Schenectady High School

Course Catalog 2017-18

A national award-winning district









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***SHS Courses May Not Be Offered Each Year**

TYPES OF DIPLOMAS

Schenectady High School wants all students to earn a high school diploma. A student must fulfill all diploma and test requirements to receive a diploma. Requirements begin when a student enters grade 9. Students from Schenectady High School may earn a Regents or Advanced Regents Diploma. Students who are pursuing an IB program may earn an IB Diploma. Students receiving a Regents or Advanced Regents Diploma are awarded a seal affixed to their diploma. Students may also receive endorsement recognition for areas of study.

ENTERING FRESHMAN CLASS

REGENTS DIPLOMA		ADVANCED REGENTS DIPLOMA	
English	4 units	English	4 units
Social Studies	4 units	Social Studies	4 units
Math	3 units	Math	3 units
Science	3 units	Science	3 units
Health	1/2 unit	Health	1/2 unit
*Art/Music/DDP	1 unit	*Art/Music/DDP	1 unit
Foreign Language	1 unit	Foreign Language	**
Physical Education	2 units	Physical Education	2 units
Sequence, Courses & Electives	3.5 unit	Sequence, Courses & Electives	4.5 unit
	+ Electives = 22 credits		+ Electives = 22 credits

* Can be fulfilled by Studio Art; Choir; Band; Orchestra; Piano; Music in Our Lives; Music Theory; Intro to Dance; Intro to Theatre; Design & Drawing for Production; Customs, Clothing and Textiles;Housing and the Environment; Drumming.

** To earn the advanced designation, the student must complete one of the following:

- A language other than English (total of three credits)
- Career and Technical Education (five credits) plus one credit in a language other than English; Career and Technical Education includes Business, Family and Consumer Sciences and Technology programs
- The arts (five credits) plus one credit in a language other than English.

DIPLOMA TEST REQUIREMENTS

Regents Diploma Requirements	Regents Diploma w/Advanced Requirements	Regents Pathway Diploma Option 4:1
1. Comprehensive English Regents Exam 2. U.S. History & Government Regents Exam 3. Global History & Geography Regents Exam 4. One Math Regents Exam 5. One Science Regents Exam	1. Comprehensive English Regents Exam 2. U.S. History & Government Regents Exam 3. Global History & Geography Regents Exam 4. Algebra, Geometry & Algebra 2 Regents Exams 5. Two Science Regents Exams 6. Language other than English Proficiency Exam OR Five credits in Career & Technical Education PLUS one credit in a language other than English OR Five credits in the arts, business, or technology PLUS one credit in a language other than English	1. 1 English Regents, 1 Math Regents, 1 Science Regents, and 1 Social Studies Regents PLUS a Pathway Exam 2. Pathway Exams include: a Second Regents exam in any of the subjects above, (Science, Math, or Social Studies), or an approved CTE assessment (Please see CTE Guidelines p. 51-61), or a Humanities/Arts assessment (pending SED approval)

The Local Diploma option will be available for students with disabilities who pass the required Regents exam.

DIPLOMA ENDORSEMENTS

AN ARTS ENDORSEMENT

For students who earn at least four credits beyond the required core course in fine arts.

A CAREER & TECHNICAL EDUCATION ENDORSEMENT

For students who complete an SED approved Career & Technical Education Program (CTE Program) in Business Management, Microsoft Office Specialist, Integrated FACS/Business at SHS. Also CTE approved programs in Culinary, CAD, Culinary/Management and Drafting & Design Management Program at SCLA.

AN ACADEMIC ENDORSEMENT

For students who earn 25 units of credit and meet Regents Diploma requirements.

· Advanced Regents with Mastery in Math – In addition to Advanced Regents Diploma requirements, an 85 or better on each of the three Regents Exams in Math will be required.

· Advanced Regents with Mastery in Science - In addition to Advanced Regents Diploma requirements, an 85 or better on each of the three Regents Exams in Science will be required.

AN ADVANCED ACADEMIC ENDORSEMENT

For students who earn 25 units of credit, meet the Advanced Regents Diploma requirements, and pass a minimum of three Advanced Placement courses.

A TECHNICAL PROGRAM ENDORSEMENT

For students who complete the requirements of the Technical Department.

AN MST ENDORSEMENT

For students who earn eight credits in Math, Science and Technology including .5 credits in any technology inclusive course.

ALTERNATE WAYS OF EARNING CREDIT

Eligible students have the option of earning up to 6.5 credits (of the 22 required) without completing specific courses of study. The school must determine that this alternative will benefit the student academically. This may be done as follows:

A. The student achieves 85 percent or better on state-developed examinations (e.g. Regents examinations, or state-approved examinations) and passes an oral examination or completes a special project.

1. In the areas of science laboratory requirements, where credit is through examination, laboratory requirements will be met through special projects demonstrating appropriate skills.

2. An art and music unit of credit may be earned through participation in a performing group (e.g. band, chorus, orchestra, dance group,) or by participating in advanced, out of school art or music activities as approved by the district.

3. Students who pass a second language proficiency exam will earn the first unit of credit in that language. Students who pass the Language Proficiency Exam can receive three units of credit. A special project is also required.

B. Simultaneous enrollment in college and high school. Students wishing to pursue college courses while still enrolled in high school should contact their counselors.

C. Students have the option to challenge select AP exams earning college credit, depending on final AP score. Interested students should see their school counselor prior to November 1st to get the process started.

D. Athletic Opt Out is an alternative PE program designed for students who participate in an interscholastic sports team. Students who complete a SCSD sport season in good standing can earn a semester credit in Physical Education.

BUSINESS DEPARTMENT

Business courses include offerings in a wide variety of subject areas including finance, computer skills, website development, marketing, human resource management, ecommerce, accounting and business law. Many of these courses also offer the opportunity to earn college credit through Schenectady Community College.

Business Department highlights include:

- First New York Federal Credit Union Patriot Branch staffed by SHS students
- Student Store
- Internship opportunities with local businesses

BUSINESS MANAGEMENT SED CTE APPROVED PROGRAM

- Career and Financial Management (1/2 unit)
- Human Resource Management - UHS (1/2 unit)
- Introduction to Management and Marketing UHS (1 unit)
- Business Math - UHS (1 unit)
- Business Communications - UHS (1 unit)
- Accounting (1 unit)
- Business Law - UHS (1 unit)
- NOCTI nationally recognized certification 15 UHS credits (A*S*K* NOCTI test)

MICROSOFT OFFICE SPECIALIST SED CTE APPROVED PROGRAM

- Career and FInancial Management (1/2 unit)
- Computer Skills (1/2 unit)
- Business Communications - UHS (1 unit)
- Human Resource Management UHS (1/2 unit)
- Introduction to Microsoft Office 2013 UHS - (1 unit)
- Advanced Microsoft Office 2013 UHS - MCAS certifications (1 unit)

Microsoft Office certifications available to both Intro and Advanced classes in the areas of Word, Excel and PowerPoint. 12 UHS credits.

FACS/BUSINESS INTEGRATED CTE PROGRAM

- Career and Financial Management (1/2 unit)
- Human Resource Management - UHS (1/2 unit)
- Food Science (1 unit)
- Food Preparation and Nutrition (1/2 unit)
- Introduction to Management and Marketing UHS (1 unit)
- Certification Tests: NOCTI Commercial Food and NOCTI A*S*K*

BUSINESS

ACCOUNTING I

(1 CREDIT)

Open to 11th and 12th graders.

This course is a study of bookkeeping and accounting principles and procedures. It is directed at developing an understanding of the fundamentals of the financial operations of business. In addition, acceptable accounting procedures for reporting to management are covered. Also, students will be examining the major components of personal finance. Some of the topics are budgets, overtime, checking, and time cards. Upon completion of this course, students can earn high school math credit. This is a required course for students enrolled in the Business Management CTE Program.

BUSINESS LAW

3 UHS CREDITS, SCCC (BUS 121) (1 CREDIT)

Open to 11th and 12th graders. No prerequisite.

Students pursuing a five-unit CTE sequence may use this course to meet the fifth unit (credit) for sequencing in Social Studies. This course explores the foundations of business law as well as the application of business concepts in everyday life. It combines instruction with the use of various media and technology to explore real cases and support active learning. It covers topics such as contracts, criminal law, environmental law, family law and consumer protection. This is a required course for students enrolled in the Business Management CTE Program.

CAREER AND FINANCIAL MANAGEMENT

(1/2 CREDIT)

Required for SED CTE approved programs.

This course is required by the NYS Education Department for any student pursuing a sequence in career and technical education. The emphasis is on business and economic systems, career planning, selection and success, and financial literacy.

BUSINESS COMMUNICATIONS

3 UHS CREDITS (1 CREDIT), SCCC BUS 212 ENGLISH CREDIT

Recommended for 11th and 12th graders

This course teaches the principles of effective communication in business, both written and oral. It focuses attention on the communication process including effective listening, writing, and speaking. Students analyze business letters, reports and memos for organization of ideas, conciseness and clarity. Students are required to write business letters and memos. A business report and oral presentation will also be completed. Students will create a professional portfolio including a cover letter and resume.

HUMAN RESOURCE MANAGEMENT

3 UHS CREDITS, SCCC (MGT 127) (1/2 CREDIT)

Open to 11th and 12th graders. This is a required course for students enrolled in both CTE approved programs.

This course will help students to develop an understanding of contemporary theory and practices relating to the management of people. This course will start with the examination of the current job market conditions. Upon completion of this class students will have an opportunity to understand the complexities of human interaction and their applications in contemporary organizations. Topics covered include meeting human resource challenges, managing separations and downsizing. It provides the foundation for contemporary theory and practices relating to the management of people. This course conveys the excitement, relevance and challenge found in the socio-cultural environment with regard to communications, ethics, personal and organizational values and attitudes, social structures and different international cultures.

INTERNATIONAL BUSINESS

3 UHS CREDITS, SCCC (BUS 135) (1/2 CREDIT)

Open to 11th and 12th graders.

This course discusses the cultural influences on global business, structure of multinational corporations, importing, exporting and trade relations, global marketing and consumer behavior, global competition and the effects on products we consume, foreign exchange, and international career planning.

BUSINESS MATH

3 UHS CREDITS (1 CREDIT), SCCC BUS 113 MATH CREDIT

Open to 12th graders. No prerequisite.

This course emphasizes the concepts of mathematics as they apply to a wide-range of personal and commercial business problems. It reinforces basic math skills and its relevance to everyday applications. These skills include the ability to solve mathematical problems, analyze and interpret data, and apply sound decision-making skills in helping students fulfill their future roles as citizens, consumers, employees, employers, investors, and entrepreneurs. The topics covered include how to dissect and solve word problems; fractions, decimals; banking; percents and

their applications; trade and cash discounts; payroll; simple interest; compound interest and present value; installment buying; depreciation; and inventory and overhead.

SPORTS AND ENTERTAINMENT MARKETING

(1 CREDIT)

Open to 11th and 12th graders.

Sports and Entertainment Marketing is a unique and innovative course designed for students with an interest in the sports and entertainment industry. This course stresses the utilization of fundamental marketing concepts and will include an orientation to the sports and entertainment industry. Marketing strategies along with topics in sponsorship, pricing, marketing research, endorsements, and promotions will be part of this course. The course will develop critical thinking, decision making and communication skills through real world applications.

INTRODUCTION TO MANAGEMENT AND MARKETING

3 UHS CREDITS, SCCC (MGT 123) (1 CREDIT)

Open to 10, 11, 12th graders. This is a required course for students enrolled in the Business Management CTE Program.

This course includes all the activities associated with the marketing of goods and services to consumers, as well as obtaining products from manufacturers and suppliers from all over the world and selling these goods to people who will use them. This course will provide students with a systematic approach to starting and operating a business. Students successfully completing this course will have a solid foundation in entrepreneurial concepts that may be applied to entry level employment or enrich post-secondary study. This is a required course for students enrolled in the Business Management CTE Program.

MICROSOFT OFFICE 2013: INTRODUCTORY CONCEPTS AND TECHNIQUES

3 UHS CREDITS, SCCC (CIS 121) (1 CREDIT)

Open to 10th, 11th and 12th graders.

This course introduces students to Microsoft Office Suite using practical work-based and academic-based projects utilizing Microsoft Word, PowerPoint and Excel. Additionally, students will learn the fundamental concepts of computers and computing including hardware, information processing, operating systems, networks and basic web design.

ADVANCED MICROSOFT OFFICE 2013

3 UHS CREDITS, SCCC (CIS 221) (1 CREDIT)

Open to 11th and 12th graders.

This course provides students with the opportunity to increase their knowledge of several components of the Microsoft Office suite of software applications including Excel, Word and Access. Students should have a good working knowledge of Microsoft Word or have completed Introduction to Microsoft Office prior to taking this course. Upon completion of this course, the student will be prepared to test for the Microsoft Office Specialist (MOS) certification in Excel, Word, and Access. Upon course completion, students will be able to: Demonstrate expertise in Word, Excel and Access as defined by the industry standard Microsoft Office Specialist (MOS) certification.

COMPUTER SKILLS AND APPLICATIONS

(1/2 CREDIT)

Recommended for 9th & 10th graders.

This course is designed to introduce students to computer applications using the Microsoft Office Suite 2013. Students will learn to create, format, and edit academic, personal and business documents using Microsoft Word, Excel, PowerPoint, and Access. Students will learn effective computer keyboarding techniques, use online resources to improve their keyboarding skills and learn computer safety techniques.

ENGLISH LANGUAGE ARTS DEPARTMENT

Four units of English are required for high school students to graduate in New York State. Our program is designed to foster the reading, writing, listening, speaking, language, and thinking skills necessary to be college and career ready. Students will be required to read, analyze and synthesize across literary and informational texts, write for multiple audiences, tasks, and purposes, listen and speak in collaborative discussions with their peers, and demonstrate a solid command of the English language.

English classes are selected with students according to reading and writing skill level, as determined by the English teacher, state assessments, and student performance. Honors/IB classes will include students who successfully complete the application process and meet the established criteria. Students that demonstrate a need for additional assistance with English skills will receive these services through supplemental instruction.

All 11th grade students are required by New York State to take the Common Core English Regents Examination; a student must pass this exam in order to earn a diploma in New York State.

ENGLISH 9: PRE-IB

HONORS (1 CREDIT)

This course is an advanced study of reading, writing, and critical thinking. Many styles of discussion and analysis are used as students build independence in their critical thinking about literary forms. Persuasive writing and literary analysis are emphasized. Students will read a variety of literary and non-fiction texts. Students are expected to show a high level of independence and motivation in this honors class.

ENGLISH 9

(1 CREDIT)

This course focuses on reading, writing, and critical thinking. Students will participate in a variety of class activities that help build independence and proficiency in reading at grade level and developing analytical skills. Persuasive writing and literary analysis are a focus of this course. Students will read a variety of literary and non-fiction texts.

ENGLISH 10: PRE-IB

HONORS (1 CREDIT)

This course is an advanced study of how history in reflected in literature and how our understanding of history is increased through reading. Many styles of classroom discussion are utilized as students develop their critical thinking and analytical skills. Students will be introduced to IB expectations and will complete complex writing tasks independently. Students are expected to show a high level of independence and motivation in this honors class.

ENGLISH 10

(1 CREDIT)

This course is a study of how history is reflected in literature and how our understanding of history is increased through reading. Students will participate in many class activities that help build independence and proficiency in reading at grade level and developing analytical skills. Informative writing, persuasive writing, and literary analysis are a focus of this course.

ENGLISH 11: HONORS

HONORS (1 CREDIT)

This advanced course is a study of how the American experience, both past and present, are reflected in American literature. Students will participate in a variety of reading activities to develop their critical thinking and writing skills. Three forms of writing are emphasized – persuasive, informative, and narrative. Students will prepare for the Comprehensive English exam given in June. This course is for students preparing for UHS classes and college-level work, and students should show a high level of independence and motivation in this class.

ENGLISH 11

(1 CREDIT)

This course is a study of how the American experience is reflected in American literature. Students will continue to hone their writing and critical thinking skills through literary and non-fiction texts. The three major forms of writing will be studied this year: persuasive, informative, and narrative. A significant amount of time will be spent preparing for the Comprehensive English exam given in June. In preparation for higher-level reading, students will learn reading strategies for complex texts.

ENGLISH 11: IB

(1 CREDIT)

Open to grade 11. Prerequisites: Average of an 85 or better in the first three quarters of English 10, attendance rate of 85% or better, must fit the IB Learner Profile showing interest in literature, motivation and a desire to learn and must complete the IB Summer Reading Assignment.

This rigorous and challenging course is the first half of the two-year IB course – English A: Literature. This course promotes an appreciation of literature and knowledge of other cultures and societies. Students will complete Parts One and Four of the IB course curriculum. Part I is a study of translated works; this may include titles such as *Chronicle of a Death Foretold, A Thousand Cranes, A Doll's House,* or *The Sound of Waves*. Students will complete a major literary analysis at the conclusion of this unit. Part Four includes such titles as *Crime and Punishment, Macbeth, One Flew Over the Cuckoo's Nest,* and *Jane Eyre*. Students will develop their critical reading skills and increase their expertise in literary analysis. Students taking this course should be self-motivated and have a strong interest in literature.

ENGLISH 12: IB

(1 CREDIT)

Open to grade 12. Prerequisites: Average of an 80 or better in the first three quarters of English 11IB, attendance rate of 85% or better, must fit the IB Learner Profile showing interest in literature, motivation and a desire to learn and must complete the IB Summer Reading Assignment.

This second year of the IB course continues to promote an appreciation of literature and knowledge of other cultures and societies. Students will complete Parts Two and Three of the IB course curriculum and will read a variety of styles and literary genres including: short story and the novel, poetry, memoir and Shakespeare. Oral and written examinations are used to assess students' individual language skills, their ability to critically analyze and comment upon familiar and unfamiliar texts, and their ability to express a personal and independent response to literature. This course prepares students for the IB English exam administered in May and fulfills the Group 1 Language requirement for the IB Diploma or Certificate.

HEROES AND LEGENDS ENGLISH 12

(.5 CREDIT)

This course surveys various heroes and legends of literature. Students will analyze different adaptations of the hero story throughout history by studying heroes and legends such as Beowulf, Greek mythology, Thor, Joan of Arc, Davy Crocket, Mulan, Arthurian legends, Mansa Musa, and Japanese Samurai warriors. The study may also include contemporary works such as The Watchmen and Iron Man. Students will analyze and critique how these characters are developed through different forms such as text, film, music, and art.

HORROR FICTION AND FILM ENGLISH 12

(.5 CREDIT)

Horror fiction and film uses popular mythology to explore the dark, squalid areas of popular culture. This semester long course examines society's dreams and the myths it creates through horror fiction and film. Specifically, this course will explore the relationship of horror fiction and film and the underlying issues of gender, race, class, ethnicity, and the power within. Several films will be viewed and related works of horror fiction are required reading. The goal of this course will be to look beneath the surface of the films and texts in order to develop a theory of the horror genre as it relates to modern culture.

LITERATURE OF THE COMPLEX MIND - ENGLISH 12

(.5 CREDIT)

This course studies literature and film that focus on characters who struggle with mental illness and cognitive disorders. Through this study, students will explore the complexity of the human mind, especially as it pertains to psychological and/or mental disorders such as schizophrenia, depression, borderline personality disorder, and autism spectrum disorder. Students will also study contemporary issues surrounding mental health issues. Texts may include One Flew Over the Cuckoo's Nest, Flowers for Algernon, The Incident of the Dog in the Nighttime, as well as options for an independent read.

SPORTS COMPOSITION AND LITERATURE ENGLISH 12

(.5 CREDIT)

This course is designed to use composition and literature – fiction, poetry, essays, biographies, journalism, and films – to illuminate and refine our understanding of the impact of sports on our personal and social lives. Some of the issues to be examined are: the nature of sport itself, the role of sports in defining values, the effects of competition, and racism/sexism in sports. Students will read a nonfiction novel that has become a popular movie and analyze the different ways that authors and directors create intense sensations that accompany sporting events. Students will also investigate sports journalism, surveying different journalists and creating their own journalistic piece based on a current sporting event that they attend. Students will research and write a brief report of controversial topics in sports. Many of the reading selections will be guided by the interests of the students and will be tailed to the needs of the class. Students will be expected to conduct critical analysis concerning the personal and professional influence of sports.

ENGLISH 12: UHS ADVANCED COLLEGE PREP

6 UHS CREDITS, SCCC (ENG 123, 124) (1 CREDIT)

Prerequisite: 80 or higher on Comprehensive English exam.

This challenging, University in the High School course is for students who want a rigorous course with an opportunity to earn 6 college credits. In the first semester, students will participate in an intensive writing course and will demonstrate mastery in utilizing the writing process and producing cohesive and effective essays. During the second semester, students critically analyze literature, exploring such issues as how literature reflects the human experience and writer's craft. Students will participate in a variety of classroom activities to develop their understanding of literary analysis and foster their communication skills.

ENGLISH 12: FINE ARTS SEMINAR

(2 CREDITS - 1 CREDIT ENGLISH 12 AND 1 CREDIT FINE ARTS)

Open to SSFA seniors only. Prerequisite: Successful completion of the Comprehensive English Regents exam.

This course is designed for the Fine Arts majors in visual art, music, theater, dance, or media arts who wish to study topics common to all fine arts disciplines. The class may include researching, making class presentations, developing journaling skills, creative problem solving, commenting on other artist's work, and personal reflections. Reading will include fiction and non-fiction works that reflect artistic experiences. Collaboration between students is a key component of this course. This course is ideal for the motivated and creative student who wishes to pursue the fine arts in college.

JOURNALISM

(1 OR 2 CREDITS)

This course is a survey of journalism and will include a historical perspective of news as well as contemporary issues in journalism. Students will focus on various aspects of newspaper production, including copy writing, advertising, layout design, ethics, and feature writing. Students will be responsible for the production of the school's newspaper, The Patriot, and may be expected to make an after-school commitment.

HEALTH

HEALTH

(1/2 CREDIT)

Open to grades 10,11, and 12. There are no prerequisites.

All students must successfully pass Health Education, as it is a State mandated program. Health Education is a 20-week course that focuses on seven skill areas. The skills include self-management, communication, decision-making, planning and goal setting, stress management, relationship management and advocacy. These skills when mastered, enable individuals to enhance personal, family and community health and safety. The following content areas are woven throughout the curriculum: HIV/AIDS, tobacco, alcohol and other drugs, nutrition, disease, safety and first aid, and human development.

FAMILY AND CONSUMER SCIENCE

Family and Consumer Science courses include offerings in three general areas – Clothing and Housing, Child Studies, and Food and Nutrition. Students get hands-on, real-life experience within these courses. All Family and Consumer Science courses count towards elective credit. Students can take the **half-credit Clothing and Textiles course and the half-credit Housing And The Environment course to fulfill their full credit Art graduation requirement.** A junior or senior can take the Applied Food Science course and have it count as their 3rd credit of science to fulfill their graduation requirement. Also if a student is pursuing an Advanced Regents diploma, they can **substitute five units in Family and Consumer Science courses for the Foreign Language requirement.**

9TH GRADE FACS ELECTIVES

Clothing and Housing Courses
Clothing and Textiles
Housing And The Environment
Child Studies Courses
Child Development

10TH – 12TH GRADE FACS ELECTIVES

Clothing and Housing Courses
Clothing And Textiles
Housing And The Environment
Child Studies Courses
Child Development
Teaching Pre-School Children (*Prerequisite: Child Development*)
Food and Nutrition Courses
Food Preparation And Nutrition Core
Applied Food Science (*Open to 11th and 12th Graders only. This course may be applied as a 3rd Credit of Science to fulfill the graduation requirement.*)

FACS/BUSINESS INTEGRATED CTE PROGRAM

- Career and Financial Management (1/2 unit)
- Human Resource Management - UHS (1/2 unit)
- Food Science (1 unit)
- Food Preparation and Nutrition (1/2 unit)
- Introduction to Management and Marketing UHS (1 unit)
- Certification Tests: NOCTI Commercial Food and NOCTI A*S*K*

CHILD DEVELOPMENT

(1/2 CREDIT)

Open to grades 9, 10, 11, and 12.

This course is the study of the principles of child growth and development from conception to adolescence. The course content will focus on the physical, cognitive, social and emotional domains of development.

TEACHING PRE-SCHOOL CHILDREN

(1/2 CREDIT)

Open to grades 10, 11, and 12. Prerequisite: Child Development.

This one semester class is planned for the student who enjoys working with children and wishes to increase skills learned in Child Development. Class time is spent planning and carrying out a structured Pre-k program for children ages 3 and 4, which is held at the high school. Preparing lesson plans, teaching and observing the preschooler gives students an opportunity to discuss and resolve problems that occur when working with children.

CLOTHING AND TEXTILES

(1/2 CREDIT)

Open to grades 9, 10, 11, and 12.

From the earliest history, clothing has been a basic human need. Decisions regarding clothing styles and the textiles used to create those styles are basic expressions of each person's unique self. This course will explore the history of fashion, culture, design principles, equipment, and construction, wardrobe planning and career pathways in clothing. Students will gain an understanding of color, design, personal style, and appropriate clothing choices. Students are required to complete sewing projects, and may be responsible for purchasing fabric. Students will work on community service projects if they are not able to cover the cost of fabric for their individual project.

FOOD PREPARATION AND NUTRITION CORE

(1/2 CREDIT)

Open to grades 10, 11 and 12.

The study of foods and nutrition has seen dramatic change as research evolves linking the preparation and consumption of foods to overall health and wellness. Find out what proper nutrition is and what it can do to help you keep your body running at optimum efficiency. Develop skills in meal and menu planning and food preparation. You will be required to participate in food preparation labs.

HOUSING AND THE ENVIRONMENT

(1/2 CREDIT)

Open to grades 9, 10, 11, and 12. Formerly called Environmental Architecture and Design.

In this class decisions as to where to live and trends related to making these decisions are studied with emphasis placed on the sociological, cultural, and aesthetic issues in housing. The elements and principles of design are also explored as they relate to architecture and interior planning. Students research career possibilities in housing and design.

APPLIED FOOD SCIENCE

(1 CREDIT) (MAY BE APPLIED TO A THIRD UNIT OF CREDIT IN SCIENCE, OR AS AN ELECTIVE CREDIT)

Open to grades 11 and 12. Prerequisite: Students must have successfully completed the Living Environment and Physical Setting Science Requirements. In addition they must have passed a Science Regents Examination.

Food Science is a part of every stage of the production, processing, preparation, and evaluation and uses of food. This is an interdisciplinary family and consumer sciences course that will integrate the basic principles of biology, chemistry, and microbiology in the context of food and the food industry. Students enrolled in this course will apply these principles and processes to the study of food and nutrition. Students will gain an understanding of how these principles apply to the composition of foods, the nutrition of foods, food and food product development, food processing, food safety and sanitation, food packaging, and food storage. Learning will involve hands-on experiences in order to encourage application to real life situations. Students will be encouraged to demonstrate their knowledge of course content through scientific methods of investigation. Investigative results will sometimes be subject to taste testing and other sensory evaluation.

SEQUENCES AND CONCENTRATIONS

Students enrolled in the School of Fine Arts may complete sequences or concentration.
State Sequence/Endorsement requires a five-credit sequence.

- **Students completing courses as listed below will earn a Fine Arts Endorsement on their diploma**
- **Students may use the five-credit sequence in place of the Foreign Language Exam.**
- **The five-credit sequences as listed below meet the State Education requirement for a Regents diploma in place of the World Language sequence and Exam.**

Theatre, Dance, or Fine Arts
- Studio in Art
- Advanced Music Theory or IB Music
- 3 credits in visual art, music, dance, and/or theatre

Music
- Music Theory
- Advanced Music Theory or IB Music
- 3 credits in music

Visual Art
- Studio in Art
- Drawing I
- Sculpture, or Ceramics, or Intro to Ceramics and Intro to Sculpture
- 2 credits in visual art

DANCE

Dance as an Alternative to Physical Education - Students in 9th and 12th grade dance classes may fulfill their Physical Education requirement through participation in dance class.

CORE COURSES

INTRODUCTION TO DANCE

(1 CREDIT)

Open to grades: 9-12.

This course will introduce students to the study and performance of dance and is specifically designed for the beginning dancer. Topics of study include: Jazz, African, Tap, Ballet, and the basic elements of choreography. Students will learn the basic techniques of these dance styles as well as the history and development of these dance styles. The course requires active physical participation as well as written work. Students will be required to wear appropriate loose fitting clothing or dance attire. Performance is part of the course requirement.

INTRODUCTORY LEVEL

AFRO-BRAZILIAN

(1/2 CREDIT - SCHEDULED ON ALTERNATING DAYS FOR THE FULL YEAR)

Open to grades: 10-12.

Students will be introduced to the study of Afro-Brazilian dance. Topics explored may include: the role of dance in the African and Brazilian cultures, African & Brazilian instruments/songs and the significance of improvisation. Students will learn traditional dances and also explore their own movement ideas. The course requires physical participation as well as written work. Students will be required to wear appropriate loose fitting clothing or dance attire. Participation in performances is also part of the course requirement.

BALLET

(1 CREDIT – ALTERNATING WITH PERMISSION FROM TEACHER AND ADMINISTRATOR)

Open to grades: 9-12.

This course will provide students an introduction to the study of ballet. Through emphasis of ballet technique and terminology, students will explore the cultural and historical contributions ballet has brought to the world of dance. Proper dance attire will be required. Students will be required to participate in daily technique classes. Performance is part of the course requirement.

HIP HOP AND WORLD DANCE

(1/2 CREDIT - SCHEDULED ON ALTERNATING DAYS FOR THE FULL YEAR)

Open to grades: 10-12.
Prerequisite: Introduction to Dance

This course will assess the cultural significance of different world dance forms and hip-hop and discuss the ways in which cultural traditions are illustrated and preserved through dance. Students will engage in group dialogue that questions the ways in which dance presents cultural values, norms, and challenges. Students must wear loose fitted clothing or proper dance attire. Performance is part of the course requirement.

INTERMEDIATE LEVEL

JAZZ

(1/2 CREDIT - SCHEDULED ON ALTERNATING DAYS FOR THE FULL YEAR)

Open to grades: 9-12.
Prerequisite: Introduction to Dance or 1 year Jazz training

This course will introduce students to the dance style of Jazz. Students will study styles of Jazz including: Hip Hop, Musical Theatre, Lyrical, and Classical Jazz. Students will also explore the topics of improvisation and solo and group choreography. Students will learn about the history and development of Jazz dance as well as the choreographers and dancers that have contributed to this dance style. Students will be required to wear

appropriate loose fitting clothing or dance attire. Performance is part of the course requirement.

TAP

1/2 CREDIT- SCHEDULED ON ALTERNATING DAYS FOR THE FULL YEAR

Open to grades: 9-12.

This course will be for beginning Tap students primarily, but students with prior training will be welcome to increase their knowledge of the art form and level of technical proficiency. As students gain a level of technical proficiency, they may explore the use of improvisation in Tap dance. Students will be required to wear appropriate loose fitting clothing or dance attire. Performance is part of the course requirement.

ADVANCED LEVEL

DANCE CONNECTION

(1 CREDIT)

Open to grades: 11-12.
Prerequisite: Requires audition.
May be taken more than one time.

This performance ensemble is a select group of experienced dancers chosen by audition. Topics explored may include: choreography, performance, anatomy, and careers in dance. Students will be responsible for learning choreography, seeking performing opportunities in the community, and taking on the responsibilities of planning a performance. Previous dance experience as well as participation in community performances will be required. Dancers should have a technical background as well as the knowledge of proper dance terminology and basic movement concepts. Auditions are held in the Spring.

THEATRE

CORE COURSE

INTRODUCTION TO THEATRE

(1 CREDIT)

Open to grades 9-12.
Prerequisites: None

Introduction to Theatre will explore basic disciplines of theatre arts ranging from performance, to writing, to designing through the development of a number of original stage presentations throughout year. Learning to collaborate with one's classmates to create a finished piece is one of the central objectives of this course.

INTRODUCTORY LEVEL

VIDEO PRODUCTION

(1/2 CREDIT)

Open to grades 9-12.

This course will introduce students to the three stages of video production (pre-production/planning, production/shooting, post-production/editing). Projects will vary from the creation of morning announcement videos to lip-synced music videos. All participants must be willing to work within a team and appear on camera.

FILM MAKING

(1 CREDIT)

Open to grades 10, 11 and 12.

This course will require students to learn about every aspect of producing a short film, including screen writing, storyboarding, basic shooting techniques, acting and editing. Students will work on different teams to produce short films over the course of the year.

ACTING I

(1 CREDIT)

Open to grades 9-12.

This course will focus on modern acting theory as developed through the teachings of Constantin Stanislavsky, Richard Boleslavsky, and others. Students will work independently on monologues and exercises as well as present scenes with others in the class. All participants will learn the importance of both giving and receiving constructive criticism. Readings will include Stanislavsky's An Actor Prepares as well as other technical texts. In addition, students will read a number of classic and contemporary plays that will be chosen for scene work.

ADVANCED LEVEL

ACTING II

(1 CREDIT)

Open to grades 10, 11, and 12.
Prerequisites: Acting I. (May be part of an English or a fine arts sequence.)

This course will build upon the skills taught in Acting I, and will provide opportunities for preparing longer scenes. Acting theory will be further developed, and time will be spent refining the critical skills that were introduced in Acting I. Students will prepare several one act plays, and a performance of these works will serve as the culminating activity for the course.

ACTING III

3 UHS CREDITS, SCCC (DRA 150)
(1 CREDIT)

Open to grades 11 and 12.
Prerequisite: Acting II.

The third course in a series exploring the art of acting emphasizes advance scene study and various modern acting theories (Stanislavsky, Adler and others). Students in Actor's Studio III must be self-motivated and serious about acting in order to benefit from the class and make a posititve contribution to it. Instruction will include inprovisation, vocal and physical exercises, dialects and monologues, and scene work.

ACTING IV

(1 CREDIT)

Open to grades 11 and 12. Prerequisite: Acting III.

The final course in a four level series exploring the art of acting emphasizes advance development of the voice and body as acting instruments. Instruction will include student directed vocal and physical exercises, relaxation techniques, and scene work. Students will work on advanced ensemble acting techniques, monologue performance, script analysis, and learn about the realities of business related to working as a professional actor.

MUSIC

CORE COURSES

BAND

(1/2 OR 1 CREDIT)

Open to grades 9-12. Prerequisites: An audition for the band director and/or a recommendation by the Middle School Band Director. May be taken more than one time.

Band is a full-year credit-bearing course. It is designed to provide students with a varied large ensemble experience by acquainting students to quality wind band literature. Students are also provided with small group lessons where they are given the opportunity to improve their instrumental technique and learn solo and ensemble performing skills. The band serves the school by means of concerts, assemblies, and appearances at public events. A course requirement for all performing groups including band is participation in all public performances. Typically, band members will perform in marching band as well.

ORCHESTRA

(1/2 OR 1 CREDIT)

Open to grades 9-12. May be taken more than one time. Prerequisites: Recommendation by the Middle School Orchestra Director and/or an audition by the director.

The applicant should have mastered the first position. The student should be able to demonstrate traditional bowing techniques, or show promise in developing them. Orchestra meets daily and is a credit bearing class. Weekly small group lessons are provided for students to improve their solo and ensemble instrumental technique. The orchestra program is designed to give the student exposure to all types of literature for string and symphony orchestra. A course requirement for all performing groups including orchestra is participation in all public performances.

DRUMMING

(1/2 CREDIT) ALTERNATING DAYS ALL YEAR

Open to grades 9-12. No previous music experience required. May be taken more than one time.

Students will learn the skills of drum performance including hand drumming and percussion from Africa, Latin America and the Middle East. Students will play a variety of instruments that may include djembes, congas, timbales, bongos, darbukas and shekeres. Additionally, students will study the basic stick techniques and apply them to snare drum, bass drum, drum set and drum line. Students will be required to perform at Sayles School of Fine Arts (SSFA) events and may play an active role in accompanying other SSFA programs such as the dance program.

MUSIC IN OUR LIVES

(1 CREDIT)

Open to grades 9-12. Preference is given to 9th graders. Prerequisites: None.

This course focuses on hands-on experiences, which may include the musical use of synthesizers, computers, keyboards, percussion instruments, or other instruments that may be available. Students gain listening skills, composing skills, performing skills as they develop some student driven projects. This course develops a student's awareness and appreciation for music from many different historical and cultural traditions. Students develop their ability to critique a piece of music for a better understanding of its style, moods, and themes.

PIANO I

(1 CREDIT)

Open to grades 9-12.

This course is designed to present a beginning high school piano student with group instruction utilizing electronic piano keyboarding experience. The approach will be a chordal approach with application to popular and familiar song material. Students will gain familiarity with key signatures, scales, rhythmic and pitch reading in both the treble and bass clefs. Keyboard ensemble repertoire will also help their musical independence. Students will learn to critique a piece of music for its style and its cultural and historical significance. Students will gain confidence in their performance skills with recitals as their skills develop.

INTERMEDIATE OPTIONS

MUSIC THEORY

(1 CREDIT)

Open to grades 10, 11, and 12. Prerequisite: Student should posses a basic ability to read music.

This course is designed to develop a student's knowledge of music theory. Sight singing, rhythmic reading, notation, major and minor scales, chord construction, elementary harmonization, and ear training are the main areas of concentration. Students will apply their musical knowledge to composing pieces for percussion and pitched instruments. Students will also gain some historical and cultural perspectives of music as they apply their understanding of music theory.

JAZZ 1 (JAZZ BAND)

(1/2 CREDIT) ALTERNATING DAYS ALL YEAR

Open to grades 9-12. Prerequisite: Recommendation from Middle School Band Director, or audition for the SSFA Band Director. May be taken more than one time.

This course is designed for Freshmen to cultivate jazz skills and upperclassmen to develop skills on their secondary instruments. All band and string instruments are accomodated. The Jazz Band represents the John Sayles School of Fine Arts at several venues and performs throughout the school and community.

PIANO II

(1 CREDIT)

Open to grades 9-12. Prerequisite: Piano I or permission of the instructor.

Piano students will improve their technique, music reading skills and increase their repertoire at the piano. Students will expand their understanding of compound meter and more advanced music reading. They will gain a broader understanding of styles of music as well as the cultural and historical significance of a variety of types of music. Students will have the option of participating in recitals to develop their performance skills on the piano.

SILHOUETTES TREBLE CHOIR

(1/2 CREDIT) ALTERNATING DAYS ALL YEAR

Open to grades 9-12. May be taken more than one time. Prerequisite: Requires an audition for the director.

This ensemble will concentrate on literature written and arranged for the treble(high) voices from renaissance to rock and Broadway. Performance demands include four major school concerts as well as opportunities in the community. Performance is part of course requirement.

ADVANCED OPTIONS

ADVANCED MUSIC THEORY

3 UHS CREDITS, SCCC (MUS 106) (1 CREDIT)

Prerequisite: Successful completion of Music Theory.

This class is recommended for students interested in pursuing college studies in music. Through analysis, ear training and composition, students will gain an understanding of advanced harmonization, tonality, part writing, texture, form, counterpoint and orchestration. Additionally, students will be introduced to jazz harmony, composition and analysis, as well as basic recording and production techniques.

JAZZ 2 (JAZZ ENSEMBLE)

(1/2 CREDIT)

Open to grades 10-12. Prerequisite: By invitation/ audition only from the band director. Completion of Jazz 1 is recommended. Limited participation. May be taken more than one time.

This course is designed to acquaint students to the "Big Band Sound" both from the historical and contemporary viewpoint. The Jazz Ensemble represents the SSFA at several venues and performs throughout the school and community. This course requires significant time commitments by its members. The Jazz Ensemble may compete annually. Students are often selected to perform in jazz combos. Credit will be awarded at the end of the year upon successful completion. Due to the level of expectations of this group, the director reserves the right to remove members that are not consistently performing to this level.

MUSIC IB (HL OR SL)

3 UHS CREDITS, SCCC (MUS 147, 121) (1 CREDIT)

IB music introduces high school music students to college-level music studies. This course addresses the fundamentals of world music and music history from an analytical perspective. Special attention is given to musical analysis through listening. In addition, students select from several independent projects, including solo or group performances, compositions, and a research-based musical investigation. This course can be taken in conjunction with SSFA performance ensembles. It is offered at both the standard and higher levels, and fulfills the arts requirement for the IB diploma. Interested students should be proficient either vocally or instrumentally, and posses a basic knowledge of music theory.

FINE ARTS

WIND ENSEMBLE

(1/2 OR 1 CREDIT)

Open to grades 9-12. Prerequisite: Requires a recommendation from and/or an audition for the SSFA Band Director. May be taken more than one time.

The goal of this group is a more advanced wind band repertoire. This course is designed for the student with advanced reading and instrumental techniques. Students are also provided with small group lessons where they are given the opportunity to improve their instrumental technique and learn solo and ensemble performing skills. A course requirement for all performing groups including wind ensemble is participation in all public performances.

SERENADERS

(1/2 CREDIT- ALTERNATING ALL YEAR)

Open to grades 10-12. Prerequisite: An audition for the director.

Serenaders is a select choral group that performs music of various styles from classical to popular. Membership is dependant on an audition where students need to show good musicianship. Since performing at civic events, concerts and competitions are part of this choral experience students are expected to show responsibility and good attitude. Serenaders must also perform with the Concert Choir. Attendance at sectionals and performances is essential.

CHAMBER CHOIR

(1/2 CREDIT- ALTERNATING ALL YEAR)

Open to grades 10, 11, and 12. Prerequisite: An audition for the director.

Chamber Choir is a select choral group which specializes in a cappella arrangements of various styles ranging from the Renaissance to jazz and pop tunes. Membership is dependant on an audition where students need to show sight reading abilities, musical independence and good musicianship. Students in this group must also perform with Serenaders and SSFA Concert Choir. Attendance at sectional rehearsals and the various performances throughout the year is essential.

CONCERT CHOIR

(1/2 CREDIT OR 1 CREDIT)

Open to grades 9-12. Prerequisite: An audition for the SSFA Choral Director and/ or a recommendation by the Middle School Choral Director.

The SSFA Concert Choir is open to all students who have an interest in singing. It is designed to help students develop skills such as pitch matching, harmonization, vocal production, sight reading and musical interpretation. Concert Choir performs a variety of musical styles including gospel, pop, jazz, and traditional. Concert attendance is part of students' quarterly grade. Students who want to play an instrument in band or orchestra and sing can alternate Concert Choir with an instrumental ensemble.

PIANO III

(1 CREDIT)

Open to grades 9-12. Prerequisite: Piano I and Piano II or permission of instructor

The Piano III course is a continuation of Piano II including demanding piano repertoire and study of different styles and historical periods of music. Students will have the option of participating in recitals in school and in the community. Students will explore more complex chordal structure and music analysis.

PIANO IV

(1 CREDIT)

Open to grade 12. Prerequisite: Piano I, II, and III or permission of the instructor

This is the advanced piano class. Students concentrate on more advanced repertoire and more demanding piano performance requirements, including ensemble playing. Students expand reading to all types of piano literature and all historical periods and styles.

INDEPENDENT ADVANCED MUSIC

(1/2 CREDIT OR 1 CREDIT)

Open to grades 11, and 12. Prerequisite: Requires the permission of the SSFA House Principal and the instructor involved.

This course is intended for advanced study in a specific music discipline allowing senior music sequence students to continue their growth beyond the courses available in the music program. The student will meet with the teacher with whom they will plan, implement, and evaluate their experiences and creative focus. This course is not intended for a student whose schedule cannot accommodate a regular class. It is intended to meet the needs of highly advanced students that have exceeded the classes offered in the music program.

VISUAL ARTS

CORE COURSES

STUDIO IN ART

(1 CREDIT)

Open to grades 9-12

Studio in Art is a hands-on class with experiences in drawing, painting, sculpting, printmaking, collage, mixed media, and pottery. Students also learn about art history, careers, and criticism and apply the Elements of Art and Principles of Design to their work. This course meets the arts elective requirement for graduation and prerequisite requirement for intermediate level visual art classes.

INTRODUCTORY LEVEL

INTRODUCTION TO DRAWING

(1/2 CREDIT)

Open to grades 9-12.

This is an introductory drawing course, which focuses on the visual understanding of the environment (figures, still life, natural forms, perspective, etc.) as a tool to allow the student to interpret accurately and creatively. This course focuses on developing observational drawing skills. Students will draw in a variety of media, which may include pencil, brush & ink, pen & ink, charcoal, conte crayon, pastels, and marker. This course is a basic preparation for all intermediate and advanced art classes. Students will critique their work as well as the work of others. Art historical references will be used throughout.

INTRODUCTION TO CERAMICS

(1/2 CREDIT) (3D OPTION)

Open to grades 9-12.

This is an introduction to the art of hand building using three basic techniques: Pinch, coil, and slab. This course will include some cultural and historical aspects of ceramics from ancient times to contemporary. Preparation of clay, shaping, molding, decorating techniques, and application of underglazes and glazes will be explored.

INTRO TO SCULPTURE

(1/2 CREDIT)

Open to grades 9-12.

Use clay, wire, fabric, and paper mache to create small to medium scale sculptures. Explore a variety of cultures as you learn and use basic 3D concepts and techniques. Use a variety of sculpture tools. Display your work in our school's library.

INTRODUCTION TO COMPUTER ART

(1/2 CREDIT)

Open to grades 9-12.

This course is an introduction to the use of a computer as a tool for making art. Drawing, painting, illustration, and graphic design, will be explored through the use and knowledge of several software programs. Students will develop problem-solving skills as they find unique solutions to creative problems. Students will leave this class with a digital portfolio of their work.

INTRO TO DIGITAL PHOTOGRAPHY

(1/2 CREDIT)

Prerequisite: Studio in Art

Intro to digital photography is a course designed to provide students with a basic understanding of digital imaging.Students will be given an introduction to the various camera functions available on digital cameras. Photoshop will be used as the image editing software for this class. The elements and principles of design will form the foundation for all visual assignments. Each student will create a photography portfolio as evidence of their mastery in composition as well as image editing. Prior knowledge of Photoshop is not required. Students will be required to provide their own digital camera or other digital imaging device for this class.

INTERMEDIATE LEVEL

DRAWING I

(1 CREDIT)

Open to grades 9-12.
Prerequisite: Studio in Art or recommendation of an art teacher.

This course teaches you how to draw from observation—how to render spatial relationships, light, texture, and forms. It will develop your ability to see and transpose what you see onto a two-dimensional drawing surface. A variety of materials and techniques will be used such as pencil, colored pencil, charcoal, pastel, and ink. Subject matter will include self-portraits, still lifes and figure studies

DRAWING & PAINTING

(1 CREDIT)

Open to grades 9-12.
Prerequisite: Studio in Art or recommendation of an art teacher.

Students will further their ability and understanding of drawing in addition to an introduction to the fundamental terminology and technology of painting. Focus is on creating convincing space, form, light and volume through control of the medium and an understanding of color drawing and painting techniques. Projects will include a variety of media and materials. This course is also intended to assist students working towards a college portfolio.

FINE ARTS

COMPUTER ART AND ELECTRONIC IMAGING I

(1 CREDIT)

Open to grades 9-12. Prerequisite: Studio in Art or recommendation of an art teacher.

This course focuses on specialized and advanced techniques in using the computer to create one's own artwork. In depth independent study in solving visual problems based on a theme will be explored. Instruction in Adobe Photoshop, Adobe Illustrator will be the main focus. Additional hardware and peripherals will be explored when needed. This class was created specifically for the computer literate artist working to develop a portfolio in the visual arts.

CERAMICS I

(1 CREDIT) (3D OPTION)

Open to grades 9-12. Prerequisite: Studio in Art or recommendation of an art teacher.

Ceramics I will continue with hand building techniques and begin to apply the knowledge of these techniques to more developed assignments that will include pinch, coil and slab techniques as well as a variety of surface techniques. Assignments may include jewelry, sculptural forms and construction pieces. Students will be encouraged to create a body of work that focuses on a concentration area for the second half of the year. This course will also reference cultural and historical aspects of ceramics. Some wheel throwing may be demonstrated and explored.

SCULPTURE I

(1 CREDIT)

Open to grades 9-12. Prerequisite:Studio in Art or recommendation of an art teacher.

Use plaster, clay, wood, fabric, wire, found objects, and paper mache to create medium to large scale sculptures. Use a variety of sculpting tools. Learn basic and advanced 3D concepts as you work both abstractly and realistically. Be part of our annual Sculpture class exhibit over the Fine Arts entrance.

ADVANCED OPTIONS

VISUAL ART PORTFOLIO AND CAREER PREPARATION

(1 CREDIT)

Open to grades 11, and 12. Prerequisite: Visual Arts sequence. Core course and Drawing I. Requires approval of the instructor.

Designed for students who wish to prepare for art schools or other advanced study in the arts. This course will facilitate research into careers, colleges and workshops and assists with portfolio, video, slide and photographic requirements for entry and scholarship opportunities. Students will have assistance with the unique application process, and financial aid and artistic scholarship sources. Concurrently, students will develop an aesthetic foundation in Art History essential for art majors.

VISUAL ART IB

Offered at both the higher and standard levels, Visual Art IB is designed to provide students with the opportunities to make their personal, socio-cultural and aesthetic experiences more meaningful through the production and understanding of art. Students will develop their aesthetic and creative facilities while expanding their perception and critical evaluation of the arts of various cultures. Students are encouraged to discover, develop and enjoy their creative visual expression and to pursue quality and technical skills through training, and individual experimentation. Visual Art IB students keep an investigative workbook in which they work with a variety of expressive media and research the arts in relation to the world around them.

VISUAL ART IB 1&2

(1 CREDIT EACH YEAR, 2 YEAR COURSE)

Open to grades 11, and 12. Prerequisite: Non-IB students- Drawing 1. IB students- Studio in Art or recommendation of an art teacher.

IB Visual Arts is a 2-year course designed to provide IB and non-IB students with the opportunity to examine their own ideas and processes in making art. In the first year, the focus is on exploration of artists and their works. Students will explore, experiment, and build their skills with a variety of 2-D and 3-D materials. Students will document their own ideas, skills, themes, and artistic explorations.

in Year two, studentsexplore thematic concepts while creating 4-7 pieces of original work. Students will design their own art exhibits, learn to photograph their work, a develop a portfolio.

VISUAL ART IB SL

(1 CREDIT)

The standard level course requires 150 hours of class time.

IB SLA - 60% studio work and 40% Investigative workbook

IB SLB - 40% studio work and 60% Investigative workbook

Students are required to submit a portfolio for review by an IB examiner in May.

SCULPTURE II

(1 CREDIT)

Open to grades 11, 12
Prerequisites:Studio in Art, Sculpture I, or approval of instructor

Build on the techniques and concepts learned in Sculpture 1 by designing, proposing, and then pursuing your own independent sculpture projects. Enjoy studio space devoted just to Sculpture 2 students. Students must be highly motivated and able to work independently to find success in this unique class.

INDEPENDENT ADVANCED STUDIO

(1/2 OR 1 CREDIT)

Open to grades 11, and 12. Prerequisite: Requires the permission of the SSFA House Principal and the instructor involved.

This course is intended for advanced study in a specific art discipline allowing senior art sequence students to continue their growth beyond the courses available in the art program. The student will meet with the teacher with whom they will plan, implement, and evaluate their experiences and creative focus. This course is not intended for a student whose schedule cannot accommodate a regular class. It is intended to meet the needs of highly advanced students that have exceeded the classes offered in the visual art program.

COMPUTER ART AND ELECTRONIC IMAGING II

Open to grades 11 and 12
Prerequisites: Core course and Computer Art and Electronic Imaging I.

This course focuses on specialized and advanced techniques in using the computer to create one's own artwork in depth studies in digital painting, animation, three dimensional rendering, and video will be explored through the use of software, hardware and peripherals made specifically for the computer literate artist.

COURSE DESCRIPTION BOOK

MATHEMATICS

For a Regents Diploma, students are required to earn at least 3 units of credit in Mathematics and pass a regents exam with a grade of at least 65%. Remediation is offered for students who fail the Algebra I regents to help them fulfill this graduation requirement. For an Advanced Regents Diploma, students must earn a grade of at least 65% on ALL three math regents exams - Algebra I, Geometry and Algebra 2.

Students have the opportunity to take many different levels of mathematics to cultivate an interest in mathematics and prepare them for life beyond high school. All mathematics courses are aligned with the standards established by the State Education Department. Students are recommended to specific mathematics classes according to skill levels which are determined by the mathematics teacher, standardized tests, and student performance.

9TH GRADE

- Algebra
- Geometry Accelerated

COURSE SEQUENCING FOR 9TH – 12TH GRADE

REGENTS DIPLOMA SEQUENCE

Algebra
Algebra 1B/Geo 1 or Geometry 1
College Bound Math
^ Statistics 1

ADVANCED REGENTS DIPLOMA SEQUENCE

Algebra
Geometry
Algebra 2 or Algebra 2A
Algebra 2B (if needed) or UHS Stats or Pre-Calculus

Or

ACCELERATED COURSES

Geometry Acc.
Algebra 2
Pre-Calculus
^ Calculus or UHS Statistics

IB DIPLOMA SEQUENCE

Geometry Acc.
Algebra 2
IB Mathematics SL
^ Calculus or UHS Statistics

Or

Algebra
Algebra 1B/Geo 1 or Geometry 1 or Geometry
College Bound Math or Algebra 2A
Mathematical Studies IB

ALGEBRA

(1 CREDIT)

The fundamental purpose of this course is to formalize and extend the mathematics that students learned in the middle grades. There is a focus on real-life applications and word problems that require a high reading level. This more ambitious version of Algebra is designed to prepare students for the Common Core Algebra Regents exam in June. Topics of this course include: algebra processes; systems of equations; inequalities; polynomials; factoring; arithmetic and geometric sequences; statistical regressions; linear, exponential, and quadratic models. A graphing calculator (TI-84+) is highly recommended.

ALGEBRA 1B/ GEOMETRY 1

(1 CREDIT)

Prerequisite: completed Algebra but scored 50-64 on the Regents Algebra exam.

This course is designed for 10th grade students who have failed the Algebra Regents in 9th grade (but passed the course). First semester will focus on mastering Algebra and test taking skills to complete the required exit exam for graduation. Students will receive course credit for this full year course and sit for the January Regents exam. Students that still have not mastered the Algebra Regents in January will need additional support

in the Spring (such as Algebra Fundamentals). The second semester of the course will begin the Geometry curriculum.

ALGEBRA FUNDAMENTALS

(CREDIT RECOVERY – 1 CREDIT; ALL OTHERS – ½ CREDIT)

Prerequisite: 11th/12 grade students who have not yet passed the Algebra Regents.

This is an intensive course for students who have not been successful with the Algebra course and Regents or who have not passed the Algebra Regents exam. Students will continue on in their math course sequence as well as being placed in a Fundamentals of Math class. This course meets every day for half a year and will be focused on providing intensive, targeted instruction to prepare students to take the Algebra Regents exam. 10th grade students who failed the Algebra course but scored a 50 or higher on the Algebra Regents can take this course and earn Algebra course credit if they pass the Algebra Regents exam.

COLLEGE BOUND MATH

(1 CREDIT)

Prerequisite: Student that successfully completed Geometry 1, Geometry, or Geometry Accelerated.

Open to 11th or 12th graders who are NOT intending to go for the advanced regents diploma. This course will include higher-level algebraic skills, the theory of functions, financial applications, and trigonometry. There will be a local final at the completion of the course. A TI-84+ calculator is highly recommended.

GEOMETRY 1

(1 CREDIT)

Prerequisite: Successful completion of either Algebra or Alg1B/Geo1.

Open to 10th, 11th, or 12th graders who are NOT intending to go for the advanced Regents diploma, who scored below a 75 on the Algebra Regents, or who still need to pass the Algebra Regents. Students will study the relationships of geometric shapes, 3-dimensional figures, angles, lines, develop the process of writing proofs, and apply geometric concepts to real-life situations. There will be a local final at the completion of the course. A TI-84+ calculator is highly recommended.

GEOMETRY

(1 CREDIT)

Students enrolling in this course MUST have passed the Algebra Regents with a 70 or higher.

The fundamental purpose of the course in Geometry is to formalize and extend students' geometric experiences from the middle grades. Students explore more complex geometric situations and deepen their explanations of geometric relationships, moving towards formal mathematical arguments. Students will study the relationships of geometric shapes, 3-dimensional figures, angles, lines, and develop the process of writing formal proofs. This is an advanced Regents math course designed to prepare the students to pass the Geometry Regents at the end of the year in June. A TI-84+ calculator is highly recommended.

GEOMETRY ACCELERATED

(1 CREDIT)

Pre-requisite: 9th grade students who have successfully completed Algebra as an 8th grader with a 75 or higher.

This course covers all the material of the Geometry course with a deeper focus on rigid motion based proofs (transformational geometry) as well as exploring additional topics. Students are expected to maintain a minimum B average for all four marking periods. This is an advanced Regents math course designed to prepare the students to pass the Geometry Regents at the end of the year in June. A TI-84+ calculator is highly recommended.

ALGEBRA 2

(1 CREDIT)

Pre-requisite: Student must have passed both the Algebra and Geometry Regents with a 72 or better.

This is a fast-paced Advanced Regents math course designed to prepare students to pass the Algebra 2 Regents in June as well as to provide them with a foundation for future IB coursework. Heavy emphasis is placed on advanced algebra, the theory of functions, trigonometry, and statistics. Practice IAs will be part of the coursework in the preparation for possible enrollment in the IB Mathematics SL, IB Math Studies, or further advanced math courses. Students below the pre-requisite will struggle with the content and pace of this course. A TI-84+ calculator is highly recommended.

ALGEBRA 2A

(1 CREDIT)

Pre-requisite: Student must have passed both the Algebra and the Geometry Regents exams.

This course is year 1 of a two year Algebra 2 sequence. Topics include: advanced algebra, the theory of functions, trigonometry, and statistics. A TI-84+ calculator is highly recommended.

ALGEBRA 2B

(1 CREDIT)

Prerequisite: Student successfully completed Trigonometry1 or any student who failed the Algebra 2 Regents.

This course is year 2 of a two year Algebra 2 sequence and is designed for students who have successfully completed Trigonometry1. Students will take the Algebra 2 Regents at the end of the year in June. Topics include: advanced algebra, the theory of functions, trigonometry, and statistics. A TI-84+ calculator is highly recommended.

STATISTICS 1

(1 CREDIT)

Pre-requisite: Successful completion of three math credits.

This course will allow students to explore how numbers and statistics affect their lives. Everyday applications will be emphasized. There will be extensive use of the TI-84+ graphing calculator, Microsoft Office software, and Internet resources.

UHS STATISTICS

(1 CREDIT)
(ACCREDITED THROUGH SCCC)

Pre-requisite: Student successfully completed Algebra 2A or a higher level course.

This course will apply statistics to real world situations. Topics include hypothesis testing, probability, descriptive statistics, and sampling strategies. There will be extensive use of the TI-84+ graphing calculator, Microsoft Office software, and Internet resources.

PRE-CALCULUS

(1 CREDIT)

Prerequisite: Student successfully completed Algebra 2, 2B, or IB Math Studies.

This course is designed to give students practice with pre-calculus concepts and prepare them for a calculus course. Topics include advanced theory of functions with an emphasis on graphing techniques, algebraic theory, limits, and an introduction to differential calculus. A graphing calculator (TI-84+) is needed.

UHS CALCULUS

(1 CREDIT)
(ACCREDITED THROUGH SCCC)

Prerequisite: Student successfully completed either Pre-Calculus or IB Mathematics SL

This course is intended to introduce students to those topics typically found in Calculus I at the college level. Functions, limits, derivation, and integration will be the focus of the curriculum. A school-level midterm and final exam will be administered. A graphing calculator (TI-84+) is needed.

IB MATHEMATICS SL

STANDARD LEVEL (1 CREDIT)

Prerequisite: Student successfully completed Algebra 2 Regents with a score of 75 or better.

Mathematical Methods IB is designed to provide students with both a background of theoretical mathematical thought as well as applied problem solving skills. The target audience is students who wish to pursue mathematics, the natural sciences, computer science or engineering in college. Course topics include advanced algebra, functional analysis, circular functions and trigonometry, vectors, probability and statistics, and differential and integral calculus. Students will take the IB Mathematics SL exam in May and a school-level final exam in June. There is one portfolio assessment, a mathematical investigation, that is to be completed before April. Successful completion of this course will result in students being well-prepared for UHS Calculus. A graphing calculator (TI-84+) is needed.

MATHEMATICAL STUDIES IB

STANDARD LEVEL (1 CREDIT)

Prerequisite: Student successfully completed College Bound Math, Algebra 2, 2A, or 2B. Attendance rate of 85% or better and must fit the IB Learner Profile with the motivation and desire to learn.

MSSL is designed for students with varied mathematical backgrounds and abilities. It offers students opportunities to learn important concepts and techniques and to gain an understanding of a wide variety of mathematical topics. These include: linear, quadratic and exponential functions; approximation and error; algorithms; probability and statistics; sets and logic; simple sequences and finance; and trigonometry. It prepares students to be able to solve problems in a variety of settings, to develop more sophisticated mathematical reasoning and to enhance their critical thinking. The individual project is an extended piece of work based on personal research involving the collection, analysis and evaluation of data. This project is to be completed before April and the student will take the IB MSSL exam in May with a school-level assessment in June. Students taking this course are well prepared for a career in social sciences, humanities, languages or arts. These students may need to utilize the statistics and logical reasoning that they have learned as part of the mathematical studies SL course in their future studies.

Before entering the course, students should have a good understanding of basic arithmetic, algebra, geometry and trigonometry. A graphing calculator (TI-84+) is needed.

PHYSICAL EDUCATION

DISTRICT PHILOSOPHY ON PHYSICAL EDUCATION:

The Physical Education Curriculum in the Schenectady City School District is a progressive program that builds upon experiences gained throughout a child's elementary and middle school years cumulating in the High School Physical Education Program.

There is increasing recognition of the importance of living an active, healthy life and of the need to make informed, responsible decisions. The Schenectady High School Physical Education Curriculum addresses the importance and benefits of a healthy and physically active lifestyle. Every student, regardless of physical ability or background, has the opportunity to pursue and enjoy these benefits, which in turn will help motivate them toward a life-long commitment to physical activity. Significant opportunities for learning social skills important for cooperation and individual success are also addressed through physical education.

Major areas of study included at the High School level may include, but are not limited to the following:

GRADES 9-12

- **Fitness Activities**
- **Soccer**
- **Lacrosse**
- **Floor Hockey**
- **Football**
- **Basketball**
- **Team Handball**
- **Track and Field**
- **Dance**
- **Weight Training**
- **Basic Swimming**
- **Fitness Swimming**
- **Aquatic Games**
- **Tennis**
- **Golf**
- **Badminton**
- **Volleyball**
- **Aerobics**
- **Rec./Project Adventure**
- **Archery**
- **Bowling**
- **Racquetball**
- **Softball**
- **Water Aerobics**
- **Yoga**
- **Karate**
- **Self Defense**
- **Pickleball**
- **Cricket**
- **Canoeing**
- **Kayaking**
- **Tae Bo**
- **Snorkeling**

POLICIES AND PROCEDURES:

CREDIT

A student must successfully complete eight (8) semesters of Physical Education in order to graduate from Schenectady High School. Physical Education must be taken each semester from grades 9 through 12 in order to meet the New York State requirements. 1/4 credit is earned each semester, giving a total of the two credits, which are needed to meet graduation requirements.

IN SCHOOL SUSPENSION

Students assigned In School suspension shall receive written assignments which must be completed that day in order to receive credit.

MEDICAL EXCUSES

Students may be excused with a parental/ guardian request for one day. Excuses presented to the Physical Education teacher may be referred to the nurse for medical evaluation. Any student who needs to be excused for additional days must obtain a medical excuse from a physician. The medical excuse should be presented to the nurse, who processes the information, and informs the Physical Education teacher of the restrictions and the duration for the student. Every effort should be made to obtain specific restrictions from the Physician so the student may participate in the Wellness Class, specifically designed to meet the students' needs. Students who are medically excused are still required to dress for class. All students not able to participate will be provided with written work which must be completed that day in order to receive credit.

CLASS CONDUCT

Students are expected to follow all adult directions. Students are to abide by the rules of the school, the teacher, as well as the rules of the game. Students are expected to treat their classmates with dignity and respect. Good sportsmanship, cooperative skills and positive attitudes toward others are stressed at all times.

PROPER ATTIRE

The following district- wide Physical Education Policies exist for the health and safety of our students and their classmates:

- Tied sneakers must be worn.
- Food, drink or gum is not allowed in the gym, locker room or pool.
- Proper attire must be worn in order to participate in class. All students are required to change out of clothing worn to school into appropriate clothing for Physical Education class. Tee shirts, sweatshirts, sweatpants or shorts are acceptable. Baggy clothes, clothing with belt hoops or pockets, i.e. jeans are prohibited. Properly secured athletic footwear is required. Unacceptable footwear includes, but is not limited to, the following: hiking boots, roller-skate sneakers, open back sneakers, high wedge or elevated sneakers. All other district policies concerning dress are in effect.

POOL DRESS CODE

Students participating in aquatic activities should keep the following guidelines in mind. Girls must wear one piece bathing suits, boys should wear shorts or a bathing suit with a mesh lining. Baggy or long gym shorts are not acceptable. Students may wear a grey or white tee shirt in the shallow end. They are not permitted, for safety reasons, to swim in the deep end while wearing a tee shirt.

JEWELRY POLICY

All jewelry must be removed (i.e. necklaces, earrings, bracelets, watches, etc.) Medical bracelets, necklaces or religious medals that cannot be removed must be taped down so they can be read. Small loop earrings, posts, or studs should be removed or be covered with tape so that the danger of injury is reduced. ALL FACIAL PIERCINGS AND EMBELLISHMENTS MUST BE REMOVED.

RELIGIOUS CONSIDERATIONS

Required religious coverings are permitted based on recognized traditions.

MAKING UP MISSED CLASSES

Students who are absent will be allowed to make up the credit. It is the student's responsibility to make these arrangements the next time they attend the class. Students can make up classes by attending another Physical Education class during their study hall. In the rare case, students who do not have a study hall can make up the credit after school during their physical education teacher's office hours, or by doing a written packet challenging their reading and comprehension skills on topics related to PE.

PHYSICAL EDUCATION

PHYSICAL EDUCATION COURSE DESCRIPTIONS:

The high school course descriptions presented here communicate the essence of the high school physical education experience. The content articulates the knowledge, skills and confidence students need to maintain meaningful physical activity throughout their lifetime. The course sequence provides a blueprint for delivering the content in a manner that equips students to make a successful transition from the physical education instructional program to participation in physical activity during adulthood.

The High School Physical Education Curriculum provides opportunities for all students in grades 9-12.

PE 9: BOYS
PE 9: GIRLS

The 9th grade PE curriculum will provide a sampling of sports and activities directed at transitioning freshmen into PE and Athletic programs. Students will be informed, invited and encouraged to become active participants in school clubs and sports. Students will engage in cooperative, competitive, non-contact, and contact activities. Activities will include but not limited to ultimate games, volleyball, badminton, pickleball, weight training, fitness activity, cricket, softball, floor hockey, basketball, lacrosse, soccer, handball and football. Classes will be gender specific.

PE 10-12: BOYS
PE 10-12: GIRLS

These courses will focus on providing students with an opportunity to understand and experience the benefits of physical activity in their life and to encourage them to develop healthy lifestyles habits. They will engage in activities that can be continued outside of school and in their community. The major components of fitness will be addressed: cardio-respiratory, muscular strength, endurance, flexibility and body composition. Students will experience cooperative, competitive, non-contact, and contact activities. Activities will include but not limited to ultimate games, volleyball, badminton, pickleball, weight training, fitness activity, cricket, softball, floor hockey, basketball, lacrosse, soccer, handball, football, yoga, tennis, golf, disc golf, and archery. This course will also incorporate the Sport Ed Model philosophies using team sport activities in particular units. The Sport Ed Model uses advanced skill demonstration, strategy and understanding of team sport concepts to help students learn and appreciate the many facets of team development and organization. Students will be guided into actively engaging in a variety of roles associated with team operations, such as coaching, officiating, planning practice and drills for skill development. Active participation will also lead to opportunity to address conflict resolution and sportsmanship standards which should be integrated into lifestyle habits. Classes will be gender specific.

POOL/WELLNESS

Co-ed classes.

This course involves both pool and wellness activities. Participants who choose the aquatic option are expected to be prepared to swim for all PE classes. Course focus will include basic water skills and survival techniques, stroke instruction, aquatic games, snorkeling, canoeing and kayaking. Those participants who have been placed by guidance for wellness activities will be expected to dress for class and will focus on the basic premises taught for swimming as well as instruction concerning personal fitness techniques.

SCIENCE

The Science Department is strongly encouraging more students to work toward earning an Advanced Regents Diploma. Several may be offered online, with lab scheduled during the day. Participation in online classes requires approval of Department Coordinator.

SCIENCE COURSES - GRADE 9

COURSE	PREREQUISITE
Biology R	None
Physics	Algebra Regents exam score of 80 or Better. Recommendation of Science and Algebra teachers.
Earth Science R	Passing grade on the Living Environment (Biology) Regents exam of a 65 or Better.

SAMPLE PATHWAYS FOR ALL STUDENTS

9TH	10TH	11TH	12TH
Biology	Earth Science	Chemistry/Physics/ Science Elective	Science Elective
Biology	Chemistry Pre-IB	Physics or Biology UHS/IB 1	Biology UHS/IB 1 or 2
Earth Science (for students who took Bio in 8th grade)	Chemistry	Physics, Biology UHS/IB 1	Biology UHS/IB 1 or 2
Physics (for students who took algebra in 8th grade)	Chemistry	Biology UHS/IB 1	Biology UHS/IB 2

BIOLOGY

(1 CREDIT)

Open to grade 9

Living Environment Regents course is built on the knowledge, understanding, and ability to do science that students have acquired in their earlier grades. Instruction is focused on understanding important relationships, processes, mechanisms, and applications of concepts with less emphasis on the memorization of specialized terminology and technical details. The assessments test students' ability to explain, analyze, and interpret biological processes and phenomena more than their ability to recall specific facts. The course is expected to prepare students to explain the most important ideas about our living environment. It is accomplished through lectures, large and small group discussions, text readings and lab activities. Laboratory experiences provide the opportunity for students to develop the scientific inquiry techniques, the use of information systems, the interconnectedness of content and skills and the problem-solving approaches (The Living Environment Core Curriculum) A lab class is a required component of this class. Successful completion of the lab portion is required to sit for the Living Environment: Biology Regents exam

BIOLOGY: H

(1 CREDIT)

This course is an advanced version of our current Biology R course. Instruction focuses on the development of the critical thinking and analytical skills that will prepare students for coursework in the International Baccalaureate Program. The course will also include an extensive research component that will familiarize students with the type of research that will be carried out in the IB program. A lab class is a required component of the course.

Students sit for the Regents Living Environment exam in June.

BIOLOGY UHS/IB (HL/YEAR 1)

4 UHS CREDITS, SCCC (BIO 141)
(1 CREDIT)

Prerequisites: Successful completion of a Regents level Science exam (65 or higher) and minimum 85% attendance rate in the sophomore year)

IB/UHS Biology is a rigorous, Group IV higher level course that

is taught over two years. During the first year, students develop a broad understanding of the field of biology, explore current topics relating to the field, and participate in research-related activities. A lab class that meets separately from the regular class is a required component of the course. This course is available to both Diploma Program and Certificate students.

BIOLOGY UHS/IB (HL/YEAR 2)

4 UHS CREDITS, SCCC (BIO 142) (1 CREDIT)

Prerequisites: Satisfactory progress on IB Biology Internal Assessment at time of scheduling (verified by Year 1 instructors.)

In Year 2 Biology (Group IV subject) students perform further study in a broad range of topics relating to Biology. The IB Biology Exam is administered in May, and this course fulfills the Experimental Sciences requirement for the full IB Diploma. A lab class that meets separately from the regular class is a required component of the course. This course is available to both Diploma Program and Certificate students.

CHEMISTRY

REGENTS (1 CREDIT)

Open to grades 10, 11, and 12. Prerequisite: Successful completion of Regents Biology or Regents Earth Science or Algebra.

Regents Chemistry presents a modern view of chemistry suitable for pupils with a wide range of skills and abilities. Topics include; matter and energy, atomic structure, bonding, periodic table, mathematics of chemistry, kinetics and equilibrium, acid-base theory, and organic chemistry. A lab class is a required component of the course. A minimum of one hour of homework is expected each day.

CHEMISTRY HONORS

(1 CREDIT)

Open to grade 10 and above. Prerequisite: successful completion of Honors Biology, Physics, 80 or above on Living Environment Regents, or the recommendation of the Science Coordinator.

This course will be an extension of our current Regents Chemistry course. It will prepare students for the science component of the International Baccalaureate Program, in addition to preparing for the NYS Regents exam in Chemistry. The course will also include an introduction to laboratory work that will familiarize students with the type of laboratory work that will be carried out in the IB program. A lab class that meets separately from the regular class is a required component of the course.

CHEMISTRY IB (SL)

4 UHS CREDITS, UALBANY (1 CREDIT)

Open to grades 11 and 12. Prerequisite: successful completion of Living Environment, Regents Chemistry, and two years of Regents-level math.

IB Chemistry provides students with a broad overview of stoichiometry, atomic theory, periodicity, bonding, states of matter, energetics, kinetics, acids and bases, oxidation-reduction, environmental chemistry, and chemical industries. A lab class is a required component of the course. The IB Chemistry exam is administered in May, which fulfills the science requirement for the IB Diploma.

EARTH SCIENCE

REGENTS (1 CREDIT)

Open to grades 10, 11 and 12. Prerequisite: Passing grade on the Living Environment Regents Exam. Students must have passed Algebra, or be in Geometry and passed Biology.

Also open to 9th graders who passed the Living Environment Regents exam in 8th grade.

Regents Earth Science considers the following topics: the earth in relation to the universe, galaxy and solar system, energy in earth processes, surface heating, weather, oceanic dynamics, forces which mold and modify surface features, erosion, volcanoes, earthquakes and deposition, and the identification of rocks and minerals. A lab class is a required component of the course. Students must have completed or currently be enrolled in Algebra and passed Biology.

ENVIRONMENTAL SCIENCE

(1 CREDIT)

Open to grades 11 and 12. Prerequisite: Received credit for one year of Living Environment and one year of Physical Setting and passed one regents exam in either course.

Environmental Science is designed to be an introductory course to environmental studies. The goals of this course are to provide students with the scientific principles, concepts, and methodologies required to:

1. Understand the interrelationships of the natural world;
2. To identify and analyze environmental problems both natural and man-made; and
3. To evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them.

Topics to be covered include interdependence of earth systems, human population dynamics, communities and ecosystems, natural resources, environmental quality, global changes, environmental management, pollution, sustainability and personal responsibility.

FIRST AID AND SPORTS MEDICINE

(1 CREDIT)

Open to grades 11 and 12. Prerequisite: Received credit for one year of Living Environment and one year of Physical Setting and passed one regents exam in either course.

This semester course is designed to give students a solid background in First Aid. It will include prevention and care of athletic injuries and current topics in sports medicine. All students may have the opportunity to be certified in First Aid and CPR upon successful completion of the class. This class is open to all students who have completed the Living Environment course.

FORENSIC SCIENCE

(1 CREDIT)

Open to grades 11 and 12. Prerequisite: Successful completion of a Regents lab science.

Forensic science is the application of science to solving crimes in the criminal justice system. This course will investigate Criminalistics, the application of science in the services of a crime laboratory. Students will become familiar with biological evidence such as DNA fingerprinting, hair analysis, drug analysis and identification. Exposure to career pathways in the criminal justice system and hands-on learning are integrated into the study of solving crimes. Labs will be incorporated into the class to facilitate learning.

PRACTICAL PHYSICS: ENGINEERING

REGENTS (1 CREDIT)

Open to grades 11 and 12.

Practical Physics:Engineering is a full-year course designed to introduce students to the world of technology and engineering, as a first step in becoming technologically literate citizens. Additionally, the course will help high school students answer the question: "Why should I study math, science and engineering if I don't plan on a technical career?" Through this course's practical real-world connections, students have an opportunity to see how science, mathematics, and engineering are part of their every day world, and why it is important for every citizen to be technologically and scientifically literate. Especially suited for juniors and seniors who have not passed the Algebra Regents yet.

PHYSICS

REGENTS (1 CREDIT)

Open to grades 9 - 12.
9th grade Prerequisite: Algebra Regents exam score of 80 or Better. Recommendation of Science and Algebra teachers.

10th–12th grade Prerequisite: successful completion of the algebra regents.

Topics include: kinematics, energy, waves, electricity and magnetism, and models of the atom. A separate laboratory is scheduled for this course and state mandates are followed. Students are expected to complete homework daily.

PHYSICS IB (SL)

8 UHS CREDITS, UALBANY (APHY 105, 106, 108, 109) (1 CREDIT)

Open to grades 11 and 12. Prerequisites: Successful completion of two Regents level Science exams and the Geometry Regents exam (65 or higher), minimum 85% attendance rate in the previous year and must fit the IB Learner Profile with the motivation and desire to learn. Students who wish to appeal the prerequisite requirements may do so using the IB Program Appeal Process.

This IB course will be an extension of our current Regents Physics course. Topics include: uncertainties of measurement, mechanics, thermodynamics, wave phenomena, electric current, nuclear and atomic structure, field forces, energy, power, climate change and astrophysics. It is intended for students who plan on further study in science. A lab class that meets separately from the regular class is a required component of the course. Students will be prepared for the Regents Physics exam, and the IB Standard Level exam that is administered in May, which fulfills the IB science requirement for the IB Diploma.

SOCIAL STUDIES DEPARTMENT

To qualify for graduation, a student must earn 4 units of credit in Social Studies including Global History and Geography 9, Global History and Geography 10, United States History and Government 11, Economics 12 (1/2 credit), and Participation in Government 12 (1/2 credit). Also, a student must pass the Regents Examination in Global History and Geography (9-10) and the Regents Examination in United States History and Government (11). Remediation is offered to students who fail to pass these examinations.

Students in the Social Studies Department have the opportunity to take courses at the following levels: Honors, Regents, IB and UHS. All courses prepare all students to meet the new Regents standards. However, the reading materials and the pace of instruction vary across the levels and offer enrichment activities or remedial assistance, depending on the skills of the student.

GLOBAL HISTORY AND GEOGRAPHY

In grades 9 and 10 Social Studies, students will examine Global History and Geography. This two year sequence is arranged chronologically beginning with the Paleolithic Era and continuing through the present.

GRADE 9 PRE-IB: GLOBAL HISTORY AND GEOGRAPHY

(1 CREDIT)

This course requires students to study topics in depth through intensive reading, writing, and analysis of primary and secondary source material. Grade 9 begins with the Paleolitchic Era and the development of the first civilizations, continues with an examination of classical societies, and traces the expansion of trade networks and their global impact. The course emphasizes the key themes of interactions over time, shifts in political power, and the role of belief systems. While the course emphasizes the importance of historical and spatial thinking, all of the social studies practices and standards are included in the study of global history and geography. As part of the course, students will further develop their research skills and participate in activities that promote critical thinking, document analysis, and use of substantive evidence in developing a thesis.

GRADE 9: GLOBAL HISTORY AND GEOGRAPHY I

(1 CREDIT)

Grade 9 begins with the Paleolitchic Era and the development of the first civilizations, continues with an examination of classical societies, and traces the expansion of trade networks and their global impact. The course requires students to read primary and secondary source material, create argument responses in writing and apply what they learn in different situations. The course emphasizes the key themes of interactions over time, shifts in political power, and the role of belief systems. While the course emphasizes the importance of historical and spatial thinking, all of the social studies practices and standards are included in the study of global history and geography.

SOCIAL STUDIES 10 PRE-IB: GLOBAL HISTORY AND GEOGRAPHY

(1 CREDIT)

This course requires students to study topics in more depth through intensive reading and writing. Course content includes the Age of Revolutions through Modern Times, including a Half-Century of Crisis and Achievement (1900-1945, The Twentieth Century Since 1945 and Global Connections and Interactions. As part of the course, students will further develop their research skills and participate in activities that promote critical thinking, document analysis, and use of substantive evidence in developing a thesis.

SOCIAL STUDIES 10: GLOBAL HISTORY AND GEOGRAPHY

(1 CREDIT)

Required for graduation, this course is a continuation of the study of Global History 9. Course content includes: The Renaissance, the Age of Revolutions (1750-1914), A Half-Century of Crisis and Achievement (1900-1945), The Twentieth Century Since 1945 and Global Connections and Interactions. Like Global History 9, this course prepares students to meet the learning standards in Social Studies (In addition to the World History Standard, Geography, Economics and Government are addressed) and offers instruction in writing skills to ready them for the more rigorous, on-demand testing requirements of the Global History Regents Examination.

US HISTORY AND GOVERNMENT HONORS 11

(1 CREDIT)

Prerequisite: High achievement in Global Studies 9 & 10 and a recommendation from social studies faculty.

This course is designed for a student who is interested and excited to learn American history. Students will be challenged to investigate and report on the major themes of American history, from the French and Indian War to modern history. Students will be developing their writing and technology skills through social studies themes. Students will be expected to research American historical periods both independently and collectively. Participants must take the US Regents in June.

SOCIAL STUDIES 11: US HISTORY & GOVERNMENT

(1 CREDIT)

Prerequisite: Global History and Geography 9 and 10.

This course is a study of the history of the United States with emphasis upon its government and development as an industrial nation. The problems of modern American society are also studied. Like Global History 9 and 10, this course prepares students to meet the new learning standards in Social Studies and offers instruction in new writing skills to ready them for the more rigorous, on-demand testing requirements of the United States History Regents Examination.

COMPARATIVE HISTORY

(1 CREDIT)

Prerequisite: Global History and Geography 9 and 10.

This 1 credit 11th grade social studies course fulfills the New York State US History graduation requirement and is designed for students who have successfully completed Global History and Geography but have not yet passed the Global Studies Regents Exam. This course will be taught using a comparative approach to history. There will be a major focus on development of the skills necessary for successfully meeting the required passing standard on the Global History and Geography and the US History and Geography Regents exams. When studying the history and foundation of the US Constitution and framework of government, students will review the Enlightenment period and French and Latin American Revolutions. When studying the Industrial Revolution and Progressive Movement in the US, students will review the Industrial Revolution in England. When studying US Westward Expansion and Empire Building, students will review European Colonization of the Americas and Imperialism in Africa and Asia.

ECONOMICS IB (SL)

3 UHS CREDITS, SCCC (ECO 221 - MACRO)

3 UHS CREDITS, SCCC (ECO 223 - MICRO)

FULFILLS THE ECONOMICS AND PARTICIPATION IN GOVERNMENT (PIG) GRADUATION REQUIREMENT

Prerequisite: Average of 85 or better in the first three quarters of US History and Geography or an average of 75 or better in the first three quarters of IB History of the Americas, an attendance rate of 85% or better and must fit the IB Learner Profile with the motivation and desire to learn. Students who wish to appeal the prerequisite requirements may do so using the IB Program Appeal Process.

IB Economics is a study of Macro- and Microeconomic theories at an introductory college level, with special emphasis placed on the international issues of trade and economic development. This is an excellent course for students interested in studying economics, finance, business, political science or history in college.

Students must complete an internal assessment project that includes an economic analysis of four current research articles. The IB Economics exam is administered in May.

SOCIAL STUDIES 12: ECONOMICS

(1/2 CREDIT)

A Prerequisite is US History. This course is a one-semester course required for graduation. It gives students the opportunity to study basic economic concepts and understandings and to analyze current economic issues.

PARTICIPATION IN GOVERNMENT/ ECONOMICS HONORS

FULFILLS THE ECONOMICS AND PARTICIPATION IN GOVERNMENT (PIG) GRADUATION REQUIREMENT

Prerequisite: High achievement in US History 11 and a faculty recommendation.

Participation in Government/ Economics Honors is a comprehensive study of the American Governmental system. It includes an intensive analysis of the Presidency, federal bureaucracy, national security, foreign affairs, congressional power and the federal court system. In addition, students will study basic economic principles within the sphere of the American economic system.

SOCIAL STUDIES 12: PARTICIPATION IN GOVERNMENT

(1/2 CREDIT)

Prerequisite is US History.

This semester course is required for graduation. It gives the students the opportunity to study the role that citizens play in a democratic society. There is study of the interaction of citizens and government and the processes by which public issues reach consensus.

INTRODUCTION TO SOCIOLOGY

(1/2 CREDIT)

This course offers an introduction to the basic concepts and perspectives of sociology, with special emphasis on the study of American society. Topics include: sociology as a science, social organization, culture, socialization, groups and associations, social stratification, collective behavior, and population.

UNIVERSITY SOCIOLOGY

3 UHS CREDITS, UALBANY (ASOL 115) (1 CREDIT)

Prerequisite: High achievement in the US History Honors Course and/or US R and passing of the US History Regents.

This is a challenging elective that offers advanced 12th grade students the opportunity to earn college credit from the State University at Albany. The course involves an intensive study of the basic concepts and perspectives of Sociology with special emphasis placed on the study of American institutions.

INTRODUCTION TO CONSTITUTIONAL LAW

(1 CREDIT FULL YEAR COURSE, ½ CREDIT IN PIG AND ½ ELECTIVE CREDIT IN CONSTITUTIONAL LAW)

This course will focus on the Bill of Rights and the most important historic and current US Supreme Court decisions. Students will explore the constitutional foundations of the decisions, and explain how precedents have changed the spirit of some laws. Students will listen to oral arguments, make judgments based on the facts of each case, and compare their decisions to the actual decision of the court. Students will also determine whether their status as public school students changes the protection offered to them by the US Constitution.

INTRODUCTION TO CIVIL LAW

(1/2 CREDIT) (P.I.G CREDIT)

This is a one-semester elective that provides students with an introduction to "THE LAW", including an overview of various types of governments throughout history and around the world. The focus of the course will be on the American legal system in general and New York State in particular. Students will follow emerging legal issues as they develop in the political and judicial processes. There will also be opportunities for students to explore and study a variety of careers related to the field of law. There will be outside materials, assignments and projects, as well as classroom visits and instruction by attorneys and other professionals.

CRIMINAL JUSTICE

(1/2 CREDIT) (P.I.G CREDIT)

This is a one-semester elective which provides students with an introduction to the American criminal justice system. Students will become familiar with the terminology and the framework under which the criminal justice system operates. Students will learn all the steps involved in a criminal proceeding from arrest and investigation through trial, sentencing, incarceration and the appeal process. Students will explore some of the root causes of crime and some of the alternatives to the traditional punishment/retribution/deterrence models of criminal justice. There will also be opportunities for students to explore and study a variety of careers related to the field of criminal justice. There will be outside materials, assignments and projects, as well as classroom visits and instruction by attorneys and other professionals.

INTRODUCTION TO PSYCHOLOGY

(1/2 CREDIT)

This one-semester course will introduce the major concepts and issues of the discipline of Psychology and is designed to enable students to learn more about the human mind, human behavior, and the field of psychology. Topics include: the basic concepts of psychology; the human brain and human behavior; learning and thinking; developmental psychology; personality; abnormal psychology; and social psychology.

PSYCHOLOGY IB (SL)

(1 CREDIT)

Prerequisites: Average of 85 or better in the first three quarters of US History and Geography or an average of 75 or better in the first three quarters of IB History of the Americas, an attendance rate of 85% or better and must fit the IB Learner Profile with the motivation and desire to learn. Students who wish to appeal the prerequisite requirements may do so using the IB Program Appeal Process.

The IB course in Psychology is designed to introduce students to the systematic study of the behavior and mental processes of humans and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major sub-fields within psychology. The students also learn the methods psychologists use in their science and

practice. This rigorous IB course is designed for students who are highly motivated and capable of being independent learners. Students taking IB Psychology must complete an Internal Assessment that requires them to replicate a psychological study. Students will conduct research on a psychological study, identify and obtain study participants, replicate the study, process and analyze the data and report their findings.

HISTORY OF THE AMERICAS IB (HL/ YEAR 1)

3 UHS CREDITS, SCCC (HIS 227) (1 CREDIT)

Prerequisites: Average of 85 or better in the first three quarters of Global History or an average of 75 or better in the first three quarters of Global History Honors, an attendance rate of 85% or better and must fit the IB Learner Profile with the motivation and desire to learn. Students who wish to appeal the prerequisite requirements may do so using the IB Program Appeal Process.

This course is a college-level course conducted in the high school setting designed to create life long learners through in-depth study of History of the Americas, students will engage in rigorous investigation of Nation-building and challenges: 1781-1867; the development of modern nations: 1865-1929; and the Cold War and the Americas: 1945-1981. Students will continue to advance their skills in writing, listening and speaking through the successful completion of research papers, projects, debates, mock trials, and interviews. Practice in critical thinking, document analysis, and use of substantive evidence and historiography in developing a thesis will continue from foundations laid in Pre-IB coursework. A strong work ethic and active participation is required of all students in sharing their work through peer review, study circles and presentations. Fulfills the New York State Graduation Requirement.

20TH CENTURY TOPICS: IB (HL/ YEAR 2)

3 UHS CREDITS, SCCC (HIS 229) (1 CREDIT)

FULFILLS THE ECONOMICS AND PARTICIPATION IN GOVERNMENT (PIG) GRADUATION REQUIREMENT

Prerequisites: Average of 80 or better in the first three quarters of IB History of the Americas, an attendance rate of 85% or better and must fit the IB Learner Profile with the motivation and desire to learn. Students who wish to appeal the prerequisite requirements may do so using the IB Program Appeal Process.

This course is a college-level course conducted in the high school setting. This is the second year of the two-year IB Higher Level History Course. Students taking 20th Century Topics will participate in a comprehensive study of the rise and rule of single-party rulers such as Joseph Stalin and Fidel Castro as well as two pivotal events of the 20th century, the Cold War and the Arab-Israeli Crisis. Students will continue to advance their critical thinking and writing skills through the synthesis and evaluation of historiography. As part of the course requirements, students will complete the internal assessment that was begun during their junior year and sit for the IB exam in May. This course fulfills the IB higher-level requirement for Individuals and Societies.

AFRICAN-AMERICAN HISTORY

This semester-long elective course is open to students who want to deepen their understanding of African American History from precolonial Africa through the present.This course will introduce students to key concepts in African American History form the early beginnings in Africa through the transatlantic slave trade, the Civil War, emancipation, Reconstruction, the civil rights era, and the Obama Presidency into the Black Lives Matter Movement. The course will highlight major social, political and economic movements, individuals, and ideas.

TECHNOLOGY

TECHNOLOGY EDUCATION

The SCSD High School Technology program offers students of all academic levels opportunities to explore different avenues in the exciting world of technology. Students can choose to do an introductory course such as the Fundamentals of Technology, **fulfill their graduation Art requirement with Design and Drawing for Production (DDP)**, or explore a variety of specific paths in technology. Students who are interested in a career in computers can follow the IT Essentials and/or Cisco Sequences and work towards obtaining different certifications. A wide variety of electives - such as Energy Applications, Graphic Communications, and Robotics - are offered to meet the interests of students as well as the needs of an ever-changing world. Students who are interested in architecture, construction, or engineering would want to take advantage of the Advanced Architectural Principles, Construction Technology, Engineering Principles, and IB Design Technology courses offered. If students are pursuing an Advanced Regents diploma, they can **substitute five units in Technology Education for the Foreign Language requirement.**

Courses recommended for 9th graders (but open to all grade levels)
Fundamentals of Technology (1/2 unit)
Electricity/ Electronics (1 unit)
Design and Drawing for Production (1 unit) – fulfills Arts requirement for graduation

Courses recommended for 10th – 12th graders - NO prerequisites (all ½ unit):
Construction Technology
Energy Applications
Graphic Communications
Introduction to Architecture
IT 1: Fundamentals - 3 UHS Credits, SCCC (CIS 110)
PC Manufacturing
Robotics
Web Design

Courses for 10th – 12th graders with prerequisites (½ unit unless marked):
Computer Programming for Tech
Engineering Principles
IB Design Tech HL Year 1 – 1 unit
IB Design Tech HL Year 2 – 1 unit
IT 2: Advanced - 3 UHS Credits, SCCC (CIS 111)
Yearbook – 1 unit

CISCO Sequence (all ½ unit)
CISCO I - 3 UHS Credits, SCCC (CIS 240)
CISCO II - 3 UHS Credits, SCCC (CIS 241)
CISCO III - 3 UHS Credits, SCCC (CIS 247)
CISCO IV - 3 UHS Credits, SCCC (CIS 247)

CTE TECHNOLOGY PATHWAYS

IT Essentials Pathway – 3 ½ credit sequence
IT Essentials is a hands on, career-oriented e-learning solution with an emphasis on practical experience to help students develop fundamental computer skills along with essential career skills. The program helps students prepare for entry-level IT career opportunities. Students will take the CompTIA A+ certification, which will also help distinguish them in the marketplace to advance their careers. The Comptia A+ certification is the industry recognized certification for entry level computer repair and support technicians.

IT ESSENTIALS PATHWAY

- Design and Drawing for Production (1 credit) and fulfills art requirement
- Electricity/Electronics - (1 credit)
- Career and Financial Management (½ credit)
- IT 1 & 2 - (½ credit & ½ credit) and 6 UHS Credits from SCCC

CCNA Pathway – 4 ½ credit sequence
Students will learn theory, design, implementation, and maintenance of computer networks. The program consists of six-1/2 unit courses (Cisco 1, 2, 3, and 4, Career and Financial Management, and Electricity/Electronics) and one full year course (Design and Drawing for Production) for a total sequence of four units. The courses prepare students to take industry recognized certification tests – either the Cisco Certified Entry level associate (CCENT) or the Cisco Certified Network Associate (CCNA).

CCNA PATHWAY

- Design and Drawing for Production (1 credit) and fulfills art requirement
- Electricity/Electronics - (1 credit)
- Career and Financial Management (½ credit)
- Cisco 1 & 2 - (½ credit & ½ credit) and 6 UHS Credits from SCCC
- Cisco 3 & 4 - (½ credit & ½ credit) and 6 UHS Credits from SCCC

CAREER AND FINANCIAL MANAGEMENT

(1/2 CREDIT)

This course is required by the NYS State Education Department for any student pursuing a sequence in career and technical education. The emphasis is on business and economic systems, career planning, selection and success, and financial literacy.

FUN-DAMENTALS OF TECHNOLOGY

(1/2 CREDIT)

Technology can be fun! Students will be introduced to a variety of topics in technology that form the foundation of our modern society. They will complete many different projects involving electronics, publishing, energy, design, and computer applications. Emphasis will be placed on developing organization, technical, presentation, and teamwork skills in a hands-on technology setting. One-fourth of the course will be dedicated to activities in career research and planning.

DESIGN & DRAWING FOR PRODUCTION (DDP)

(1 CREDIT) (FINE ART CREDIT)

Have you ever wondered how your cell phone went from and idea to a product? Design and Drawing for Production (DDP) is an activity-based course which will teach you how products are created from start to finish. Students in DDP will develop solutions to various design or product problems using research, sketching, drawing and presentation techniques. Individual and group projects will emphasize the development of the critical thinking and encourage you to think creatively. The computer will be used to create original 3-D solutions. DDP may be used to satisfy the art requirement for graduation.

ELECTRICITY/ ELECTRONICS

(1 CREDIT) MAY BE USED AS SCIENCE CREDIT

Would this course spark your interest? The world of electronics surrounds us in our everyday lives. This class will provide students with an opportunity to master the basic theories of DC electronics and put those theories into practice through exciting and challenging lab projects and experiments. Applied math skills will be developed in the analysis of projects and experiments. Students will be given opportunities to design, build, operate, and test electronic projects in both individual and group project settings.

INTRODUCTION TO ARCHITECTURE

(1/2 CREDIT)

Open to grades 10, 11, and 12.

Are you interested in pursuing a career in Architecture? This course will introduce students to the fundamentals of architectural design. Students will learn and apply the concepts of planning, researching, developing, and evaluating architectural structures. One project will focus on the exciting and challenging process of designing a residential deck concluding with the building of an original scale model. Classwork will emphasize understanding and applying the fundamentals in both individual and group project work.

CONSTRUCTION TECHNOLOGY

(1/2 CREDIT)

Open to Grades 10, 11, 12

Do you like working with your hands? Do you like building things? Would you like to have a job that offers great pay? Have you ever thought about constructing your own home? This course is intended to introduce students to the basics of construction systems including concepts and applications in estimation, framing, foundations, electrical, plumbing, and interior finish. Class topics will include eco-friendly homes, security systems, smart homes, and other fascinating topics!

COMPUTER PROGRAMMING FOR TECHNOLOGY

(1/2 CREDIT)

Prerequisite: Jr/Sr or if the Sophmore is enrolled in Trig Acc-PreIB.

How did Bill Gates develop such an impressive collection of software? The answer is by computer programming! In this class, students will work in four distinct languages in order to develop a basic understanding of the common elements of programming. While you will not become an expert in any one language, you will gain a broad understanding of what it takes to develop a well-designed and fully functional program. Students will work individually as well as in small groups to complete the programming challenges. And who knows, perhaps YOU could be the next great programmer of the 21st century!

ENERGY APPLICATIONS

(1/2 CREDIT) MAY BE USED AS SCIENCE CREDIT

Open to Grades 10, 11, 12.

Is our world at risk of running out of energy? How will we supply the energy demanded by future generations? Our class will explore the past, present, and future of energy sources and applications. Is it possible to develop a solar powered cell phone? How does that

"french fry car" work? Hands on activities will help students understand the concepts in one of the hottest career growth areas in the new Tech Valley! If you've ever wondered watts up, this class is for you!

ENGINEERING PRINCIPLES

(½ CREDIT) MAY BE USED AS A SCIENCE CREDIT

Prerequisite: Jr/Sr or if the Sophmore is enrolled in Trig Acc-PreIB.

Have you ever thought about developing a new product that could change the world? The world needs enthusiastic, creative designers who are not afraid to dream big! If this sounds interesting, you should consider a career in the field of engineering. This class will provide students with an opportunity to look at the variety of exciting and challenging career paths in engineering. This is where you will solve real world problems by applying your math and science skills. Graduates of Schenectady High who work in engineering will visit this class to share their career experiences.

ROBOTICS 1 & 2

(1/2 CREDIT) MAY BE USED AS A SCIENCE CREDIT

Open to grades 10, 11, 12.

Is it possible that someday you might actually be able to have a robot that would do your homework? How has robotics changed our society and what are the future implications? Robotics will allow students to engage in fascinating applications of math and science to design, build, and program both radio-controlled and autonomous (self-guiding) robots. This class will give you a glimpse into your future as we continue to rely more on automation, artificial intelligence, and systems design to solve complex technological problems that we face as a society.

WEB DESIGN

(1/2 CREDIT)

Open to grades 10, 11 and 12.

When was the last time you added a new feature to your Facebook account? Would you like to go beyond what Facebook is capable of creating and develop your own web content? This is a one semester, project-based introduction to developing and presenting web-based information. While the primary focus of the class is on content development, students will discuss issues facing today's web professionals such as copyright, freedom of speech, and web security. Students will work with the elements of layout, content, navigation, and interface design as they complete individual, small group, and large group projects. Students will also be required to present their work to the class for peer evaluation and review. By the time you complete this class, you should be ready to plan, develop, and maintain your own website!

PC SURGERY (PC MANUFACTURING)

(1/2 CREDIT)

Open to grades 10, 11, 12.

Have you ever started up your computer only to view the "blue screen of death?" What do you do now? PC surgery will teach you critical care knowledge that will let you bring your computer back to life! Don't be intimidated by your computer, PC Manufacturing will put you in control! EVERY STUDENT should take this course before graduation!

IT 1: FUNDAMENTALS OF HARDWARE & SOFTWARE

(1/2 CREDIT)
3 UHS CREDITS, SCCC (CIS 110)

Open to grades 10, 11, 12.

Did you know that computer hardware and software is the foundation of the 5 fastest growing careers over the next decade? This class will empower you with the skills to diagnose and repair hardware and software issues that can prevent your computer from operating at its full potential. Take IT 1 and start your own computer repair business!

IT 2: ADVANCED HARDWARE & SOFTWARE

(1/2 CREDIT)
3 UHS CREDITS, SCCC (CIS 111)

Prerequisite: IT 1 Fundamentals.

If you are considering a career in Information Technology, you should definitely consider taking this class to fully prepare yourself for the industry standard COMP-TIA exam. This class moves into more complex topics following IT 1 and will provide students with hands-on experiences in diagnosis, repair, and verification of hardware and software performance.

CISCO 1

3 UHS CREDITS, SCCC (CIS 240)
(1/2 CREDIT)

Open to grades 10, 11, 12.

Semester 1: You write an email and you click on send. Have you ever wondered what happens next? Cisco 1 will teach you! Students will explore various aspects of the Internet including the hardware and software required for connectivity. Hands on activities will include designing, building, and troubleshooting networks. IT careers are in high demand and this class will open your eyes to many of these opportunities.

CISCO II

3 UHS CREDITS, SCCC (CIS 241) (1/2 CREDIT)

Prerequisite: CISCO 1.

Semester 2: Routers and Routing Basics. Cisco 2 focuses on the configuration of router, network design and security. Topics include: Router user interfaces, components and configurations; Basics of IOS versions, naming and software backup; TCP/IP Protocol Suite, IP addressing and sub netting; Interior routing protocols- RIP; and Access Control Lists (ACLs).

CISCO III

MUST COMPLETE CISCO III AND IV FOR 3 UHS CREDITS, SCCC (CIS 247) (1/2 CREDIT)

Prerequisite: CISCO 2.

Semester 3: Switching Basics and Intermediate Routing. Cisco 3 expands students' knowledge of routing, network implementation and troubleshooting. The class includes extensive hands-on experiences with all the following topics: VLSM (Subnetting a subnet); Routing protocols – RIP Version 2, OSPF and EIGRP; Switching and VLANs; Spanning – Tree Protocol; and Network documentation, security and troubleshooting.

CISCO IV

MUST COMPLETE CISCO III AND IV FOR 3 UHS CREDITS, SCCC (CIS 247) (1/2 CREDIT)

Prerequisite: CISCO 3.

Semester 4: WAN Technologies. Cisco 4 introduces students to Wide Area Networks (WANs) and investigates all the following topics: WAN devices, encapsulation formats, and communication; PPP components, session establishment and authentication; ISDN uses, services and configuration; and Frame relay technology and configuration. These courses prepare students for the industry certifications CCENT and CCNA.

GRAPHIC COMMUNICATIONS

(½ CREDIT)

Open to Grades 10, 11, 12

Are you a photo bug? Do you have tons of photos and want to display them in a creative way? This course will introduce students to the amazing world of design for digital media. Students will have the opportunity to use digital cameras to create exciting class projects focusing on page layout, editing, digital video, and much more. This class will fully qualify students to be successful in the Yearbook class.

YEARBOOK

(1 CREDIT)

Have you ever been part of a team that accomplished the seemingly impossible? Would you like next year's Patriot to be the best yearbook ever? Well, that won't happen without your contribution! This course offers hands-on training in photography, copy writing, editing, page layout, and design. The course includes extensive use of the computer to produce the yearbook in a "camera ready" format. Students will work with the financial advisor to sell advertisements and market the yearbook in school and in the community. Students interested in careers in journalism, advertising, business, or any type of communications will find this course to be rewarding and valuable. You have an opportunity to be part of a lifetime of memories when you join our staff.

IB DESIGN TECHNOLOGY (HL/YEAR 1)

(1 CREDIT) MAY BE USED AS A SCIENCE CREDIT

Prerequisites: Successful completion of a Regents level Science exam (65 or higher) and minimum 85% attendance rate in the sophomore year.

B Design Technology is a rigorous, Group IV higher level course that is taught over two years. DT is designed to teach students how to adapt to the ever-changing world of technology and to approach the solution of real world problems through the application of the Design Cycle Model. This course is available to both Diploma Program and Certificate students.

IB DESIGN TECHNOLOGY (HL/YEAR 2)

(1 CREDIT) MAY BE USED AS A SCIENCE CREDIT

Prerequisites: Satisfactory progress on Design Tech Year 1 Internal Assessment at time of scheduling (verified by Year 1 instructors)

In Year 2 Design Technology, students perform further study in a broad range of topics relating to the principles of design. The IB Design Technology Exam is administered in May, and this course fulfills the Experimental Sciences requirement for the full IB Diploma. A key component of Year 2 is the completion of the Design Project, a 41 hour self-directed applied research project that pursues a comprehensive solution to a real world design problem. This course is available to both Diploma Program and Certificate students.

WORLD LANGUAGES DEPARTMENT

Schenectady High School offers study in three modern languages—French, Spanish and Arabic. All students must successfully complete one year of World Language study to fulfill graduation requirements. Qualifying students may continue with a course that provides the option of earning Advanced Regents, University credit and/or an International Baccalaureate Diploma. The programs at the International Baccalaureate and Regents level stress the four skills of listening, speaking, reading, and writing and cover material in depth. Students wishing to enter an Internation Baccalaureate or certification in World Language certificate program should receive a grade of 85% or higher on the LOTE Checkpoint B exam.

The primary goal of World Language study is to achieve communication with a native speaker in the context of everyday situations appropriate to the level of study. Classroom instruction at all levels is primarily done in the target language and enhanced by modern technology available district-wide. Students will develop an understanding and appreciation of the values, attitudes, and customs of the cultures where the language they are studying is spoken.

Students are encouraged to participate in one or more extracurricular activities sponsored by the World Languages Department: Foreign Language Club, trips abroad, and field trips to major cities, cultural events and restaurants.

FRENCH 1

(1 CREDIT)

SPANISH 1

(1 CREDIT)

Open to students in grades 9-12.

Emphasis will be placed on listening and speaking skills with an introduction to reading and writing. Upon successful completion at this level students will be able to converse in simple sentences. The students will develop a general understanding and appreciation of the customs and traditions of French or Spanish speaking people.

FRENCH 2

(1 CREDIT)

SPANISH 2

(1 CREDIT)

Open to students in grades 9-12. Prerequisite: Successful completion of French 1 or French 8, Spanish 1 or Spanish 8.

This course continues the Foreign Language Regents sequence. Students will develop a better understanding of the culture of the French or Spanish speaking world through the acquisition of listening, speaking, reading and writing skills.

FRENCH 3

(1 CREDIT)

SPANISH 3

(1 CREDIT)

Open to students in grades 9, 10, 11, and 12. Prerequisite: Successful completion of French 2/French 8A or Spanish 2/Spanish 8A.

In French 3 and Spanish 3 there is a continued emphasis on all four skills: listening, speaking, reading, and writing. Vocabulary is expanded to improve all four skills. French and Spanish culture continues to be an integral part of the program.

FRENCH 4

(1 CREDIT)

Open to students in grades 10, 11 and 12. Prerequisite: Successful completion of French 3/French 9acc, or Spanish 3/Spanish 9acc.

Students will develop the proficiency essential for success on the WL examination. There is continued emphasis on all four language skills. Students are expected to express themselves orally as well as through written composition in French or Spanish. Appropriate authentic materials will expand the student's knowledge of the culture of French or Spanish speaking people. Students will take the WL Checkpoint B Exam in June. Upon successful completion of the WL Checkpoint B Exam, students fulfill the World Language requirement for the Advanced Regents Diploma.

SPANISH 4

3 CHS CREDITS, SCCC (SPA 122)

(1 CREDIT)

Open to students in grades 10, 11 and 12. Prerequisite: Successful completion of 9acc, or Spanish 3/Spanish 9acc.

Students will develop the proficiency essential for success on the WL examination. There is continued emphasis on all four language skills. Students are expected to express themselves orally as well as through written composition in French or Spanish. Appropriate authentic materials will expand the student's knowledge of the culture of French or Spanish speaking people. Students will take the WL Checkpoint B Exam in June. Upon successful completion of the WL Checkpoint B Exam, students fulfill the World Language requirement for the Advanced Regents Diploma.

SPANISH 5

3 CHS CREDITS, SCCC (SPA 222)

(1 CREDIT)

Open to students in grades 10, 11 and 12. Prerequisite: Successful completion of Spanish 4

This course furthers the knowledge of the student's language skills through review of the fundamentals of Spanish structure, and by emphasizing oral reading comprehension and self-expression in speaking and writing. The course also expands students' understanding of the civilization, culture, and customs of Spanish-speaking people. The Pre-requisite for this course is successful completion of Spanish 4 CHS.

FRENCH 9: PRE-IB/ ACCELERATED

(1 CREDIT)

Open to grade 9. Prerequisite: Average of 80 or better in the first three quarters of French 8 Accelerated.

The ninth grade accelerated French course is designed for the serious student interested in developing all four language skills; speaking, listening, reading and writing. The enriched curriculum for these courses will be taught on an advanced level which emphasizes critical thinking and will prepare the students for future coursework in the International Baccalaureate Program.

SPANISH 9: PRE-IB/ ACCELERATED

(1 CREDIT)

Open to grade 9. Prerequisites: Average of 80 or better in the first three quarters of Spanish 8 Accelerated.

The ninth grade accelerated Spanish course is designed for the serious student interested in developing all four language skills; speaking, listening, reading and writing. The enriched curriculum for these courses will be taught on an advanced level which emphasizes critical thinking and will prepare the students for future coursework in the International Baccalaureate Program.

FRENCH 10: PRE-IB/ ACCELERATED

(1 CREDIT)

Open to grade 10. Prerequisites: Average of 80 or better in the first three quarters of French 9 Pre-IB Accelerated.

The 10th grade accelerated French course is designed to develop mastery of the four language skills. Students are expected to express themselves orally as well as through written composition in the language. Appropriate authentic materials will be used to continue exploring the different cultures. Students will develop the proficiency essential for success on the WL Checkpoint B Examination. The enriched curriculum for this course will be taught on an advanced level, emphasizing critical thinking in order to prepare the students for future coursework in the International Baccalaureate Program in the 11th grade. Students will take the WL Checkpoint B Exam in June. Upon successful completion of the WL Checkpoint B Exam, students fulfill the World Language requirement for the Advanced Regents Diploma.

SPANISH 10: PRE-IB/ ACCELERATED

(1 CREDIT)

Open to grade 10. Prerequisites: Average of 80 or better in the first three quarters of Spanish 9 Pre-IB Accelerated.

The 10th grade accelerated Spanish course is designed to develop mastery of the four language skills. Students are expected to express themselves orally as well as through written composition in the language. Appropriate authentic materials will be used to continue exploring the different cultures. Students will develop the proficiency essential for success on the WL Checkpoint B Examination. The enriched curriculum for this course will be taught on an advanced level, emphasizing critical thinking in order to prepare the students for future coursework in the International Baccalaureate Program in the 11th grade. Students will take the WL Checkpoint B Exam in June. Upon successful completion of the WL Checkpoint B Exam, students fulfill the World Language requirement for the Advanced Regents Diploma.

FRENCH 11: IB (SL)

4 UHS CREDITS, UALBANY (ASPN 103) (1 CREDIT)

Open to students in grade 11. Prerequisites: Average of 80 or better in the first three quarters of French 10 Pre-IB Accelerated and an attendance rate of 85% or better.

This is the first year of a two-year preparation for the IB Language B exam in French. It is for students who intend to continue in the IB Diploma Program or earn an IB Certificate in French. Other interested students must seek permission of the instructor. This course is a college-level course conducted in a high school setting. The syllabus for this course is determined by the objectives and assessment criteria of the IB Language B course at the standard level, and that of the corresponding intermediate level course at UAlbany. The skills of listening, speaking, reading and writing are equally emphasized and are taught and developed through the study of a range of authentic oral and written text chosen by the teacher. A variety of oral and written examinations are used to assess students' listening, speaking, reading and writing skills.

SPANISH 11: IB (SL)

4 UHS CREDITS, UALBANY (ASPN 103) (1 CREDIT)

Open to students in grade Open to students in grade 11. Prerequisites: Average of 80 or better in the first three quarters of Spanish 10 Pre-IB Accelerated and an attendance rate of 85% or better.

This is the first year of a two-year preparation for the IB Language B exam in Spanish. It is for students who intend to continue in the IB Diploma Program or earn an IB Certificate in Spanish. Other interested students must seek permission of the instructor. This course is a college-level course conducted in a high school setting. The syllabus for this course is determined by the objectives and assessment criteria of the IB Language B course at the standard level, and that of the corresponding intermediate level course at UAlbany. The skills of listening, speaking, reading and writing are equally emphasized and are taught and developed through the study of a range of authentic oral and written text chosen by the teacher. A variety of oral and written examinations are used to assess students' listening, speaking, reading and writing skills.

FRENCH 12: IB (SL)

4 UHS CREDITS, UALBANY (AFRE 222) (1 CREDIT)

Open to students in grade 12. Prerequisites: Average of 80 or better in the first three quarters of French 11 IB and an attendance rate of 85% or better.

This course is a college-level course conducted in a high school setting. This course continues the IB Language B preparation in French. Students will sit for the IB speaking exams in January or March and the written exam in May. Students will continue to develop a high level of proficiency essential for success on the International Baccalaureate Exam at the Standard Level. The continued development of critical thinking, speaking, writing, and reading in the language is mandatory and is focused around the study of several IB suggested global themes including an appreciation of world cultures. The scope and diversity of supporting materials are determined by the instructor in order to provide students with the skills necessary for the component parts of the IB exam and fulfill course requirements for the corresponding intermediate level language course at UAlbany.

SPANISH 12: IB (SL)

4 UHS CREDITS, UALBANY (ASPN 104) (1 CREDIT)

Open to students in grade 12. Prerequisite: Average of 80 or better in the first three quarters of Spanish 11 IB and an atten¬dance rate of 85% or better.

This course is a college-level course conducted in a high school setting. This course continues the IB Language B preparation in Spanish. Students will sit for the IB speaking exams in January or March and the written exam in May. Students will continue to develop a high level of proficiency essential for success on the International Baccalaureate Exam at the Standard Level. The continued development of critical thinking, speaking, writing, and reading in the language is mandatory and is focused around the study of several IB suggested global themes including an appreciation of world cultures. The scope and diversity of supporting materials are determined by the instructor in order to provide students with the skills necessary for the component parts of the IB exam and fulfill course requirements for the corresponding intermediate level language course at UAlbany.

ARABIC 1 PRE-IB/ACCELERATED

(1 CREDIT)

The level 1 accelerated Arabic course is designed for the serious student interested in developing all four language skills; speaking, listening, reading and writing. The enriched curriculum for these courses will be taught on an advanced level which emphasizes critical thinking and will prepare the students for future coursework in the International Baccalaureate Program.

ARABIC 2 PRE-IB/ACCELERATED

(1 CREDIT)

The level 2 accelerated Arabic course is designed to develop mastery of the four language skills. Students are expected to express themselves orally as well as through written composition in the language. Appropriate authentic materials will be used to continue exploring the different cultures. Students will develop the proficiency essential for success on the Regents examination or equivalent. The enriched curriculum for this course will be taught on an advanced level, emphasizing critical thinking in order to prepare the students for future coursework in the International Baccalaureate Program in the 11th grade. Students will take the Regents Exam or equivalent in June. Students will also take the WL Checkpoint B Exam in June. Upon successful completion of the WL Checkpoint B Exam, students fulfill the World Language requirement for the Advanced Regents Diploma.

ARABIC 3 IB ab Initio

(1 CREDIT)

This is the first year of a two-year preparation for the IB Language ab Initio exam in Arabic. It is for students who intend to continue in the IB Diploma Program or earn an IB Certificate in Arabic or Chinese. Other interested students must seek permission of the instructor. The syllabus for this course is determined by the objectives and assessment criteria of the IB Language ab Initio Syllabus. The skills of listening, speaking, reading and writing are equally emphasized and are taught and developed through the study of a range of authentic oral and written text chosen by the teacher. Successful students will apply their language skills in a range of situations. A variety of oral and written examinations are used to assess students' listening, speaking, reading and writing skills.

ARABIC 4 IB ab Initio

(1 CREDIT)

This course continues the IB Language ab Initio preparation in Arabic. Students will sit for the IB speaking exams in January or March and the written exam in May. Students will continue to develop a high level of proficiency essential for success on the International Baccalaureate ab Initio Exam. The continued development of critical thinking, speaking, writing, and reading in the language is mandatory and is focused around the study of several IB suggested global themes including an appreciation of world cultures. The scope and diversity of supporting materials are determined by the instructor in order to provide students with the skills necessary for the component parts of the IB exam enabling students to successfully achieve the IB Diploma or Certificate.

SPECIAL PROGRAMS: UHS/CHS

UNIVERSITY IN THE HIGH SCHOOL/ COLLEGE IN THE HIGH SCHOOL

University in the High School (UHS) courses are conducted under the auspices of Schenectady County Community College (SCCC) and the University at Albany (UAlbany). A student successfully completing a UHS/CHS course receives a college transcript issued through the State of New York showing completion of three or four semester hours of college credit. New courses for UHS/CHS credit are dependent on college's approval. Current courses undergo periodic review from the colleges.

FEES

Students receiving credit are charged a tuition fee at a significantly reduced rate. Courses through SCCC are free because their cost is offset by the usage fee the district charges the college. For courses through UAlbany, the charge is $97 per credit hour. Students who are eligible to receive free and reduced lunch receive a 50% tuition reduction for courses taken through UAlbany.

COURSES APPROVED THROUGH THE UNIVERSITY AT ALBANY (UALBANY)

Chemistry IB (SL) — p.30 — four creditstt
French 11: IB (SL) (AFRE 221) — p.42 — four credits
French 12: IB (SL) (AFRE 222) — p.42 — four credits
Physics IB (SL) (APHY 105, 106, 108, 109) — p.31 — eight credits
Spanish 11: IB (SL) (ASPN 103) — p.42 — four credits
Spanish 12: IB (SL) (ASPN 104) — p.42 — four credits
University Sociology (ASOL 115) — p.34 — three credits

COURSES APPROVED THROUGH SCHENECTADY COUNTY COMMUNITY COLLEGE (SCCC)

Acting III (DRA 150) — p.15 — three credits
Advanced Music Theory (MUS 106) — p.17 — three credits
Biology IB (HL/Year 1) (BIO 141) — p.29 — four credits
Biology IB (HL/Year 2) (BIO 142) — p.29 — four credits
Business Communications (BUS 212) — p.52 — three credits
Business Law (BUS 121) — p.6 — three credits
Cisco I (CIS240) — p.38 — three credits
Cisco II (CIS 241) — p.39 — three credits
Cisco III (CIS 247) — p.39 — three credits
Cisco IV (CIS 247) — p.39 — three credits
College Level Drawing — p.54 — three credits
Computer Aided Design (CIS 140) — p.55 — three credits
Computer Skills and Applications — p.51 — 1/2 credit
Culinary Prostart — p.52 — two credits
Ecommed 1 (E-Commerce) (BUS 109) — p.6 — three credits
Economics IB (SL) Macro (ECO 221) — p.33 — three credits
Economics IB (SL) Micro (ECO 223) — p.33 — three credits
English 12: UHS Advanced College Prep (ENG 123, 124) — p.10 — six credits
History of the Americas: IB (HL/Year 1) (HIS 227) — p.34 — three credits
History of the Americas: IB (HL/Year 2) (HIS 229) — p.34 — three credits
Human Resource Management (MGT 127) — p.6 — three credits
International Business (BUS 135) — p.7 — three credits
Introduction to Culinary Arts (HOT 132) — p.52 — two credits
Introduction to Management and Marketing (MGT 123) — p.7 — three credits
IT 1: Fundamentals of Hardware and Software (CIS 110) — p.38 — three credits
IT 2: Advanced Hardware and Software (CIS 111) — p.38 — three credits
Microsoft Office 2007: Introductory Concepts and Techniques (CIS 121) — p.7 — three credits
Microsoft Office 2007: Advanced Concepts and Techniques (CIS 221) — p.8 — three credits
Microsoft Office 2010: Introductory Concepts and Techniques (CIS 121) — p.52 — three credits
Money Management and Business Mathematics — p.7 — three credits
Music IB (HL or SL) (MUS 147, 121) — p. 17 — three credits
UHS Statistics — p.25 — three credits
Spanish 4 CHS (SPA 122) — three credits
Spanish 5 CHS (SPA 222) — three credits

THE INTERNATIONAL BACCALAUREATE PROGRAM (IB)

The International Baccalaureate (IB) Program is a rigorous pre-university course of study for highly motivated students in the 11th and 12th grades. The IB Diploma commands international recognition and is acknowledged course credit at many colleges and universities. Schenectady is a lead IB school for the surrounding area.

IB PROGRAM COURSE OFFERINGS

ADDITIONAL DIPLOMA REQUIREMENTS

THEORY OF KNOWLEDGE (TOK)

The purpose of Theory of Knowledge (TOK) is to stimulate reflection on the knowledge and the experience of students both in and outside the classroom. TOK examines various areas of knowledge, truth, logic, value judgments, and the role of language and thought in knowledge. The course challenges students to question the basis of knowledge, to be aware of subjective and ideological biases, and to develop a personal mode of thought derived from analysis of evidence and expressed in rational arguments. A group oral presentation and an essay written on prescribed topics form TOK's IB assessment.

CONNECTIONS - IB

(1 CREDIT)

Open to grade 10.
Prerequisite: None

Recommended for tenth graders who aspire to enroll in the International Baccalaureate Program. This is an exciting interdisciplinary course that will provide students with the skills to think critically about ideas relating to the Sciences and Humanities. It will encourage students to view knowledge issues through a variety of lenses while also building an appreciation for examining the world from multiple perspectives. The focus of the classroom will include both individual and group hands on projects along with specific instruction in study skills, writing, debate, reasoning, and researching. Students in this program will also investigate the interrelationship of art, music, and literature, in gaining knowledge of their world.

EXTENDED ESSAY

The Extended Essay is a 4,000 word independent research paper due near the end of the second year of the program. Written in one of the subjects of the IB curriculum under the direct supervision of a qualified teacher at the school, the essay offers students an opportunity to investigate a topic of special interest and acquaints them with the kind of independent research and writing skills expected at university. The essay is externally assessed according to specific criteria.

INTERNATIONAL BACCALAUREATE
PRE-IB CURRICULUM FOR GRADE 9 & 10

ENGLISH

English 9 Honors
English 10 Honors

SOCIAL STUDIES

Global History 9 Honors
Global History 10 Honors

MATH

Trigonometry Accelerated/Pre-IB

SCIENCE (2)

Honors Biology
Honors Chemistry
Honors Physics

WORLD LANGUAGES

Pre-IB Accelerated French, Spanish, Chinese or Arabic 9
Pre-IB Accelerated French, Spanish, Chinese or Arabic 10

PHYSICAL EDUCATION

Arts Requirement
Art/ Music

ELECTIVE

Connections

CREATIVITY, ACTION, SERVICE (CAS)

Creativity, Action, Service (CAS) is at the heart of the Diploma Programme. It involves students in a range of activities alongside their academic studies throughout the Dimploma Programme. The three strands of CAS, which are interwoven with particular activities, are characterized as follows:

Creativity: experiences that involve creative thinking.
Action: physical exertion contributing to a healthy lifestyle.
Service: an unpaid and voluntary exchange that has a learning benefit for the student.
Students need to provide reflection, document their activities and provide evidence that they have achieved eight key learning outcomes over their junior and senior years. The CAS Extended Project is long-term, collaborative, and singular in focus.

SPECIAL PROGRAMS: IB

TWO-YEAR SCHEDULE

HIGHER LEVEL COURSES	GRADE 11	GRADE 12
Group 1 Language A-1	English (Year 1)	English (Year 2)
Group 3 Individuals and Society	History of the Americas IB (HL/Year 1)	20th Century Topics IB (HL/Year 2)
Group 4 Experimental Sciences OR		
Group 6 Visual Arts	Biology (Year 1)	Biology (Year 2)
	Design Tech (Year 1)	Design Tech (Year 2)
	Visual Arts (Year 1)	Visual Arts (Year 2)
	IB Music (Year 1)	IB Music (Year 2)
STANDARD LEVEL COURSES		
Group 2 Language A-2	French 11 IB (SL)	French 12 IB (SL)
	Spanish 11 IB (SL)	Spanish 12 IB (SL)
Group 3 Individuals and Society	Economics (SL)	Economics (SL)
	Psychology (SL)	Psychology (SL)
Group 5 Mathematics	Math Methods (SL)	Math Methods (SL)
	Math Studies (SL)	Math Studies (SL)
Group 6 Visual Arts	IB Music (SL)	IB Music (SL)
	IB Visual Art (SL)	IB Visual Art (SL)

If you have not chosen courses from every group choose listed above, choose one Standard Level course from the groups listed below:

- **Group 3: Individuals and Society (not if you have already chosen a Higher Level course from this group)**
- **Group 4: Experimental Sciences (not if you have already chosen a Higher Level course from this group)**
- **Group 6: Arts (not if you have already chosen a Higher Level course from this group)**

THE IB CURRICULUM GRADES 11 AND 12

Students may chose to be involved in the IB program but not be full Diploma Candidates. Students may take individual courses to earn IB certificates in all courses except Theory of Knowledge. Certificate students are not required to participate in the Extended Essay or the CAS components.

HIGHER LEVEL COURSES

All IB courses are designed for the university bound student and follow a prescribed syllabus upon which the examinations are based. Courses offered at the higher level must be taught for a minimum of 240 hours (1 hour = 60 minutes) over the two year diploma program. With a greater number of required hours, higher level (HL) courses allow students to pursue a subject in more depth than at the standard level.

STANDARD LEVEL COURSES

All IB courses are designed for the university bound student and follow a prescribed syllabus upon which the examinations are based. Courses offered at the standard level must be taught for a minimum of 150 hours (1 hour = 60 minutes). Like higher level courses, standard level (SL) courses are designed to be taught over two years. However, some schools have success meeting the requirements of SL courses in one year.

TO EARN AN IB DIPLOMA YOU NEED TO TAKE:

- **3 Higher Level courses - Higher Level courses over a 2-year period**
- **3 Standard Level courses (all Foreign Language courses are 2 years for standard level)**
- **1 Theory of Knowledge course**

YOU MUST ALSO TAKE AT LEAST 1 COURSE FROM EACH GROUP.

- **Group 1: Language-A1: English**
- **Group 2: Language-A2: Foreign Language (French or Spanish)**
- **Group 3: Individuals and Societies: History of Americas, Economics (HL and SL), Psychology**
- **Group 4: Experimental Sciences: Biology, Design Technology, Chemistry, and Physics**
- **Group 5: Mathematics: Mathematical Studies and Mathematical Methods**
- **Group 6: Arts and Electives: Music, Visual Arts**

INTENSIVE INSTRUCTION COURSES

Seminar Courses provide students with additional support in their core classes. Fundamentals Courses provide students with intensive instruction in the core classes of English, math, social studies, and science for course and Regents credit. Credit Recovery options may be offered to students who have failed to earn course credit.

Students must pass NYS Regents exams in all of these core areas to graduate from high school. The five required exams are in the content areas of English, math, science, social studies (2). Student placement in a Fundamental's Course is determined by student performance, past state test data, and teacher/counselor recommendation.

FRESHMEN SEMINAR

(UP TO 1 CREDIT)

Freshmen Seminar is a course designed for students who did not meet proficiency on one or more NYS exams in the 8th grade. Students are enrolled in this course based on severity of need. The 9th grade teams' math, social studies, and English teachers teach this course focusing on honing comprehension skills with both narrative and expository texts, reading and writing skills, and general math skills. Should students demonstrate significant improvement in skill level and meet proficiencies within their core courses, they will have the opportunity to enroll in an elective course at the end of the first semester.

SOPHOMORE SEMINAR

(1/2 CREDIT)

Sophomore Seminar is a full year alternating day course for 10th grade students co-taught by English and Global History teachers. Ninth grade teachers recommend students for this course based on reading and writing skill levels demonstrated in their freshmen year. The course focuses on increasing students' background knowledge of modern world events and history through historical literature, improving comprehension and writing skills, and ultimately preparing students for success on the NYS Global History Regents exam.

ALG 1/GEO

(1 CREDIT)

This course is designed for 10th grade students who have failed the Algebra Regents in 9th grade (but passed the course). First semester will focus on mastering Algebra and test taking skills to complete the required exit exam for graduation. Students will receive course credit for this full year course and sit for the January Regents exam. Students that still have not mastered the Algebra Regents in January will need additional support such as Fundamentals of Math course. The second semester of the course will begin the Geometry curriculum.

ALGEBRA FUNDAMENTALS

(CREDIT RECOVERY – 1 CREDIT; ALL OTHERS – ½ CREDIT)

Pre-requisite: 11th/12 grade students who have not yet passed the Algebra Regents.

This is an intensive course for students who have not been successful with the Algebra course and Regents or who have not passed the Algebra Regents exam. Students will continue on in their math course sequence as well as being placed in a Fundamentals of Math class. This course meets every day for half a year and will be focused on providing intensive, targeted instruction to prepare students to take the Algebra Regents exam. 10th grade students who failed the Algebra course but scored a 50 or higher on the Algebra Regents can take this course and earn Algebra course credit if they pass the Algebra Regents exam.

FUNDAMENTALS OF ENGLISH

(UP TO 1 CREDIT WHEN STUDENT PASSES EXAM)

This is an intensive course for 11th and 12th grade students who have not been successful with the English 11 course and Regents or who have not passed the English Regents exam. Students will continue on in their English course sequence as well as being placed in a Fundamentals of English class. This course meets every day for half a year and will be focused on providing intensive, targeted instruction to prepare students to take the English Regents exam.

FUNDAMENTALS OF US HISTORY

(UP TO 1 CREDIT WHEN STUDENT PASSES EXAM)

This is an intensive course for students who have not been successful with the US History 11 course and Regents or who have not passed the US History Regents exam. Students will continue on in their social studies course sequence as well as being placed in a Fundamentals of US History class. This course meets every day for half a year and will be focused on providing intensive, targeted instruction to prepare students to take the US History Regents exam.

FUNDAMENTALS OF SCIENCE

(UP TO 1 CREDIT WHEN STUDENT PASSES EXAM)

This is an intensive course for students who have not been successful with a science course and Regents or who have not passed a science Regents exam. Students will continue on in their science course sequence as well as being placed in a Fundamentals of Science class. This course will be held on alternating days for a full year and will be focused on providing intensive, targeted instruction to prepare students to take a science Regents exam.

READING 1

(1/2 CREDIT OR 1 CREDIT)

A course for students who qualify for reading services based upon the STAR Reading Assessment. The purpose of Reading 1 is to improve students' reading comprehension through explicit strategy instruction utilizing short, high-interest texts, extensive independent reading and explicit writing instruction. Students apply reading and writing strategies they have learned to content area texts and writing assignments. Instruction will include recognition of main ideas and details, critical reading skills, and vocabulary improvement. Reading comprehension and study skills are enhanced through the practice of annotating, outlining, mapping, underlining, and summary writing. The goal of this course is to improve reading comprehension, vocabulary skills, and reading fluency in the content areas.

READING II

(1/2 CREDIT OR 1 CREDIT)

A course for students who qualify for reading services based upon the STAR Reading Assessment and the SRI. Instruction will focus on fluency and comprehension skills, as well as explicit vocabulary instruction. Opportunities to practice reading high interest text at students' instructional levels will be paired with practical strategies to build comprehension. The goal of this course is to increase students' reading fluency rates, usage of comprehension strategies, and vocabulary knowledge across disciplines.

READING III

(1/2 CREDIT OR 1 CREDIT)

A course for students in need of explicit instruction in phonemic awareness, decoding strategies, and vocabulary knowledge who qualify for reading services based upon the STAR Reading Assessment and the WIST or the WADE. Instruction will focus on specific decoding strategies, with a goal of increasing decoding ability, vocabulary knowledge, and fluency rates for an overall increase in reading comprehension.

AFJROTC PROGRAM

The Air Force Junior Reserve Officer Training Corps (JROTC) is a citizenship program designed to instill respect, discipline, responsibility and character. **It is not a recruiting program, there is no military commitment.** The mission of JROTC given to all the military services by Congress: "Build better citizens for America". ROTC is in over 3,500 high schools throughout the country.

Air Force JROTC is the world's largest aerospace science and leadership education program. There is a four-year curriculum with scheduled academic classes and instruction covering aviation history, the science of flight and space, world cultures studies, leadership, character, life skills, health and fitness, and management. Management training encompasses creative thinking, problem solving, communication skills, and organizational skills. There are also voluntary teams and activities involving drill, fitness, flying and community services to help **provide a sense of belonging and teamwork** in a respectful and caring environment. Cadets in the AFJROTC program wear the United States Air Force uniform once each week; in addition to engaging in physical fitness exercises one day each week.

Wellness is an exercise program for all levels of JROTC, focused upon individual base line improvements with the goal of achieving a national standard as calculated with age and gender. The Wellness Program is comprised of 19 exercises that develop all muscle groups and provide sufficient anaerobic and aerobic intensity.

AEROSPACE EDUCATION 1

(1 CREDIT)

Open to grades 9, 10
Prerequisites: At least a freshman in high school, U.S. citizen, and maintaining overall academic average of 70 percent (waivers may be given for otherwise qualified candidates).

Completion of all workbook, textbook assignments and textbook chapter tests; Air Force uniform wear and physical fitness. Uniform and all books are provided by the Air Force.

This course is an initial exploration of aerospace activities and leadership techniques. It acquaints the student with the historical development of flight throughout the centuries and progresses to modern day; and the role of the United States Air Force, its customs and courtesies, with special emphasis on leadership and management techniques. Field trips will be made to operation flying units to provide the practical application of aerospace education. Course topics will include modern aircraft, its design and purpose, a history of air power with emphasis on the United States Air Force and its interaction in our modern day world. There will be opportunities to participate in leadership situations.

Wellness is an exercise program focused upon individual base line improvements, comprised of 19 exercises developing all muscle groups.

AEROSPACE EDUCATION 2

(1 CREDIT)

Open to grades 10, 11
Prerequisites: Successful completion of AS- I course and/or recommendation by the Aerospace Science Instructor.

Completion of all workbook, textbook assignments and textbook chapter tests; Air Force uniform wear and physical fitness. Uniform and all books are provided by the Air Force.

This course will examine selected areas of aeronautics, the component factors of aerospace power, and will develop in the student his/her leadership as a Cadet Sergeant to participate in Air Force drill and ceremonies. Course topics will include the theory of flight, aircraft propulsion systems, air navigation, and military instructional techniques. This course will provide the student with the basic techniques of airmanship and leadership.

Wellness is an exercise program focused upon individual baseline improvements, comprised of 19 exercises developing all muscle groups.

AEROSPACE EDUCATION 3

(1 CREDIT)

Open to grades 11, 12.
Prerequisites: Successful completion of AS-II course and/or recommendation by Aerospace Science Instructors.

Completion of all workbook, textbook assignments and textbook chapter tests; Air Force uniform wear and physical fitness. Uniform and all books are provided by the Air Force.

This course examines the space programs and technologies. This course will develop in the student his/her leadership abilities as a Cadet Officer. Here an analysis is made of factors and techniques involved in leadership situations. Course topics will include lunar/planetary explorations, propulsion and guidance and control of space vehicles.

Wellness is an exercise program focused upon individual baseline improvements, comprised of 19 exercises developing all muscle groups.

AEROSPACE EDUCATION 4

(1 CREDIT)

Open to grade 12
Prerequisites: Successful completion of ASIII course and approval of the Aerospace Science Instructors and/or Guidance Counselor.

This fourth year offers, to those students who have completed AS-I, AS-II, AS-III, during their ninth, tenth and eleventh grades respectively, three different options to continue their AFJROTC experience. The options are:

1. Management of the Cadet Corps through active incorporation of previously learned theories and leadership techniques as a key staff member;
2. Survival: Survive – Return. Survival instruction will provide training in skills, knowledge, and attitudes necessary to successfully perform fundamental tasks needed for survival.
3. Cultural Studies: An introduction to Global Awareness. Introduction to the world's cultures through the study of world affairs, regional studies, and cultural awareness.

Wellness is an exercise program focused upon individual base line improvements, comprised of 19 exercises developing all muscle groups.

Completion of all workbook, textbook assignments and textbook chapter tests; Air Force uniform wear and physical fitness. Uniform and all books are provided by the Air Force.

BENEFITS: If you successfully complete three years of Air Force Junior ROTC and enroll in Air Force ROTC in college, you may receive credit for the first semester of the 4-year program as a candidate who is qualified. Each Air Force Junior ROTC unit can also nominate qualified candidates for Air Force Academy consideration. If you enter the military service, you may be able to enter two pay grades higher than your fellow enlistees if you have successfully completed two years of the program. All eligible Air Force Junior ROTC cadets can compete for Air Force ROTC college scholarships.

AFJROTC CURRICULUM - FOUR-YEAR PROGRAM

AS I	**Journey into Aviation History**
LE I	**Leadership Education Citizenship Character and Air Force Tradition + DRILL + Unlocking Your Potential**
Wellness	
AS II	**Science of Flight**
LEII	**Leadership Education Communication, Awareness, and Leadership + DRILL + Financing College + NEFE**
Wellness	
AS III	**Exploring Space - The High Frontier**
LE III	**Leadership Education, Life Skills and Career Opportunities + DRILL**
Wellness	
AS IV	**1: Management of the Cadet Corps 2: Survival: Survive - Return 3: Cultural Studies: An Introduction to Global**
Awareness	
LE IV	**Leadership Education Principles of Management + DRILL**
Wellness	

AS - Aerospace Science
LE - Leadership Education

STEINMETZ CAREER AND LEADERSHIP ACADEMY

It is essential that students acquire skills that support digital literacy, inventive thinking, effective communication, and high productivity in order to ensure that they are qualified to succeed in work and life in our global economy. The Steinmetz Career and Leadership Academy is a school in which students and teachers use technology to learn, create and to prepare for leadership. Technology has a fundamental role in the school environment, and students will be engaged in active inter-disciplinary projects that question and solve 21st century challenges.

SCLA provides an innovative approach to instructional delivery for students who have preferences for non-traditional access to learning. Students play an essential role in preparing themselves for career opportunities. Incoming students explore curriculum with a personal laptop computer for use both in the classroom and at home. This digital academy utilizes project-based learning and problem solving in the classroom with less reliance on traditional methods of instruction.

SCLA also offers students the opportunity to pursue a program of study in our career pathways classes including Office Management, Culinary Arts, Computer Aided Design and the Media Arts programs.

PROGRAM HIGHLIGHTS

- One to one laptop initiative
- Project-Based Learning Instruction and Web 2.0 Tools
- Technology infused classrooms (School Wide Wifi, SMARTBoard, Ceiling Mounted Projection, Document Cameras)
- Promotion of Digital Citizenship and 21st Century Learning Schools

SCLA CTE PROGRAMS

CULINARY CTE APPROVED PROGRAM

- Career and Financial Management (1/2 unit)
- Computer Skills (1/2 unit)
- Introduction to Culinary Arts (1 unit)
- Intermediate Culinary Arts (1 unit)
- Advanced Culinary Arts (1 unit)
- ProStart (ServSafe UHS Credit)
- **Industry Recognized Certification: ProStart Written and Performance**

CULINARY/MANAGEMENT PROGRAM (CTE APPROVAL PENDING)

- Career and Financial Management (1/2 unit)
- Advanced Culinary Arts (1 unit)
- ProStart (ServSafe UHS Credit)
- Introduction to Microsoft Office 2013 (UHS) (1 unit)
- **Industry Recognized Certifications: Microsoft Office Word and PowerPoint and ProStart written and performance**

CAD CTE APPROVED PROGRAM

- Career and FInancial Management (1/2 unit)
- Computer Aided Design (1 unit) (CHS Credit)
- **Must take 2 of the 3 following courses:**
- Design & Drawing For Production (I unit)
- CAD/Residential Construction (1 unit)
- CAD/Manufacturing Systems (1 unit)
- **Industry Recognized Certification: NOCTI CAD**

DRAFTING AND DESIGN MANAGEMENT PROGRAM (CTE APPROVAL PENDING)

- Career and FInancial Management (1/2 unit)
- Design & Drawing For Production (I unit) (Art Credit)
- Computer Aided Design (1 unit) (CHS Credit)
- Introduction to Microsoft Office 2013 (UHS) (1 unit)
- **Industry Recognized Certifications: NOCTI Computer-Aided Design and Microsoft Office Word and PowerPoint**

REQUIRED COURSES FOR A SEQUENCE IN ANY CAREER AND TECHNICAL EDUCATION PROGRAM

CAREER AND FINANCIAL MANAGEMENT

(1/2 CREDIT)

This course is required by the NYS State Education Department for any student pursuing a sequence in career and technical education. The emphasis is on business and economic systems, career planning, selection and success, and financial literacy.

COMPUTER SKILLS AND APPLICATIONS

(1/2 UHS CREDIT)

Recommended for 9th and 10th graders.

This course is designed to introduce students to computer applications using Microsoft Office Suite 2013. Students will learn keyboarding skills through drill practice and reinforcement of correct techniques. Students will create, format and edit academic and business documents. This course provides students with the foundation skills necessary to complete college assignments and/or word in a business office environment. =

MICROSOFT OFFICE 2013: INTRODUCTORY CONCEPTS AND TECHNIQUES

3 UHS CREDITS, SCCC (CIS 121)
(1 CREDIT)

This course provides students with an in depth introduction to the Microsoft Office 2013 suite including Word, Excel, Access and PowerPoint. It exposes students to practical examples of the computer as a useful tool and acquaints students with the proper procedures to create documents, worksheets, and presentations suitable for coursework, professional purposes and personal use. This course uses an exercises-oriented approach that allows learning by doing.

BUSINESS COMMUNICATIONS

3 UHS CREDITS, SCCC (BUS 212)
(1 CREDIT)
ENGLISH CREDIT

Recommended for 12th graders.

This course teaches the principles of effective communication in business, both written and oral. It focuses attention on the communication process including effective listening, writing and speaking. Students analyze business letters, reports and memos for organization of ideas, conciseness and clarity. Students are required to write business letters and memos. A business report and oral presentation will also be completed. Students will create a professional portfolio including a cover letter and resume.

CULINARY ARTS

Put the Culinary Arts Program to work for you. Students will develop the real-world skills and knowledge needed to get ahead in the food service business. Student in the Culinary Arts Program learn how to prepare a variety of food products. They develop the essential skills of responsibility, self-confidence and decision making while preparing and serving lunch to the stall at Steinmetz Educational Center, surrounding schools and catered events. Upon completion of the program, students have an opportunity to receive nationally recognized proStart certification, earn college credit for high school classes and scholarships for the National Restaurant Association Educational Foundation.

INTRODUCTION TO CULINARY ARTS

(1 CREDIT)

This curriculum focuses on students learning about the food service kitchen. Students create food products using commercial equipment in a work-like environment while adhering to NYS food sanitation and safety laws. Students focus on team work by using the kitchen brigade system to complete production of menus. Curriculum emphasizes successful teamwork and employee relations, cooking methods, salad production, sandwich production, soup production, quick breads, yeast breads, and cookies.

INTERMEDIATE CULINARY ARTS

(1 CREDIT)

Curriculum builds on the information learned in Introduction to Culinary Arts. Students focus on the art of service while further advancing cooking techniques. Students serve customers using a variety of service styles through the lunch program or catering events. Students learn about poultry, stocks and sauces, potatoes and grains, and breakfast production. NYS Food Sanitation and Safety Laws are strictly reinforced.

ADVANCE CULINARY ARTS

(1 CREDIT)

Menu planning and marketing skills are emphasized in this course. Through a digital restaurant simulation, students create a virtual restaurant while learning about restaurant management. Students add to their culinary skill base by learning cake production, specialty desserts, dairy cooking and egg products. NYS Food Sanitation and Safety Laws are strictly reinforced.

CULINARY PROSTART

2 UHS CREDITS, SCCC (1 CREDIT)

Curriculum builds on the information learned in Intermediate/Advance Culinary Arts. Students complete the National Restaurant Association ServSafe certification program. Curriculum includes meats and seafood, charcuteries and Grande Manger, pies and pastries, chocolate, and global cuisine. Students plan nutritious menus for the lunch program learning about sustainability and cost controls. NYS Food Sanitation and Safety Laws are strictly reinforced.

SENIOR SEMINAR

(CAREER EXPLORATION INTERNSHIP PROGRAM (1 CREDIT EACH)

The Career Connection Program is a half-year or full year non-paid internship experience. Career Connections provides a link between school and possible career options. A student completing 54 hours will earn ½ credit and a student completing 108 hours will earn 1 credit towards a Regents Diploma. The program provides hands-on experience in a variety of career choices. On-site time may be afterschool. All Federal and NYS Child Labor Laws are strictly enforced. This course is recommended for ALL Steinmetz students regardless of their career pathway.

MEDIA ARTS

The Media Arts career pathway at SCLA is a program designed to give students technical skills and training in multiple areas within the genre of media arts. Students, through problem solving within areas of color and design, graphic design, digital photography and computer art, will explore the many career and job opportunities within advertising, design, print and web media. They will be prepared for entry-level jobs in these fields or entrance into a college program specializing in media arts. Students will complete the Media Arts sequence of courses having compiled several reference notebooks and a senior portfolio.

STUDIO IN ART

(1 CREDIT)

Studio in Art is an introduction to the high school art program designed to help the student discover why and how art is made. Aesthetics, art criticism, and art history (both western and non-western) are integrated with the development of concepts based on the elements of art and principles of design. Two-dimensional activities may include drawing, painting, printmaking, collage and lettering using a variety of media. Additionally, three-dimensional design projects require the manipulation of various media in order to create spacial structures. Art appreciation and/or historical references are integrated into each activity to expand how a student observes, critiques, and enjoys art. This course fulfills the studio art requirement for graduation.

INTRODUCTION TO DRAWING

(1/2 CREDIT)

Prerequisite: students must have completed or be simultaneously enrolled in Studio Art or instructor's approval.

This is an introductory drawing course, which focuses on the visual understanding of the environment (figures, still life, natural forms, perspective, etc.) as a tool to allow the student to interpret accurately and creatively. This course focuses on developing observational drawing skills. Students will draw in a variety of media, which may include pencil, brush & ink, pen & ink, charcoal, conte crayon, pastels, and marker. This course is a basic preparation for all intermediate and advanced art classes. Students will critique their work as well as the work of others. Art historical references will be used throughout.

INTRODUCTION TO COMPUTER ART

(1/2 CREDIT)

Prerequisite: Students must have completed or be simultaneously enrolled in Studio Art or have instructor's approval.

This course is an introduction to the use of the computer as a tool for making art. Drawing, painting, illustration, design, and page layout will be explored through the use and knowledge of several software applications. Students will develop problem-solving skills as they find unique solutions to class challeneges. Scanners and digital cameras may be explored.

GRAPHIC DESIGN

(1 CREDIT)

This course is designed to highlight color and design concepts and extend practical use to the world of media arts. From advertising and typography, to game, toy and product design, students will learn the fundamentals of graphic design from real-life examples. Students will use a variety of techniques in their design solutions, focusing on computers and digital photography and video. Solutions to design problems will be discussed in both group and individual critiques.

COMPUTER ART

(1 CREDIT)

Prerequisite: Studio Art, Introduction to Drawing and Introduction to Computer Art, or instructor's approval

Computer Art serves to broaden students' knowledge of software and equipment used in Introduction to Computer Art as well as introduce new processes. Students will begin completing and compiling projects to be used within their senior portfolios. Students will be expected to create a comprehensive notebook containing all assignments and exercises. This will include work done for community agencies and the Schenectady City School District. This notebook will serve as a resource guide for the student and will house the beginning of their portfolio. The focus of the course is using technological resources as the tools for creating visual art. Filmmaking will be introduced during the 4th quarter.

COLLEGE LEVEL DRAWING

3 UHS CREDITS, SCCC
(1 CREDIT)

Prerequisite: Studio Art, Introduction to Drawing, Introduction to Computer Art, Graphic Design, Advanced Graphic Design, Computer Art A & B, Senior Portfolio or instructor's approval.

College Level Drawing is a full-credit course taught in the high school classroom that allows students to earn Introduction to Drawing credit through SCCC. Students may take the course solely for high school credit or may earn 3 college credits transferable to any SUNY or CUNY school and most other colleges.

SENIOR PORTFOLIO REVIEW

(1 CREDIT)

Prerequisite: Studio Art, Introduction to Drawing, Introduction to Computer Art, Computer Art A & B, Graphic Design and Advanced Graphic Design or instructor's approval.

This is a full-credit course that helps students prepare a comprehensive portfolio reflecting their work over the past three years. The course is structured for each student individually based upon their career and educational goals. This portfolio is designed for use for employment and college applications.

CTE TECHNOLOGY PATHWAYS

Drafting and Design Management Pathway – 3 ½ credit sequence

The DDM program is designed to train and prepare students for various careers in which the software skills learned through the CAD program and the Office Management Program can help to open career paths. Students who complete the program will find themselves leaving high school with the skills necessary to find entry level drafting positions at many companies. They also will be able to continue their education in a host of various related degree programs at many colleges and universities. The student's enrolled in this program greatly increase their marketability. Enrolled students will also have the opportunity to earn six college credits through the CHS CAD class and the CHS Microsoft class. The DDM program is a combination of classes from the CAD Program and the Office Management Program. It has a total of 4 different classes for a total of 3.5 credits. As a part of the program students will take the NOCTI CAD exams, as well as the Microsoft Office Certifications. Students will work on the Autodesk (2013) suite of software, including Inventor, AutoCAD, and Architectural Desktop, and Microsoft Office 2013, including MS Word, MS Excel, and MS PowerPoint.

DRAFTING AND DESIGN MANAGEMENT PROGRAM (CTE APPROVAL PENDING)

- Career and FInancial Management (1/2 unit)
- Design & Drawing For Production (I unit) (Art Credit)
- Computer Aided Design (1 unit) (3 UHS Credits from SCCC)
- Introduction to Microsoft Office 2013 (1 unit) (3 UHS Credits from SCCC)
- **Industry Recognized Certifications: NOCTI Computer-Aided Design and Microsoft Office Word and PowerPoint**

COMPUTER AIDED DESIGN PATHWAY

- Career and FInancial Management (1/2 unit)
- Computer Aided Design (1 unit) (3 UHS Credits from SCCC)
- **Must take 2 of the 3 following courses:**
- Design & Drawing For Production (I unit) (Art Credit)
- CAD/Residential Construction (1 unit)
- CAD/Manufacturing Systems (1 unit)
- **Industry Recognized Certification: NOCTI CAD**

COMPUTER AIDED DESIGN PROGRAM OVERVIEW

The CAD program is designed to train and prepare students for various careers in which computer design is a part of the job, such as the "Nanotech" field, and all of the building trades. Students who complete the four-year program will find themselves leaving high school with the skills necessary to find entry level drafting positions at many companies. They also will be able to continue their education in a host of various related degree programs at many colleges and universities, especially including Hudson Valley's Associates Degree in CAD. Enrolled students will also have the opportunity to earn three college credits through the UHS CAD class. The CAD program is an update of the former Property Management Program. It has a total of 8 different classes for a total of 6 credits. As a part of the program students will take the NOCTI CAD exams, as well as the CareerSafe OSHA certifications. Students will work on the AutoDesk suite of software, including Inventor, AutoCAD, and Architectural Desktop.

DESIGN & DRAWING FOR PRODUCTION (DDP)

(1 CREDIT) (FINE ART CREDIT)

Open to grades 9, 10, 11, and 12. This is a Core Technology course. There are no prerequisites.

Have you ever wondered how your cell phone went from and idea to a product? Design and Drawing for Production (DDP) is an activity-based course which will teach you how products are created from start to finish. Students in DDP will develop solutions to various design or product problems using research, sketching, drawing and presentation techniques. Individual and group projects will emphasize the development of the critical thinking and encourage you to think creatively. The computer will be used to create original 3-D solutions. DDP may be used to satisfy the art requirement for graduation.

COMPUTER AIDED DESIGN/ MANUFACTURING SYSTEMS

(1 CREDIT)

Did you ever look a product and think, "I could make that much better?" This course focuses on assembling products in an assembly line, factory type setting. Students will organize themselves as a real company making real products. They will utilize the CAD lab and wood shop to take their product from design through production. Some of the tools that are available for them to use are mini-lathes with duplicators, table and panel saw, drill presses, and routers.

COMPUTER AIDED DESIGN/ RESIDENTIAL CONSTRUCTION

(1 CREDIT)

The lights are out, and National Grid tells you it is your problem. Or you mistakenly threw your homework down the drain, and now your sink is clogged. Or maybe you just want to have your computer and your 360 both networked in your house. This class is hands on and introduces students to various building trades. This class also allows the students to earn a lifetime OSHA certification through the CareerSafe Online platform of exams. Students will utilize the CAD lab to model and prototype, and then build in the wood shop using the most modern tools and equipment available.

COMPUTER AIDED DESIGN

3 UHS CREDITS, SCCC (CIS 140) (1 CREDIT)

Prerequisite: Grade 11 or 12, or permission from instructor

College credit in high school for free! This course teaches the basics of computer aided drafting as applied to engineering drawings using the AutoCAD 2013 drafting package. Student will learn various topics in CAD that map to the SCCC CAD class at Schenectady County Community College. Upon successful completion of the class with a "B" or better, the student will receive a SCCC transcript. Did I mention the cost? ITS FREE!

CAREER & TECHNICAL SCHOOL

Career & Technical School programs provide education for the development of occupational skills and aptitudes so that each individual may be properly educated as a competent worker and responsible citizen. The aims of the Career & Technical School programs are:

- To acquire skills for employment;
- To provide practical experience while learning;
- To prepare for further trade, technical and/ or advanced training;
- To provide credit toward graduation from high school; and
- To appreciate the world of work.

Students receive four credits for each year of successful study in a Career & Technical School program. College credit may also be earned through some of the programs.

A decision to enter a Career & Technical School program should be made carefully since the Schenectady City School District must pay tuition for students who take these courses. Also, it is not always possible to provide other courses to replace a dropped vocational course once the school year is underway.

Students are urged to visit the programs they are interested in to help them understand the courses and the expectations of the program, before they decide to attend. School Counselors have more information about each program and can arrange visits.

Courses offered in the Career & Technical School at Capital Region BOCES include:

ADMINISTRATIVE & MEDICAL OFFICE ASSISTANT

1 YEAR/4 CREDITS/GRADES 11- 12

This is a one-year program designed for students interested in developing a variety of business skills. The program focuses on business software such as Microsoft Office Suite (Word, Outlook, Excel, PowerPoint, Access, and Publisher) and general business office skills. Students prepare for nationally recognized Microsoft Certified Application Specialist (MCAS) certification(s). They apply their skills in real-world settings throughout the school year such as medical, legal, insurance, and other businesses. They also may earn integrated math credit. Projects include office management, scheduling, written and electronic communication, data entry and database management and spreadsheets.

AUTO BODY COLLISION AUTO BODY REFINISHING

1 YEAR/4 CREDITS/GRADES 11-12

Auto Body Collision and Auto Body Refinishing are two stand-alone courses with no prerequisites. They include instruction in repairing, refinishing and painting damaged vehicles. "Hands-on" experience prepares students for entry-level positions in the auto body field.

AUTOMOTIVE TRADES TECHNOLOGY I

1 YEAR/4 CREDITS/GRADES 10-12

AUTOMOTIVE TRADES TECHNOLOGY II

1 YEAR/4 CREDITS/GRADES 11-12

This is a one- or two-year program that will prepare students to work on a variety of vehicles. Students will learn to locate mechanical problems through careful diagnosis and perform the necessary repairs using modern test equipment and tools. This type of "hands on" experience and instruction prepares students for entry-level employment in the automotive technology field.

AUTOMOTIVE TRADES TECHNOLOGY TECH PREP

1 YEAR/4 CREDITS/GRADE 12

Prerequisites: Math 9, 10 or Tech Prep Math, three years of English and two years of science.

This is a one-year accelerated program for seniors that combines applied academics and work experiences in the automotive field. Internships at local businesses are an important part in which

students in this program are jointly enrolled in Career & Tech and at Hudson Valley Community College and can earn up to 10 credits toward an associate's degree.

AYES AUTOMOTIVE TECHNICIAN

1/2 DAY

2 YEARS/4 CREDITS
GRADE 11-12

2 YEARS/8 CREDITS
GRADE 11-12

Prerequisites: Algebra. For admission, students must complete an application and interview process

Learn the basics of automotive technology in your junior and senior years of high school while receiving paid and unpaid work experience at a sponsoring local automotive dealership. Upon graduating you can go on to study at the college-level while gaining even more extensive on-the-job experience. The program is ASE/NATEF certified and is supported by General Motors and Chrysler Corporations. Students will be eligible to test for ASE certification when they complete the program and will receive college credits, putting them in advanced standing to pursue an associate's degree. A tool scholarship program is also offered so that students can earn full ownership of a starter set of tools at a dramatically discounted price.

BUILDING TRADES I

1 YEAR/4 CREDITS
GRADES 11-12

BUILDING TRADES II

1 YEAR/4 CREDITS
GRADES 11-12

This one- or two-year program is designed for young people who wish to enter the building trades field as carpenters. It includes methods and procedures for dwelling construction, operation of machines, safety, hand tools, trade theory, related math and blueprint reading. Students work on small construction jobs along with full-size live experience in constructing, repairing and remodeling. Students may be required to travel from school.

3D PRINTING AND GREEN CONSTRUCTION TECHNOLOGY

1 YEAR/4 CREDITS/GRADE 12

Clean, Green & Advanced Technology is an exciting course that prepares high school seniors for careers that can literally make a world of difference. They learn about high-wage, high-skill, high-demand science and environmentally friendly technologies that will prepare them for college and beyond. They solve problems and build the skills necessary to shape the future in solar energy, Smart Home and Smart Grid energy-saving solutions, wind technology and advanced, automated production. Students take part in interesting work-based learning activities and field trips to businesses and research facilities and earn three college credits in electrical circuits through a college-in-the-high-school course that aligns with a number of related technical degree programs in our region.

CNT: COMPUTER TECHNICIAN CNT: NETWORK TECHNICIAN

1 YEAR/4 CREDITS
GRADES 11-12

This program, offered as either a half-day or full-day course, features a state-of-the-art computer and network lab and prepares students to either pursue more advanced training or directly enter the workforce. Students are prepared to test for professional certification as an A+ Certified Computer Service Technician, N+ Network Technician, BICSI Wiring Technician, S+ Server Technician and Cisco Certified Network Associate (CCNA). Students can earn up to nine college credits through an agreement with Schenectady County Community College, Fulton Montgomery Community College, ITT and SUNY Cobleskill.

COMPUTER & NETWORK TECHNICIAN/ INFORMATION TECHNOLOGY I

COMPUTER & NETWORK TECHNICIAN/ INFORMATION TECHNOLOGY II

1 YEAR/4 CREDITS
GRADES11- 12

Computer & Network Technician/Information Technology offers students a hands-on, project-based approach to mastering theory, concepts and practices in an ever-changing career. Students learn through extensive real-life experiences in a lab equipped with the latest hardware, software and technology. In both years of the program, students prepare for multiple, nationally recognized certification exams, including A+ computer service technician, N+, Cisco Certified Entry Networking Technician (CCENT) and S+ network technician. Topics of study also include Microsoft and Linux network operating systems. Qualified year-two students may choose to complete two to three electives including: fiber optics, copper wiring, wireless technology, security and voice. Work experiences and internships build students' skills and employability. Upon completion, they may pursue further education or start their careers.

CRIMINAL JUSTICE I

1 YEAR/4 CREDITS
GRADES 11-12

CRIMINAL JUSTICE II

1 YEAR/4 CREDITS
GRADES 11-12

Criminal Justice program teaches students about the history, theory, practices and recent developments in security, law enforcement and the criminal justice field. They learn about police, court and prison systems, operation of security and protection programs, and procedures in public, commercial and residential settings. Hands-on learning teaches patrolling and investigative skills, including radio use, note-taking, evidence gathering, and dealing with safety hazards and emergency situations, as well as lifting fingerprints, photographing and diagramming crime scenes and using surveillance cameras. Criminal Justice students also study civil and criminal law. Upon completion, they may enter the profession or continue their education at college or law enforcement or protection academies. Those who are 18 or older may test for New York State Security Officer certification.

COSMETOLOGY I
COSMETOLOGY II

1 YEAR/4 CREDITS
GRADES 11-12

Two years and summer school required.

This program offers theory and practical experience to assure that students receive a complete and balanced training in all phases of this most interesting and challenging occupational field. The Cosmetology classroom is fully equipped with facilities and equipment such as one would find in a modern beauty shop. Upon successful completion of the program, students are eligible to take the New York State Licensing exam. There is a cost to each student of approximately $35 for supplies. Students can earn college credit in Ethics through an agreement with Schenectady County Community College.

CULINARY ARTS AND HOSPITALITY I AT SCLA

1 YEAR/4 CREDITS
GRADES 11-12

CULINARY ARTS AND HOSPITALITY II AT SCLA

1 YEAR/4 CREDITS
GRADES 11-12

The Culinary Arts and Hospitality program is designed to provide students with a foundation in the quantity preparation and service of food. Students perfect their skills by preparation and service of foods ranging from American to classical cuisine. Areas of emphasis include meats, poultry, seafood, soups, stocks, sauces, salads, appetizers and beverages. Students will also have the opportunity to learn short order, grill work and banquet catering. The course can be taken for one or two years.

CULINARY ARTS TECH PREP

1 YEAR/4 CREDITS/GRADE 12

Prerequisite: Math I or Tech Prep Math, Keyboarding or Introduction to Computers, Biology or

Chemistry, and three years of high school English.

This program is designed to offer seniors a solid foundation in the culinary arts field through related instruction in the areas of math, science, communications and technology. With an accelerated curriculum, students work with faculty who have industry experience to discover how important theories go hand-in-hand with practical applications. Tech Prep prepares students to earn an associate's degree as well as for professional careers in the hospitality field. Students are enrolled in both Career & Tech and college programs and earn up to 11 credits toward the degree. Through Career & Tech's partnership with high schools, colleges and local businesses, students are familiarized with career options.

ELECTRICAL TRADES I

1 YEAR/4 CREDITS
GRADES 10-12

ELECTRICAL TRADES II

1 YEAR/4 CREDITS
GRADES 11-12

Electrical Trades students learn basic electrical skills and theory and progress to the cutting edge of 21st century, green technologies through classroom and hands-on lessons. In each theory class and lab, students construct the circuits discussed, gaining skill and experience as they move from residential into commercial and industrial wiring. The materials, meters and methods used give them an in-depth understanding of their field and the knowledge needed to work with the latest environmentally friendly technologies. Units of study include residential and commercial/ industrial wiring, control equipment, photovoltaic systems, motors and generators, lighting branch circuits and fixtures, and national electrical code. Electrical Trades students work on projects such as wiring a modular home, working with computer network technician students on a Smart Home, and powering up and testing a photovoltaic panel. They are prepared to earn certification through the National Center for Construction

Education and Research; may earn advanced standing in the National Joint Apprenticeship and Training Committee and International Brotherhood of Electrical Workers programs; and are prepared for college, technical school or specialized training programs.

VIDEO GAMING AND ANIMATION DESIGN

1 YEAR/4 CREDITS
GRADES 11-12

Gaming, MultiMedia & Web Design is a one-year program for students interested in the creative worlds of video game design, computer graphics, programming and Web design. They learn how to create video games, digital art and computer graphics, animations, comics and websites. Students work on a variety of projects and apply their knowledge by serving actual customers. They are prepared to take Adobe Certified Associate exams in Photoshop and Flash and may earn college credit. Upon completion of the program, students may continue their Career & Tech studies in Internet Application Design or Computer Network Technician/Information Technology, or at college.

GLOBAL FASHION STUDIES

1 YEAR/4 CREDITS
GRADES 11-12

Global Fashion Studies students learn about garment theory, textiles, fashion and apparel manufacturing, sales and promotion, and college and career opportunities. First-year students focus on merchandising; second-year students learn about marketing and master National Retail Federation customer service standards. The course features specialized software, hands-on projects, lectures and guest speakers, videos, field trips, job shadowing and internships, and community service. Through a year-long entrepreneurship project, students design a product, conduct market research and then produce and sell their creations. They create a professional portfolio to showcase their best work and earn college credits. After completing Global

Fashion Studies, students may start their careers or advance their education at college.

HVAC/R/HEATING, REFRIGERATION & PLUMBING I

1 YEAR/4 CREDITS
GRADES 11-12

HVAC/R/HEATING, REFRIGERATION & PLUMBING II

1 YEAR/4 CREDITS
GRADES 11-12

This one- or two-year program teaches the skills and technical knowledge required for entry-level employment in this challenging field. Units of instruction include heating, refrigeration, air conditioning systems, heat pumps and reverse cycle systems, heat loss and cooling load calculations, electrical circuit troubleshooting and repair, and solar energy. Students participate in highly individualized lab projects. Students can earn up to four college credits through agreements with Hudson Valley Community College.

INTERNET APPLICATION DESIGN

1 YEAR/4 CREDITS
GRADES 11-12

Students interested in designing for the Web, creating smart phoneapps or videos, or learning about the latest security software will love Internet Application Design. This one-year course teaches Web technology for designers, video creation, Internet security, servers, e-commerce and smart phone applications. Students also focus on modules such as animation, digital photography, audio and video, Webcomics, game design, desktop publishing, programming and interfaces. They are prepared to take Adobe Certified Associate exams in Dreamweaver and Flash. Upon completion, they may continue their studies in Gaming, MultiMedia & Web Design, or Computer& Network Technician/ Information Technology, or at college.

DIESEL TECH MEDIUM/HEAVY DUTY TRUCK REPAIR I & II

1 YEAR/4 CREDITS
GRADES 11-12

Medium/Heavy Duty Truck Repair students work on late-model trucks and diesel engines, learning about electrical and electronic theory, computerized control systems, steering, suspension, chassis and braking systems. They also learn about alternative fuels including biodiesel, and about hybrid vehicle technology. Automotive Service Excellence (ASE)-style testing during the Medium/Heavy Duty Truck Repair program prepares students to pursue certification after graduation. Medium/ Heavy Duty Truck Repair at Career & Tech is the only high school-level program in the state to earn certification by the National Automotive Technician Education Foundation/Institute for Automotive Service Excellence (NATEF/ASE).

FLORAL DESIGN I & II

1 YEAR/4 CREDITS/GRADES 11-12

The Floral Design program uses multiple settings to prepare students for employment, including an on-campus flower shop, community sites and area businesses, regional flower shows and competitions. Students in this half-day program gain hands-on experience in the artistic and business aspects of floral design and create arrangements and designs for actual customers

NURSE ASSISTANT

1 YEAR/4 CREDITS/GRADES 11-12

This one-year course is designed to prepare students to function in several assistant-level occupations in the health field. Topics include orientation to the health care industry, its workers and environments, basic structure and function of the human body, disease prevention and control, medical ethics, growth and development, nutrition and health care procedures. Clinical experiences are provided in area health care facilities. Students are prepared for the NYS licensing exam for nurse assistant. There is a cost to each student of approximately $50 for a uniform and shoes. Students can earn college credit through agreement with Schenectady County Community College.

PATIENT CARE SERVICES

1 YEAR/4 CREDITS/GRADES 11-12

Patient Care Services focuses on basic skills and knowledge needed in a health related field. Students learn about infection control, personal care, resident relations, and housekeeping as related to providing indirect care to residents of a health care facility. facility. Students gain real-world experience and put their skills into practice through job sampling experiences at health-care and nursing facilities. Upon completion, they are prepared for a range of career opportunities or further education. The program meets provisions of students' individualized educational programs by providing challenging, developmentally appropriate career prep experiences.

WELDING & METAL FABRICATION I & II

1 YEAR/4 CREDITS
GRADES 10-12

Welding & Metal Fabrication students learn the skills and techniques necessary for success in a career that values well trained, experienced workers. They learn shielded metal arc welding (stick); MIG, flux-cored and TIG welding; and automated Orbital TIG welding. They also learn about the operation of welding and metal fabrication machinery blueprint reading, clean room environments and shop theory. Students may earn college credits and take multiple American Welding Society welder certification tests free of charge. Upon completion, they are prepared to seek employment or go on for more advanced training at a technical school or college.

MANUFACTURING & MACHINING TECHNOLOGY I & II

1 YEAR/4 CREDITS
GRADES 11-12

Tech Valley Manufacturing & Machining Technology was developed in cooperation with local business and industry, colleges and professional associations to meet our region's growing demand for advanced manufacturing professionals. This program is held at Mohonasen High School in partnership with BOCES. Students benefit from partnerships with advanced manufacturers such as Atlas Copco, Greno industries inc., GE Energy, PVA, and Simmons Machine Tool, who offer opportunities for field trips, job shadowing and internships. Students may earn college credits through College in the High School program.

NEW VISIONS PROGRAMS

To enroll in any New Visions program, you must complete a program application and participate in an interview/selection process. Additionally, you must have: a GPA of 85 or above; positive attendance pattern; maturity and ability to work both independently and in teams; strong communication skills, i.e. reading, writing, speaking, listening.

NEW VISIONS: HEALTH CAREER EXPLORATION

1 YEAR/4 CREDITS/GRADE 12

If you're intrigued by the fast-paced world of medicine, check out the New Visions Health Careers Exploration program. Students in this challenging one-year program use area hospitals as their classroom and work side-by-side with health care professionals to learn the various aspects of the health care field firsthand.

Students spend a portion of each day in their own high school, and three-and- a-half hours on-site at Ellis Hospital in Schenectady or St. Peter's Hospital in Albany. Throughout the academic year, students rotate through 40 departments in the hospital to experience the full spectrum of health care operations, ranging from high-tech bioengineering and nuclear medicine to the fundamentals of the business office and hospital administration. This type of experience assists students who have an interest in the field in choosing an area of study for college that is based on firsthand experience.

Course Credits—Students successfully completing this program will receive:

- 1 credit in Intro to Medical Science;
- 1 credit in Health Policy & Careers;
- 1/2 credit in Economics H;
- 1/2 credit in Law &
- Government H; and
- 1 credit in English H.

NEW VISIONS: JOURNALISM & MEDIA STUDIES

1 YEAR/4 CREDITS/GRADE 12

New Visions: Journalism & Media Studies students are immersed in the exciting and ever-evolving world of communications. Their classroom is based at the Times Union, and they work with professionals in news writing, photography and production for print and electronic journalism. A full broadcast career exploration component at WMHT is also part of the curriculum, as are offsite tours of radio stations, recording studios, Hearst Corp. headquarters in Manhattan and broadcasting facilities in Boston. Students learn how digital technology is changing news gathering and dissemination by participating in interactive projects with new media technologies. Special projects include blogging and photo and video assignments for Timesunion.com. Students also write, edit and publish their own student newspaper, The Legacy, and maintain the interactive Electronic Student Press website, www.esp.edu. Students earn six college credits through the University at Albany and three college credits through Hudson Valley Community College, giving them a competitive college advantage.

Course Credit:

- 1 credit in English 12 H
- 1 credit in Journalism
- 1 credit in Mass Communications & Marketing
- 1/2 credit in Economics H
- 1/2 credit in Participation in Government H.

NEW VISIONS: LAW AND GOVERNMENT

1 YEAR/4 CREDITS/GRADE 12

This program offers interested high school seniors an opportunity to explore some of the specialization of law and government in a "real life" setting at the State Capitol. This unique course of study integrates academics and on-site career exploration and involves students in rotations through various job settings to observe professionals at work. Students will gain insights into the governmental and legal process, including specialized areas of law such as criminal prosecution, environmental protection and consumer fraud. This experience will help them in developing a network of professional contacts. Students also may earn four credits in criminal justice through the University at Albany.

Course Credits—Students successfully completing this program will receive:

- 1 credit in English H;
- 1 credit in Legal Speaking & Presentations;
- 1/2 credit in AP U.S. Gov't & Politics;
- 1/2 credit in Economics H;
- 1/2 credit in Criminal Justice; and
- 1/2 credit in Legal Careers Practicum

AUTO SERVICES/ SMALL ENGINE REPAIR, CAREER OPTIONS, CARPENTRY SERVICES, FOOD SERVICES, OFFICE OPERATIONS/ HEALTH SERVICES, VOCATIONAL TRAINING & TRANSITION

(NO CREDIT) 1-3 YEARS

GRADE - PLACEMENT BY CSE

Students must be recommended by C.S.E. The Multi-Occupations Program is designed for the IEP student who wants to learn hands-on at an alternative pace to provide exposure and background experiences in a variety of vocational and trades careers.

ENGLISH AS A SECOND LANGUAGE (ESL)

Students will be assessed upon registration to Schenectady High School through an interview and the NYSITELL (New York State mandated examination) if necessary. Those who are determined to require support will attend ESL classes, based on their level of English proficiency. Students attend ESL classes until they test proficient on the New York State English as a Second Language Achievement Test (NYSESLAT).

The program is designed to increase students' reading, writing, listening and speaking skills to a level equivalent to that of their native speaking peers and those needed to succeed in life in the United States. These skills will be developed through the use of authentic reading materials, content area concepts, as well as materials similar to those used in the ELA classes. ESL standards are based on ELA standards; hence, students will be required to read literary and informational texts (both authentic and based on concepts from content area classes), write for multiple audiences, tasks and purposes, and listen and speak in collaborative discussions with their peers.

All ESL students must pass all of the required Regents examinations in order to earn a diploma in New York State. This includes the English Regents or Common Core exam in English Language Arts that all 11th grade students are required by New York State to take and pass.

ENGLISH 9 ESL
ENGLISH 10 ESL
ENGLISH 11 ESL
ENGLISH 12 ESL

ESL students at the beginner and intermediate level will receive their English credit through their ESL courses, as approved by New York State Education Department.

All students at the advanced ESL students in grades 9-12, take one ESL class as well as one mainstream English class so as to transition from ESL to mainstream English.

ESL BEGINNER 9, ESL BEGINNER 10 – 12

Students in the beginner ESL classes develop their writing skills by learning to form sentences, paragraphs and eventually essays in English. This includes topics such as topic sentence, thesis, and parts of an essay. Essay forms include expository, narrative, and compare/contrast essays. Grammar is taught both implicitly as well as explicitly, then practiced through the writing activities. Reading is developed through a variety of reduced text materials including novels, plays and authentic materials. Speaking and listening skills are developed simultaneously.

ESL INTERMEDIATE AND ADVANCED 9

Ninth grade ESL students continue to develop writing skills with the focus on mastering parts of an essay and the support of a thesis. Grammar is reviewed and reinforced with the aim of increasing students' awareness in formal written English and developing written communication skills. Vocabulary growth, as well as a more in depth study of literary elements and literary devices is promoted through reading a variety of genres and analyzing content.

ESL INTERMEDIATE AND ADVANCED 10 – 12

A significant amount of time will be spent preparing for the Comprehensive English Regents exam and the Common Core exam in English Language Arts given in January and June. Students will work towards mastering the writing skills required to pass the exam, including the application of literary elements to support a thesis, both given to and created by the writer. Emphasis will be placed on increasing reading fluency and comprehension, as well as vocabulary development, through the reading and analysis of literary texts in various genres.

SPECIAL EDUCATION PROGRAMS

CONSULTANT SERVICES

This service is provided as a direct and/or an indirect service to students in grades 9 through 12. Collaboration between the general education teacher and the special education teacher focuses on the needs of the students and the ways to improve skills necessary for success in the general education classroom. Students in this program are fulfilling requirements to earn a local/regents diploma.

RESOURCE ROOM

This service is provided outside of the general education program. Instructional groups consist of a maximum of five students for up to five periods per week daily or alternate days. This program is appropriate for identified students demonstrating academic delays as well as organizational and time management difficulties. Students in this program are fulfilling requirements to earn a local/regents diploma.

REGENTS/SPECIAL CLASSES (15:1)

This program provides services to students who require intense academic support to improve skills in core areas necessary to earn a local/regents diploma. Each student is programmed into small, structured classes at their grade level of instruction to meet the state mandated diploma requirements.

INTEGRATED CO-TEACHING CLASSES

For those special education students who require additional support in the mainstream there are a variety of classes offered at ninth and tenth grade levels in the four core subject areas. A seminar provides additional support for reteaching, preteaching and intensive reading support. These classrooms offer the support of a special education teacher to provide academic assistance including program accommodations and testing accommodations.

MANAGEMENT NEEDS SPECIAL CLASS

This program provides services to students with emotional and/or learning disabilities whose behaviors interfere with their ability to be successful in general education classes. Counseling which addresses emotional and/or behavior issues can be a component of the program. Students in this program are fulfilling requirements to earn a local/regents diploma.

CDOS CERTIFICATE SPECIAL CLASS

This program provides instruction to special education students in grades 9-12 who require instruction in a smaller class setting. Students receive instruction in functional reading, writing, science, social studies and math. Students in this program may pursue programming in a vocational experience or may be involved in a community work experience. Students in this program are fulfilling requirements to earn a Career Development and Occupational Studies (CDOS) Commencement Credential

SKILLS AND ACHIEVEMENT CREDENTIAL CERTIFICATE SPECIAL CLASS

This program provides services to students with multiple disabilities who require a high staffing ratio to address their individual needs. Social skills necessary to live and work independently in the community are developed. These students are eligible for the New York State Alternate Assessment. Students in this program are fulfilling requirements to earn a Skills and Achievement Credential Certificate.

TRANSITION CONSULTANT

Transition Consultation Services is a direct service available to all special needs juniors and seniors who are pursuing Regents or local diplomas or CDOS or SACC Credential Certificates. Services include orientation and referral to adult/postsecondary services such as service coordination, ACCESSVR (vocational rehabilitation) and support services in college campuses.

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1445 The Plaza • Schenectady, New York 12308 • 518-881-2044 • Fax: 518-370-8169
High School Principal: Diane Wilkinson, wilkinsond@schenectady.k12.ny.us

SMALLER LEARNING COMMUNITIES

Class of 2017
Class Principal: Peter Parisi
518-881-2044 ext. 44838
Fax: 518-881-3813
Email: parisip@schenectady.k12.ny.us
Assistant Principal: Jocelyn Hoffman
Hoffmanj@schenectady.k12.ny.us

Class of 2018
Class Principal: Peg Normandin
518-881-2044 ext. 44830
Fax: 518-881-3946
Email: normandinm@schenectady.k12.ny.us
Assistant Principal: Joseph Slichko
slichkoj@schenectady.k12.ny.us

Class of 2019
Class Principal: Christopher Chank
518-881-2044 ext. 44834
Fax: 518-881-3923
Email: chankc@schenectady.k12.ny.us
Assistant Principal: Jonathan Goyette
goyettej@schenectady.k12.ny.us

Class of 2020
Class Principal: Jerry Rosen
518-881-2044 ext. 44842
Fax: 518-881-3819
Email: rosenj@schenectady.k12.ny.us
Assistant Principal: David Preston
prestond@schenectady.k12.ny.us

Steinmetz Career and Leadership Academy
Principal: Gregory Fields
880 Oakwood Avenue
Schenectady, NY 12303
518-881-2030 ext. 30100
Fax: 518-881-3802
Email: fieldsg@schenectady.k12.ny.us
Assistant Principal: Joanne Wolcott
wolcottj@schenectady.k12.ny.us

International Baccalaureate Program
Coordinator: Trish Embree
Email: embreep@schenectady.k12.ny.us
518-370-8151

COUNSELING AND GUIDANCE OFFICE

District Director of Student Support
Rita Levay
518-881-3412
Email: levayr@schenectady.k12.ny.us

Grades 9
Amanda Cruz
Email: evansa@schenectady.k12.ny.us
Lisa Knupp
Email: knuppl@schenectady.k12.ny.uss
Teri Thomas
Email: thomast@schenectady.k12.ny.us

Grades 10-12
Earl Barcomb
Email: barcombe@schenectady.k12.ny.us
Sarah Curcio
Email: curcios@schenectady.k12.ny.us
Chelsea Houghton
Email: houghtonc@schenectady.k12.ny.us
Kassandra Jackson
Email: jacksonk@schenectady.k12.ny.us
Megan Jordan
Email: quiveym@schenectady.k12.ny.us
Jeanne Myers
Email: myersj@schenectady.k12.ny.us
Colleen Pacella
Email: pacellac@schenectady.k12.ny.us

Steinmetz Career and Leadership Academy
Lorraine Keimel
Email: keimell@schenectady.k12.ny.us