of Technical Drawing & Design and Drawing for Production)

This course is the universal language of engineers, architects, designers, and trades people who rely on accurate plans to convey information. Students who take this course learn to produce these drawings by conventional methods and through the use of computers. This course teaches students how to use technical drawing as part of the creative process of design. Students conceptualize objects, design them, develop technical drawings and build finished products using the design plan. Introduction to the use of computer aided drawing (CAD) is covered. This is a relevant course for students who intend to pursue a technical or engineering track in college. Students planning to enter a 2 or 4 year technical or engineering college program are encouraged to select this course.

Technology Challenge may be used to satisfy the 1 credit of music/art requirement.

## Technology Electives

### **6000- GOOGLE HELP DESK**

**Credit: ½**

This is a blended learning, independent study course focused on the integration of technology into our everyday lives. As part of this course, students train to staff the high school's student help desk to assist faculty and students with technology-related issues. Regular, independent work is completed through the Google platform of applications, including, but not limited to, crafting websites and creating professional development opportunities for teachers. All students will be required to take the Google Level 1 Educator exam at the end of the semester in order to become Google Certified Educators.

### **7112- TECHNOLOGY II\***

**Credit: ½**

**Prerequisite: Technology Challenge or Studio Art**

**(combination of Architectural Drawing & Principles of Engineering)**

In this course students study the design and construction techniques related to the efficient use of living and working areas. Students produce drawings by conventional methods, computers, and build scale models from their own designs. Grades 10-12 who are planning to pursue a career in engineering. This course is designed to familiarize students with the work of engineers and the various engineering disciplines. The method of instruction is through problem based learning where students design, construct, and test their solutions to engineering problems. Because effectiveness in technical writing and interpersonal communications are vital to success in engineering, these skills will be emphasized throughout the course. It is desired that the student take Technology Challenge or Studio Art prior to enrollment in this course.

### **7115- ALTERNATIVE ENERGY**

**Credit: ½**

This course is for Juniors and Seniors. It is intended to acquaint students with the sources and forms of energy available now and what may be available in the future. Students will learn that there are often choices to be made about the most appropriate energy form to use. The course stresses the importance of identifying the issues and problems associated with use of each energy form.

### **7241- WOODWORKING TECHNOLOGY**

**Credit: ½**

In this course students build projects from working drawings using both hand and power tools. They learn to glue, clamp, and apply finishes. The skills developed in this course are useful to future tradespeople and homeowners.

### **7301- FURNITURE MAKING**

**Credit: 1**

**Prerequisite: Permission of the instructor and Woodworking Technology or Production Systems**

This advanced woodworking course is open to qualified students. Students will follow detailed plans in construction quality wood products. Admission to the course is based on aptitude and past performance in woodworking technology. Students should have prior course work in technical drawing. This is an excellent course for the capable student who wants to prepare for training, beyond high school, in carpentry, cabinet making or furniture making.

### **7401- CONSTRUCTION I (formerly known as Residential Structures)**

**Credit: ½**

**Prerequisite: One year each of a science, math, and ½ year of technology**

This course is for the individual who has an interest and aptitude for working with tools and materials. It requires a development of manual skills and thorough knowledge and understanding of basic principles and

practices related to construction work. In addition this course includes: job estimates on lumber, concrete, plumbing, and electrical.

## **WORLD LANGUAGE DEPARTMENT**

Foreign languages are offered throughout high school. Instruction is a continuous, expanding process. Emphasis at all levels is functional communication. The ability to communicate effectively at any given level of proficiency will require a specific vocabulary, a specific set of linguistic structures, and specific knowledge of certain cultural items. These skills cannot be acquired in one single unit of instruction. Students acquire this gradually as their proficiency in communication becomes more advanced. The components are revisited again and again each time at a more advanced level. The majority of class time is spent in developing real communication as opposed to reviewing grammatical structures.

### **3111- ITALIAN 1**

**Credit: 1**

This is a beginner's course. It also serves those students with little experience with a second language and/or those who have not passed the Proficiency exam. Successful completion will meet requirements for Foreign Language other than English and/or enable the student to continue onto the next level of study.

### **3121- SPANISH 1**

**Credit: 1**

This is a beginner's course. It also serves those students with little experience with a second language and/or those who have not passed the Proficiency exam. Successful completion will meet requirements for Foreign Language other than English and/or enable the student to continue onto the next level of study.

### **3211- ITALIAN 2**

**Credit: 1**

**Prerequisite: Italian 1**

This course provides students with opportunities to continue the development of their listening, speaking, reading, and writing skills. Students participate in simple conversational situations by combining and recombining learned elements of the language orally and in writing. They are able to satisfy basic survival needs and interact on issues of everyday life in the present and past time, inside and outside of the classroom setting. Focus is placed on understanding main ideas. They develop a better understanding of the similarities and differences between cultures and languages and they examine the influence of the beliefs and values on the target culture(s). Integration of other disciplines is ongoing throughout this course.

### **3221- SPANISH 2**

**Credit: 1**

**Prerequisite: Spanish 1**

This course provides students with opportunities to continue the development of their listening, speaking, reading, and writing skills. Students participate in simple conversational situations by combining and recombining learned elements of the language orally and in writing. They are able to satisfy basic survival needs and interact on issues of everyday life in the present and past time, inside and outside of the classroom setting. Focus is placed on understanding main ideas. They develop a better understanding of the similarities and differences between cultures and languages and they examine the influence of the beliefs and values on the target culture(s). Integration of other disciplines is ongoing throughout this course.



**3111- ITALIAN 3****Credit: 1****Prerequisite: Italian 1 and 2**

This course provides students with additional opportunities to expand their listening, speaking, reading, and writing skills as they relate to the language and as they access short literary texts, authentic materials, and media on generally familiar topics. Students satisfy limited communication and social interaction demands; they initiate and maintain face-to-face communication. They identify main idea(s) and significant details in discussions, presentations, and written texts within a cultural context, read and interpret authentic materials, narrate and describe in sentences, groups of related sentences, and short cohesive passages in present, past, and future time and compose messages, announcements, personal notes, and advertisements. They refine their knowledge and understanding of the target language and culture(s) and their own by examining the interrelationship of other cultures to their own, by demonstrating behaviors appropriate in target cultures, and by applying their knowledge and skills inside and outside of the classroom setting. Integration of other disciplines is ongoing throughout this course.

**3321- SPANISH 3****Credit: 1****Prerequisite: Spanish 1 and 2**

This course provides students with additional opportunities to expand their listening, speaking, reading, and writing skills as they relate to the language and as they access short literary texts, authentic materials, and media on generally familiar topics. Students satisfy limited communication and social interaction demands; they initiate and maintain face-to-face communication. They identify main idea(s) and significant details in discussions, presentations, and written texts within a cultural context, read and interpret authentic materials, narrate and describe in sentences, groups of related sentences, and short cohesive passages in present, past, and future time and compose messages, announcements, personal notes, and advertisements. They refine their knowledge and understanding of the target language and culture(s) and their own by examining the interrelationship of other cultures to their own, by demonstrating behaviors appropriate in target cultures, and by applying their knowledge and skills inside and outside of the classroom setting. Integration of other disciplines is ongoing throughout this course.

**3411- IT201-ITALIAN III (aka Italian 4)(Columbia Greene Community College)****College credit: 3****Prerequisite: Italian 3****Credit: 1**

A major focus of this course is to enable students to communicate in writing and in extended conversations on a variety of topics. Students begin to narrate, discuss, and support fairly complex ideas and concepts using concrete facts and topics in past, present, and future time. They satisfy routine social demands and meet most social requirements. Another emphasis of this course is on culture and literature. Short stories, poetry, excerpts from various periods of literature, current events, and authentic materials are included. Emphasis is placed on independent reading. Finer points of grammar are studied to aid oral and written communication. There is more in depth study of the target culture(s) and their influence throughout the world. Students are able to connect the target language inside and outside of the classroom setting. Students may choose to take this is a college credit course or for high school credit.

**3421- SA201-SPANISH III (aka Spanish 4) (Columbia Greene Community College)****College credit: 3****Prerequisite: Spanish 3****Credit: 1**

A major focus of this course is to enable students to communicate in writing and in extended conversations on a variety of topics. Students begin to narrate, discuss, and support fairly complex ideas and concepts using concrete acts and topics in past, present, and future time. They satisfy routine social demands and meet most social requirements. Another emphasis of this course is on culture and literature. Short

stories, poetry, excerpts from various periods of literature, current events, and authentic materials are included. Emphasis is placed on independent reading. Finer points of grammar are studied to aid oral and written communication. There is more in depth study of the target culture(s) and their influence throughout the world. Students are able to connect the target language inside and outside of the classroom setting. Students may choose to take this as a college credit course or for high school credit.

**3511- SA202-SPANISH IV (aka Spanish 5) (Columbia Greene Community College) College credit: 3**

**Prerequisite: Spanish 4 Credit: 1**

This course is a continuation of Spanish 4 with more emphasis on conversation. Students can manage to be in everyday situations when totally immersed in the target language. Study focuses on literary works along with a detailed study of Spanish and Latin American history and culture.

**NOTE: IT201, SA201, and SA202 students will need to be admitted to Columbia Greene Community College as Early Admissions candidates and will have to pay tuition to the college.**

**Created by**



**The Hudson Senior High Guidance Department**