2024-2025 Dryden High School

COURSE GUIDE

OUR MISSION

Educate and empower each learner
To achieve excellence and build a better world

2024 - 2025
Catalog of Courses
CEEB CODE 331655

Dryden High School
PO Box 88
Dryden, New York 13053
607-844-8694

Dear Students, Parents, and/or Guardians:

This course guide will serve as a resource for students as well as parents in the crucial planning of course selection. One will find important information such as graduation requirements, all course offerings and Regents mandates. Parental involvement is imperative for the student to reach maximum success during the high school experience.

Counselors are available to assist each student and parent in educational and career planning. Planning well will translate into the optimum educational experience for your child.

All electives are subject to staff and funding availability. All courses must have a minimum number of students requesting it, in order for any course to be offered. To adequately address this "unknown factor", students will choose a first course and an alternate course during their scheduling meeting with their counselor.

Thank you for your continued support and involvement in your child's education.

Mrs. Sarah Powell
High School Principal

Mr. Dale Sweet
High School Assistant Principal

Counselors
Mrs. Michelle Kannus
Mr. Laszlo Engel

Counseling Assistant
Mrs. Michelle Sinnigen

Printed January 2024

New York State Diploma Requirements

Diploma Types: Local Diploma, Regents Diploma, Regents Diploma with Advanced Designation

Subject Area	Minimum Number of Credits
English	4
Social Studies Global History & Geography (2) U.S. History (1) Participation in Government (1/2) Economics (1/2)	4
Science Life Science (1) Physical Science (1) Life or Physical Science (1)	3
Mathematics	3
World Language	1[1]
Visual Arts/Music	1
Physical Education (each semester)	2
Health	.5
Electives	3.5
Total	22

[1]Students with a disability may be excused from this requirement if stated on their IEP

Examination Requirements

Local Diploma Minimum of 55	Regents Diploma Minimum of 65	Regents with Advanced Designation Minimum of 65
English Language Arts (ELA)	English Language Arts (ELA)	English Language Arts (ELA)
Social Studies (1)	Social Studies (1)	Global History & Geography II and US History & Government
Math (1)	Math (1)	Algebra I, Geometry and Algebra II
Science (1)	Science (1)	Living Environment and a Physical Science (Earth, Chemistry or Physics)
Pathway (1)[2]	Pathway (1)[2]	Checkpoint B LOTE Exam`

Regents with Advanced Designation Diploma require 2 additional credits in World Language, or a 5 unit sequence in the Arts or CTE (BOCES campus or our Business, Finance & Computer Program, and Computer Science). The Regents chart above is the Traditional Pathway Testing combination for the Advanced Designation, but there are additional assessment options available as well.

[2]**Pathway Options-** all students must pass 4 required Regents exams. In addition, all students must choose ONE of the following options: CDOS credential or one additional math, science, or social studies Regents or an approved CTE assessment.

WEIGHTED RANK

Dryden High School weighs each student's class rank. What this means is, if a student takes a college-level, concurrent credit course, an Advanced Placement course, an Honors level course or participates in a New Visions Program, then their rank will be weighted according to the following weight factor criteria:

- College-level, concurrent credit courses weighted at 1.1
- Advanced Placement courses weighted at 1.1
- New Visions courses weighted at 1.1
- Honors courses weighted at 1.05

This weighted system benefits those students who accept the additional challenges of advanced level coursework. Please note that the GPA is not weighted, only the class rank. Please see our most up-to-date courses listed below. If your child is interested in these courses, please be sure to contact your child's counselor.

SPECIALIZED PROGRAMMING OPTIONS

THESE COURSES MAY NOT BE OFFERED EVERY YEAR SO PLEASE WORK WITH YOUR COUNSELOR TO PLAN AHEAD

College-Level, Concurrent Credit Courses

- Astronomy 101
- Biology 104
- Biology 105
- Physics 104
- Physics 105
- Env Science 101
- Chemistry 101
- Chemistry 102
- Technical Math 122
- Algebra II
- College Algebra 120
- PreCalculus 138
- Calculus-201
- Computer Programming I
- Computer Programming II
- English 101
- English 102
- Public Speaking
- Adv Video Prod
- Graphic Design
- Photography
- Ceramics B
- Drawing/Painting
- Computer Applications
- Personal Health
- Web Page Design
- Intro to Microsoft Office
- Business Math
- INVEST in Business I & II
- College/Career Prep I & II
- Yearbook
- Career & Financial Mgt
- Business Law
- Spanish 3
- Spanish 4
- Spanish 5

Honors Courses

- Algebra I Honors
- Algebra II Honors
- English 9 Honors
- English 10 Honors
- English 11 Honors
- Earth Science Honors
- Global I Honors
- Global II Honors
- US History & Government Honors

New Visions Courses

-Engineering

-Health and Medical Science

-Life Science

-Exercise Science & Human Performance ***(New 24-25)***

2024-2025 Cayuga-Onondaga BOCES
AP Online Course Offerings
Enrollment will be contingent upon committee decision

AP ART HISTORY (1 credit)

Grade: 12

The AP Art History course is a yearlong survey of art and architecture across centuries, cultures, and styles. In this course students will cover art and architecture created from the Ancient World to the 20th Century and beyond. They will develop an appreciation and understanding of art and architecture using these seven key concepts: Identification and Attribution, Visual Analysis, Contextual Analysis, Finding Meaning, Interdisciplinary Awareness, Reading Skills, and Writing Skills. By using these concepts, students will be able to identify works of art, artists, and styles.

AP Exam: Exam fees are to be paid by the student or by the school district. The individual school district orders the exam on behalf of the student and administers it.

AP CALCULUS AB (1 credit)

Grade: 12

Students in this course will walk in the footsteps of Newton and Leibnitz.

An interactive course framework combines with the exciting on-line course delivery to make calculus an adventure. The course includes a study of limits, continuity, differentiation, and integration of algebraic, trigonometric, and transcendental functions, and the applications of derivatives and integrals.

AP Exam: Exam fees are to be paid by the student or by the school district. The individual school district orders the exam on behalf of the student and administers it.

Required Materials: Graphing calculator Prerequisites: Algebra 1, Geometry, Algebra II, Pre-Calculus or Trigonometry/Analytical Geometry.

AP CALCULUS BC (1 credit)

Grades: 12

Calculus BC can be offered by schools where students are able to complete all the Prerequisites before taking the course. Calculus BC is a full-year course in the calculus of functions of a single variable. It includes all topics taught in Calculus AB plus

additional topics, but both courses are intended to be challenging and demanding; they require a similar depth of understanding of common topics. The Calculus AB subscore is reported based on performance on the portion of the Calculus BC Exam devoted to Calculus AB topics. Prerequisites before studying calculus, all students should complete four years of secondary mathematics designed for college-bound students: courses in which they study algebra, geometry, trigonometry, analytic geometry, and elementary functions. These functions include linear, polynomial, rational, exponential,

logarithmic, trigonometric, inverse trigonometric and piecewise-defined functions. In particular, before studying calculus, students must be familiar with the properties of functions, the algebra of functions, and the graphs of functions. Students must also understand the language of functions (domain and range, odd and even, periodic, symmetry, zeros, intercepts, and so on) and know the values of the trigonometric

functions at the numbers 0, _6 , _4 , _3 , _2 and their multiples.

AP Exam: Exam fees are to be paid by the student or by the school district. The individual school district orders the exam on behalf of the student and administers it. Required Materials: Graphing calculator Prerequisites: Algebra I, Geometry, Algebra II, Pre-Calculus or Trigonometry/Analytical Geometry.

AP COMPUTER SCIENCE A (1 credit)

Grades: 11-12

The AP® Computer Science A course is equivalent to the first semester of a college level computer science course. The course involves developing the skills to write programs or part of programs to correctly solve specific problems. AP® Computer Science A also emphasizes the design issues that make programs understandable, adaptable, and when appropriate, reusable. At the same time, the development of useful computer programs and classes is used as a context for introducing other important concepts in computer science, including the development and analysis of algorithms, the development and use of fundamental data structures, and the study of standard algorithms and typical applications. In addition an understanding of the basic hardware and software components of computer systems and the responsible use of these systems are integral parts of the course.

Technology Requirements: Students must have access to a computer system that represents relatively recent technology (PIII). Schools need to have Java and Bluj software already installed on a designated machine(s) before the course starts and enough memory in their lab machines (128 MB) so that students will be able to compile and run Java and BluJ programs efficiently.

AP Exam: Exam fees are to be paid by the student or by the school district. The individual school district orders the exam on behalf of the student and administers it.

Pre-requisites: Algebra I is required. Algebra II is highly recommended. Students must have taken and successfully passed Web Design and JavaScript.

AP COMPUTER SCIENCE PRINCIPLES (1 credit)

Grades: 9-12

This AP Computer Science Principles (CSP) class uses the CompuScholar Computer Science Foundations[1] curriculum as the primary resource. It is taught as a one-year sequence and covers all required topics in the “Computer Science Principles” course description published by the College Board. The Python language is taught as the basis for programming topics. Students need to have typical computer usage skills prior to

starting this course. Other introductory programming courses are not required, but are helpful. All required concepts are taught from the ground up in a fun, step-by-step manner. The course uses a variety of multimedia content such as full-color, interactive text, narrated instructional videos, and guided exercises. Strong emphasis is placed on hands-on programming labs to demonstrate mastery of lesson concepts.

Required Performance Task: You will design and implement a program that might solve a problem, enable innovation, explore personal interests, or express creativity. You are allowed to collaborate with your partner(s) on the development of the program only. The video and Personalized Project Reference that you submit for this performance task must be completed individually, without any collaboration with your partner(s) or anyone else. You can develop the code segments used in your Personalized Project Reference with your partner(s) or on your own as you work on the performance task during class. You will be provided with a minimum of 9 hours of class time to complete and submit the following: Final program code (created independently or collaboratively) § A video that displays the running of your program and demonstrates functionality you developed (created independently) Code Segments for your Personalized Project Reference (created independently).

Technology Requirements: No local software installation is needed. The Python activities can be completed from any web browser on any device including Chromebooks and tablets.

AP ENGLISH LANGUAGE AND COMPOSITION (1 credit)

Grades: 11-12

An AP course in English Language and Composition engages students in becoming skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts and in becoming skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer's

purposes, audience expectations, and subjects as well as the way generic conventions and the resources of language contribute to effectiveness in writing. The college composition course for which the AP English Language and Composition course substitutes is one of the most varied in the curriculum. **AP Exam:** Exam fees are to be paid by the student or by the school district. The individual school district orders the exam on behalf of the student and administers it.

Pre-Requisites: Teacher recommendation, English I, II (honors), with a B+ average.

AP ENVIRONMENTAL SCIENCE (1 CREDIT)

Grades: 11-12

This course provides students with a global view of their world and their role in it. It examines the scientific principles and concepts required to understand the interrelationships between ocean, land, and atmosphere that guide the natural world and allow Earth to be a planet suitable for life.

Required Materials: Students will be responsible for supplying the materials needed for the labs. Calculator, paper, pen/pencil, newspaper or wax paper, water-based maker, spray bottle, digital camera, plastic cups, navy beans, kidney beans, black beans, black-eyed peas, marker.

AP Exam: Exam fees are to be paid by the student or by the school district. The individual school district orders the exam on behalf of the student and administers it.

AP EUROPEAN HISTORY (1 CREDIT)

Grades: 11-12

In AP European History students investigate significant events, individuals, developments, and processes in four historical periods from approximately 1450 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical comparisons; and utilizing reasoning about contextualization, causation, and continuity and change over time. The course also provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places: interaction of Europe and the world; poverty and prosperity; objective knowledge and subjective visions; states and other institutions of power; individual and society; and national and European identity.

AP Exam: Exam fees are to be paid by the student or school district. The individual school district orders the exam on behalf of the student and administers it.

AP HUMAN GEOGRAPHY (1 credit)

Grades: 11-12

Explore the patterns and processes that impact the way humans understand, use, and change Earth's surface. Geographic models, methods, and tools help you examine the effect that human social organization and interconnections have on our world.

AP Exam: Exam fees are to be paid by the student or by the school district. The individual school district orders the exam on behalf of the student and administers it.

AP MACROECONOMICS (1 credit)

Grades: 11-12

This course places particular emphasis on the study of national income and price-level determination, and also familiarizes students with economic performance measures, the financial sector, stabilization policies, economic growth and international economics. Solid math and writing skills, along with a willingness to devote considerable time to homework and study, are necessary to succeed. Emphasis is placed on critical and evaluative thinking skills.

AP Exam: Exam fees are to be paid by the student or by the school district. The individual school district orders the exam on behalf of the student and administers it.

AP MICROECONOMICS (1 credit)

Grades: 11-12

This course is designed to give students a thorough understanding of the principles of economics that apply to the function of individual decision-makers, both consumers and producers, within larger economic systems. It places primary emphasis on the nature and function of product markets. It also examines factor markets and the role of government in promoting greater efficiency and equity in the economy. Solid math and writing skills, along with a willingness to devote considerable time to homework and study, are necessary to succeed. Emphasis is placed on critical and evaluative thinking skills.

AP Exam: Exam fees are to be paid by the student or by the school district. The individual school district orders the exam on behalf of the student and administers it.

AP PSYCHOLOGY (1 credit)

Grades: 11-12

AP Psychology is a college-level course providing students with an overview of the development of human behaviors and thoughts. Along with preparation for the AP Psychology exam, the goals of this course are to immerse students in modern psychological investigation techniques, to accentuate the ethics and morality of human and animal research, and to emphasize scientific critical thinking skills in application to the social sciences. Psychology is a diverse social and biological science with multiple perspectives and interpretations. The primary emphasis of this course is to help students develop an understanding of concepts rather than memorize terms and technical details; the ultimate goal is to prepare students to successfully take the AP Psychology examination offered in May.

AP Exam: Exam fees are to be paid by the student or by the school district. The individual school district orders the exam on behalf of the student and administers it.

AP STATISTICS (1 credit)

Grade: 12

Advanced Placement Statistics is designed to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Topics introduced include the exploratory analysis of data and numerical techniques to study patterns, methods of valid data collection, probability as the tool for anticipating what distributions of data should look like, and confirming models through statistical inference.

AP Exam: Exam fees are to be paid by the student or by the school district. The individual school district orders the exam on behalf of the student and administers it.

Pre-requisites: Algebra I & II

AP US GOVERNMENT & POLITICS (1 credit)

Grade: 12

This course includes both the study of general concepts used to interpret U.S. government and politics and the analysis of specific examples. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. government and politics.

AP Exam: Exam fees are to be paid by the student or by the school district. The individual school district orders the exam on behalf of the student and administers it.

AP US HISTORY (1 credit)

Grades: 11-12

The AP U.S. History course focuses on the development of historical thinking skills (chronological reasoning, comparing and contextualizing, crafting historical arguments using historical evidence, and interpreting and synthesizing historical narrative) and an understanding of content learning objectives organized around seven themes, such as identity, peopling, and America in the world. In line with college and university U.S.

history survey courses' increased focus on early and recent American history and decreased emphasis on other areas, the AP U.S. History course expands on the history of the Americas from 1491 to 1607 and from 1980 to the present. It also allows teachers flexibility across nine different periods of U.S. history to teach topics of their choice in depth.

AP Exam: Exam fees are to be paid by the student or by the school district. The individual school district orders the exam on behalf of the student and administers it.

AP WORLD HISTORY (1 credit)

Grades: 11-12

Structured around the investigation of five course themes and 19 key concepts in six different chronological periods, from approximately 8000 B.C.E. to the present. Provides a clear framework of six chronological periods viewed through the lens of related key concepts and course themes, accompanied by a set of skills that clearly define what it means to think historically.

AP Exam: Exam fees are to be paid by the student or by the school district. The individual school district orders the exam on behalf of the student and administers it.

ADDITIONAL PROGRAMS

PLATO/Edmentum

PLATO courses at Dryden High School are mainly a credit recovery program but can be used for credit accrual to assist our students in graduating in a timely manner. PLATO provides self-paced online instruction for high school students that is individualized instruction, meets state and national standards. It can be utilized in any number of educational applications including academic intervention services, credit accrual, dropout prevention, summer school, and credit recovery. Courses available are core courses in Math, English, Science, and Social Studies. Teacher or Counselor recommended students only.

READING

Reading class is a course designed to improve literacy skills. Better reading and writing skills will help a student work more quickly and effectively in school. Also, improved reading skills will help a student later in work and personal life. Students' programs are personalized to meet each individual's needs as much as possible. Ongoing goals include reading comprehension (being able to understand what you read), reading fluency (reading out loud effectively), vocabulary, writing, and spelling. The program is arranged in several different types of activities. Among other things students will gather to work as a whole group, work individually on leveled software, meet in small groups to work on reading and writing skills, and also to read independently.

½ - 1 credit

5-Credit Visual Art Sequence For Advanced Designation Diploma

Below is a suggestion for course selection and planning your Art sequence by grade level. You may take any combination of classes as long as prerequisites or foundation classes are met.

The courses offered through the Dryden High School Art Department provide students with experiences from a wide variety of transferable and marketable skills that are creative and versatile, regardless of what field is pursued after high school. The Dryden High School Art Department offers support for students who plan on attending art school as well as those who are not. Students considering an art based career will find experiences that build portfolios for any type of art career including; architecture, graphic design, interior design, landscape architecture, fashion design, medical illustration, package & product design, animation, video & game design, industrial design, surface pattern design, book design & illustration, cartooning, metal & jewelry design, photojournalism, cinematography, culinary arts, film & video production, fine arts and art education. Assistance in portfolio development is integrated within each class.

High School Course Planning

9th Grade: Studio in Art (1 credit)
10th Grade: 1 Art Class (1 credit)
11th Grade: 1 Art Class (1 credit)
12th Grade: 2 Art Classes (2 credits)

Total: 5 credits in Art

*Note: Some students take more than 5 credits in Arts. Grade 9 options only include foundation level courses (Studio in Art and Media Arts). Grades 10-12, students may choose an additional course from any of our class offerings provided that prerequisites are met.

Student 5-Unit Art Sequence NYS Regents Graduation Requirements:

- **5 Credits of Art must be successfully accomplished by 12th grade.**
- **Students are required to maintain a digital portfolio and will be required to submit digital portfolio documentation in June of their Senior year to demonstrate competency in Art sequence coursework.**
- **The final digital portfolio shall consist of at least 15-20 works overall representative of student's best 3-5 works from each class. This sequence is available to all students regardless of their plans after graduation.**

STUDIO IN ART – Grades 9 – 12

Studio in Art students are introduced to the fundamentals of artistic expression. The course includes experiences in drawing, painting, two-and three-dimensional design, and sculpture. The course emphasizes observation and interpretation of the visual environment, visual communication, imagination, and symbolism through an introduction to various visual arts media. The focus of this comprehensive course is the study of how artists convey ideas through application of a variety of media, and the study of historical and contemporary art and artists from a worldwide perspective. The creation of a digital art portfolio is required to meet the Art Department and NYS Learning Standards.

Option in 5 Credit Advanced Designation Diploma Sequence **OR** an Elective

This course fulfills the graduation requirements for one credit of Art/Music.

1 credit

DIGITAL & MEDIA ARTS – Grades 9 – 12

Digital and Media Arts is a yearlong foundations course that explores traditional media as well as new media. This course introduces students to the creative and conceptual aspects of media arts production and computer science, including a range of techniques, genres and styles, mediums, and forms; such as moving image, sound, spatial, and interactive programming and design. Topics may include development of ideas, synthesis of visual and sound components, production and presentation. Focus is on development of ideas and application of form and structure through application of a variety of media, and the study of historical and contemporary art and artists from a worldwide perspective. Students develop media literacy and an understanding of balancing freedom and responsibility as they analyze and create media artworks. The creation of a digital art portfolio is required to meet the Art Department and NYS Learning Standards.

Option in 5 Credit Advanced Designation Diploma Sequence **OR** an Elective

This course fulfills the graduation requirements for one credit of Art/Music.

1 credit

ART ELECTIVE COURSES

These courses may be taken in any sequence once the foundation classes or prerequisite has been successfully completed.
(These elective courses do not meet the graduation requirements for one credit of Art/Music)

STUDIO IN SCULPTURE A & B – Grades 10 – 12

(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING & FUNDING)

Sculpture courses promote expression of ideas through three-dimensional works. Students explore representational and abstract sculpture through subtractive (carving), additive (modeling), and assemblage techniques in one or more media. Materials to be explored may include resistant materials: glass, plaster, stone, wood and metal, as well as, plastic materials: clay, plasticine, paris craft, wire, papier mache, fabric and fibers. Students are introduced to basic techniques in low and high-relief work (Ex: Glass Fusion, Stained Glass, Clay Reliefs… etc.), mask making, figure sculpture, installation/site specific sculpture, assemblage, and mixed media constructions. A study of historical and contemporary sculpture and sculptors from a worldwide perspective, and instruction and practice in the critique process are addressed. Students interested in sculpture, ceramics, industrial design, architecture, interior design, special effects or set design may be interested in this course. The creation of a digital art portfolio is required to meet the Art Department and NYS Learning Standards.

Prerequisite: Sculpture A is a prerequisite for Sculpture B.

Option in 5 Credit Advanced Designation Diploma Sequence **OR** an Elective

½ - 1 credit

ADVANCED STUDIO IN PHOTOGRAPHY: DARKROOM – Grades 10 – 12

(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING & FUNDING)

This course is designed for Art sequence students in grades 11 and 12. It is a full-year advanced-level photography course emphasizing traditional 35mm black and white darkroom development. Students will explore the full potential of the 35mm camera (Auto, Manual Setting, ISO, Shutter Speed, F-Stop, Long Exposures…etc.), as well as accurately exposing and developing film. Students will also have opportunities to experiment with alternative photographic processes such as pinhole cameras (camera obscuras), photograms, sun printing, tintypes, liquid emulsion, polaroid lifts & transfers... etc. This course is recommended for those students who are interested in pursuing a

degree in photography and/or communications, and for those who wish to further explore a wide variety of visual art techniques to develop an art portfolio. A survey of the work of both traditional and contemporary photographers and printmakers, as well as craftsmanship, visual composition, communication of ideas, proper use of equipment, and an overview of photographic history will create a solid foundation upon which students can develop new techniques and ideas. Upon successful completion of this course students will be familiar with materials and processes of traditional darkroom photography. Students are expected to participate in publishing their work, through in-school and community exhibitions, and in submitting their work to various photographic competitions. Work that is created throughout each semester will be combined to strengthen their portfolio development. Note: An adjustable 35mm camera is required. While students are encouraged to use their own 35mm camera, a limited number of 35mm cameras are available to sign-out. The creation of a digital art portfolio is required to meet the Art Department and NYS Learning Standards.

Prerequisite: Studio in Photography (ART 106)

Option in 5 Credit Advanced Designation Diploma Sequence OR an Elective.

1 credit

COLLEGE CREDITS FROM SUNY TC3 FOR CONCURRENT ENROLLMENT

- ART COURSES AVAILABLE TO STUDENTS -

ART COURSE	High School Credit	TC3 Credit*
Advanced Video Production COMM 115	**1**	**3**
Painting ART 115	**1**	**3**
Graphic Design ART 117	**1**	**3**
Ceramics A & B ART 130	**1**	**3**
Studio in Photography ART 106	**1**	**3**
	Total College Credits	**15**

***College credits from SUNY TC3 for Concurrent Enrollment in the above art classes available to students earning 85% or higher for each marking period.**

CERAMICS A & B (ART 130) – Grades 10 – 12

(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING & FUNDING)

In Ceramics A, students will learn basic skills and technical knowledge of traditional hand building methods: pinched forms, coil and slab construction and wheel throwing and will use a range of surface decoration and firing techniques. Students must successfully complete A before continuing in B. Students taking A in one year and B in another year must have approval from the instructor.

In Ceramics B, students will apply the knowledge and skills gained in Ceramics A. Students are expected to demonstrate growth in problem solving, controlling the properties of clay to develop complex forms, strengthening artistic expression and critical thinking.

In Both A & B, historical and contemporary trends in ceramics are studied through research and in-class presentations. Students are expected to express themselves through visual, verbal and written formats. The creation of a digital art portfolio is required to meet the Art Department and NYS Learning Standards. Students interested in a career in ceramics, industrial design, architecture, sculpture, or set design may begin building a portfolio for continuing study in the arts. Students taking Ceramics A in one year & B in another year must have prior approval from the instructor.

Prerequisite: Ceramics A is a prerequisite for Ceramics B

Option in 5 Credit Advanced Designation Diploma Sequence **OR** an Elective

½ - 1 credit/3 TC3 credits (ART 130) when taken with Ceramics A

DRAWING & PAINTING (ART 115) – Grades 10 – 12

(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING & FUNDING)

This course is designed for all students that desire to improve upon their skill set. Students in their first year of Drawing and Painting will work from direct observation of the figure, still-life, landscape and architectural forms. Review with emphasis and understanding of design principles, form, color theory, critical thinking, and problem solving. These concepts will be introduced and illustrated throughout the course by the exposure and analysis of movements across cultures and art history. A variety of drawing and painting techniques and media experimentation, including pencil, ink, charcoal, pastel, acrylic, collage, watercolor, oil paint and mixed media will be covered. The creation of a digital art portfolio is required to meet the Art Department and NYS Learning Standards. This class will help with portfolio development and career and college readiness.

Option in 5 Credit Advanced Designation Diploma Sequence.

1 credit/ 3 TC3 credits (Art 115)

WEB PAGE DESIGN – Grades 11 – 12

This course is an introduction to the development of web pages for the Internet. Students will build basic web pages, and will have opportunities to incorporate more advanced features in the second semester. Topics include HyperText Markup Language (HTML), Cascading Style Sheets (CSS), and Extensible HyperText Markup Language (XHTML), including links, graphics, backgrounds, and colors. More advanced topics will include document types (Strict, Transitional, and Frameset), internet graphics developments, and advanced metatags. The second semester will also incorporate aspects of JavaScript, Flask, and A-Frame (a web framework for building virtual reality experiences based on a foundation of HTML).

Prerequisites: Digital Media Arts

(Cross Listed with Computer Science & Communications Program)

1 credit / 2 TC3 credits (CAPS 152, CAPS 153)

GRAPHIC DESIGN (ART 117) – Grades 10 – 12

Graphic Design is the art of visual communication through two-dimensional works. Students considering a career in the design fields such as advertising, game design, presentation design, packaging design, magazine layout, corporate design, motion graphics, animation, or web design should enroll in this course. Students will apply their knowledge of the elements and principles of design to strengthen their visual literacy. We will explore a range of design techniques using various media and software programs and study the design work of contemporary and historical designers. Possible projects include symbol development/logo design, page layout design, animation, motion graphics, and web design. We incorporate new technologies and ideas into the curriculum as changes develop in the field. Students will also explore applications for learning digital languages such as HTML and CSS as they apply to their work. The creation of a digital art portfolio is required to meet the Art Department and NYS Learning Standards. Written, visual and research-based journal assignments are given regularly as independent work. Students are expected to strengthen their verbal, written and visual communication based deeply in the elements and principles of design.

Option in 5 Credit Advanced Designation Diploma Sequence **OR** an Elective.

(Cross Listed with Computer Science & Communications Program)

1 credit / 3 TC3 credits (ART 117- Design Foundations I)

INTRODUCTION TO VIDEO PRODUCTION – Grades 10 – 12

(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING & FUNDING)

In this semester elective course students will study video as a visual art. Students will learn how to operate a video camera and equipment, and they will learn how to create and edit videos, using Adobe Premiere CC, Audition and AfterEffects software. Students will write process papers on their own productions and engage in verbal critiques of their work as well as provide feedback to their classmates. Some of the projects covered during the semester are as follows: group projects, autobiography, stop motion animation, and documentary. Students will also study lighting and sound design, screenplay writing and storyboarding. Students interested in video, television, animation, gaming, graphic design, advertising, creative writing, journalism and photography will enjoy this class. The creation of a digital art portfolio is required to meet the Art Department and NYS Learning Standards.

Option in 5 Credit Advanced Designation Diploma Sequence **OR** Independent Art Elective.

(Cross Listed with Computer Science & Communications Program)

½ credit (with Advanced Video Production in the same year, 3 TC3 credits COMM 115)

ADVANCED VIDEO PRODUCTION – Grades 10 – 12

(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING & FUNDING)

This is a semester course open to students who have successfully completed the Introduction to Video Production course. Students will apply the concepts learned in the introductory course to develop their own body of work. Students will decide on the focus of the body of work based on personal interests and on consultations with the course instructors and classmates. Students will write their own scripts or literary adaptations to drive their storytelling. Students will continue to advance editing skills through Adobe Premiere CC, Audition and AfterEffects. Students will also explore options for showcasing and exhibiting their work through competitions and festivals. The creation of a digital art portfolio is required to meet the Art Department and NYS Learning Standards.

Art Credit Prerequisite: Introduction to Video Production

Option in 5 Credit Advanced Designation Diploma Sequence

OR Independent Art Elective

(Cross Listed with Computer Science & Communications Program)

½ credit / 3 TC3 credits (COMM 115) when taken in the same year with Introduction to Video Production

STUDIO IN PHOTOGRAPHY (ART 106) – Grades 10 – 12

(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING & FUNDING)

This course is designed for Art sequence students in grades 10, 11 and 12. It is a full-year introductory-level photography course emphasizing photojournalism/storytelling photography as well as exploring a variety of approaches to materials and techniques in the making of prints or multiple images. Students will explore the full potential of the digital camera (Manual Setting; ISO; Shutter Speed; F-Stop; Long Exposures… etc.), as well as the following digital programs: Adobe Photoshop; Bridge and Camera Raw to replicate traditional darkroom techniques. This course is recommended for those students who are interested in pursuing a degree in communications, and for those who wish to further explore a wide variety of visual art techniques to develop an art portfolio. Upon successful completion of this course students will be familiar with materials and processes of photography, printmaking, as well as photojournalistic concerns. This course emphasizes the ethics in copyright infringement laws. A survey of the work of both traditional and contemporary photojournalists, photographers and printmakers and basic guidelines for creating well-designed images, captions and layouts will create a solid foundation upon which students can develop new techniques and ideas. Students are expected to participate in publishing their work, through in-school and community exhibitions, and in submitting their work to various photographic competitions. The creation of a digital art portfolio is required to meet the Art Department and NYS Learning Standards. This class will help with portfolio development and career and college readiness.

Option in 5 Credit Advanced Designation Diploma Sequence **OR** an Elective.

1 credit/ 3 TC3 credits (ART 106)

BUSINESS, FINANCE, & COMPUTER PROGRAM

BUSINESS MAJORS

(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING & FUNDING)

BUSINESS CORE

Introduction to Computers/Business Communications
Career & Financial Management
Computer Applications/Entrepreneurship

5-UNIT CTE SEQUENCE

Business Core (3 courses listed above)
+ 2 Additional Business Courses

Career & Technical Education (*CTE) NYSED Certified (5 credits)*

Students completing a sequence of not less than 5 credits in CTE (Career and Technical Education) may substitute the additional 2 credits of LOTE to achieve the Regents Diploma with Advanced Designation.

Business Course	High School Credit	TC3 Credit Option*
Introduction to Microsoft Office/Business Communications	1	2
Career & Financial Management	1	3
Computer Applications & Entrepreneurship	1	5
College & Career Prep I	1	4
College & Career Prep II	1	1
INVEST/Risk Management I	1	6
INVEST/Risk Management II	1	1
Business Math	1	3
Yearbook & Computer Publications	1	1
Total College Credits Possible		26

BUSINESS, FINANCE, & COMPUTER PROGRAM

College credits from SUNY TC3 for Concurrent Enrollment in Business, Finance, & Computer courses available to students earning 85% or higher each marking period.

CORE COURSES

INTRODUCTION TO MICROSOFT OFFICE/BUSINESS COMMUNICATIONS – Grades 9 – 12

Learn to key by touch—no need to look for the keys you want! Create and edit papers quickly and easily using Microsoft Word. Just think: No more, "It won't do what I want!" "Where did it go?" "What happened?" Know how to apply communications theory to business and daily life. Increase keyboarding speed and accuracy to help you with school, college, and employment. Properly format letters, memos, essays, reports, resumes and professional emails. Practice verbal and non-verbal communication skills. Develop basic abilities with Microsoft Word, Excel and PowerPoint. **Introduction to Microsoft Office/Business Communications is a required course for all Business, Finance, & Computer majors**.
1 credit / 2 TC3 credits (CAPS 100, CAPS 111)

CAREER AND FINANCIAL MANAGEMENT – Grades 9 – 12

Acquire knowledge to make, save and invest your money. Learn about career opportunities, budgeting your money, car and home buying, and filing income taxes. Complete job shadows at local businesses and host business professionals. Participate in interesting hands-on activities and projects that help you learn including working in the Lion's Den School Store. Completion of or current enrollment in Introduction to Computers/Business Communications is recommended. **Career and Financial Management is a required course for all Business, Finance, & Computer majors**.
(Cross Listed with Computer Science & Communications Program)
1 credit / 3 TC3 credits (BUAD 109)

COMPUTER APPLICATIONS & ENTREPRENEURSHIP – Grades 10 – 12

Gain intermediate to advanced skills in Microsoft Word, Excel, Access, and Publisher. Format spreadsheets, databases and business documents. Design storyboards, certificates, flyers, brochures. Produce your own business plan complete with "green" components, calling card, brochure, and financial statements; share your proposed plan with business professionals. Host guest presenters. Participate in an entrepreneurship

seminar and tour a local financial institution. Completion of or current enrollment in Introduction to Computers/Business Communications and Career & Financial Management are a plus. **Computer Applications & Entrepreneurship is a required course for all Business, Finance, & Computer majors.**

1 credit / 5 TC3 credits (CAPS 121, CAPS 131, BUAD 103)

BUSINESS MAJOR (SEQUENCE) COURSES

(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING & FUNDING)

BUSINESS MATH – Grades 11 – 12

Experience how math can be applied in your daily life to help you handle money wisely so you avoid common financial problems. Learn math for payroll, taxes, mortgages, loans, credit cards, sales, marketing, banking, investing, and services. Practice the math you will continue to use throughout your life. **Schedule Business Math as the third unit of math required for graduation or as a Business elective. Prerequisite: Algebra I and Geometry.**

1 credit / 3 TC3 credits (BUAD 222)

COLLEGE & CAREER PREP I & II – Grades 11 – 12

Take control of your future and prepare for college and employment. Become college knowledgeable through research, establishing your criteria, and personal interviews with college students. Develop a college resume, write a college essay, compile a college portfolio, and create a college budget. Find and apply for scholarships, learn about financial aid, and qualify for a local scholarship. Network with college and business professionals. Apply professional etiquette. Enhance communication skills. Participate in college and career seminars, guest presentations, and the year-end award ceremony. *Second year students have higher expectations and more leadership responsibilities.* **Introduction to Microsoft Office/Business Communications is highly recommended along with initiative, commitment, and eagerness to participate in activities**.

1-2 credits or 2 DHS credits with Approved Work Site Component / 4 TC3 credits (ACAD 150, CAPS 141)

INVEST I & II – Grades 10 – 12

Invest in yourself to experience the world of business. Meet CEO's, COO's, VP's and Managers of local businesses and host their visits. Interact with business experts through class presentations, business tours, job shadowing, paid internships, "mock" job interviews, and more. Participate in events with students from area INVEST programs. Attend a "real" insurance conference, network with business professionals, enjoy a luncheon, and listen to well-known keynote speakers like the host of CNN's Cross-Fire, the Ragin' Cajun—James Carville, the winner of Dancing with the Stars—JR Martinez, and Terry Bradshaw of the Pittsburgh Steelers. Qualify for local scholarships ($100-$1,000) and apply for National INVEST scholarships ($500-$5,000). Plan and host the INVEST Award Ceremony; receive National INVEST certification. Show your readiness for college and the world of work. *Second year students have higher expectations and more leadership responsibilities.* **Introduction to Microsoft Office/Business Communications is highly recommended along with initiative and eagerness to participate in activities.**

1-2 credits or 2 DHS credits with Approved Work Site Component / 6 TC3 credits (BUAD 203, BUAD 208)

YEARBOOK AND COMPUTER PUBLICATIONS – Grades 11 – 12

Create, plan, and produce the Dryden High School yearbook. Learn about theme creation, photography, Photoshop editing, and layout design. Use high-tech digital cameras, scanners, and online software programs. Utilize sales techniques, interpersonal skills, file organization, accurate record keeping, and time management skills. Plan and host the yearbook distribution event. *Second year students have higher expectations and more leadership responsibilities.*

Completion of Introduction to Microsoft Office/Business Communications a plus.

1-2 credits / 1 TC3 credit (CAPS 100)

MARKETING

Apply marketing concepts and event management skills to plan, organize, and run school events. Compete against classmates to create, promote and sell your product. Design advertising campaigns including flyers, brochures, audio and video commercials. Explore consumer behaviors, conduct market research, and identify target markets. Learn how businesses apply "green" marketing in their campaigns. Create a marketing strategy for a sport and/or entertainment school function(s). Host guest speakers from the local sports and entertainment fields. Promote the Lion's Den school store.

1 credit

ACCOUNTING I – Grades 11 – 12

Learn the bookkeeping level of day-to-day business records for both service and merchandising businesses. Topics include the basic accounting cycle and financial statements. Through the use of simulations and independent projects, gain an awareness of personal financial responsibility and an appreciation for accuracy in record keeping. Participate in computerized accounting projects. The culminating project includes a simulated activity. Accounting provides practical applications for many careers and personal use and is a great foundation for continued accounting study at the post-secondary level.
1 credit

BUSINESS LAW – Grades 11 – 12

Gain knowledge about the basic principles of law including contracts, consumer issues, insurance, negotiable instruments, wills, torts, landlord-tenant, and court procedures. Emphasis is on contract law and the importance of citizen rights and responsibilities. A mock trial experience may be included. Analyze cases, do a variety of legal projects, field trips, and guest speakers.
1 credit / 3 TC3 credits (BUAD 201)

COMPUTER SCIENCE & COMMUNICATIONS CTE

COMPUTER SCIENCE MAJORS

COMPUTER SCIENCE CORE

Computer Science Explorations

Computer Programming I & II

Career & Financial Management**

5-UNIT CTE SEQUENCE

Computer Science Core (listed above)

+ 2 Additional Computer Science Credits

**Career & Financial Management is a required course for all students seeking a Career & Technical Education (CTE) Endorsement

Suggested Pathway 1
Computer Science Explorations (1 cr.)
Computer Programming I & II (1 cr.)
Career and Financial Management (1 cr.)
Choose 2 credits from:
Topics in Computer Science (1 cr.)
Robotics (1 cr.)
Network Design (.5 cr.)
Fundamentals of Security (.5 cr.)

Suggested Pathway 2
Computer Science Explorations (1 cr.)
Computer Programming I & II (1 cr.)
Career and Financial Management (1 cr.)
Choose 2 credits from:
Topics in Computer Science (1 cr.)
Web Page Design (1 cr.)
Graphic Design (1 cr.)
Video Production (1 cr.)

CONCURRENT ENROLLMENT COLLEGE CREDITS FROM SUNY TC3

COMPUTER SCIENCE COURSES AVAILABLE TO STUDENTS

COMPUTER SCIENCE COURSE	HS Credit	TC3 Credit
Computer Programming I	.5	3
Computer Programming II	.5	3
Career and Financial Management	1	3
Network Design	.5	3
Fundamentals of Security	.5	3
Web Page Design	1	2
Graphic Design	1	3
Video Production	1	3
	Total College Credits	23

Students earning 85% or higher for each marking period will be eligible for Concurrent Enrollment College credits from SUNY TC3.

COMPUTER SCIENCE CORE COURSES

COMPUTER SCIENCE EXPLORATIONS – Grades 9 – 12

This course provides an introduction to students on the breadth of the field of computer science through an exploration of engaging and accessible topics. This course is designed to focus on the conceptual ideas of computers and help students understand why certain tools or languages might be utilized to solve particular problems. The goal of this class is to develop the computational practices of algorithm development, problem solving and programming. This will be done within the context of problems that are relevant to the lives of today's students. Students will be introduced to topics such as interface design, limits of computers, and societal and ethical issues. Upon completion of this course, students will be prepared to engage in more challenging computer science topics such as programming, web development, and networking. **Computer Science Explorations is a required course for all CSC majors.**

1 credit

COMPUTER PROGRAMMING I – Grades 10 – 12

This course introduces students to computer programming as a discipline to solve problems and process information. Topics include computer memory, variables, data types, algorithms, decisions, repetition, files, arrays and modules using a common programming language such as Python, Java, or C++. **Computer Programming I is a required course for all CSC majors. Computer Programming I & II can also be scheduled as the third unit of math required for graduation.**

Prerequisites: Prior completion of, or current enrollment in Algebra I. Prior exposure to CS/programming topics recommended.

(Cross Listed with Math)

1 credit / 3 TC3 college credits (CSCI 160)

COMPUTER PROGRAMMING II – Grades 10 – 12

This is an introductory computer science course covering problem-solving, algorithm development, and object-oriented design in a modern programming language such as Python, Java, or C++. Specific topics include objects, methods, data structures, classes, abstraction, encapsulation, inheritance, polymorphism, and exception handling. Applications are from a variety of areas. **Computer Programming II is a required course for all CSC majors. Computer Programming I & II can also be scheduled as the third unit of math required for graduation.**

Prerequisites: Prior completion of, or current enrollment in Algebra I. Prior completion of Computer Programming I with a grade of C or above.

(Cross Listed with Math)

1 credit / 3 TC3 college credits (CSCI 165)

CAREER AND FINANCIAL MANAGEMENT – Grades 9 – 12

Acquire knowledge to make, save and invest your money. Learn about career opportunities, budgeting your money, car and home buying, and filing income taxes. Complete job shadows at local businesses and host business professionals. Participate in interesting hands-on activities and projects that help you learn including working in the Lion's Den School Store. Completion of or current enrollment in Introduction to Computers/Business Communications is recommended. **Career and Financial Management is a required course for all CSC majors.**

(Cross Listed With Business)

1 credit / 3 TC3 credits (BUAD 109)

COMPUTER SCIENCE ELECTIVES

MODERN TOPICS IN COMPUTER SCIENCE – Grades 10 – 12

Computer science is an ever changing discipline. Any student of computer science should be familiar with a range of topics such as computer design, algorithms, programming language design, programming methodology, data structures, information retrieval, computer networks, cyber security and artificial intelligence. In addition, computing students should be aware of the effects their field has had, and will continue to have, on individuals, organizations, and society. This course gives students an opportunity to review the breadth of computer science, to focus on some key ideas, and to reflect on its wider impact. Students will have opportunities to delve deeper into topics presented, and to engage in topics of their interest.

1 credit

ROBOTICS – Grades 10 – 12 (offered even Fall to odd Spring years)

In this course, students will design and build robots to solve real-world problems. Using engaging robotics-based activities, students will build and enhance basic coding skills as they learn about project flow, loops, conditionals, and algorithms. Students will use simulation software and build prototypes to test their designs. The year will begin with virtual robotics and will include both block based coding as well as an introduction to Python. Students will then apply their programming skills to code physical robots. Students will work together to solve the challenges that are presented and engage in friendly classroom competitions. Additionally, students will explore career opportunities, employer expectations, and educational needs in the robotic and automation industry. **Prerequisites:** Prior completion of, or current enrollment in, Algebra I.

1 credit

NETWORK DESIGN – Grades 11 – 12 (offered odd years, Fall semester)

Covers design, installation, and maintenance of local area networks. Topics include installation of hardware and network software, installation of application software, system configuration, hardware and software testing, setting up directories, user accounts, and user access rights. Discussion of different network topologies, medium, and software are also included.

1 credit / 3 TC3 credits (CIS 132)

(Anticipated Fall 2025)

FUNDAMENTALS OF SECURITY – Grades 11 – 12 (offered even years, Spring semester)

This course will focus on the practical and theoretical knowledge of information security. Topics covered include network security threats, mitigation/defense techniques, virtual private networks (VPNs), firewalls, intrusion detection, and security policies in the information

technology organization. The course will introduce students to the requirements and outcomes covered by the CompTia Security+ exam.

1 credit / 3 TC3 credits (CIS 224)

(Anticipated Spring 2026)

WEB PAGE DESIGN – Grades 11 – 12

This course is an introduction to the development of web pages for the Internet. Students will build basic web pages, and will have opportunities to incorporate more advanced features in the second semester. Topics include HyperText Markup Language (HTML), Cascading Style Sheets (CSS), and Extensible HyperText Markup Language (XHTML), including links, graphics, backgrounds, and colors. More advanced topics will include document types (Strict, Transitional, and Frameset), internet graphics developments, and advanced metatags. The second semester will also incorporate aspects of JavaScript, Flask, and A-Frame (a web framework for building virtual reality experiences based on a foundation of HTML).

Prerequisites: Digital Media Arts

(Cross Listed with Art)

1 credit / 2 TC3 credits (CAPS 152, CAPS 153)

GRAPHIC DESIGN (ART 117) – Grades 10 – 12

Graphic Design is the art of visual communication through two-dimensional works. Students considering a career in the design fields such as advertising, game design, presentation design, packaging design, magazine layout, corporate design, motion graphics, animation, or web design should enroll in this course. Students will apply their knowledge of the elements and principles of design to strengthen their visual literacy. We will explore a range of design techniques using various media and software programs and study the design work of contemporary and historical designers. Possible projects include symbol development/logo design, page layout design, animation, motion graphics, and web design. We incorporate new technologies and ideas into the curriculum as changes develop in the field. Students will also explore applications for learning digital languages such as HTML and CSS as they apply to their work. The creation of a digital art portfolio is required to meet the Art Department and NYS Learning Standards. Written, visual and research-based journal assignments are given regularly as independent work. Students are expected to strengthen their verbal, written and visual communication based deeply in the elements and principles of design.

Option in 5 Credit Advanced Designation Diploma Sequence **OR** an Elective.

This course assists in the development of an AP 2D Design portfolio.

(Cross Listed with Art)

1 credit / 3 TC3 credits (ART 117- Design for Electronic Media)

INTRODUCTION TO VIDEO PRODUCTION – Grades 10 – 12

(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING & FUNDING)

In this semester elective course students will study video as a visual art. Students will learn how to operate a video camera and equipment, and they will learn how to create and edit videos, using Adobe Premiere CC, Audition and AfterEffects software. Students will write process papers on their own productions and engage in verbal critiques of their work as well as provide feedback to their classmates. Some of the projects covered during the semester are as follows: group projects, autobiography, stop motion animation, and documentary. Students will also study lighting and sound design, screenplay writing and storyboarding. Students interested in video, television, animation, gaming, graphic design, advertising, creative writing, journalism and photography will enjoy this class. The creation of a digital art portfolio is required to meet the Art Department and NYS Learning Standards.

Option in 5 Credit Advanced Designation Diploma Sequence **OR** Independent Art Elective.

(This course does **NOT** meet the graduation requirements for one unit of Art/Music.)

½ credit (with Advanced Video Production in the same year, 3 TC3 credits COMM 115)

ADVANCED VIDEO PRODUCTION – Grades 10 – 12

(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING & FUNDING)

This is a semester course open to students who have successfully completed the Introduction to Video Production course. Students will apply the concepts learned in the introductory course to develop their own body of work. Students will decide on the focus of the body of work based on personal interests and on consultations with the course instructors and classmates. Students will write their own scripts or literary adaptations to drive their storytelling. Students will continue to advance editing skills through Adobe Premiere CC, Audition and AfterEffects. Students will also explore options for showcasing and exhibiting their work through competitions and festivals. The creation of a digital art portfolio is required to meet the Art Department and NYS Learning Standards.

Art Credit Prerequisite: Introduction to Video Production

Option in 5 Credit Advanced Designation Diploma Sequence

OR Independent Art Elective

(Cross Listed with Computer Science & Communications Program)

½ credit / 3 TC3 credits (COMM 115) when taken in the same year with Introduction to Video Production

ENGLISH

ENGLISH 9

The English 9 course is built upon reading from the major genres: short stories, novels, drama, poetry, and non-fiction. Some goals for the class are 1) expanding vocabulary skills; 2) discussing readings in depth; and 3) writing with insight, accuracy, and clarity. Grammar is reviewed and reinforced. A research paper/project is introduced. The New York State Regents exam is comprehensive and given in the junior year. This course is aligned with the New York State Common Core Learning Standards and introduces Common Core Regents preparation.
1 credit

ENGLISH 9 HONORS

English 9 Honors is aligned with the New York State Common Core Learning Standards and designed for the student with a strong interest in reading, writing, and speaking. The class covers much of the material presented in English 9 in more depth. In addition, the class explores other challenging books and topics. Readings will include short stories, novels, drama, poetry, and nonfiction. Some goals for the class are 1) fostering a love of reading literature and non-fiction; 2) expanding vocabulary skills; 3) discussing readings in depth; 4) writing with insight, accuracy, and clarity; 5) using and citing research materials; 6) speaking comfortably in front of a classroom; and 7) using creativity in writing and projects.
Prerequisite: Students must have an average of 85% or higher in ELA 8, score a 3 or 4 on the ELA State test, and obtain a teacher recommendation to select this course. Students must complete a summer reading project and maintain an 85% or higher average to remain in the course.
1 credit

ENGLISH 10

English 10 is a survey course of British Literature, fiction, nonfiction, and poetry from its origins in *Beowulf* to the 20th century. Emphasis is placed upon interpretation and analysis skills, spelling and vocabulary, as well as expository writing. A research paper is required. This course is aligned with the New York State Common Core Learning Standards and continues Common Core Regents preparation from English 9.
1 credit

ENGLISH 10 HONORS

This course is for students who want to go beyond the requirements of the regular English 10 course in British literature. Students will study all of the British literature in the regular curriculum, and they will also read more complex texts and nonfiction. Like the regular English 10, there is a mandatory research paper. The vocabulary accompanying the course is advanced. Overall, this course is taught at a faster rate; the instructor delves into texts with more depth. English 10 Honors is aligned with the New York State Common Core Learning Standards and prepares students for English 11 Honors, and the ELA Common Core Regents.
Prerequisite: Students who have an 85% or higher in English 9 or 9H and who obtain a teacher recommendation may select this course. Students must complete a summer reading project and maintain an 85% or higher average to remain in the course.
1 credit

ENGLISH 11

American Literature is the focus of this course. Students read a variety of American novels, stories, poems, and other works. Both American classics and modern popular works are taught. Emphasis is placed upon reading comprehension and analytical skills, listening skills, spelling and vocabulary, and expository writing. Instruction also focuses on skills needed for the New York State English Language Arts Common Core Regents Exam, which is given in January and June. This course is aligned with the New York State Common Core Learning Standards and builds upon skills learned in grades 9 and 10. A research paper is required.
1 credit

ENGLISH 11 HONORS

This program is an intensive course in analysis of American Literature. Students write from literature and from personal experience. Students are expected to read from a list of classic novels throughout the year in addition to regularly assigned literature from an anthology. Opportunities for public speaking and problem solving are provided. A research paper is required. Instruction focuses on skills needed for the New York State Common Core Regents Exam, which is given in January and June. This course is aligned with the New York State English Language Arts Common Core Learning Standards and builds upon skills learned in grades 9 and 10.
Prerequisite: Students must have an average of 85% or higher in English 10 or 10H and obtain a teacher recommendation to select this course. Students must turn in summer reading projects on the first day of school and maintain an 85% average or higher to remain in this course.
1 credit

SENIOR LEVEL ENGLISH COURSES

MYTHOLOGY 1

This course offers a study of mythology from the Greco-Roman, Norse, and Egyptian traditions. Students will study each tradition's pantheons, its heroes as well as various creation and origin stories. Students will be introduced to the concepts of archetypes and the monomyth as common threads to be explored throughout the course. Pop culture interpretations of traditional myths will also be a subject of further investigation. Students will be required to complete an extended research paper or project using MLA documentation, several essays as well as group and individual projects.
½ credit

MYTHOLOGY 2

This course offers a study of mythology from the Japanese, Chinese, Native American, Indian, and Oceanic traditions. Similar to Mythology 1, students will still study the various pantheons, heroes, and creation stories, but units will take a more comparative and cross-cultural approach, integrating mythological stories from across traditions. Students will continue to look at archetypes and the monomyth as common threads to be explored in the course. Students will be required to complete an extended research paper or project using MLA documentation, several essays as well as group and individual projects. **While not required, it is recommended that students take Mythology 1 before enrolling in Mythology 2.**
½ credit

CREATIVE WRITING

Students will write poetry, fiction, song, autobiography, and drama. We will work on developing right-brained, imagistic thinking. Each student is encouraged to explore different genres, but he/she will be allowed to develop his/her own strengths in a chosen genre. Journal writing is a requirement.
½ credit

COMMUNICATION

This course is designed to connect communicative theory with practice. We will explore different aspects of effective communication including sending messages and active listening. We will study communication as a process, analyzing various situations, and completing a number of projects. Topics include, but are not limited to: interpersonal communication, non-verbal communication, body language, listening, small group communication and public speaking.
½ credit

DRAMA

The elective in Drama will include selections such as *Antigone, Importance of Being Earnest* and films such as *Catch me if you Can, North by Northwest, Arsenic and Old Lace* and *Wait Until Dark.* It will strengthen and enhance skills in ensemble work/teamwork, movement, voice, scene and play analysis, scene work including an emphasis on character development and emotional truth, improvisational skills, character analysis and performance. The course will also include performance as well as independent script writing.
½ credit

ENGLISH 12 A

English 12 A is a half-year course centered on academic and real-world writing and nonfiction reading. Students will write college essays, memoirs, research papers, and essays as well as resumes and cover letters. Students will focus on vocabulary and grammar. Increasing independent reading habits will also be a semester-long priority. Students will be required to complete an extended research paper or project using MLA documentation.
½ credit

ENGLISH 12 B

English 12 B is a half-year course centered on literature, primarily the novel. Students will read novels from the science fiction, historical fiction, and realistic fiction genres. As in English 12 A, vocabulary and grammar will be priorities. Students will continue to strengthen independent reading habits. In addition, students will be required to complete an extended research paper or project using MLA documentation, several essays as well as group and individual projects.
½ credit

PUBLIC SPEAKING/PUBLIC COMMUNICATION

This semester course provides an opportunity for high school students to earn 3 college credits from TC-3 while they are still in high school. This course is designed to introduce students to the art of public speaking and to help them become more effective communicators. We will cover introductory, informative, persuasive, special occasion and impromptu speeches, with the potential for more if time allows. Students will discover how to research, organize, and prepare information for a variety of communicative purposes. Focus is on performance and analysis. Students must maintain at least a 75% average to earn college credit.
½ credit / 3 TC3 college credits

MASS MEDIA
(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING & FUNDING)

This course is designed to analyze mass media and the influence of media on our lives. We will explore social networking, pod casting, magazine and newspaper journalism, powerpoint presentations and multimedia news production. Our thoughts, feelings, society and culture are all affected by mass media.
This course does not meet the NCAA English requirement.
½ credit

YOUNG ADULT LITERATURE

Students will read and study the genre known as YA and take a closer look at how the world looks to the teenage narrator. The course will revolve around the reading of YA novels focused on teen issues such as identity, mental health, and relationships as well as YA's take on other popular genres such as the science fiction subgenre of the dystopian novel and fantasy through the use of folklore and mythology. Taking on a book club model, students will work in small groups, often reading different titles related to an overall theme or focus. Students will write several essays, participate in class discussions, give presentations, and complete projects to add depth to their understanding of the topics studied.
½ credit

*Please note that YA novels incorporate real life moments. As adults we hope students never have to experience some of the more damaging realities presented in these novels, but this would be naive. Just as in real life, the teenagers in these novels sometimes engage in risky

behaviors like drinking and substance abuse, make bad choices, use bad language, succumb to peer pressure, have sexual relationships, and are the victims of abuse; therefore, it is imperative that teen readers have the opportunity to explore such situations safely and vicariously. Censoring YA literature lessens the impact these titles can have on the reader and the discussions that will hopefully spring from reading them.

ENGLISH 101 – Academic Writing II
(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING & FUNDING)

This semester course provides an opportunity for high school students to earn 3 college credits from TC-3 while they are still in high school. **Students must possess superior English skills to succeed in this course as it is writing intensive.** The course is centered on the study of the rhetorical modes of writing: definition, process, narration, description, compare/contrast, cause/effect, and argumentation. Context for assignments, which may be centered on a certain theme, is provided by scholarly readings. Mastering the standard forms of the language is another focal point of the course. Students will write a number of short, researched essays, and one extended research paper using MLA documentation. Students need a final course average of 75 in order to receive transferableTC3 college credit.
Prerequisite: Students must score at least an 85 on the English Language Arts Common Core Regents Exam and have an English 11 final course grade of at least 85. Additionally, students must be recommended by their English 11 teacher and have completed the summer reading assignment upon arrival in September.
½ credit / 3 TC3 college credits

ENGLISH 102 – Approaches to Literature
(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING & FUNDING)

Unlike English 101, which focuses on nonfiction from a variety of disciplines, English 102 focuses on literature as a fine art. Students will analyze novels, short stories, drama, and poetry from world literature. While there is an emphasis on modern literature, this course is still writing intensive. Students write analytical essays discussing various techniques that writers employ in the pieces of literature studied. Students will write a number of short, researched essays, and one extended research paper using MLA documentation. Students need a final course average of 75 in order to receive transferable TC3 college credit.
Prerequisite for this course is English 101 with a minimum final average of 75.
½ credit / 3 TC3 college credits

FAMILY AND CONSUMER SCIENCE

GOURMET FOODS - Grades 10 – 12

Gourmet Foods is a 20-week course that covers a variety of topics including kitchen safety and sanitation, cooking vocabulary, equipment, nutrition, and eating well on a budget. Guest presenters provide an opportunity for networking as you learn more about food, ***and*** career options that you may not have previously considered. Most importantly, in Gourmet Foods you'll learn practical cooking and planning skills as you prepare and sample recipes in the food lab.
½ credit

GLOBAL FOODS - Grades 10 – 12

Gourmet Foods is a 20-week course where students will compare cuisines, ingredients and preferred cooking methods of various cultures throughout the world and the United States. The influence of traditions and regional and cultural perspectives on food choices and culinary practices will be emphasized. Students will examine the issues and conditions that affect the availability and quality of food in the global market, and apply advanced cooking techniques, including the use of specialty and advanced equipment in the preparation of food dishes.
½ credit

SEWING WORKSHOP – Grades 10 – 12
(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING & FUNDING)

Sewing Workshop is a 20 week course for students in grades 10 – 12. If you are creative and looking for a hands-on elective to learn how to use a sewing machine to create a functional item, this class is for you. Students will begin the course with an exploration of fashion and personal clothing style before developing a basic knowledge of sewing terminology, equipment, and sewing construction skills. Projects may include a pillow case, pajama bottoms, and then a garment of choice. No prior sewing experience required.
½ credit

MATHEMATICS SEQUENCES 2024-2025

The following courses offer the student the option for a

Regents Diploma (sequence 1 & 2) or a

Regents Diploma with Advanced Designation (sequence 3, 4 & 5).

*Please review graduation requirements on page 1.

Sequence 1

Pre-Algebra

Algebra 1 (R)

Geometry (NR)

Modern Math (NR) or Math 122* (C)

Sequence 2

Algebra 1 (R)

Geometry (R or NR)

Business Math or Modern Math (NR)

Modern Math (NR) or Math 122* (C)

Sequence 3*

Algebra 1 or Algebra 1 Honors (R)

Geometry (R)

Trigonometry & Statistics

Algebra 2 (R) & (C)

Sequence 4*

Algebra 1 or Algebra 1 Honors (R)

Geometry (R)

Algebra 2 Honors (R)

College Algebra 120 & Precalculus 138 (C)

Sequence 5 (Accelerated)*

Algebra 1 Honors (R) (8th grade)

Geometry (R)

Algebra 2 Honors (R)

College Algebra 120 & Precalculus 138 (C)

Calculus 201 (C)

(NR) indicates Non-Regents course

(R) indicates Regents Course

(C) indicates college credit through TC3

**** Indicates college preparatory coursework in mathematics***

PRE-ALGEBRA

This course contains a general introduction to algebra and other areas of basic skills in mathematics. Problem-solving topics and techniques are introduced. Emphasis is given to preparation for the Algebra I Regents Exam the following year.

Prerequisite: Math 8

1 credit

ALGEBRA 1

The fundamental purpose of this course in Algebra is to formalize and extend the algebraic topics that students learned in the middle grades. This algebra-based course will cover the topics outlined in the high school Next Generation Learning Standards for Algebra 1 through the introduction of modeling, discourse, and problem-solving. Emphasis is given to preparation for the Algebra 1 Regents Exam.

Prerequisite: Course credit in Math 8 and/or Pre-algebra.

1 credit

ALGEBRA 1 HONORS

The fundamental purpose of this course in Algebra is to formalize and extend the algebraic topics that students learned in the middle grades. This algebra-based course will cover the topics outlined in the high school Next Generation Learning Standards for Algebra 1. Algebra 1 Honors requires greater independent work habits as it moves at a faster pace. This provides opportunities for highly challenging coursework to increase algebraic discussion and deepen

students' understanding of algebraic concepts. Emphasis is given to preparation for the Algebra 1 Regents Exam.

Prerequisite: 90 or higher average in Math 8 and teacher recommendation.

1 credit

GEOMETRY (R)

The fundamental purpose of this course in Geometry is to formalize and extend the geometric experiences from the middle grades. This formal proof-based course will cover the topics outlined in the high school Next Generation Learning Standards for Geometry. Emphasis is given to preparation for the Geometry Regents Exam.

Prerequisite: Course credit in Algebra 1 and a recommended score of 75 on the Algebra 1 exam.

1 credit

GEOMETRY (NR)

The fundamental purpose of this course in Geometry is to formalize and extend the geometric experiences from the middle grades. This course will cover the topics outlined in the high school Next Generation Learning Standards for Geometry. This course takes a more informal approach to the study of geometric concepts in comparison to Regents Geometry. Students in this course will not prepare for or take the Geometry Regents exam.

Prerequisite: Course credit in Algebra 1

1 credit

TRIGONOMETRY & STATISTICS

Building on their previous work with functions, and on their work with trigonometric ratios and circles in Geometry, students now use the coordinate plane to extend trigonometry to model periodic phenomena. Students will extend their understanding of probability to include unions, intersections, complements, conditional probabilities, and the concept of independence. Data distributions will be analyzed along with methods of collecting data. Students explore using data from a random sample to estimate a population mean or a population proportion and use simulation to create an understanding of margin of error. The final focus of study is on drawing conclusions, such as statistical significance, based on data from a statistical experiment. This is year one of a two-year sequence toward the Algebra 2 Regents exam.

Prerequisite: Course credit in Regents Geometry with teacher recommendation.

1 credit

ALGEBRA 2 (MATH 120 COLLEGE ALGEBRA)

Building on their work with linear, quadratic, and exponential functions from Algebra 1, students extend their repertoire of functions to include polynomial, rational, radical, and logarithmic functions. Students work closely with the expressions that define the functions and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and exponential equations using logarithms. This is year two of a two-year sequence toward the Algebra 2 Regents exam. Students will take the Algebra 2 Regents exam in June.

Prerequisite: Course credit in Trigonometry & Statistics, teacher recommendation, and a minimum of 65 on the Trigonometry & Statistics final exam.

1 credit/4 TC3 college credits

ALGEBRA 2 HONORS

Building on their work with linear, quadratic, and exponential functions, students extend their repertoire of functions to include polynomial, rational, and radical functions. Students work closely with the expressions that define the functions and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. Building on their previous work in Algebra 1 & Geometry, students will examine probability distributions, identify different ways of collecting data, and use the coordinate plane to extend trigonometry to model periodic phenomena. This course will cover the topics outlined in the high school Next Generation Learning Standards for Algebra 2. Students in this course will take the Algebra 2 Regents exam in June.

Prerequisite: Course credit in Geometry, teacher recommendation, and a minimum of 80 on both prior mathematics Regents exams.

1 credit

MODERN MATHEMATICS

This course is designed as a third or fourth year of mathematics for students who have already passed a mathematics Regents exam. Topics may include consumer mathematics, intermediate algebra, geometry, logic, statistics, and probability.

Prerequisite: Course credit in at least 2 mathematics courses and a passing score on 1 mathematics Regents exam.

1 credit

COLLEGE ALGEBRA (MATH 120)

(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING AND FUNDING)

This course covers fundamental algebra topics, including equations and inequalities, functions and graphing, polynomial and rational functions, and exponential and logarithmic functions.

Prerequisite: Course credit for Algebra 2 Honors and a minimum of 65 on the Algebra 2 Regents exam.

½ credit / 4 TC3 college credits

PRECALCULUS (MATH 138)

(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING AND FUNDING)

This course continues the study of fundamental algebra and trigonometry topics, including trigonometric identities and applications, analytic geometry, systems of equations, sequences, series, and probability.

Prerequisite: Minimum of 75 in College Algebra

½ credit / 4 TC3 college credits

TECHNICAL MATHEMATICS (MATH 122)

Designed specifically to meet the needs of students in technology programs, this course is a study of fundamental algebraic operations, linear equations, functions, applied geometry, trigonometry, and vector analysis. MATH 122 fulfills the SUNY General Education Mathematics requirement. This is an applied mathematics course.

Prerequisites: 3 credits in high school mathematics; 65 or greater on Algebra 1 regents; Recommendation from a math teacher.

1 credit / 3 TC3 college credits

CALCULUS (MATH 201)

(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING AND FUNDING)

This course deals with the mathematics of change and motion and is designed for advanced high school mathematics students. Topics include limits, continuity, derivatives of algebraic and trigonometric functions, anti-derivatives, and the definite integral. Applications include curve sketching, optimization problems, and related rates.

Prerequisite: Minimum of 73 in Precalculus.

1 credit / 4 TC3 college credits

COMPUTER PROGRAMMING I – Grades 10 – 12

This course introduces students to computer programming as a discipline to solve problems and process information. Topics include computer memory, variables, data types, algorithms, decisions, repetition, files, arrays and modules using a common programming language such as Python, Java, or C++. **Computer Programming I is a required course for all CSC majors. Computer Programming I & II can also be scheduled as the third unit of math required for graduation.**

Prerequisites: Prior completion of, or current enrollment in Algebra I. Prior exposure to CS/programming topics recommended.

½ credit / 3 TC3 college credits (CSCI 160)

COMPUTER PROGRAMMING II – Grades 10 – 12

This is an introductory computer science course covering problem-solving, algorithm development, and object-oriented design in a modern programming language such as Python, Java, or C++. Specific topics include objects, methods, data structures, classes, abstraction, encapsulation, inheritance, polymorphism, and exception handling. Applications are from a variety of areas. **Computer Programming II is a required course for all CSC majors. Computer Programming I & II can also be scheduled as the third unit of math required for graduation.**

Prerequisites: **Prior completion of, or current enrollment in Algebra I. Prior completion of Computer Programming I with a grade of C or above.**

½ credit / 3 TC3 college credits (CSCI 165)

MUSIC

HS CONCERT BAND

The Concert Band is Dryden High School's large instrumental ensemble. This ensemble is open to all HS students who play a standard band instrument. Students enrolled in the course will have weekly pull out lessons. Those studying privately on their band instruments may opt out of the weekly lessons. The Concert Band performs four curricular concerts and several community concerts per year. These concerts occur outside the regular school day. Students enrolled in Concert Band may also play in the small ensembles offered by the school. Those who wish to join band for the first time should contact the band director.
½ - 1 credit

SENIOR HIGH CHORUS

The Senior High Chorus is an ensemble of mixed voices that performs a variety of music ranging from classical to popular. The group meets every other day and is open to all students who are interested in learning how to read music and sing with proper vocal technique. All students will participate in small group lessons that rotate during the school day. The ensemble performs three concerts a year. No prior experience is required other than a love for singing!
½ credit-1 credit

MUSIC THEORY
(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING AND FUNDING)

Students will be instructed in the basics of musicianship, music literacy and Common Practice Theory. Composition and keyboard skills will also be explored. Students will be expected to sing. Assessments will include written tests, playing tests, sight-singing hearings, and group and independent projects.
1 credit

MUSICAL THEATER HISTORY
(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING AND FUNDING)

Calling all performers, technical theater artists, and musical enthusiasts! This course will offer students a chance to explore the development of musical theater and the genre’s role in American culture throughout our history. The class will feature project based exploration as well as practical experience with both the technical and performance aspects of musical

theater. There will also be chances to connect with professionals in the field. Come discover the little known facts of your favorite musicals and learn how the art form evolved to what it is today. No prior music or theater experience is required to take this class, just a desire to learn and have fun!

½ - 1 credit

PHYSICAL EDUCATION & HEALTH

PHYSICAL EDUCATION

Physical education is a requirement for all students. The program is geared to instill in all participants an attitude of good health and physical fitness. Students in grades 9, 10, 11 and 12 take physical education three days out of each six-day cycle. The program includes a variety of lifetime leisure activities, cooperative games, competitive team and individual sports in exercise and fitness related activities. PE classes are held outdoors throughout the school year, so please dress accordingly. The student successfully completing the program will earn 1/2 credit of credit each year. Physical education grades are averaged into the students' overall GPA.

2 credits in PE are required for graduation.

½ credit per year

HEALTH

This course is discussion-oriented, dealing with individual and community health. The course is divided into three components: You, Your Body, and Your Choices. Community resources and films are essential aspects of the topics discussed. Health 10 is a graduation requirement for all students. Typically, this course is taken in the sophomore year.

½ credit

PERSONAL HEALTH (HLTH 206 PERSONAL HEALTH)
(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING & FUNDING)

Seniors who take this course will discuss and assess a wide range of health topics. College level course work will include in depth analysis on nutrition, fitness, human sexuality, drug use, consumer health, and environmental health. An ability to work independently will be needed for successful completion of this course. Students need a final course average of 75 in order to receive transferableTC3 college credit.

Prerequisite: Health 10

½ credit / 3 TC3 credits

LIFEGUARDING COURSE
(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING AND FUNDING)

The American Red Cross lifeguard training and certification are imperative to the process of getting hired on as an official Red Cross lifeguard. This detailed training includes both testing of hands-on skills as well as comprehension on written tests. The certification, which includes First Aid, CPR and AED training, is valid for two years upon completion and is accepted nationwide. The American Red Cross is the most respected source for training and certification of this kind. Once the class is successfully completed students will pay $35 to the American Red Cross

Prerequisite: Students must be at least 15 years old by the last day of class and Students must pass a pre-course swimming skills test prior to taking lifeguarding courses.

¼ to ½ credit

SCIENCE

All students are expected to take science classes in 9th, 10th and 11th grade regardless of science acceleration. Physics and Chemistry are required by colleges for science and health-related majors.

For any science course culminating in a NYS Regents exam, there is a lab requirement. Students who fail to meet the lab requirement will not be eligible to take the Regents Exam.

Since the number of Advanced or Honors sections will vary from year to year to meet student needs, it is possible that there may be more applicants than there are seats. Enrollment in advanced or honors sections of science classes is based on the applicant's past academic performance. This includes not only teacher recommendations, but hard data such as class rank, past Regents scores in science and math, and general course grades. All applicants will be considered in the same way.

Sequence 1
9th grade - Regents Biology
10th grade - Regents or Honors Earth Science
11th grade - Science Elective, Regents Chemistry* or Chemistry 101/102 Honors#
12th grade - Regents Physics* or Physics 104/105# or Biology 104/105 or Science Elective

Sequence 2 - Science Accelerated Students
8th grade - Regents Biology
9th grade - Regents or Honors Earth Science
10th grade - Regents Chemistry* or Chemistry 101/102 Honors#
11th grade - Regents Physics* or Physics 104/105# or Biology 104/105# or Science Elective
12th grade - Regents Physics* or Physics 104/105# or Biology 104/105# or Science Elective

***** Indicates college preparatory coursework in science
# Indicates concurrent enrollment classes through TC3

Science Electives will be offered yearly dependent on available staffing and include: Astronomy, Climate Change, Field Biology, Food Science, Forensics, Independent Research, Marine Biology

REGENTS BIOLOGY

(Living Environment)

This is a laboratory-based course that teaches the basic concepts and skills needed to understand modern biology. Students learn about the key biological concepts and have extensive laboratory experiences to learn about the process of scientific investigation. Students study the unity and diversity of life. Topics include ecology, biochemistry, cell structure and function, genetics, evolution, taxonomy, and anatomy and physiology. Students will take the Living Environment Regents exam at the end of this course.

8th grade accelerated students who do not maintain an 80% average in Marking Period 1, an 85% in Marking Period 2 and a semester 1 average of 85% may be required to change to the Life Science course.

1 credit

REGENTS EARTH SCIENCE

Regents Earth Science teaches the basic concepts and skills needed to understand the geosciences through laboratory investigations and classroom activities. Topics include geology, oceanography, meteorology, environmental science, and astronomy. Students will take the Earth Science Regents exam at the end of the course.

1 credit

EARTH SCIENCE HONORS

Earth Science Honors is a laboratory-based course which explores the geosciences including geology, astronomy, environmental science, oceanography and meteorology. Earth Science Honors is a rigorous and fast-paced course for self-motivated, high-achieving students with strong algebra skills. Students in this course are required to give presentations on modern issues in the geosciences, lead class discussions of current scientific literature, and attend the evening “Conversations with Scientists” lecture series. Considerable time and effort in and out of the classroom is required. Students will take the Earth Science Regents exam at the end of this course. Eligibility for this course is based on past performance in science and math, and teacher recommendation. Students who do not maintain an 80% average in the course (starting with the first marking period) may be required to change to the Regents Earth Science course. Enrollment will be limited to 24 students per section.

Prerequisite: Biology, Teacher Recommendation, and minimum score of 80% on the Living Environment Regents exam.

1 credit

REGENTS CHEMISTRY

This Chemistry course is designed to prepare students for the New York State Regents Chemistry Exam. The course covers the same basic topics as honors Chemistry, with less emphasis on mathematical applications. It requires work in and out of class. Topics include properties of matter, atomic structure, chemical bonding, chemical equations, reaction rates, stoichiometry, organic and nuclear chemistry. Students will perform numerous labs and use computer simulations, giving the course a guided inquiry approach. Anyone interested in careers in engineering, environmental or health-related fields will find this course helpful. A Regents exam is given in June. Enrollment will be limited to 24 students per section.

Prerequisite: Biology and Earth Science and Teacher Recommendation or permission of current teacher and minimum Algebra I Regents score of 70%.

Co- or Prerequisite: Regents Geometry

1 credit

CHEMISTRY HONORS

This chemistry course gives the students the solid grounding in basic chemical principles and skills that they need for college. It meets all requirements for New York State Regents Chemistry. Add to that foundation, a strategic problem solving strand and an innovative laboratory strand and students will leave with a mastery of content objectives, experiences in scientific inquiry, and mathematical relationships. The laboratory portion of the course integrates technology, inquiry based labs, and formal written lab reports. Anyone interested in careers in engineering, environmental or health-related fields will find this course necessary. A Regents exam is given in June. Students need a final course average of 75 each semester in order to receive transferable TC3 college credit. Students who do not maintain an 80% average in the course (starting with the first marking period) may be required to change to the Regents Chemistry course. Enrollment will be limited to 24 students per section.

Prerequisite: Biology and Earth Science, Teacher Recommendation and minimum Regents score of 80% for Living Environment and Earth Science, and a minimum Algebra I Regents score of 75%.

Co- or Prerequisite: Regents Geometry

1 credit/ 8 TC3 credits (Chemistry 101 and Chemistry 102)

REGENTS PHYSICS
(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING & FUNDING)

This course is the recommended basic function and preparatory course for most college level introductory physics courses. It is a comprehensive program which integrates lab activities, demonstrations and lectures. This course has traditionally been the fourth science course taken in the Regents sequence for academic students. The course is fairly mathematical but does not involve any advanced math. A working knowledge of basic trigonometry and algebra are required, but no calculus will be included. Students should have completed or at least be taking Algebra 2. The topics of study are the same as those in college physics (described below), but emphasis may vary. Anyone interested in careers in engineering or health-related fields will find this course necessary. A Regents exam will be given in June.
Prerequisite: Biology and Earth Science and Teacher Recommendation.
1 credit

PHYSICS 104/105- GENERAL PHYSICS I & II
(MAY NOT BE OFFERED EACH YEAR- CONTINGENT ON STAFFING AND FUNDING)

This course is a laboratory-based program in introductory physics designed to meet the needs of advanced students planning college level study in any science, engineering, or health-related field. The course is rigorous and emphasizes quantitative methods using computer interfacing for data collection and analysis. Students who take this course must have a strong working knowledge of Algebra 2/Trigonometry mathematics, be fluent in using a scientific calculator, and should be taking advanced math (calculus or pre-calculus) along with physics. Topics of study include, but are not limited to, Newtonian mechanics, waves and sound, light and optics, electricity and magnetism, nuclear and modern physics. Students need a final course average of 75 each semester in order to receive transferable TC3 college credit. Enrollment will be limited to 24 students per section.
Prerequisite:
PHSC 104: Teacher Recommendation, Biology and Chemistry with minimum scores of 80% on each of the Living Environment and Chemistry Regents exams.
PHSC 105: Teacher Recommendation, Course average in PHSC 104 of C or better.
Co-requisite/Prerequisite: Advanced Algebra
½ credit/ 4 TC3 credits each semester

ENVIRONMENTAL SCIENCE - ENVS101 - Grades 11-12

Environmental science is a multi-disciplinary concurrent course for you if you have an interest in learning about the many ways all of us interact with the natural environment. By increasing your knowledge, you can have a more positive impact on your immediate environment and your community! You will learn the science behind real-life issues and problems that affect the environment. A balanced view of each environmental issue will be presented, along with

valuable scientific content. The philosophy driving this course is that informed citizens can make better decisions about how to build a sustainable society. In addition, this course encourages a critical understanding of the various historical, political, economic, and ethical forces that have shaped and continue to shape our world. You are invited to come and learn more about the biological, chemical, and physical aspects of our environment. Students need a final course average of 75 each semester in order to receive transferable TC3 college credit.

Prerequisite: minimum score of 65% on the Living Environment and Earth Science Regents exam

1 credit/ 3 TC3 credits

FORENSIC SCIENCE

This is a one-year applied science course that is based on principles and procedures used in crime scene investigations and introductory analyses performed by forensic scientists. It relates many areas of scientific endeavor to real-life situations and builds on previous biology, chemistry, and physics skills. The course will focus on applying current scientific methods to the collection, documentation, preservation, examination, and interpretation of physical evidence, using modern laboratory technologies and procedures. Some of the topics that will be covered are the investigation of fingerprints, fiber analysis, toxicology, blood/DNA samples, ballistics, and other trace evidence.

Prerequisite: Biology

1 credit

INDEPENDENT RESEARCH COURSE
(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING & FUNDING)

This course provides an opportunity for students to conduct an independent research project on their topic of interest. Are you passionate about engineering and want to design a functioning model to test its feasibility or maybe you want to develop a research backed exercise routine to trial? Topics may range from biomedical sciences to nuclear physics, the students imagination is the limit. Students will gain valuable experience with performing a literature review and/or experimental trials ending with a final report or poster presentation. The report/poster should represent a summary of the student's research done over the course of the spring semester.

Prerequisites: Biology and Earth Science

1 credit

BIOLOGY 104/105-GENERAL BIOLOGY I & II

(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING AND FUNDING)

This is a concurrent enrollment college introductory level biology course. BIOL 104 and BIOL 105 course sequence is strongly recommended for students interested in life science and environmental science programs. This course is also appropriate for those who have a deep interest and curiosity about living things and a rigorous study of biology even if their major is in another field. Topics include basic chemistry and biochemistry, cell morphology, physiology, classical and molecular genetics, evolution, ecology, biodiversity, the scientific method, and independent research. Laboratories are strongly quantitative. Substantial outside preparation for lectures and laboratories is required. Students need a final course average of 75 each semester in order to receive transferable TC3 college credit. Enrollment will be limited to 24 students per section.

Prerequisites:

Bio 104: **Biology and Chemistry with minimum scores of 80% on each of Living Environment and Chemistry Regents exams.**

Bio 105: **Course average in Bio 104 of C or better.**

1/2 DHS credit /4 TC3 credits per semester

MARINE BIOLOGY – Grades 11 – 12
(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING & FUNDING)

Come and explore the great world of the sea in an introductory course into the marine sciences. The course of study will focus on marine organisms, their behaviors and their interactions with the environment. Other topics to be covered will be: oceanic zones and their biodiversity, marine ecology and oceanography. This course is intended to provide students with the opportunity to obtain ½ science credit to meet graduation requirements and may be paired with another ½ science credit to complete a third year of science.
Prerequisite: Biology
½ credit

ASTRONOMY – ASTR 101 – Grades 10 – 12

(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING & FUNDING)

This is a concurrent enrollment introductory level astronomy course. The course encompasses the study of the Earth, the planets, our solar system, stars, galaxies, and the evolution of the universe. We will explore the possibility that life exists elsewhere in the

universe and how humans might actually be able to travel vast distances in interstellar space. Experiments and activities will emphasize how we know what we think we know about places we've never been. A long term project will get you intimately acquainted with the planets and important moons in our solar system. Current missions and the role of NASA and its partners will be investigated, and evening star gazing with your classmates with our school's powerful reflecting telescope will help you recognize stars and their constellations in the night sky. This course is intended to provide students with the opportunity to obtain ½ science credit to meet graduation requirements and may be paired with another ½ science credit to complete a third year of science.

Prerequisites: Earth Science and Algebra1

Students need a final course average of 75 in order to receive transferableTC3 college credit.

½ credit / 3 TC3 credits

FOOD SCIENCE

(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING & FUNDING)

Food science offers juniors and seniors the opportunity to explore career options in the food industry. There will be scientific investigations in the laboratory where students will study some of the effects and properties of food additives, preservatives and preparation techniques. Safe handling techniques will be stressed. Much of the course will be hands-on learning. There will be several projects students must complete at home. Students should expect to prepare reports and discuss their results. Tasting of laboratory products and other sensory evaluations of products may be included.

Prerequisite: Biology

1/2 credit

CLIMATE CHANGE
(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING & FUNDING)

Climate change is perhaps the most important environmental issue of the 21st century. Students will discover the scientific basis for our understanding of climate change and how today's climate change is different from past climate cycles. Causes of climate change, both natural and human-produced, will be explored and students will learn how scientists use technology to acquire climate data and how long-term models are developed. Additionally, students will explore the impacts of these changes on humans and the entire Earth ecosystem and what strategies are being developed to address the problem. Finally, students will consider the potential social, economic, and political consequences of climate change and debate what international policy solutions might be necessary.

Prerequisites: Biology, Earth Science, and Algebra

½ credit

FIELD BIOLOGY (Grades 11-12)

(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING & FUNDING)

Students will become more aware and appreciative of their natural surroundings as they discover and examine the biological diversity and ecology of terrestrial and aquatic ecosystems of Central New York. This course will focus on student-centered, student-driven inquiry as well as citizen science opportunities. Current and future impacts of climate change on our local ecosystems will also be explored. During this course, students will conduct a research project - which can be a new, self-created project or the continuation (and augmentation) of existing citizen science research - with a culminating presentation and summary paper. This course offers students the opportunity to get outside, use scientific and statistical methods to collect and analyze relevant data, and participate in current local and global research projects. Field trips will be a required part of this course.

Prerequisite: Biology and minimum score of 65% on the Living Environment Regents exam

½ credit

ANATOMY AND PHYSIOLOGY I/II BIOL 131/132

(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING & FUNDING)

This is a concurrent enrollment college course where students are introduced to the basic organization of the human body, basic biochemistry involved in physiological interactions, basics of tissue organization, and histology. In addition, the course surveys the 9 major organ systems of the body with emphasis on the integumentary, skeletal, muscular and nervous systems of the human body. This course will also compare the human systems to those of other organisms. BIOL 131/132 fulfills the SUNY General Education Natural Science requirement. Students will be expected to engage in the material outside of class by reading, watching videos, taking notes and more. Lab work will be extensive and will include dissections and lab reports. The exams will be detailed. Any students considering taking this class must be well organized, focused, responsible, and have disciplined work habits. This course prepares students to take additional course work in fields requiring a full year of human anatomy and physiology. This course will be fun and engaging as there are many hands-on activities/labs/dissections, etc. to reinforce learning.

Prerequisites:

Completion of Living Environment/Biology with an 80% or better and passed the Living Environment with an 80% or better.

1 credit/ 8 TC3 credits for the whole year

SOCIAL STUDIES

Students must pass four Social Studies courses and at least one Social Studies Regents Exam in order to graduate.

<table>
<tr><th>Grade Level</th><th>Courses Required for Graduation</th><th>Elective Courses</th></tr>
<tr><td rowspan="2">9</td><td>Global I Regents - or -</td><td rowspan="4"></td></tr>
<tr><td>Global I Honors</td></tr>
<tr><td rowspan="2">10*</td><td>Global II Regents - or -</td></tr>
<tr><td>Global II Honors
(TC3 Concurrent Enrollment- HSTY 116-117)</td></tr>
<tr><td rowspan="2">11*</td><td>US History and Government Regents - or -</td><td rowspan="5">In-person:
● Holocaust Studies
● Psychology

Online:
● AP European History
● AP Human Geography
● AP Psychology
● AP World History</td></tr>
<tr><td>US History and Government Honors
(TC3 Concurrent Enrollment- HSTY 201-202)</td></tr>
<tr><td rowspan="4">12</td><td>Economics - or -</td></tr>
<tr><td>AP Macroeconomics (online)
AP Microeconomics (online)</td></tr>
<tr><td>Participation in Government - or -</td></tr>
<tr><td>AP US Government and Politics (online)</td></tr>
<tr><td colspan="3">*Course culminates in a Regents Exam</td></tr>
</table>

Social Studies Courses

REGENTS GLOBAL HISTORY & GEOGRAPHY I

This is the first part of a 2-year course that covers the New York State Social Studies Framework, organized around Enduring Issues that recur across time and place and historical eras. Global I focuses on the world from the dawn of human history to about 1750. Students will be able to grasp the fundamental characteristics of civilizations, as well as how people have become more interconnected over time. Units include the following information:

- The first civilizations
- Classical Greece, Rome, and Asia
- Latin American and African civilizations
- The Middle Ages across Eurasia and Africa
- The development of transregional trade networks
- The Renaissance and Reformation
- The age of European exploration

This course will also build fundamental social studies skills that will enable success on the Regents Exam, which will take place at the end of Global II. These skills include analyzing historical documents and writing formal essays that connect documents to the Enduring Issues over time.

Successful completion of the course fulfills a graduation requirement.

1 credit

HONORS GLOBAL HISTORY & GEOGRAPHY I

Prerequisites: Students must have an average of 85 or higher in 8th Grade Social Studies and obtain a teacher recommendation in order to enroll in this course. Students must maintain a minimum average of 85 (NYS "Mastery" level) to remain in the course.

This is an advanced version of the Global I class described above. In addition, students will read supplemental works and must complete a research paper of 3 pages using Chicago-style citation.

Honors Global I is designed for the self-motivated student who is willing to accept academic challenges and increased independent workload, is willing to be pushed to strive for greater

achievement, is able to openly participate in a positive manner, and has the academic maturity to listen actively while classmates or the teacher offer ideas. Students must maintain a minimum average of 85 (NYS “Mastery” level) to remain in the course.

Successful completion of this course fulfills a graduation requirement.

1 credit

REGENTS GLOBAL HISTORY & GEOGRAPHY II

This is the second part of a 2-year course that covers the New York State Social Studies Framework, organized around Enduring Issues that recur across time and place and historical eras. Global Studies II focuses on the world from approximately 1500 through present day events. Units of study include:

- World in 1750
- Enlightenment, Revolution, Nationalism
- Industrial Revolution
- Imperialism
- The World Wars and the Years In Between
- The Cold War
- New Nations
- Globalization
- Current Events

This course will also build fundamental social studies skills that will enable success on the Regents Exam, which will take place at the end of Global II. These skills include analyzing historical documents and writing formal essays that connect documents to the Enduring Issues over time. Successful completion of this course and passing the Regents exam fulfills a graduation requirement.

1 credit

HONORS GLOBAL HISTORY & GEOGRAPHY II

(TC3 CONCURRENT ENROLLMENT: HSTY 116 and 117)

Prerequisites: Students must have an average of 85 or higher in Regents Global I or Honors Global I and obtain a teacher recommendation in order to enroll in this course. Students must also complete a summer reading project and maintain a minimum average of 85 (NYS "Mastery" level) to remain in the course.

This course is an advanced level of the Global II course described above. In addition, to earn college credit, students will read supplemental works and produce a research paper of 3-5 pages using Chicago-style citation.

Honors Global II is designed for the self-motivated student who is willing to accept college-level academic challenges and increased independent workload, is willing to be pushed to strive for greater achievement, is able to openly participate in a positive manner, and has the academic maturity to listen actively while classmates or the teacher offer ideas.

Successful completion of this course and passing the Regents exam fulfills a graduation requirement. Successful completion also confers 3 hours of college credit per semester.

1 credit

REGENTS UNITED STATES HISTORY & GOVERNMENT

This course continues the effort of the Social Studies program to ensure that students develop an understanding of and appreciation for the American tradition rooted in history and adapted by contemporary society. Topics of study include:

- Colonial Foundations (1607-1763)
- Constitutional Foundations (1763-1824)
- Expansion, Nationalism and Sectionalism (1800-1865)
- Post- Civil War Era (1865-1900)
- Industrialization and Urbanization (1870-1920)
- The Rise of American Power (1890-1920)
- Prosperity and Depression (1920-1939)
- World War II (1935-1945)

- Cold War (1945-1990)
- Social and Economic Change/Domestic Issues (1945-present)
- The United States in a Changing World (1990-present)

This course will also build fundamental social studies skills that will enable success on the Regents Exam, which will take place at the end of US History & Government. These skills include analyzing historical documents and identifying relationships between them and examining the reliability of documents. Writing formal essays that connect documents to the Constitutional and Civic Issues over time. Successful completion of this course and passing the Regents exam fulfills a graduation requirement.

1 credit

UNITED STATES HISTORY & GOVERNMENT HONORS

(TC3 CONCURRENT ENROLLMENT: HSTY 201-202)

Prerequisites: Students must have an average of 85 or higher in Regents Global II or Honors Global II and obtain a teacher recommendation in order to enroll in this course. Students must also complete a summer reading project and maintain a minimum average of 85 (NYS "Mastery" level) to remain in the course.

This course is an advanced level of the United States History & Government course described above. In addition, to earn college credit, students will read supplemental works and produce a research paper of 5-7 pages using Chicago-style citation.

Honors US History and Government is designed for the self-motivated student who is willing to accept college-level academic challenges and increased independent workload, is willing to be pushed to strive for greater achievement, is able to openly participate in a positive manner, and has the academic maturity to listen actively while classmates or the teacher offer ideas. Students must maintain a minimum average of 85 (NYS "Mastery" level) to remain in the course.

Successful completion of this course and passing the Regents exam fulfills a graduation requirement. Successful completion also confers 3 hours of college credit per semester.

1 credit

ECONOMICS

This course is designed to provide the students with economic knowledge and skills necessary to function as informed and economically literate citizens in US society and the world. Elements of study include:

- Microeconomics: Supply, demand, and prices; competition, business organization, labor
- Macroeconomics: GDP;unemployment, inflation and distribution of income; money, fiscal and monetary policy; international trade, developing economies
- Personal financial management

Successful completion of this course fulfills a graduation requirement.

½ credit

PARTICIPATION IN GOVERNMENT

This course is designed to assist students in becoming effective participants in government. Elements of study include:

- Foundations of American Democracy
- Civil Rights and Civil Liberties
- Rights, Responsibilities and Duties of Citizenship
- Political and Civic Participation
- Public policy
- Current Events/Current Issues

Successful completion of this course fulfills a New York State graduation requirement. As part of the course, students must complete a mandatory community service component. A minimum of 10 hours (5 hours per marking period) of approved community service, which is verified by the Participation in Government teacher, is required. Students are required to accurately log their volunteer hours, as well complete 3 journal entries and a final report. **Students who take PLATO will also be required to complete this Community Service Component.**

½ credit

<u>Drop/Add requirements for Economics and Participation in Government</u>: Students who wish to join a semester course after the end of the first full week will be accountable for the material presented before their enrollment, including assessments.

HOLOCAUST STUDIES

(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING & FUNDING)

This course is offered to juniors and seniors as a Social Studies elective. The course examines the roles of prejudice and discrimination, the historical events preceding the Holocaust, the roles of individuals associated with the Holocaust (victims, perpetrators, bystanders, resistance fighters, rescuers, collaborators), and the many impacts of the Holocaust.

½ credit

PSYCHOLOGY

(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING & FUNDING)

Psychology is the study of human thought and behavior. While it is a broad field of study, psychologists narrow their focus by specializing in certain subfields of psychology. The goal of this elective is to expose curious students to the various topics that they might encounter if they choose to pursue coursework in psychology in the future. Major topics of study include, but are not limited to:

- Historical and contemporary approaches to psychology
- The brain and the nervous system
- Developmental theories
- Reactions to and coping with stress
- Psychological disorders
- Personality
- Social psychology

½ credit

Also see pages 3-7 for descriptions of these online courses:

AP EUROPEAN HISTORY

AP HUMAN GEOGRAPHY

AP PSYCHOLOGY

AP WORLD HISTORY

TECHNOLOGY

DESIGN AND DRAWING FOR PRODUCTION – (DDP)

DDP is a study of engineering graphics as a medium for communication and problem solving. Course content will include a contemporary systematic process for the development of graphic representations to communicate ideas, objects, or systems. This course develops student problem solving skills with emphasis placed upon the concept of developing solid rendering of an object. The course emphasizes critical thinking, creative problem-solving and the decision-making processes by requiring the student to examine past solutions, learn technical drawing processes, experience design techniques and become critically active in evaluating both personal work and work by others. The course will emphasize the design development process of a product and how a model of that product is produced, analyzed and evaluated. Emphasis will be placed on skills development through hands-on laboratory experience.

This course is a Technology Education course and can be used to fulfill the Art/Music requirement for graduation.

1 credit

SYSTEMS OF TECHNOLOGY – GRADES 10 – 12
(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING & FUNDING)

A semester long introductory elective course that will cover three (3) systems of technology.
Production Systems: Students will design and construct projects from the technological materials of wood, metals, and plastics.
Transportation Systems: Students will design and construct a land, marine, or aerospace vehicle (motorized scooter, remote controlled boat, flying model rocket).
Energy Systems: Building projects that use gasoline engines, wind power, and solar cells.
½ credit

ELECTRICITY/ELECTRONICS – GRADES 10 – 12

(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING & FUNDING)

This elective course is open to all students who would like to experience hands-on activities in electricity and electronics. It meets for one semester and is divided into two parts. Introduction to Electricity will include activities which will develop knowledge and skills for working with low voltage and line voltage (110 volts) circuits and devices. Basic house wiring is included. Electronics will include activities which develop knowledge and skills for building electronic circuits. Electronic components and integrated circuits will be used to produce electronic printed circuit board projects. ½ credit

WORLD LANGUAGES

<u>All students will be required to have at least one credit in a language other than English.</u> They may attain that credit by passing the Checkpoint A Exam upon completion of the required Middle School program (grades 7-8) or by passing a High School language course.

FRENCH I

(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING AND FUNDING)

Students will work to develop the basic communicative skills of listening comprehension, speaking, reading and writing necessary to be successful at Checkpoint A of the New York State Syllabus. This course can serve as the minimum credit required for the LOTE graduation requirement OR as an elective for additional language study.

1 credit

SPANISH 1

Students will work to develop the basic communicative skills of listening comprehension, speaking, reading and writing necessary to be successful at Checkpoint A of the New York State Syllabus. Spanish 7/8 is the equivalent to the completion of high school Spanish 1. This course is for students who have never taken Spanish or have not met their LOTE graduation requirement through Middle school.
1 credit

SPANISH 2T

This transitional course is for new entrants to the district and those students who passed the Checkpoint A Exam. It is a review class which reinforces the communicative and grammar skills from Spanish 7/8 and/ or Spanish 1 to build additional proficiency. It is designed for students that plan to continue to the Checkpoint B (Spanish 3) level and need more time to develop skills needed for success in Spanish 2.
1 credit

SPANISH 2

This is the second year of the sequence that leads to Checkpoint B of the New York State Syllabus. Emphasis is placed on increasing vocabulary and building communicative proficiency. Students will be expected to weave communicative skills and

aspects of culture into both written and oral performance assessments throughout the year. Students will begin to speak Spanish more frequently as the year progresses.

Prerequisite: Students must have scored 85 or better on the Checkpoint A Exam and/ or have teacher recommendation to go directly to this course.
1 credit

- **College credits from SUNY TC3 for Concurrent Enrollment in Spanish courses available to students earning 85% at the end of the first semester.**

SPANISH 3

This course completes the New York State Checkpoint B LOTE sequence. The students will be exposed to complex grammatical structures while continuing the development of their reading, writing, speaking and listening skills. Students will be expected to converse in Spanish with the language instructor and their classmates on a regular basis. Successful completion of the three-year program, including passing the Checkpoint B Exam, is necessary for attainment of a Regents Diploma with Advanced Designation.
1 credit/3 TC3 credits (Spanish 102)

SPANISH 4
(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING AND FUNDING)

In Spanish 4, students will continue to develop proficiency of the language in the language and related cultures. Additional emphasis is placed on the fostering of spoken fluency, while students continue to develop their listening, reading and writing. Students will be exposed to an array of readings, current events and cultural experiences.

1 credit/3 TC3 credits (Spanish 201)

SPANISH 5

(MAY NOT BE OFFERED EACH YEAR - CONTINGENT ON STAFFING AND FUNDING)

Spanish 5 will continue to develop and enrich the students' proficiency of the language in the areas of conversation, culture, history and literature. Emphasis continues to be placed on oral communication, while incorporating literature and current topics of interest. Students will use a wide variety of cultural experiences and authentic resources to develop more advanced proficiency in the language.

1 credit/3 TC3 credits (Spanish 202)

New York State Seal of Biliteracy

Graduating seniors may be eligible to earn the New York State Seal of Biliteracy in recognition of a high degree of proficiency in two or more languages. This Seal will document their language proficiency for both future employers and university programs. Students can begin earning points towards their Seal in 11th grade in a wide variety of their classes. The Seal of Biliteracy can be earned either as a component of the World Language program or independently during 12th grade. Interested students should contact Mrs. Tice or Mrs. Bustamante.

The list of courses below may contribute towards the NYS Seal of Biliteracy:

Art

Advanced Studio in Photography: Darkroom

Studio in Photography

Graphic Design

Ceramics

Intro to Video Production & Advanced Video Production

AP Studio Art 2D & 3D

Advanced Drawing & Painting

Drawing & Painting

Business

Introduction to Microsoft Office/ Business Communications

Career & Financial Management

Computer Applications & Entrepreneurship

Business Math

College & Career Prep I & II

Invest I & II

Accounting

Business Law

English

Mythology I & II

English 12A & 12B

Young Adult Literature

Public Speaking

Communication

English 11

English 11 Honors

English 101

English 102

Mathematics

Math 122

Health

Personal Health

Lifetime Health, Nutrition & Fitness

Science

Environmental Science

Forensic Science

Astronomy

Social Studies

Government

World Languages

Spanish 5

2024-2025
TST BOCES CAREER AND TECH CENTER
COURSE GUIDE

Animal Science	1 or 2 years
Auto Body	1 or 2 years
Auto Technology	1 or 2 years
Computer Technology	1 or 2 years
Construction Trades	1 year
Cosmetology	1 or 2 years
Culinary Arts	1 or 2 years
Digital Media Technology	1 or 2 years
Early Childhood	1 or 2 years
Exercise & Health Sciences	1 or 2 years
Heavy Equipment	1 or 2 years
Nurse Assisting and Health Occupations	1 or 2 years
Public Safety and Emergency Services	1 or 2 years
Welding	1 or 2 years

Course offerings are subject to change by the TST BOCES Career and Tech Center. Students receive 3 – 4 credits for each year of their Career and Tech Program.

As we seek to improve our student programming, some of these course offerings or curriculum components may change.

CAREER AND TECH EDUCATION (CTE)

Website: https://www.tstcte.org/

Career and Tech Education (CTE) programs educate students in a variety of technical areas, preparing them for entering the workforce with a marketable skill and for continuing on to higher education. These programs are taught for a minimum of 2 hours during the AM or PM session each day, and all courses provide a job shadow and/or internship experience over the course of their completed curriculum. Bus transportation is provided daily to and from the Career and Tech Center. Students continue their major academic subjects in the remaining three or four periods at the home school district. Students receive 2 – 4 credits for each year of their Career and Tech Program.

All Career and Tech classes are currently New York State approved. To be approved, courses must meet rigorous guidelines related to assessment, an academically strong curriculum that is aligned with the New York State Learning Standards, and relevance to industry practices. All CTE courses meet the NYS graduation requirement to allow students to earn the CTE Pathway by attaining mandatory CDOS hours, and second year students are eligible to earn a Technical Endorsement upon completion of the two year curriculum. Most Career and Tech courses offer integrated math and science credit, and some classes offer Concurrent Enrollment college credit. All Career and Tech Programs have articulation agreements with colleges that have a related program.

Successful Career and Tech students are eligible to participate in National Leadership Organizations, such as NTHS (National Technical Honor Society) https://nths.org/, FFA (Future Farmers of America) https://www.ffa.org/ , and SkillsUSA https://www.skillsusa.org/ . Students involved in these organizations compete at the regional, state and national level in Career and Tech related competitions, and attend workshops and conferences to enhance their leadership skills.

COLLEGE & CAREER SERVICES

Website: https://www.tstcte.org/

Throughout the two year curriculum, all Career and Tech students will be able to take part in a variety of opportunities to help each student devise an individualized plan for their future. CTE students will attain first hand experience in learning about the numerous career and college options that are available in their Career and Tech field of study. This process begins in the fall of their junior year and it continues to develop throughout their two year curriculum.

All Career and Tech students will have the opportunity to participate in events such as:

Business Partnerships - Connecting Classroom to Employment

Career Counseling

Career Fairs

Career Interest Inventories

College Campus Visitations

College Fairs

Connection to Labor Unions

Digital Portfolios to Showcase Projects and Experiences

Employability Workshops

Exposure to Career Pathways

Hiring Employment Events

Individualized Job Shadow and Internship Experiences

Industry Immersion Field Trips

Mock Interviews with Business Partners

Presentations with Guest Speakers/Industry Professionals

Resume Building

With the support of the College and Career Services Initiative, Career and Tech Education is building a bridge to provide students with a direct connection to a wide variety of industry partners to assist with college and career success.

ANIMAL SCIENCE: 1st Year – PM & 2nd Year – AM

Course Description: This program prepares students for the technical skills necessary for diverse careers in animal care. Topics of study include four primary areas: veterinary science, canine management, grooming, and lab animal science. First year students will primarily focus on hands-on experiences, managing a day kennel with 5 - 7 dogs, and operating a grooming parlor designed as a learning model. This practical approach hones their abilities in animal handling, grooming, and business management. Second year students will focus primarily on veterinary science and production management. Students will acquire expertise in medical terminology, comparative anatomy and physiology, physical examinations, common diseases and disorders, clinical procedures, surgical nursing, office management skills, as well as First Aid/CPR training. This program emphasizes the importance of effective communication and collaboration with both animals and people. Students with a passion for working with animals and a desire to interact positively with clients will find this program fulfilling. Leadership opportunities are available in this class through the local chapter of the National Student Leadership Organization, FFA (Future Farmers of America), where students participate in leadership training, workshops and national conferences.

Integrated Academic Credits Available: 1 credit of Math and 1 credit of Science over the course of the two year curriculum.

Industry Certification/Concurrent Enrollment Credit Options: *This course offers 3 Concurrent Enrollment credits in the area of Veterinary Technology through Genesee Community College.* Students can earn industry certification in RECOVER Basic Life Support for Companion Animals and OSHA 10- Veterinary certification upon completion of this program.

Required Materials: Students will need to purchase scrubs and safety glasses for this course – estimated cost is $30.00.

College Majors/Career Opportunities in this Field: Veterinary Technician, Agriculture, Veterinary Assistant, Equine Studies, Zoology, Conservation Officer, Animal Trainer, Animal Care Specialist, Pet Groomer, Animal Laboratory Assistant, Animal Shelter Worker, Pet Salesperson, Farm Owner/Herdsman.

College Articulation Agreements: Alfred State College, SUNY Canton, SUNY Cobleskill, SUNY Delhi, SUNY Morrisville, Genesee Community College, Jefferson Community College

Website: https://www.tstcte.org/animal-science.html

AUTO BODY: 1st Year – PM & 2nd Year – AM

Course Description: This program trains students in collision repair, automotive detailing, painting and restoration work. Topics of study include: collision and auto body repair, auto refinishing, welding techniques, and replacement of parts and sections of panels. Students learn to use hand, power, and specialized auto body tools and equipment to repair dents and frame work on metal and plastic sections of automobiles. Students have the opportunity to create customized paint graphics, airbrushing, and restoration work on high performance and show quality vehicles.

Integrated Academic Credits Available: 1 credit of Math and 1 credit of Science over the course of the two year curriculum.

Industry Certification/Concurrent Enrollment Credit Options: Students can earn industry certification in OSHA 10 and Fusion safety training, plus students are prepared for I-Car industry certification upon completion of this program.

Required Materials: Students will need to purchase work boots, work clothes, and safety glasses for this course – estimated cost is $50.00.

College Majors/Career Opportunities in this Field: Automotive Detailer, Auto Body Technician, Shop Owner/Manager, Automotive Insurance Claim Adjuster, Parts Manager, Auto Glass Installer, Auto Collision Repair Technician.

College Articulation Agreements: Alfred State College, SUNY Canton, SUNY Morrisville, Nashville Auto-Diesel College, Ohio Technical College, Universal Technical Institute

Website: https://www.tstcte.org/auto-body.html

AUTO TECHNOLOGY: 1st Year – PM & 2nd Year – AM

Course Description: This is a nationally certified automotive program through ASE (Automotive Service Excellence.) Topics of study include: engine performance, tire repair/replacement, alignment, fuel systems, wiring and electrical systems, power trains and transmissions, brake repair and replacement, steering and suspension. Students will diagnose, troubleshoot and perform preventative maintenance on foreign/domestic cars and light trucks by using the latest techniques and computerized diagnostic equipment.

Integrated Academic Credits Available: 1 credit of Math and 1 credit of Science over the course of the two year curriculum.

Industry Certification/Concurrent Enrollment Credit Options: ASE (Automotive Service Excellence) Entry-Level Industry Certification in Maintenance and Light Repair and NYS certification in Motor Vehicle Inspections, plus Fusion safety training, are available upon completion of this program.

Required Materials: Students will need to purchase work boots, work clothes, and safety glasses for this course – estimated cost is $50.00.

College Majors/Career Opportunities in this Field: Automotive Service Technician, Tire Mechanic, Parts Specialist, Shop Owner, Automotive Sales Representative, Engine Performance Technician, Emissions Analyst, Mechanical Design/Engineering.

College Articulation Agreements: Alfred State College, SUNY Canton, SUNY Delhi, SUNY Morrisville, Nashville Auto-Diesel College, Ohio Technical College, University of Northwestern Ohio, Universal Technical Institute

Website: https://www.tstcte.org/auto-tech.html

COMPUTER TECHNOLOGY: **1st Year – PM & 2nd Year – AM**

Course Description: Students will learn the skills necessary to work in the fields of information technology and computer network design and management, and be introduced to the fundamentals of cybersecurity and Python programming. Topics of study include: identifying, assembling, and repairing PC hardware and peripherals; installing and configuring Windows operating systems; Windows server configuration and administration; network design, installation, and maintenance; introduction to cybersecurity, disaster recovery, threat mitigation, workstation/network security; introduction to Python programming, syntax, logic flow and libraries

Integrated Academic Credits Available: 1 credit of Math and 1 credit of Science over the course of the two year curriculum.

Industry Certification/Concurrent Enrollment Credit Options: *This course offers 6 Concurrent Enrollment credits through Tompkins Cortland Community College*. Students may be eligible to take several industry certifications - Cisco Certified Support Technician (CCST); CCST Cybersecurity, and PCAP - Certified Associate in Python Programming.

Required Materials: A notebook is recommended to take class notes and activities.

College Majors/Career Opportunities in this Field: IT Technical Support, Network Support Technician, Database Management, Computer Programmer, Information Technology, Computer Repair, Security Administrator, Software Developer, Computer Forensics.

College Articulation Agreements: Bryant & Stratton College, SUNY Canton, SUNY Cobleskill, SUNY Morrisville, Finger Lakes Community College, Tompkins Cortland Community College

Website: https://www.tstcte.org/computer-technology.html

CONSTRUCTION TRADES: 1st Year – PM & 2nd Year – AM

Course Description: This course encompasses all of the skills that are necessary in residential and commercial construction. Students will learn the fundamental practical skills needed in the construction field, such as: proper use of hand and power tools, safety procedures, blueprint reading, and obtaining accurate measurements. Practical knowledge will be applied by working with drywall, installation, finish carpentry, framing, roofing, floor installation, door and window installation, siding, electrical wiring, restoration work, plumbing, stonework and masonry.

Integrated Academic Credits Available: Not applicable for his course. Students can enroll in Personal Money Management or Science if these credits are needed towards graduation.

Industry Certification/Concurrent Enrollment Credit Options: Students can earn industry certification in OSHA 10 and Fusion safety training upon completion of this program.

Required Materials: Students will need to purchase a tool belt, work boots, work clothes, and safety glasses for this course – estimated cost is $75.00.

College Majors/Career Opportunities in this Field: Construction Laborer, Flooring/Window/Drywall/Carpet Installer, Building Inspector, Carpenter, Electrician, Plumber, Boilermaker, Painter, Roofer, Laborer, Contractor, Construction Manager.

College Articulation Agreements: Alfred State College, SUNY Delhi, SUNY Morrisville

Website: https://www.tstcte.org/construction-trades.html

COSMETOLOGY: **1st Year – PM & 2nd Year – AM**

Course Description: Students will learn technical and communication skills required to be successful in a professional salon work environment. Topics of study include: hair coloring, styling, conditioning and shaping, esthetics, nail care, and massage. Product knowledge, proper application and technical procedures are taught to enhance the personal care of hair, nails, and skin. Students develop and practice their skills during clinic events. Students must accumulate 1,000 hours of instruction in order to be eligible to take the NYS certification exam.

Integrated Academic Credits Available: 1 credit of Math and 1 credit of Science over the course of the two year curriculum.

Industry Certification/Concurrent Enrollment Credit Options: Students can be eligible to earn a NYS Cosmetology License upon completion of the program.

Required Materials: First year students will need to purchase a kit that includes: mannequin, smock, and hair supplies – total cost of the kit is $200.00. Second year students must buy a senior kit – total cost is $100.00. Close toe shoes are required footwear for this course. Fundraising opportunities are available for students to offset required materials for this course.

College Majors/Career Opportunities in this Field: Hair Stylist, Cosmetologist, Salon Owner, Color Consultant, Nail Technician, Esthetician, Product Sales Representative, Barber, Electrolysis, Make-Up Artist, Salon Manager.

College Articulation Agreements: SUNY Morrisville, Bryant & Stratton College

Website: https://www.tstcte.org/cosmetology.html

CULINARY ARTS: **1st Year – PM & 2nd Year – AM**

Course Description: Students will learn the fundamentals of safety and sanitation, equipment operation, and how to prepare short order and large quantity cooking meals. Topics of study include: baking breads and pastries, creating main entrees, side dishes, and soups, practicing professional skills through customer service, menu planning, and recipe conversions. Students will work effectively with their team members, learn restaurant management skills through catering services, cake and pastry orders, and the complete operation of *Bistro 555,* the on-campus restaurant.

Integrated Academic Credits Available: 1 credit of Math and 1 credit of Science over the course of the two year curriculum.

Industry Certification/Concurrent Enrollment Credit Options: *This course offers 3 Concurrent Enrollment credits through Tompkins Cortland Community College.* Students can earn industry certification as a ServSafe Food Handler upon completion of the program.

Required Materials: Students will need to purchase a Culinary Arts uniform for this course – estimated cost is $50.00.

College Majors/Career Opportunities in this Field: Pastry Chef, Sous Chef, Restaurant Owner, Food Sales Representative, Nutritionist, Baker, Short Order Cook, Executive Chef, Food Service Manager, Hospitality, Resort Manager.

College Articulation Agreements: Alfred State College, SUNY Broome, SUNY Cobleskill, SUNY Delhi, SUNY Morrisville, Tompkins Cortland Community College

Website: https://www.tstcte.org/culinary-arts.html

DIGITAL MEDIA TECHNOLOGY: **1st Year – PM & 2nd Year – AM**

Course Description: Students will experience an overview of graphic design, video production, game design, and animation. Topics of study include: graphic design, digital photography, digital video production, 2D and 3D animation techniques, and video game design. Both raster and vector-based design software will be utilized to provide creative, practical solutions to graphic design challenges. Students will create both complex animations and working video games using a variety of tools, including Adobe Animate, Autodesk 3dsMax, GameMaker Studio, Unreal Engine, Blender and Dragonframe. Throughout this course, there is a strong emphasis on problem-solving, effective time management, and working both in teams and independently.

Integrated Academic Credits Available: 1 credit of Art over the course of the two year curriculum. Students can also enroll in Personal Money Management or Science if these credits are needed towards graduation.

Industry Certification/Concurrent Enrollment Credit Options: *This course offers 7 Concurrent Enrollment credits through Tompkins Cortland Community College.* Students can earn several Adobe Certified Professional certifications completion of this program.

Required Materials: Students do not need to purchase extra supplies for this course.

College Majors/Career Opportunities in this Field: Graphic Design, Communications, Game Design, New Media, Animation, Advertising Design, Web Design, Multimedia Artist, Game Artist, UI/UX Designer, Production Assistant, Videographer, App Developer, and Photographer.

College Articulation Agreements: Bryant & Stratton College, Cayuga Community College, Tompkins Cortland Community College

Website: https://www.tstcte.org/digital-media-technology.html

EARLY CHILDHOOD: **1st Year – PM & 2nd Year – AM**

Course Description: This is a comprehensive course, designed to provide students with opportunities to explore their career interests in the field and engage in in-depth study and exploration of key concepts in early childhood education. Using a variety of modalities, including, lectures, hands-on activities, investigations, presentations, guest speakers, laboratory experiences, and field trips, students will learn about a range of topics. Key topics include: Early Childhood Career Exploration; Child Development and Theory; Child Health, Safety and Nutrition; Early Childhood Indoor and Outdoor Environments; Curriculum development and Lesson planning; Developmentally Appropriate Practice; Learning in the Content Areas (Art, Music, Science, Math, Literacy,); Classroom Management and Positive Guidance. First year students will observe and care for infants/toddlers/preschool children in a professional classroom environment, plus participate in a job shadow experience. Second year students will participate in internship experiences that will be held in regional child care centers, elementary schools, and at the Ithaca Community Childcare Center (IC3) on Warren Road in Ithaca.

Integrated Academic Credits Available: Not applicable for his course. Students can enroll in Personal Money Management or Science if these credits are needed towards graduation.

Industry Certification/Concurrent Enrollment Credit Options: *This course offers 9 Concurrent Enrollment credits through Tompkins Cortland Community College.* Students can earn the Foundations in Health and Safety e-Learning industry certification and up to 15 hours of required industry training in childcare upon completion of this program. Additionally, students can become First Aid and CPR certified in year 2.

Required Materials: Students will be asked to bring in basic art materials, which will be stored in a craft bin that is supplied by the CTE program.

College Majors/Career Opportunities in this Field: Child Care Provider, Preschool Teacher, Early Intervention Specialist, Speech Therapist, Social Worker, School Counselor, Head Start Director, Teacher Assistant, Special Education Teacher, Preschool Director, Reading Specialist, Nanny.

College Articulation Agreements: Tompkins Cortland Community College, SUNY Canton, SUNY Cobleskill

Website: https://www.tstcte.org/early-childhood.html

HEAVY EQUIPMENT: **1st Year – PM & 2nd Year – AM**

Course Description: Students will be trained in the operation, maintenance, diagnosis and repair of heavy equipment, farm machinery and heavy duty trucks. Topics of study include: principles of the diesel engine, alternative fuel sources, drive train, brakes, suspension and steering, electrical systems, hydraulics, landscaping, agriculture, conservation, welding, and preventive maintenance. This program is designed to meet the growing demand for technicians and operators in the transportation, construction and agricultural fields.

Integrated Academic Credits Available: 1 credit of Math and 1 credit of Science over the course of the two year curriculum.

Industry Certification/Concurrent Enrollment Credit Options: Students can earn industry certification in OSHA 10 and Fusion safety training, plus forklift operation certification upon completion of this program.

Required Materials: Students will need to purchase work boots, work clothes, and safety glasses for this course – estimated cost is $50.00.

College Majors/Career Opportunities in this Field: Heavy Equipment Technician, Backhoe Operator, Diesel Mechanic, Skid Steer Operator, Hydraulics Technician, Equipment Manager, Heavy Equipment Operator, Diesel Truck Driver, Highway Superintendent, Construction Laborer, ForkLift Operator.

College Articulation Agreements: Alfred State College, SUNY Cobleskill, SUNY Morrisville, SUNY Canton, University of Northwestern Ohio, Ohio Technical College, Universal Technical Institute

Website: https://www.tstcte.org/heavy-equipment.html

NURSE ASSISTING & HEALTH OCCUPATIONS: **1st Year – PM & 2nd Year – AM**

Course Description: Students will learn the skills to be a supportive caregiver through clinical experiences in nursing homes, hospitals, and private homes. Topics of study include: personal care procedures, anatomy and physiology, body mechanics, body structures and functions, medical terminology, nutrition, human biology, disease treatment and prevention, and medical legality issues. During clinical rotations, students perform personal care procedures, learn to take vital signs, and assist patients with mobility using crutches, canes, walkers and wheelchairs.

Integrated Academic Credits Available: 1 credit of Math, 1 credit of Science and ½ credit of Health over the course of the two year curriculum.

Industry Certification/Concurrent Enrollment Credit Options: *This course offers 6 Concurrent Enrollment credits through Tompkins Cortland Community College.* Students can earn industry certifications in Phlebotomy, Certified Nurse Assistant, Home Health Aide, Personal Care Aide, and American Heart First Aid and CPR certification upon completion of this program.

Required Materials: Students will need to purchase scrubs, and shoes – estimated cost is $75.00. Students are required to have completed a yearly physical exam and be up to date on all immunizations, including a flu and Covid-19 vaccines, and two PPD inoculations, in order to participate in the mandatory clinical rotations.

College Majors/Career Opportunities in this Field: Home Health Aide, Certified Nursing Assistant, Physical Therapy Aide, Phlebotomist, Registered Nurse, Respiratory Therapist, Emergency Medical Technician, Licensed Practical Nurse, Surgical Technician, Nutritionist, Physician Assistant.

College Articulation Agreements: Tompkins Cortland Community College, Bryant & Stratton College, SUNY Morrisville

Website: https://www.tstcte.org/nurse-assisting-and-health-occupations.html

PUBLIC SAFETY & EMERGENCY SERVICES: 1st Year – PM & 2nd Year - AM

Course Description: Students will learn criminal and civil law, vehicle and traffic law, arrest and court procedures, report writing and professional communication skills. Topics of study include: interviewing skills, self-defense, security, fingerprinting, civil rights, forensics, accident and crime scene illustration, digital photography, and forensics. Students will participate in community service projects, participate in guest speaker presentations, attend local field trips to agencies/organizations, conduct physical conditioning exercises, learn patrolling skills, collect evidence and crime scene investigation tactics. Students who are interested in the field of corrections, probation, judicial system, law enforcement, along with first responders (EMT, Fire Department, etc.) may be interested in this course.

Integrated Academic Credits Available: 1 credit of Math and 1 credit of Science over the course of the two year curriculum.

Industry Certification/Concurrent Enrollment Credit Options: Students can attain American Heart First Aid and CPR certification upon completion of this program

Required Materials: Students will need to purchase PT gear (black t-shirt and black shorts) for this course – estimated cost is $30.00.

College Majors/Career Opportunities in this Field: Corrections Officer, Police Officer, Security Guard, Conservation Officer, Military Police, Homeland Security Advisor, Crime Scene Investigator, State Police Officer, Customs/Border Control Agent, Court Reporter, Criminologist, Probation Officer, First Responder, Private Investigator.

College Articulation Agreements: Alfred State College, Bryant & Stratton College, Corning Community College, SUNY Delhi, SUNY Morrisville, Tompkins Cortland Community College

Website: https://www.tstcte.org/public-safety--emergency-services.html

WELDING: **1st Year – PM & 2nd Year – AM**

Course Description: Students will learn to manipulate metal using a variety of welding techniques including MIG, TIG, arc welding, and plasma cutting. Topics of study include: metallurgy, flame cutting, blueprint reading, set up and operation of drill press machine, and cutting and shearing techniques. Students will practice these methods on aluminum, stainless steel, and other materials. Students can create unique designs by using the CNC (Computer Numerical Control) Plasma Machine or developing metal sculpture projects.

Integrated Academic Credits Available: 1 credit of Math and 1 credit of Science over the course of the two year curriculum.

Industry Certification/Concurrent Enrollment Credit Options: Students can earn industry certification in OSHA 10 and Fusion safety training upon completion of this program.

Required Materials: Students will need to purchase a welding tool kit, work boots, work clothes, and safety glasses for this course – estimated cost is $180.00.

College Majors/Career Opportunities in this Field: CNC Operator, Tool and Die Maker, CAD Programmer, Welding Technician, Fabricator, Pipefitter/Steamfitter, Iron Worker, HVAC Technician, Metal Sculptor, Underwater Welder, Boilermaker, Sheet Metal Worker, Plumber.

College Articulation Agreements: Alfred State College, SUNY Delhi, Ohio Technical College, Universal Technical Institute

Website: https://www.tstcte.org/welding.html

In addition, the Career and Tech Center offers classes in Physical Education, Math and Science for those students who need to complete additional graduation requirements. Course descriptions are listed below:

PERSONAL MONEY MANAGEMENT: **Offered during 1st year or 2nd year of CTE Program**

Course Description: This course is designed to develop a thorough understanding and mastery of the arithmetic processes involved in financial literacy in order to help students plan and manage personal finances by making educated decisions about money. Topics of study include: percentages, budgeting, earning income and paying taxes, simple and compound interest, credit cards and installment buying, home ownership, banking transactions, and finance. Students will examine current world economic conditions focusing on how these can impact their personal economic situations and learn how to apply mathematical principles to financial matters.

Note: This course satisfies one (1) credit of Math towards graduation. *This course offers 3 Concurrent Enrollment credits through Tompkins Cortland Community College.*

PHYSICAL EDUCATION: **Offered during 1st year and/or 2nd year of CTE Program**

Course Description: This course will focus on team and individual sports, with a focus on life-long fitness. Topics of study include: recreational sports, strength and flexibility, cardio-conditioning, and weight training. Students are required to wear sneakers for class.

Note: This course satisfies one-half (1/2) credit of Physical Education towards graduation each year.

SCIENCE: **Offered during 1st year or 2nd year of CTE Program**

Course Description: This course provides students with authentic science that correlates with their Career and Tech Program. Topics of study include: concepts associated with physical science, scientific process and investigation, and introductory chemistry. Students will conduct lab work that is related to science concepts taught through the different technical fields offered through Career and Technical Education.

Note: This course satisfies one (1) credit of Physical Science towards graduation.

NEW VISIONS PROGRAMS

Website: https://www.tstnv.org/

New Visions is an honors level program that offers seniors a progressive, college and career exploratory, and academically challenging senior year. These programs are demanding yet extremely rewarding for highly motivated, mature, responsible, and academically capable students. New Visions students must be extremely trustworthy, exhibit a high degree of integrity, and be excited to work collaboratively with others who express varying points of view. Students are required to manage their time well, keep track of deadlines, and participate in group work with minimal intervention by the teacher. This provides students the freedom to acquire knowledge through independent and cooperative learning, both in the classroom, lab and in the professional work setting. The New Visions programs are highly regarded by collegiate administrators as evidence of a student's motivation, intelligence, and desire for success.

New Visions students will divide their week between classroom theory and instructional days where students will discuss literature, global concerns, and science-related topics in an integrated academic learning environment. Students will work on projects independently and in groups, while earning concurrent enrollment college credits and mandatory credits for graduation. In addition, students will participate in rotational experiences where they will work with professionals, graduate students, and college professors that work within their field of study.

The New Visions programs are held daily from 10:00am – 2:00pm daily at Cornell University, Ithaca College or Cayuga Medical Center. Students receive high school credit for English 12 Honors, Participation in Government and Economics Honors, two elective science credits, as well as concurrent enrollment college credits. Students are expected to be professional, courteous and to strictly adhere to the guidelines set forth by their teachers and mentors.

Interested students must apply to their specified New Visions program during the early portion of the second semester of their junior year. Following the submission of the completed New Visions application, qualified students will be invited to participate in a formal interview. Acceptance into a New Visions Program is very competitive. The selection process is based on grades, recommendations, an interview and an essay, among other criteria. Students who enroll in the New Visions Programs intend to pursue a competitive college or university upon graduation.

NEW VISIONS: ENGINEERING:

This innovative and exciting course is located in Thurston Hall, allowing students a commanding view of the Cornell University Engineering Quad and the campus beyond. The curriculum is designed for high-achieving high school seniors who are interested in pursuing higher education, and eventually, a career in engineering. The program focuses on the study and application of physics and engineering concepts, along with on- and off-campus engineering experiences that show students how practicing engineers apply these tools. The engineering experiences will include touring engineering labs throughout Cornell University, visiting local and regional engineering companies, participating in topical lectures from engineering faculty and experts, and working in the PARADIM material science labs. The integrated core academics take a critical look at Government, Economics, English and Physics, all through the lens of engineering. Students are actively engaged in engineering design challenges throughout the year that touch on every major branch of engineering - mechanical, electrical, environmental, genetic, civil and chemical. In order to be successful in this course, students must be organized, respectful, motivated and willing to step outside their comfort zones to learn in new ways. Students must also be ready to learn from failure and to understand that there is never just one way to solve a particular problem. Finally, this course relies heavily on working as a team, so students should be prepared to work in a group in a productive, efficient and enjoyable way.

Students will receive integrated high school academic credits for the following courses: English 12 Honors, Economics/Participation in Government Honors, Fundamentals of Engineering, and PHSC 211 - Physics I: Mechanics and Heat upon completion of this program.

Concurrent Enrollment Credits: PHSC 211 - Physics I: Mechanics and Heat (4 credits) from Tompkins Cortland CC and Engineer Your World (3 credits) from University of Texas at Austin are earned upon completion of the program.

College Majors/Career Opportunities in this Field: Civil Engineering, Mechanical Engineering, Biomedical Engineering, Agricultural Engineering, Electrical Engineering, Materials Engineering, Engineering Technician, Industrial Engineering, Architecture

Website: https://www.tstnv.org/engineering.html

NEW VISIONS: EXERCISE SCIENCE & HUMAN PERFORMANCE

In partnership with Ithaca College, students enrolled in this demanding one year program will gain exposure to a range of health careers from athletic training to physical therapy to speech pathology and more. By exploring the effects of exercise on human health, wellness and sports performance, students will gain greater understanding of the expectations for different careers through internships, community involvement, and independent research. Topics of study will include: anatomy, resistance training principles, mobility practices, and kinesiology. Students will design personal training programs as well as group fitness classes. Throughout the year, coursework and guest speakers will highlight various career paths in the sports and health sciences industry. New Visions students integrate their field experiences into their assignments, research projects, and discussions in the classroom.

Students will receive integrated high school academic credits for the following courses: English 12 Honors, Economics/Participation in Government Honors, Introduction to Kinesiology, Medical Terminology, and Physical Education upon completion of this program.

Concurrent Enrollment Credits: RECR 112 - Introduction to Kinesiology (3 credits), HLTH 104 - Medical Terminology I (3 credits), FITN 217 Cardio Conditioning (1 Credit) and FITN 215 Strength & Conditioning (1 credit) are earned upon completion of the program.

College Majors/Career Opportunities in this Field: Recreational Therapy, Athletic Training, Sports Management, Physical Therapy, Physical Education or Health Teacher, Coaching, Fitness Instructor, Certified Personal Trainer, Gym Manager, Chiropractor, Strength and Conditioning Coach, Orthopedic Technician, Occupational Therapy, Speech Therapy.

Website: https://www.tstnv.org/

NEW VISIONS: HEALTH AND MEDICAL SCIENCES

This exciting and challenging professional studies program focuses on career exploration in the healthcare field located at Cayuga Medical Center in Ithaca. The curriculum immerses students through a combination of classroom learning and clinical rotations throughout Cayuga Medical Center and its community affiliates. Through daily involvement with medical professionals, students become more informed of the range of healthcare professions available to be studied. Students observe and assist with patient care, learn laboratory and diagnostic procedures, and interact with a variety of healthcare professionals. Through their clinical experiences students recognize the importances that every role plays in helping ensure quality patient care. New Visions students integrate their experiences on clinical rotations into their assignments, research projects, and discussions in the classroom.

Students will receive integrated high school academic credits for the following courses: English 12 Honors, Economics/Participation in Government Honors, Health and Medical Sciences, and BIOL 131/132 - Human Anatomy and Physiology upon completion of this program.

Concurrent Enrollment Credits: BIOL 131 - Human Anatomy and Physiology I (4 credits) and BIOL 132 - Human Anatomy and Physiology II (4 credits) are earned upon completion of the program.

College Majors/Career Opportunities in this Field: Medical Doctor, Physicians Assistant, Anesthesiologist, Respiratory Therapist, Neonatologist, Dermatologist, Emergency Physician, Nurse Practitioner, Oncologist, Primary Care Physician, General Practitioner, Chiropractor, Pharmacist, Community Health Practitioner, Podiatrist, Public Health Nurse, Registered Nurse, Radiologist, Midwife

Website: https://www.tstnv.org/health-and-medical-sciences.html

NEW VISIONS: LIFE SCIENCES/APPLIED SCIENTIFIC RESEARCH:

This unique, fun and innovative program is located at the Guterman Lab in the College of Agriculture and Life Sciences Department at Cornell University. Students will explore numerous career opportunities in the science of agriculture, food, and natural resources or veterinary medicine. Students choose a rotational experience in veterinary medicine (case study research) or an applied research experience allowing for exploration within unique interest areas in state of the art laboratories across the university campus. Research experiences are planned in close collaboration with and supervised by the New Visions Teacher, which can include the study in plant and animal science, veterinary medicine, forestry, land and water conservation, agriculture business, sustainability, fishery-wildlife management, biological engineering, and much more. The course is designed to attract mature students of high professional and ethical standards who are interested in life science and inquiry. Selected students are not afraid to work hard both independently and with others. Each year, students become a cohort that is expected to set and achieve student driven goals by leaving the program, and their community, a better place.

Extension leadership opportunities are available in this class through the local chapter of the National Student Leadership Organization, the FFA (Future Farmers of America), where students participate in leadership training, workshops and national conferences.

Students will receive integrated high school academic credits for the following courses: English 12 Honors, Economics/Participation in Government Honors, Applied Scientific Research, and ENVS 110/111 - Food Systems upon completion of this program.

Concurrent Enrollment Credits: ENVS 110 - Food Systems Seminar I: Introduction to the US Food System (3 credits) and ENVS 111 - Food Systems II: Food Movements (3 credits) are earned upon completion of the program.

College Majors/Career Opportunities in this Field: Laboratory Technician, Microbiology, Wildlife Biologist, Ecologist, Epidemiology, Zoology, Veterinary Science, Agricultural and Food Science, Environmental Science, Plant Science, Agriculture, Food Science, Natural Resources, Clinical Research

Website: https://www.tstnv.org/life-sciences--applied-scientific-research.html

WORLD OF WORK PROGRAMS

Website: https://www.tstboces.org/page/world-of-work

The World of Work program assists high school students with a variety of instructional needs. Classes promote self-esteem and positive socialization, as well as cognitive and motor skills development through a progressive curriculum. The classes integrate students into the most appropriate and least restrictive Career and Tech setting, offering instruction in both generic and job specific skills, which are important for competitive employment and independent living. Students will work on employability training skills, including: attendance, punctuality, hygiene, organization and efficiency, building confidence, taking responsibility and showing respect. The goal is to create a personal skill set for each student to help them maintain employment upon graduation. World of Work classes are offered in the AM and PM for a minimum of two hours each day.

CAREER EXPLORATION PROGRAM (Grades 11 & 12): AM or PM Session

The Career Exploration Program (CEP) provides students with the opportunity to explore realistic career options available in our community. Generally, students who enroll in this program are nearing completion of their high school career, and this is typically the capstone course leading to entry-level work. Most CEP students have taken Food Services and/or Outdoor Recreation Services prior to enrollment in this course. Students will have the opportunity to participate in internship experiences during the school year. These work experiences are based on the student's interests and abilities, and individual progress is closely monitored and evaluated. Transportation is provided to and from the work site. Students work directly with a job-site mentor (an employee), learning general and technical job skills in the field, and students receive a written work evaluation at the end of each internship.

FOOD SERVICES (Grades 9 – 12): AM or PM Session

The Food Services Program develops a foundation of skills necessary to become an entry-level food service employee. A balance of theory and kitchen skills gives students real world experience. Students work in groups to learn to properly use culinary tools and equipment, and they are encouraged to develop and use their creativity in the selection and presentation of their recipe execution. Students participate in on-site

training by working and managing an on-campus coffee shop, pizza delivery system, and catering service which reinforce student's interpersonal and job skills as they gain practical experience in related food service occupations. This class involves all participants to use their literacy, math and science skills as it relates to the culinary field.

OUTDOOR RECREATION SERVICES (Grades 9 – 12): AM or PM Session

The Outdoor Recreation Services Program exposes students to a wide range of job skills and employability experiences. The curriculum has a heavy emphasis on the repair and maintenance of small engine power equipment, including: ATV's, lawn mowers and chainsaws. Students will also be working with aspects of traditional agriculture mechanics, such as: MIG Welding, basic framing, plumbing, wiring, and tractor operation and maintenance. Woodworking and basic construction skills are developed throughout the curriculum.

Joshua Bacigalupi, Superintendent of Schools

Board of Education:

Heather Williams, President	**Beverly Dodici**	**Daniel Mulligan**
Justin St. Juliana, Vice President	**Bridget Flanigan**	**David Peck**
	Andréa Lamb	**Ronald Szymanski**

High School Principal
Mrs. Sarah Powell, ext. 5236
(spowell1@dryden.k12.ny.us)

Assistant High School Principal
Mr. Dale Sweet, ext. 5227
(dsweet1@dryden.k12.ny.us)

Director of Physical Education and Athletics, Asst. Principal
Mr. Todd Kwiatkowski, ext. 5201
(tkwiatk1@dryden.k12.ny.us)

High School Counseling Office Grades 9-12
Mrs. Michelle Kannus, School Counselor, Grades 9 – 12: A – K, ext. 5282
(mkannus1@dryden.k12.ny.us)

Mr. Laszlo Engel, School Counselor, Grades 9 – 12: L – Z, ext. 5275
(lengel1@dryden.k12.ny.us)

Mrs. Michelle Sinnigen, Counseling Assistant, ext. 5226
(Msinnig1@dryden.k12.ny.us)

Mrs. Mary Hicks, High School Social Worker, ext. 5225
(mhicks1@dryden.k12.ny.us)

Middle School Counseling Office Grades 6-8

Ms.Jessica Reynolds, School Counselor, Grades 6 All, 7 A – L ext. 4242
(jreynol1@dryden.k12.ny.us)

TBA, School Counselor, Grades 7 M-Z, 8 All ext. 4228

High School Department Chairs (2024-2025)

ART	Elizabeth Rechtin / Shannan Hannula
BUSINESS	Linda Bruno
ENGLISH	Heather Brecht
FACS	Janet Vorstadt
WORLD LANGUAGE	Rebecca Tice
LIBRARY	Ben Eckley
MATH	Daniel Miller
MUSIC	Kelly Lutz
PHYSICAL EDUCATION	TBA
SCIENCE	Travis Crocker / Karen Taylor
SOCIAL STUDIES	Matthew Gardner
SPECIAL EDUCATION	Jaime Schmitt
TECHNOLOGY	Angela Eichorst