



WEBUTUCK HIGH SCHOOL

COURSE DESCRIPTIONS

Updated for 2023-2024

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Art/Cinema

Studio Art

1.0 Credit

Full Year

Grade level(s): 9-12

Description: Studio Art is a foundation course, which is an introduction to the function, 2-D, and 3-D formats of the visual arts, also techniques of the visual arts, both past and present. Students will be encouraged to “find their voice” as a way to express ideas in a personally creative way. Students will learn art appreciation and theory through a series of hands-on experiences that will visually represent the Elements and Principles of Art and Design, in 2-D drawing, painting, and sculpture and 3-D drawing, painting, and sculpture. Work that is based on individual interests and personal reflection will also be emphasized as a way to show critical thinking, problem solving and the creative process. Art History and appreciation will also be emphasized in this course. This course satisfies the one credit minimum Fine Arts class required for graduation.

Drawing & Painting

1.0 Credit

Full Year

Grade level(s): 9 -12

Description: Drawing & Painting is an advanced level art course designed to introduce the students to different styles and techniques in art. The students will build skill and confidence with extensive practice by using the various drawing and painting materials and tools. Students will be encouraged to “find their voice” as a way to express ideas in a personally creative way. Students will explore, develop, and create work based on ideas that are formed by looking at major artists involved in the turning points of modern art. Work that is based on individual interests and personal reflection will be emphasized as a way to show critical thinking, problem solving and the creative process. The students will see that art is more than developing technical skill with materials; it is a part of the evolution of ideas that creates our view of the world.

Mural Painting

1.0 Credit

Full Year

Grade level(s): 9-12

Description: The mural painting class will introduce students to the history of mural painting, street art and contemporary trends in the street art tradition of Mural Art. The cultural and societal significance of mural painting is a long standing tradition rich with narrative and decoration. Students will be encouraged to “find their voice” as a way to express ideas in a personally creative way as permanent artworks displayed in the hallways and rooms of our schools. Work that is based on individual interests and personal reflection will also be emphasized as a way to show critical thinking, problem solving and the creative process. Mural painting will further the development of the students’ understanding for various art styles current to today’s 21st century ideas for personal expression and story-telling. The students will be exposed to contemporary trends as they relate to our students and their personal interpretations and inspirations of the world around them. The students will participate in the creative process as it relates to recording information, sketching ideas, practicing work with materials, design of murals to be painted, collaged, or drawn in public spaces.

Intro to Animation
Grade level(s): 9-12

not offered in 23-24

1.0 credit

Full Year

Prerequisite: None

Description: This course is designed to teach students the basics of traditionally drawn and digital animation, or moving images, emphasizing both audio and visual capture. Students will learn to plot, plan, storyboard, create, and execute animations using the principles of animation. We will start with basic techniques such as flip books and progress to building animations with digital software apps like Flipaclip, Procreate, Stop Motion and Studio Pro, among others. Drawing, staging, motion, timing, and presentation are just a few of the techniques we will explore. Each class will consist of brief descriptions or demonstrations, viewing relative work, hands-on experimentation and practice, and critiques. Building skills and confidence for drawing, storytelling, digital mechanics, and camera techniques will be an integral part of this course. This is predominantly a hands-on and interactive course, however, we will also examine the historical contexts of the moving image and discuss the power and influences of animation and computer generated imagery in our contemporary culture.

Independent Study/ Portfolio Prep

0.5 or 1.0 Credit

As arranged

Prerequisite: Studio Art and permission of Instructor

Description: To be arranged by the student and teacher based on specific interest and skills already established. Students will be encouraged to “find their voice” as a way to express ideas in a personally creative way. The Portfolio Prep course is designed to help and guide those students that are interested in pursuing art at a higher education institution. Work that is based on individual interests and personal reflection will also be emphasized as a way to show critical thinking, problem solving and the creative process. The student and the teacher will work closely to develop a body of work that is created and presented in an appropriate manner. The students will also learn how to talk about art, how to write artist statements, and how to build social media platforms to exhibit their work.

Architectural/Mechanical Drafting [3d Digital Design]
Grade Level(s): 9-12

1.0 Credit

Full Year

Description: This course is designed to give students a brief introduction to basic 2d drawing skills, 3d modeling, 3d printing, LEGO Education, and computer generated design. There will be an emphasis made on learning and applying the elements of art & the principles of design. The history of architecture & digital design will be a key theme, as will contemporary 20th & 21st century trends in architecture and engineering. Work that is based on individual interests and personal reflection will also be emphasized as a way to show critical thinking, problem solving and the creative process. Students will learn appropriate ways to draw plans, construct 3d models, and work with digital computer aided design[*cad*] software. Projects will be based on curriculum standards, as well as student interest. Students will be encouraged to “find their voice” as a way to express ideas in a personally creative way.

Cinema Studies
Grade Level(s): 10-12

.5 Credit Half Year

Description: SEE MOTION PICTURES WITH A FRESH, NEW PERSPECTIVE and APPRECIATION! Come join us as we explore the history, theory and criticism of motion pictures and related media, studying motion pictures as both an art form, historical time piece and as a cultural phenomenon that has had a global influence on both audiences and inspiring artists from all walks of life. Learn about its early pioneers and inventors. View films that will make you travel back through time, see the present in a WHOLE NEW WAY and venture INTO THE FUTURE of WHERE MOVIES ARE GOING! Come join us on this once in a lifetime adventure!

Technology/Design

Studio in Computer Art
Grade Level(s): 9-12

1 Credit

Full Year

Prerequisite: None

Description: A predominantly digital exploration of mediums on the iPad, computer, and video game system. Upon exiting the course, the student will learn various techniques encompassing field work in graphic design, animation, video game design, cartooning, virtual reality, photo manipulation and video work. This course satisfies the one credit minimum requirement in Fine Arts needed for graduation.

Digital Design and Application
Grade Level(s): 9-12

1 Credit

Full Year

Prerequisite: None

Description: A half digital, half hands-on course. Mediums like digital art applications will be used to create physical builds in the workshop. Students will have the opportunity to work within their interests as the course progresses while maintaining a working knowledge of digital resources to create sculptures, large paintings, murals, website headers, personal logos, and blueprints. This course satisfies the one credit in Fine Arts minimum requirement needed for graduation.

(Digital) Media Arts
Grade level(s): 9-12

1 Credit

Full Year

Prerequisite: None

This course is designed as a brief introduction to the contemporary trend of digital computer aided art and design. Graphic Design application and theory, film and editing, 3D design and printing, and social media specialization utilizing all the tools on Apple iPads. There will be an emphasis made on crafting traditional drawings and paintings as a way to render them digitally. The reciprocal process will be a fundamental theme in this course. Students will learn how and why to make unique & interesting logos, websites, and visually stimulating digital fine art. This course will also be a brief introduction to audio & video production & digital printing. This course satisfies the one credit in Fine Arts minimum requirement needed for graduation.

Art of the Motion Picture Not offered 23-24
Grade level(s): 11-12

1 Credit

Full Year

Prerequisites: None

Description: The evolution of film coincides with our society. Film holds up a mirror to how we progress through our history as a country. The study of the film medium will include special attention to cultural impact, movie critique, production, framing, script writing, and promotion. Students will gain a general understanding on how film concepts are used to convey messages. Students will participate in watching films both in class and at home while seeing beyond what a typical casual viewer will ingest. Moreover, students will be able to grasp a tighter understanding of our cultural development by

following film trends throughout history. The course will culminate with the creation of student's own short films utilizing all the techniques learned throughout class. **Please Note:** Within the first week of the course, a waiver will be delivered to the students requiring a signature from the student's guardian. The waiver will include the potential films being covered in class and films with a rating higher than PG13 will have an asterisk along with a link to the Parent's Guide on IMDB. The Parent's Guide link will provide information indicating instances within the films the viewer may find offensive (violence, nudity, language, etc). Films may instances of adult situations, period accurate portrayals of smoking/drinking, coarse language, violence, etc. Failure to obtain a guardian's signature within the timeframe specified by the instructor will result in removal from the course.

English

English 9

1 Credit

Full Year

In English 9, students will continue to develop skills in reading, writing, listening, and speaking. Students will study a variety of literary genres such as short stories, novels, poetry, drama, and nonfiction. There will be an emphasis on essay writing, paragraph writing, introduction paragraphs, and structuring essays. Students will take a local exam, but will be working to prepare for the Comprehensive English Regents Exam, which they will take in 11th grade.

English 9 Honors

1 Credit

Full Year

Prerequisite: 8th grade English teacher recommendation

English 9 Honors is an accelerated class that entails extensive reading and writing. This rigorous course requires critical thinking, peer collaboration, and active participation. Students will be reading and studying a variety of literature including short stories, plays, poetry, novels, and nonfiction. They will also be working on perfecting their own original short story that will be published in a class anthology. Students can expect a challenging and exciting course that builds upon their reading and writing skills.

English 10

1 Credit

Full Year

Prerequisite: Successful completion of English 9

English 10 focuses on reading comprehension, interpretation and analysis, oral presentation, and writing skills; students will continue to prepare for the Comprehensive English Regents Exam, which they will take in 11th grade. Writing skills emphasized include the incorporation of evidence, varying sentence structure, and argumentative essays. Literature selections include works from various genres, including short stories, poetry, novels, a Shakespearean play, and the nonfiction essay. Grammar and vocabulary skills and application are also str

English 10 Honors

1 Credit

Full Year

Prerequisite: Successful completion of English 9/9 Honors and 9th grade English teacher recommendation.

Description: English 10 Honors is an accelerated class that requires students to think deeply and richly about both fiction and nonfiction. The course places a heavy emphasis on a variety of writing skills in preparation for the English Regents Exam in English 11. Writing skills emphasized include the incorporation of evidence, varying sentence structure, and argumentative essays. Literature selections include works from various genres, including short stories, poetry, novels, a Shakespearean play, and the nonfiction essay. Grammar and vocabulary skills and application are also stressed. Students should expect a rigorous, challenging, active experience in the course.

English 11**1 Credit****Full Year**

Prerequisite: Successful completion of English 10.

Description: English 11 is a continuation of the development of the skills in usage: spelling, vocabulary, reading, and writing. Components of literature selections, critically analyzed, are the basis of required written papers. In addition, students will prepare for the Comprehensive Regents Examination to be administered at the completion of the course. Literary works from various genres are studied (short story, poetry, essay, drama, novel, etc.).

English 11 Honors**1 Credit****Full Year**

Prerequisite: Successful completion of English 10/10 Honors and 10th grade English teacher recommendation

Description: English 11 is a continuation of the development of the skills in usage: spelling, vocabulary, reading, and writing. Components of literature selections, critically analyzed, are the basis of required written papers. In addition, students will prepare for the Comprehensive Regents Examination to be administered at the completion of the course. Literary works from various genres are studied (short story, poetry, essay, biography, autobiography, drama, novel, etc.). Students should expect a rigorous, challenging, active experience in the course.

English 12 A and English 12 B**.5 Credit EACH Half Year Each**

Prerequisite: Successful completion of English 11

Description: English 12 is the culmination of the student's development and practice of language skills, including usage, spelling, listening, speaking, vocabulary, writing, and literature. Hamlet is the senior drama selection. In addition, the student will practice the skills related to successful entrance into post-secondary education, autobiographies, application essays, selection criteria, and interview skills.

DCC English 101 (ENG 101)**.5 Credit/3DCC Credits****Half Year - Fall semester****Grade Level: 12**

Prerequisite: Successful completion of English 10, 11 and 12; Teacher recommendation. All students must have a score of at least an 80 on the English Regents exam or pass the DCC Entrance Exam to register for this course.

Description: addresses the major principles of college writing, which are meant to serve students in all the disciplines across the curriculum. The course concentrates primarily on expository and argumentative writing; traditional rhetorical modes; and effective composing, revising and editing strategies. English 101 covers MLA conventions, and a research paper is required. Critical thinking and reading skills are also stressed.

DCC English 102 (ENG 102)**.5 Credit/3DCC Credits Half Year - Spring semester****Grade Level: 12****Prerequisite:** ENG 101 with a grade of C or better.**Description:** A continuation of ENG 101, with further study of the resources of the language through a critical analysis of imaginative forms of writing. Emphasis will be placed upon well organized written composition, factually supported conclusions and awareness of language variety. Effectiveness of expression and validity of judgment in the student's writing are stressed. Genre reading will include fiction, poetry and drama.**Creative Writing****.5 Credit****Half Year****Grade Level(s): 9-12****Prerequisites:** Desire and willingness to write; successful completion of prior ELA course**Description:** This course is designed to expose students, no matter how skilled, to the process of writing in a variety of genres. Using a combination of writer's workshop and peer review, students will learn basic strategies for gathering ideas for writing, critically reading, and revising prose and poetry. Students will create original forms of descriptive writing, poetry, drama and fiction; much student choice will be given. Students will be encouraged to enter local and national contests. This is a tech heavy course.**Mystery, Horror and Suspense in Literature****.5 Credit****Half Year****Grade Level: 12****Prerequisite:** achieved all necessary Regents credits for English Language Arts prior to this course. Students should have experience working with long and short texts, analytical skills for accessing literature and film, and the ability to write and produce a culminating research paper by the conclusion of the unit.**Description:** This 12th grade English half year course invites fans of Mystery, Horror and Suspense genres in literature and in film to explore classic and modern stories found within the genres and to connect the fundamental fears and conflicts to the fears and conflicts that exist beyond fiction.**ENL****1 Credit****Full Year****Grade level(s): 9-12****Prerequisite:** student must qualify based on proficiency level on the NYSESLAT**Description:** This course assists students to learn English and meet challenging state academic content and student academic achievement standards. The program enables Limited English proficient students to speak, read, write and comprehend English and strives to assimilate students from various language and cultural backgrounds to mainstream classes within three years.

English ENL 9/10
Grade level(s): 9-10

1 Credit

Full Year

Prerequisite: student must qualify based on proficiency level on the NYSESLAT

Description: English ENL is a course to engage ELLs in content level reading and analysis using techniques sensitive to language acquisition. Students will read a variety of written work and engage in critical analysis. Students will learn paragraph structure and basic techniques of writing an essay while also developing vocabulary and the four skills of reading, writing, speaking and listening in English.

English ENL 11/12
Grade level(s): 11-12

1 Credit

Full Year

Prerequisite: student must qualify based on proficiency level on the NYSESLAT

Description: English ENL is a course to engage ELLs in content level reading and analysis using techniques sensitive to language acquisition. Students will read a variety of written work and engage in critical analysis. Students will learn paragraph structure and basic techniques of writing an essay while also developing vocabulary and the four skills of reading, writing, speaking and listening in English. Also in grade 11 students will prepare for taking the English Regents at the end of the course

Health and Physical Education

Senior High Health
Grade Level(s): 10-12

0.5 Credit **Full Year**

Description: Content areas of this course include: drugs, alcohol, and tobacco, the consequences associated with driving a motor vehicle under the influence of drugs/alcohol as mandated by the New York State Education Department. Also covered are AIDS education, mental health/psychology, family life, nutrition, personal health, first aid, and health-related careers. A great deal of emphasis is placed on student participation and involvement with class discussion. Emphasis is placed on responsible decision-making and using problem solving skills as they relate to the student's health.

Physical Education
Grade Level(s): 9-12

0.25 Credit per **Semester Full Year (by semester)**

Description: The Physical Education Department offers a wide range of activities based upon the state mandated syllabus. Throughout the course, students are offered the following activities: aerobics, archery, badminton, basketball, field hockey, floor hockey, football, golf, fitness, horseshoes, lacrosse, paddleball, shuffleboard, soccer, softball, speed-a-way, speedwell, racquetball, team handball, tennis, volleyball, and weight training.

Strength and Conditioning
Grade Level(s): 9-12

.5 Credit **(meets every other day for the full year)**

Prerequisite: None

Description: The purpose of this class is to both educate and provide the opportunity to work on one's personal fitness and overall health. Students will learn the benefits of exercising, how to develop a fitness plan, how to set, plan, and achieve fitness related goals. They will also have the opportunity to exercise 2-3 times per week in the school fitness room and gymnasium. Credit for this course can be used towards satisfying the Physical Education requirement for graduation.

Nutrition
Grade Level(s): 9-12

.5 Credit **(meets every other day for the full year)**

Prerequisite: None

Description: This course will provide an overview of good nutrition principles that are necessary for physical and mental wellness and a long, healthy life. Instructional materials include discussions of digestion, basic nutrients, weight management, sports and fitness, and life-span nutrition. The Nutrition and Wellness course emphasizes an understanding of today's food and eating trends and gives students the capacity to intelligently evaluate all available sources of nutrition information and make informed decisions. Unit topics include a course introduction, wellness and food choices in today's world, digestion and major nutrients, body size and weight management, sports/exercise nutrition and evaluating the ingredients of an unhealthy meal and making it healthier.

Mathematics

Algebra I Common Core

1 Credit

Full Year

Description: Common Core Algebra I is the first course in New York State’s three-year sequence. New York State requires all students to pass a Mathematics Regents Exam to satisfy Regents Diploma requirements. The objective is for each student to be successful on the Common Core Algebra I Regents Exam. The focal point of this course is the Algebra content strand. Topics include linear equations in one variable, quadratic functions with integral coefficients and roots, absolute value, exponential functions, coordinate geometry, data analysis, right triangle trigonometry, and elementary probability. Application problems and multiple solution methods will also be explored. All students will take the Algebra I Regents Exam at the conclusion of this course. This course is required for graduation.

Algebra A

1 Credit

Full Year

***NCAA eligibility accepts .5 credit

Prerequisite: Teacher recommendation and/or less than an overall 75 in Math 8.

Description: This course covers the first half of the NGen Algebra I curriculum. This course can be used as one credit towards the three math credits required for graduation. The course concludes with a local final exam during exam week in June. With successful completion of this course, students will take the Algebra B course the following school year.

Algebra B

1 Credit

Full Year

***NCAA eligibility accepts .5 credit

Prerequisite: Successful completion of Algebra A.

Description: This successive course to Algebra A finishes the remaining topics in the NGen Algebra I curriculum. This course can be used as one credit towards the three math credits required for graduation. The final exam for this course is the NYS Algebra I Regents exam. Passing this exam satisfies a graduation requirement.

Geometry Common Core

1 Credit

Full Year

Prerequisite: Successful completion of Algebra and Math teacher recommendation

Description: Common Core Geometry is the second course in New York State’s three- year sequence. If a student is seeking a Regents Diploma with Advanced Designation, the state requires passing the Common Core Geometry Regents Exam as one of the three required math exams. The objective is for each student to be successful on the Common Core Geometry Regents Exam. Students will study geometric relationships formally and informally. Students will be required to demonstrate mathematical reasoning through formal proofs and problem solving; investigate properties of triangles, quadrilaterals, and circles; transformational and coordinate geometry; 3-dimensional geometry and logic. All students will take the New York State Common Core Geometry Regents Examination at the conclusion of this course.

Geometry NR**1 Credit****Full Year****Grade Level(s):** 10-12**Prerequisite:** Successful completion of Algebra

Description: This course will explore basic topics of Geometry including plane and solid figures, coordinate geometry, logic, reasoning, and constructing arguments. Applications of these exercises will be emphasized. This course can be used to fulfill one of the 3 minimum math credits required for graduation.

Algebra II Common Core**1 Credit****Full Year****Prerequisites:** Passing Algebra I and passing the Algebra Regents Exam

Description: Common Core Algebra II is the third course in New York State's three-year sequence. If a student is seeking a Regents Diploma with Advanced Designation, the state requires passing the 11 Common Core Algebra II Regents Exam as one of the three required math exams. The objective is for each student to be successful on the Common Core Algebra II Regents Exam. The course will cover the traditional second year of Algebra and a traditional Trigonometry course. Some of the major topics covered include intermediate algebra, exponential and logarithmic functions, probability, and statistics. Solving problems via a variety of methods, including algebraically and graphically will be emphasized. The use of the TI-84 graphing calculator is integrated throughout the course. All topics include sophisticated application problems based on "real world" situations. All students will take the New York State Common Core Algebra II Regents Examination at the conclusion of this course.

Algebra II/Trig (NR)**1 Credit****Full Year****Prerequisite:** Passing Algebra I and passing the Algebra Regents Exam

Description: This course can be used as one of the minimum 3 mathematics credits required for graduation.

Pre-Calculus**1 Credit****Full Year**

Prerequisite: Successful completion of Algebra, Geometry CC and Algebra II CC or approval of math department chair.

Description: This course is designed to provide students with a strong background in mathematics, with the skills necessary, to make the transition to college level mathematics. Topics to be covered will include, but not be limited to, applying the mathematics of the Regents sequence to a variety of problem situations, graphing theory, theory of equations, introduction to derivatives and their applications, application of logarithms to economics, sequences and series, and an introduction to area under a curve. Graphing calculators will be widely used throughout the course.

STEAM**1 Credit****Full Year****Grade level(s): 11-12****Prerequisite:** Successful completion of Biology and Algebra

Description: This course is designed to give students an opportunity to apply concepts of Science, Technology, Engineering, Art, and Math to inquire and design solutions to 21st Century problems.. This course is heavily project oriented and will require extensive hands-on application of mathematical and scientific principles. While there is an emphasis made on “real world” problem solving, projects will range to include an introduction to coding, robotics, simple machine concepts, LEGO Education, and 3D modeling. Alternative and Project Based models of assessment will be incorporated. Students will be using iPad, Chromebook and Mac based computer systems as technology tools. Developing critical thinking and knowledge transference skills is an emphasis of this course. This course may be used as either the third required credit towards graduation in Math **or** Science or it may be used as an elective credit.

Financial Math**1 Credit****Full Year****Grade level(s): 11-12****Prerequisite:** Successful completion of Algebra, some level of Geometry and junior or senior status.

Description: This course is designed to provide students with practical financial skills that will be necessary in everyday life. It will explore math topics such as gross income, net income, savings account, charge accounts, and credit cards. It will also introduce topics including loans, housing, automotive purchases, and insurance. This course will prepare students for present and future financial management.

Personal Finance**.5 Credit****Half Year****Grade Level(s): 11-12**

Description: This course will teach you what you need to know in the real world! **Banking:** learn about checking and savings accounts; how to manage online/mobile accounts and discover what banking fees are. **Taxes:** What taxes are listed in your paystub, how do you file taxes, what is a 1040 and how do you file? **Budgeting:** Strategies, how do you do a household budget, how do you budget for transportation and food? How do you build a budget and stick to it? **Investing:** Learn about the stock market, bonds, managing risk, funds, how to invest for retirement; what is modern investing? **Credit:** What are loan fundamentals, how do you use credit cards wisely? How do you calculate payments? Learn about Auto loans and mortgages. What is your credit report, credit score and how do you build your credit? **Insurance:** Learn about insurance for your car, home, renters insurance, and health insurance. Leave this course with the knowledge you need to be a fiscally responsible adult.

DCC Precalculus (MAT 185)**1 Credit/3 DCC Credits****Full Year****Grade level(s): 11 - 12**

Prerequisite: Successful completion of Algebra II CC with a score of at least 79 on the Algebra II Regents Exam and teacher recommendation.

Description: This course is intended primarily for students planning to take calculus. Topics include a review of the fundamental operations; polynomial, rational, trigonometric, exponential, logarithmic, and inverse functions; modeling and data analysis.

DCC Statistics (MAT 118)
Grade level(s): 11 - 12

1 Credit/3 DCC Credits

Full Year

Prerequisite: Completion of Algebra II CC or Algebra II/Trig with a score of at least a 71 on the Algebra CC Regents exam.

Description: This course is a College Level Math class, all students that successfully complete this class will receive 3 math credits towards their college degree. Basic statistical procedures are developed. Topics include descriptive statistics, probability, probability distributions, hypothesis testing, confidence intervals, correlation and regression, and an introduction to game theory. At times this course may be very challenging. Students are encouraged to seek extra help when needed.

DCC Calculus (MAT 221)

1 Credit/4 DCC Credits

Full Year

Grade level: 12

Prerequisite: Successful Completion of DCC Precalculus (MAT 185) with a grade of at least C, OR high school precalculus with a grade of at least a C, OR permission of the department.

Description: This course is the first of a three-semester sequence developing calculus for the student majoring in engineering, mathematics, or the sciences. Topics include the derivative, limits, continuity, differentiability, the definite integral, the Fundamental Theorem of Calculus, techniques of differentiation (including for transcendental functions), applications of differentiation, mathematical modeling and computer applications.

Introduction to Computer Science

1 Credit

Full Year

Grade Level(s): 11-12

Prerequisite: Completion of Geometry Regents and concurrent enrollment in Algebra II CC or Completion of Algebra II with a grade of C or better. Students should also have strong reading and writing skills.

Description: This course will introduce students to the basics of computer programming. Java will be the main programming language used, however other languages will be introduced as time permits. Topics include: simple and structured data types (one dimensional) arrays and strings; control structures; object oriented programming methodologies; algorithms for array manipulation; problem solving strategies; programming and debugging techniques. Students will study basic software engineering principles and develop beginning programming skills using the programming language Java. No prior programming experience is required.

Music

Senior High Band
Grade level(s): 9-12

1 Credit

Full Year

Prerequisite: Must play an instrument, suggested to have played in Junior High band

Description: This organization performs music of appropriate grade levels in a variety of musical styles. Performances are scheduled throughout the year for events such as the annual winter and spring concerts, musical, pep rallies, Memorial Day parade, and other local performances. These events are considered as culminating experiences and, therefore, attendance is mandatory. Exceptions will be left to the discretion of the Band Director. All local performances are considered as community service with exception of the annual concerts and the musical. The goal of instruction for this group is to introduce students to a variety of musical styles and composers, and to produce music of an appropriate grade level in a sensitive and technically efficient manner.

Senior High Chorus
Grade level(s): 9-12

1 Credit

Full Year

Prerequisite: Must be able to sing and match pitch at a high school level, and suggested to have participated in Junior High Chorus

Description: This organization performs music of appropriate grade levels in a variety of musical styles. Performances are scheduled throughout the year and include annual winter and spring concerts and other local performances. The winter and spring concerts are considered as culminating experiences and therefore, attendance is mandatory.

Piano
Grade Levels: 9-12

.5 Credit

Half Year

Prerequisite: None

Description: Group piano course featuring Piano Lab. No prior experience needed. Due to the nature of the Music Lab we can accommodate students of different levels.

Guitar I/II
Grade Levels: 9-12

.5 Credit

Half Year

Prerequisite: None

Description: Group Guitar course featuring Guitar Lab. Acoustic and Electric guitar group instruction. Also includes opportunities to explore similar instruments such as electric bass, ukulele, and banjo. No prior experience needed. Due to the nature of the Music Lab we can accommodate students of different levels.

Electronic Music/Music Technology**.5 Credit****Half Year****Grade Levels: 9-12**

Prerequisite: None for Electronic Music I; Electronic Music I or permission of instructor for Electronic Music II

Description: This course explores topics related to using technology to relate to, create and perform Music. Focus will be on learning to use and understand electronic instruments, MIDI, music production apps/software, audio recording & engineering, looping, effects, etc., in relation to existing music and in the creation of new music by the students.

Introduction to Dramatic Arts**.5 Credit****Half Year****Grade Levels: 9-12**

Prerequisite: None

Description: This course is open to all high school students wishing to obtain fine arts credit in theater arts. The curriculum is broad with the purpose of exposing the student to the fundamentals of acting. The course is entirely participatory and includes the following units of study: acting games, vocal technique, radio plays, pantomime, improvisation, character study, scene study, stage combat, theater history, and monologues.

Music in Our Lives I/II not offered 23-24**.5 Credit****Half Year****Grade Level: 9-12**

Prerequisite: None for Music in Our Lives I. Must complete Music In Our Lives I to take part II.

Description: How is Music woven into our cultures and our lives? How do we interact with, relate to, and share music? Learn about musical genres and various styles through activities designed to connect with the cultural and historical context of the music you are learning about. Develop skills in critical listening and elements of music theory, including use of piano keyboards, guitars and other music technology in our Music Lab! Learn about professions in the Music field aside from performing, such as audio engineer, instrument building, software design, marketing, etc. and how to make music a part of your life at any level or age. No prior experience in music is necessary for enrollment in this course. *Must complete Music In Our Lives I to take part II.*

Science

Living Environment/Biology

1 Credit

Full Year

Prerequisite: Freshman or Advanced Middle School status or transfer student

Description: The Living Environment is an introductory course that explores the fundamental processes of living things. Students will be introduced to biological themes and concepts that make up the living world. Topics such as Scientific Inquiry, Organization and Patterns in Life, Ecology and Biodiversity, Energy, Matter and Organization, Genetics and Evolution, Reproduction, Growth and Development, Dynamic Equilibrium, and Human Influences on the Environment will be investigated. Laboratory activities related to all areas of the curriculum will be presented. **The New York State Living Environment Regents Exam will conclude the course.**

Please note: Critical to understanding science concepts is the use of scientific inquiry to develop explanations of natural phenomena. Therefore, as a prerequisite for admission to the Regents examination in the Living Environment, students must have successfully completed 1200 minutes of laboratory experience with satisfactory written reports for each laboratory investigation.

Physical Setting/Earth Science

1 Credit

Full Year

Prerequisite: Successful completion of Living Environment/Biology or transfer student

Description: Earth Science is part of the New York State Physical Setting curriculum. It is an interesting, but demanding course covering several areas of study, including geology, oceanography, meteorology, and astronomy. These four distinct areas interact with each other in a dynamic and ever-changing environment. Geology is the study of the forces that create and shape the Earth; plate tectonics, volcanism, earthquakes, and rocks and minerals. Physical oceanography is the study of water, waves, currents and the sea floor. Meteorology includes weather forecasting and climate trends, and how these shape depositional and erosional forces. Through Astronomy we have learned much about the age and evolution of the universe and how it changes over time.

Please note: Critical to understanding science concepts is the use of scientific inquiry to develop explanations of natural phenomena. Therefore, as a prerequisite for admission to the Regents examination in Earth Science, students must have successfully completed 1200 minutes of laboratory experience with satisfactory written reports for each laboratory investigation.

Physical Setting/Chemistry

1 Credit

Full Year

Prerequisite: Successful completion of two Regents level science courses along with the successful completion of two Regents level mathematics courses. Students wishing to take Chemistry concurrently with their second Regents mathematics course should have achieved a Regents science exam score of 75% or higher.

Description: This is a comprehensive Chemistry course dealing with the substances of the physical world and their interactions at the particle level. Major topics include: matter and measurement, atomic structure, periodic table, chemical bonding, stoichiometry, kinetics, thermodynamics, equilibrium, acid-base chemistry, reduction and oxidation chemistry, organic chemistry, and nuclear chemistry. **Please note:** Successful completion and written documentation of a minimum of 1200 minutes of laboratory work is required to be eligible to take the NYS Physical Setting/Chemistry Regents exam.

Physical Setting/Physics

1 Credit

Full Year

Prerequisite: Successful completion of three Regents level mathematics courses along with the successful completion of two Regents level science courses. Students wishing to take physics concurrently with their third Regents level mathematics course should have achieved a Regents mathematics exam score of 85% or higher on their previous Regents exam.

Description: This course considers our ideas about the nature of the physical world. Major topics include mechanics, energy, wave phenomena, electricity, magnetism, and modern physics. The analysis of problems using the methods of mathematics is emphasized throughout the course. **Please note:** Successful completion and written documentation of a minimum of 1200 minutes of laboratory work are required to be eligible to take the NYS Physical Setting/Physics Regents exam.

Environmental Science offered every other year

1.0 Credits

Full Year

Prerequisites: Successful completion of Living Environment and Earth Science or permission of instructor (for out of state transfers)

Description: Think Globally, Act Locally! In this Environmental Science course students will engage with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. This course has students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them. Environmental Science is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography. Topics include ecosystem studies, biodiversity, population dynamic, earth systems and resources, water studies, energy resources, pollution, and human impacts on the Earth. Students will be afforded the opportunity to engage with local governments on environmental issues and participate in service projects to benefit our environment.

Forensics offered every other year

1 Credit

Full Year

Prerequisite: Successful completion of Regents Biology is needed prior to enrolling in this course.

Description: Forensics is a year-long non-Regents elective course that examines the many disciplines of science that can be used to answer legal questions. We explore

- How can scientific investigation assist in understanding the facts of a crime?
- How can I effectively present my evidence in a way others can understand and rely upon?
- Are there limits to what we can prove through scientific investigation alone?

Students will also explore some of many of the scientific techniques and technologies that assist in the gathering and processing of physical and biological evidence.

Chemistry in Everyday Life

0.5 Credit

Half Year

No additional lab period

Prerequisites: Successful completion of Biology and Earth Science

Comments: This is a one semester or every other day course.

Description: Have you ever wondered why fireworks are different colors? Ever wonder why cold packs work? Or why does your lotion need to be “PH balanced”? And how does that stain remover actually get that ketchup out of your white T-shirt? In this hands-on course we look at the ways that Chemistry explains the substances we encounter everyday and explore scientific phenomena through hands-on experimentation. Topics covered include composition of matter, absorption and emission spectra, states of matter, behavior of gasses, phase transitions, endothermic and exothermic reactions, solubility, and acid base chemistry.

Food Science

0.5 credit

Half Year

Prerequisites: None

Comments: This is a one semester or every other day course.

Description: Have you ever wondered why that cake you made did not rise properly? Or why milk goes bad in a week but yogurt seems to last forever in the fridge? Or why homemade salad dressing always separates (but sometimes store bought dressing doesn't)? Or why are there so many food recalls all the time? Science can help answer these questions. An understanding of basic chemistry and biology can help us make sense of the properties of food preparation, food nutrition, microbial growth, and food preservation techniques. By exploring these concepts we can help our food stay fresh and edible longer, make sure our cakes and breads rise properly, and minimize the safety risks involved in preparing and storing food.

DCC Biology 105

0.5 Credit/4 DCC Credits

Half Year

Prerequisite: Successful completion of The Living Environment and Chemistry courses (65%+) or recommendation of the instructor and an additional science teacher.

Description: General Biology I (BIO 105) is an interdisciplinary study of basic biological concepts, including the nature of science, matter, the cell, characteristics of living matter, a brief survey of the living world, and ecology. BIO 105 and 106 are recommended for students who wish to pursue studies in the Biological and Life Sciences. Laboratory activities related to all areas of the curriculum will be presented. Concurrent enrollment students can earn four credits from Dutchess Community College.

DCC Biology 106

0.5 Credit/4 DCC Credits

Half Year

Prerequisite: BIO 105 with a grade of C or better.

Description: General Biology II (BIO 106) is a continuation of BIO 105, including homeostasis in organisms, genetics, evolution, and a consideration of the structure and function of living tissues, organs, and organ systems. Laboratory activities related to all areas of the curriculum will be presented. Concurrent enrollment students can earn an additional four credits from Dutchess Community College.

Social Studies

Global History I **Grade level: 9**

1 Credit

Full Year

Prerequisite: Successful completion of Social Studies 8

Description: This course is based upon the Social Studies standards of history, geography, economics, and civics. The course utilizes a chronological format organized around themes and concepts. The themes/concepts of belief systems, change, culture and intellectual life, diversity, economic systems, environment, geography, imperialism, inter-dependence, justice and human rights, movement of people and goods, nationalism, political systems, science and technology and urbanization are examined in the analysis of world regions. The following Global History eras are included:

I. Introduction to Global History, Ancient World

II. Ancient World: Civilizations and Religion (4000 B.C. to 500 A.D.)

III. Expanding Zones of Exchanges and Encounter (500 – 1200)

IV. Global Interactions (1200 – 1650)

V. The first Global Age (1450 – 1770)

This course satisfies a graduation requirement.

Global History I Honors **Grade level: 9**

1 Credit

Full Year

Prerequisite: Successful completion of Grade 8 Social Studies with an average of 85 or higher and teacher recommendation.

Description: This course covers the same material as the Global History I course. The honors course however, has increased the use of primary source documents and inquiry learning methods, as well as the use of student driven research and presentation. It also uses higher order critical thinking lessons for increased development of the Global content. This course satisfies a graduation requirement.

Global History II **Grade level: 10**

1 Credit

Full Year

Prerequisite: Successful completion of Global History I or Global History I Honors

Description: This newly revised course is based upon the Social Studies standards of history, geography, economics, and civics. The course utilizes a chronological format organized around themes and concepts. The themes/concepts of belief systems, change, culture and intellectual life, diversity, economic systems, environment, geography, imperialism, inter-dependence, justice and human rights, movement of people and goods, nationalism, political systems, science and technology and urbanization are examined in the analysis of world regions. The Global History eras include: I. The Age of Revolutions (1750 - 1914)

II. A Half Century of Crisis and Achievement (1900 - 1945)

III. The Twentieth Century since 1945

IV. Global Connections and Interactions

This course satisfies a graduation requirement and culminates with the Global History Regents Exam.

Global History II Honors
Grade level: 10

1 Credit

Full Year

Prerequisite: Successful completion of Global History I with a grade of 85 or higher or Global History I Honors with a grade of 80 or higher and teacher recommendation.

Description: This course covers the same material as the Global History II course. The honors course, however, has increased the use of primary source documents and inquiry learning methods, as well as the use of student driven research and presentation. It also uses higher order critical thinking lessons for increased development of the Global content. This course satisfies a graduation requirement and culminates with the Global History Regents Exam.

American History (US History)
Grade level: 11

1 Credit

Full Year

Prerequisite: Successful completion of Global History I and II; transfer student as deemed appropriate; or permission of instructor.

Description: The focus of this survey course is the Constitution. Students learn the enduring importance of the Constitutional issues as they study the formation of the government and how it has grown and changed over the years. The chronological treatment of the United States history begins with the reconstruction and goes to the present. Students are expected to stay abreast of current events. Students will be required to read from many different sources and write small papers. This course is required for graduation and culminates in the US History Regents exam.

US History Honors
Grade level: 11

1 Credit

Full Year

Prerequisite: Successful completion of Global History I and II and teacher recommendation.

Description: This course covers the same material as the American History course. The honors course, however, has increased the use of primary source documents and inquiry learning methods, as well as the use of student driven research and presentation. It also uses higher order critical thinking lessons for increased development of the US History content. This course satisfies a graduation requirement and culminates with the US History Regents Exam.

Government & Economics
Grade level: 12

1 Credit

Full Year

Prerequisite: Successful completion of Global History I and II and senior status.

Description: This course is taught as one section but is broken into two areas. The economics area is designed to provide students with the economic knowledge and skills that will enable them to make important decisions as informed and economically literate citizens in our society and in the world. Students will complete a stock market project to help them better understand the role of investment in the US economy. The Government area will prepare the student to assume his/her role as a citizen. Students learn to analyze public policy issues, to identify players, and to become participants in the democratic system. They are expected to attend board meetings of policy boards in the community, such as town board, planning board, school board, or zoning board, and one session of local court. This course satisfies a graduation requirement.

DCC Government (GOV 121)**.5 Credit/3 DCC Credits****Half Year****Grade level: 12**

Prerequisite: Successful completion of Global I, II and US History with a grade of 85 or higher in US History and teacher recommendation. Must also be senior status.

Description: This course deals with the philosophy, structure, functions and process of our national government. Topics include the methods of political and historical analysis, the machinery of government, the political process and political behavior. This course satisfies a graduation requirement.

DCC Economics (ECO 105)**.5 Credit/3 DCC Credits****Half Year****Grade level: 12**

Prerequisite: Successful completion of Global I, II and US History with a grade of 85 or higher in US History and teacher recommendation. Must also be senior status.

Description: This course provides students with the fundamentals of economic literacy and understanding. Students will explore such major economic issues as monopolistic power, inflation and recession, government spending and taxation, the banking system and international trade.

Psychology**.5 Credit****Half Year****Grade level(s): 11-12**

Prerequisite: junior or senior status

Description: This course will include a study of physical and mental development, learning theory, sensation and perception, child and adolescent development, and the psychological basis for behavior and motivation. Some personality theory will be examined, as will additional units in the areas of social psychology, abnormal psychology and therapy.

Sociology**.5 Credit****Half Year****Grade level(s): 11-12**

Prerequisite: junior or senior status

Description: This course provides a broad overview of sociology and how it applies to everyday life. Major theoretical perspectives and concepts are presented, including sociological imagination, culture, deviance, inequality, social change and social structure. Students also explore the influence of social class and social institutions, such as churches, education, healthcare, government, economy and environment. The family as a social structure is also examined.

Introduction to Criminal Justice not offered 23-24
Grade level(s): 10-12

1 Credit **Full Year**

Prerequisite: Enrolled in a Social Studies course

Description: This course provides an introduction to the history, function and application of the criminal justice system in the United States. It focuses on the foundations of criminal justice, law enforcement, the courts, corrections, and additional issues in criminal justice. The definitions of law, crime, and justice are explored before students learn about the history, structure, roles, issues and ethics of law enforcement. Students then explore aspects of the court system such as sentencing, trial, appeals and forensics. Corrections are discussed as well as additional issues in our modern world such as Cyber Security, the Juvenile justice system, terrorism, and the future of criminal justice.

Elements of Anthropology
Grade Levels: 11-12

.5 credit **Half Year**

Prerequisite: None (students will be required to get permission slips to view PG-13 and R movies)

Description: This course will approach seemingly “natural” ideas such as indigeneity,(origins) race, gender, sexuality, and class as cultural constructions that change over time. These themes will critically examine, for instance, the international division of labor, growth of the media, and global commodification of culture. The coursework will apply these anthropological perspectives to a variety of sources, ranging from traditional ethnographies to novels, music, films, and new forms of electronic media. The course has a media library, which includes a range of historical fiction and non-fiction movies. Students will examine these films and other forms of media to analyze historical and cultural events throughout the human experience.

Abnormal Psychology
Grade Levels: 11-12

.5 credit **Half Year**

Prerequisite: General or intro to psychology

General Description: Is there such a thing as normal? When should we label someone as having a disorder? How can we re-shape the discussion to focus on what works for people instead of what doesn't? These are complex questions that require an understanding of the way psychology assesses and treats people who are seemingly “abnormal.” We will examine the ways that psychology shapes our understanding of ourselves and those around us.

This course focuses on the symptoms, causes, and treatments of a wide variety of psychological disorders such as mood, personality, somatoform, dissociative, childhood, eating, and sexual disorders; anxiety; schizophrenia; and organic brain syndromes. It explores historical understanding and treatment of abnormal behavior and diagnostic methods used to classify disorders.

World Languages

Spanish I

1 Credit

Full Year

Grade Level(s): 9-12

Prerequisite: None

Description: Spanish I is for any students who wish to begin studying Spanish in high school with no previous knowledge or study of the language. It is also for students who were not successful in their 7th and 8th grade classes and need to repeat the course for the foreign language credit required for graduation. This course starts at the beginning and builds a foundation of the language. Students will learn the Spanish alphabet and pronunciations, numbers, colors, calendar vocabulary and telling time in Spanish. Students will learn verbs and ways to express likes and dislikes, adjectives and adjective agreement. The course covers basic verb conjugation in the present tense as well as the subject pronouns. Spanish I will prepare students for Spanish II and fulfill the language credit required for graduation.

Spanish II

1 Credit

Full Year

Prerequisite: Successful completion of Spanish 7 & 8 and passing of Spanish Checkpoint B Exam; or Successful completion of Spanish I

Description: Spanish II is designed to continue the study of the language and cultures of Spanish speaking countries. The course focuses on improvement of skills with further emphasis on communication in Spanish. Listening and speaking skills are used to help the student increase their ability to use Spanish correctly. In addition, reading and writing skills will continue to be developed.

Spanish III

1 Credit

Full Year

Prerequisite: Successful completion of Spanish II

Spanish III is designed to continue the study of the language and culture of the Spanish speaking world. Many areas of interest are explored through practice to improve language proficiency. Students will work to improve their listening, reading, writing and speaking skills in the target language. Students will work toward mastery on a comprehensive final exam with all four components.

Spanish IV

1 Credit

Full Year

Prerequisite: Successful completion of Spanish III

Description: Spanish IV is a project based cultural course with an emphasis on writing and speaking Spanish. Students will choose a Spanish speaking country to “study” in for the year. Each unit is based on your travels to this country and you will become an expert on your country throughout the year. Students will keep a journal highlighting their experiences in their country of study. They will participate in several real life simulations in which students will be communicating in Spanish in different situations as if they were in their country (i.e. in an airport, bargaining in the market, sick at the hospital etc.) The year culminates with a final project showcasing all you have learned about your Spanish speaking country throughout your “travels.”

DCC College Spanish 201
Grade level(s): 12

0.5 Credit/3 DCC Credits

Half Year

Prerequisite: Successful completion of Spanish IV or Permission of Instructor

Description: College Spanish 201 is a course for students who can already communicate orally in Spanish and who have a good knowledge of basic Spanish grammar. This course stresses improvement in speaking, reading, and writing in Spanish. Students will be required to complete online assignments through an online platform called Connect. Students read articles from Spanish magazines and websites, along with poems and short stories by Spanish and Latin American authors. In addition, they review and expand their use of Spanish grammar and practice applying it in conversations, writing assignments, and listening activities.

DCC College Spanish
Grade level(s): 12

202 0.5 Credit/3 DCC Credits

Half Year

Prerequisite: Successful completion of DCC College Spanish 201 with a grade of C or better.

Description: College Spanish 202 is a course for students who can communicate orally on the intermediate level and can begin to read unabridged Spanish literature. This course emphasizes the improvement of speaking, reading, listening, and writing skills. Students read selections from Spanish and Latin American literature, listen to Spanish podcasts, read Spanish magazines, and work on their remaining problems with Spanish grammar. The 202 course places an emphasis on understanding and communicating with the subjunctive mood in Spanish Class instruction is almost entirely in Spanish.

La Cinema Por Los Ojos De Latinos

.5 Credit

Half Year

Grade Level(s): 10,11,12 Or any native Spanish speaking High School student

Prerequisite: Completion of at least Spanish II

Description: This course will be separated into four different topics: Immigration, Magic Realism, Political History of Latin American Countries and Culture. Students will watch a series of films based on each topic. Before and after each film, students will engage in discussion analyzing the topic of the films, which will also cover Spanish vocabulary and culture. This course will also discuss the film techniques that were used to capture the themes of the films.

Spanish Conversation and Culture

.5 Credit

Half Year

Grade level (9-12)

Description: In this course we will research and discuss popular topics in Latin America. These topics may include current events, pop culture, significant historical events, and influential people in Latin American countries.

Students will be given literature to read, videos to watch, and presentations to view about these topics. Students will be expected to engage in discussion analyzing the topics. This class will allow students to be able to express their personal opinions about any of the topics. Class participation will be essential to this conversation course.

Conversación y Cultura en Español

Descripción del curso: En este curso investigaremos y discutiremos temas populares en los países latinoamericanos. Los temas que pueda discutir incluyen eventos de actualidad, cultura pop, eventos importantes y personas influyentes en los países latinoamericanos.

Los estudiantes recibirán literatura para leer, videos para ver y presentaciones sobre los temas. La expectativa de esta clase es que los estudiantes participen en discusiones. En esta clase los estudiantes pueden expresar sus opiniones personales sobre cualquier tema. La participación en la clase será esencial para este curso de conversación.

CTE/Work Based Learning

Life Skills

.5 credit

Half Year

Grade Level(s): 9-12

Description: What does it take to be an adult in today's world? Learn the necessities of life such as how to change a tire, create a resume, fill out applications for insurance, how to balance a checkbook, make a simple meal, invest in the stock market, file taxes and many other basic skills every young adult needs to know.

Career Exploration:

.5 credit

Half Year

Grade Level(s) : 9-12

Description: Answer the age old question, "what do you want to be when you grow up"? Explore different career paths, identify personal strengths, build a resume, and practice interviewing skills. Meet and get to ask questions to professionals in different careers.

Senior Work Experience:

1.0 credit

Full Year

Grade Level: 12

Prerequisite: Must have completed or be concurrently enrolled in Career Exploration.

Description: Get real life work experience: Already have a part-time job? You can use your part-time job to meet the needs of this course. Don't have a part-time job but want one? We can help. Gain work experience in areas where you may be interested in pursuing a career. Students may leave school 9th period and have an opportunity to work in different businesses in the area. This course gives students an opportunity to build a resume and obtain letters of recommendation. Students may also obtain their CDOS certificate in addition to their High School Regents or Advanced Regents diploma with the successful completion of this course.

Dutchess BOCES Career & Technical Institute

The programs listed below are offered at the Dutchess BOCES CTI Center in Poughkeepsie. All programs offer students the opportunity to gain basic entry level career skills as well as the skills necessary to enter a College or Technical school. For more detailed information on the programs, please visit the DCC BOCES website at www.dcboces.org/CTI or call one of their school counselors at (845) 486-8001.

**** Please note that CTI Courses are not currently NCAA approved.*

Students who are accepted into a BOCES program will spend half their day at the CTI center in Poughkeepsie and half day at Webutuck High School.

Career Exploration Program: This course is geared for students in 10th and/or 11th grade who are classified with disabilities and pursuing a Regents diploma of CDOS credential. Students will be given a foundation in career skills and will explore a number of career options. Students will have hands-on learning opportunities in a variety of trade areas to prepare them for future study. Additional services include career counseling, career research and work based learning opportunities. Upon successful completion, students may enter CTE programming.

Small Engine Technology I: Students will explore the theory and operation of two and four cycle engines including basic Carburetion, Lubrication, Ignition, Cooling, and Fuel Supply, Air Induction, and Emissions. Students will have the opportunity to dive into real life scenarios in the small engine shop using specialty diagnostic tools and skills they have developed.

Small Engine Technology II: Students will dive deeper into two and four cycle engine operation, focusing on engine systems and engine service. Students will explore trade specific tools used by the industry to diagnose and service various engines and vehicles related to power equipment, power sports and marine sports.

Careers in Animal & Plant Sciences I: Students cultivate an understanding of the diverse and profitable fields of Agriculture. A wide variety of topics are covered including plant and animal biology and technology, leadership skills, college and career exploration, and career skills development. The program emphasizes hands-on, heads-on and hearts-on learning with on-site projects, public speaking events, work placements, and guest speakers. Field trips to businesses, organizations, colleges, and industry events are also included within the class. In the first year, students focus on five animal science and five plant science careers including Veterinary Technician, Wildlife Manager, Animal and Plant Producer, Floral Designer, Arborist/Tree Climber, Animal and Plant Research Scientist, Landscape Architect, Agriculture Business Manager, and Animal Trainer.

Career in Animal & Plant Sciences II: In the second year, students focus on application of knowledge gained in year one. By applying to college, designing and running a year long research project, and working at off-site placements, students experience their interests in a real-world context. All students become FFA members which connects young agriculturalists to others like them and to industry professionals. Opportunities in leadership, competitions, awards and travel are available to members.

Construction Trades I & II: This two-year program is designed to provide 11th and 12th grade students with training in jobsite and shop safety, knowledge of personal protective equipment and OSHA regulations. Students will gain experience working with various hand tools, power tools and construction materials. In

addition to the theory and practical experience the student will receive working in and around the CTI campus; field trips, internships and guest speakers will supplement the course. Within an atmosphere of discipline and attention to detail, rigorous academics will integrate construction practices and job readiness instruction with Career literacy, Trade related to mathematics, and hands-on skill building activities. Students complete their high school education while being exposed to the various aspects of a career in the construction trades and receive training to apply for, interview for and retain employment. An emphasis is placed on customer service, communication skills and work ethic, helping students become better prepared to approach their future as critical thinkers and responsible citizens.

Trade Electricity I & II: This program provides students entry level skills in construction electricity. Courses emphasize job safety, electrical theory, electrical calculations, work ethic, proper tool use and exposure to professional opportunities within the trade. First year focus is on residential installations, followed by second year directed at commercial and industrial installations and include electrical theory, safety/OSHA job-site regulations, commercial/industrial wiring methods, circuit loading calculations, hands & power tool usage, service entrance installation/calculations, and introduction to electric motors/controllers. Students must provide hand tools and code book.

***Heating, Ventilation, and Air Conditioning I & II:** This introductory program will cover the basics of the HVAC trade. It will include basic HVAC/R principles, safety, tools, and professionalism. Students will learn the basics of HVAC electrical wiring, hydronic heat, forced air heat, air conditioning and refrigeration. Students will learn how to install, repair and maintain residential and commercial heating and cooling systems; this includes: proper usage of tools, proper protocol for annual preventative maintenance, and how to properly identify and diagnose issues/malfunctions within HVAC systems.

Welding & Fabrication II: This second year program is geared toward advanced level welding and fabrication using various welding techniques on carbon, stainless steel, and aluminum. It will provide students with all of the advanced skills and confidence needed to join the welding workforce including resume writing and job interview preparation.

***Fashion Design & Merchandising I & II:** this is a two-year program which offers instruction and practical experience in the skills and theory necessary to be employed within the fashion design and merchandising industry. Students will have the opportunity to learn and practice different functions of the merchandising process, including the development of buying plans, promotional materials, events and sales strategies for multiple retail channels. Students will develop visual research skills through applied design principles, and creativity to select appropriate fabrics for the construction of garments by editing and balancing a ready-to-wear collection. They will develop their skills through visual, technical, digital and verbal presentations.

Graphic Design I: Students will be given the opportunity to explore the exciting world of Graphic Arts, Graphic Design, and Multimedia Arts. Students will develop skills and workplace competencies while exploring the many facets of communication careers. Students use a hands-on learning approach using the ADOBE SUITE of creative software where the emphasis is placed on problem solving skills, and communication techniques. As part of the graduation requirement, all students develop and create projects that will be part of a portfolio used in seeking employment or college acceptance. The majority of the work done is project-based. In year one, students will be introduced to design terms and concepts where they will learn and use Adobe Illustrator, Photoshop and InDesign to make projects that utilize these concepts.

Graphic Design II: In year two, students will build upon what they learned in year one with an emphasis on solving more complicated design tasks. They will learn to use digital tools on drawing pads and develop advanced photography skills.

TV/Film Production I & II: This course introduces students to the basics of film production and will help students develop a solid foundation in the three phases of production (Pre-Production...scripts, storyboards etc. ... Production... “Action” and Post Production... editing, voice overs etc.) In addition, students will develop skill and workplace competencies while exploring the production job market. TV/Film students will gain an understanding of how films and television shows are constructed, technically as well as thematically. Students will be introduced to the basic “building blocks” and formal elements of production (narrative, lighting, cinematography, sound editing) that make up the film as well as some fundamental principles of analysis, genre, style, performance and storytelling.

Early Childhood Education I: Students will explore the physical, cognitive, and social-emotional development of children ages birth to eight. Learners will develop and build teaching and guidance skills and will have the opportunity to write lesson plans and a children’s book. Students will design a classroom environment based on developmentally appropriate practices and current state licensing standards.

Early Childhood Education II: During the second year of this program students will explore teaching the individual subject areas and will develop practical strategies for guiding children in their daily routines grounded in educational theory. Students will have the opportunity to study a children’s author and an educational theorist, and will put their previous study into practice by working off-site in a local early childhood setting.

Introduction to Health Occupations: IHOC is a one year introductory course into the health occupations. We explore many health related careers. Topics such as: professionalism, legal and ethical issues, infection control, growth and development, cultural competence and nutrition will be covered. This course is foundational in nature and a solid starting point for continuing in a variety of health care career options. Introduction to Health Occupations is strongly recommended before taking the Nursing Assistant (CNA) course. The second year option is the Nursing Assistant program.

NursingAssistant: This one-year course for seniors introduces the student to the foundation skills necessary for the study of Nursing. Successful students qualify to take the CNA exam. Successful completion satisfies the health requirement for high school graduation. Important Note: Intro to Health Occupations is strongly recommended before taking Nursing Assistant. Work maturity skills and professionalism is essential to success in the Nursing Assistant program.

Culinary Arts / Restaurant Management I & II: Come and explore the art of food! The program explores Culinary Arts, Baking and Pastry and Restaurant Management. We have two full production kitchens that support our forty seat restaurant and catering. As a student in this program, you will learn the real techniques that are needed to be successful in the food service industry. Our culinary program doesn't just include culinary theory; it also provides practical knowledge and skills you can apply to your first job and throughout your professional career. You will cover many units of study including sanitation and safety, nutrition and food science, and, of course culinary and baking techniques. Keep your interest alive and your love for food and cooking fresh by trying new foods and running a real restaurant. Come taste and flavor what we have to offer you!

Cosmetology I: Cosmetology I is the first year of a 2 year program in which students have the opportunity to achieve 500 hours. This part of the course provides foundational training necessary for the development of basic Hand manipulative skills, safety judgements, proper work habits, and professional attributes necessary to achieve competency in entry-level job skills. Good attendance is essential to this course.

Cosmetology II: Cosmetology II is the second year of a 2 year program in which students have the opportunity to achieve 500+ hours. This part of the course builds off of the foundational training necessary to continue to develop hand manipulative skills, safety judgements, increase proper work habits, and professional attributes necessary to achieve competency for achieving and acquiring an entry-level position. The students will more thoroughly develop their foundational skills through practical drill experience and project based learning. Good attendance is essential to this course. At the end of this year, students who successfully complete the program, with at least 1000 hours, will be eligible to apply for the New York State Cosmetology Licensing Exam in order to obtain their license.

Computer Networking & Cybersecurity: This 1 year program in Network + Computer Training is designed to provide the student with the technical knowledge and skills required for an entry-level position in the information and computer technology career field. The program will participate in the NYS Career Exploration and Internship Program (CEIP). The course will prepare you to take the TestOut Network Pro and CompTIA Networking + Certification Examination.

Computer Hardware Technology: (Formerly called A+ Computer Repair.) This 1-year program in Computer Hardware Technology Technician is designed to provide the student with the technical knowledge and skills required for an entry-level position in the information and computer technology field. The program will participate in the NYS Career Exploration and Internship Program (CEIP). The course will prepare you to take the TestOut PC Pro and CompTIA A+ Certification Examinations. Prerequisite: Math Course A.

Security & Law Enforcement I: The first year of the program is designed as an introduction to the field of criminal justice covering the components of the criminal justice system (police, courts, corrections), the interactions of these components through the steps in the criminal justice process, as well as the constitutional requirements of due process of law. Students will become familiar with the law, specifically the New York State Penal Law, the Criminal Procedure Law, and the Vehicle and Traffic Law. Students will also be exposed to controversial topics, such as search and seizure, use of force and police defensive tactics. Students will receive a realistic introduction to the popular subject of crime scene investigation. Students will finish the year by demonstrating their knowledge and skills through realistic scenario-based training.

Automotive Technology I: In this program students work with skilled instructors to learn repair techniques on foreign and domestic cars and light trucks using the latest techniques and computerized diagnostic equipment. Throughout the rigorous two-year program, students will learn to diagnose and repair various vehicle systems and work on real cars with state-of-the-art electronic testing equipment. While working in a modern service and repair facility, students gain daily practical experience repairing vehicles provided by Dutchess BOCES, students and faculty. Completion of this program ensures your readiness for entry-level employment in the automotive industry. Year 1 Topics Include: Lubrication & Cooling Systems, Brakes, Steering, Suspension.

Automotive Technology II: Students dive deeper into the topic of Automotive in Year 2. Topics Include: Electrical System, Engine Performance, Manual Drive Train, and Automatic Transmission. Selected students may be eligible for internship experience at local repair facilities during the second year of this program.

Related Academics:

Career Literacy (CTE English): All programs offer .5 credit per year in high school English, with the exception of Career Exploratory.

Integrated/Specialized Science and Math: Please refer to the CTI Academic Reference Guide.

DCC Early Bridge Program

Part-time Option:

Prerequisite: Students must be at least 16 years of age, be junior or senior status, have permission of their School Counselor and the building Principal and have their own transportation.

Please Note: The cost of this program is based on current fees at DCC and is the sole responsibility of the student and their family. This program does not qualify for federal student aid. Scheduling of DCC courses is the responsibility of the student and **MUST** not interfere with their Webutuck class schedule.

Full-time Option:

Prerequisite: Students **MUST** be senior status (at least 16 years of age), have permission of their School Counselor and the building Principal and have their own transportation. **Please Note:** Students must complete all required courses for high school graduation as determined by their School Counselor while at Dutchess Community College. At a *minimum* these will include, English 101, English 102, Government 121, Economics 105, and one PE course *EACH* semester. The cost of this program is based on current fees at DCC and is the sole responsibility of the student and their family. This program does not qualify for federal student aid.

Students must file the Early Admissions Application to DCC in the Spring of their junior year in consultation with their high school counselor. A Part-Time Early Admissions Application must also be completed and submitted to DCC at the time of registration. This form requires the signature of both the high school counselor and the parent/guardian. Students must agree to have mid-term and final grades sent back to the high school. Final grades will appear on both the Webutuck high school transcript and the DCC transcript. Students will be required to take a college placement exam prior to class registration and admittance into the program. Students and families need to be aware that the Early Admissions program is not designed to function as an alternative to high school. The program is intended for students who possess above average high school grades and maturity, who desire to begin their college experience prior to graduating high school. Early admission applicants are **NOT** guaranteed admission. Decisions made by DCC are final.