

South Seneca High School 2024-2025 Course Guide

Table of Contents

<u>Note for Both Parents and Students</u>	p.2
<u>Graduation Requirements</u>	p.3
<u>Course Offerings Overview</u>	p.4
<u>Dual Credit Courses</u>	p.5
<u>Agriculture</u>	p. 6
<u>Art</u>	p.6
<u>Business</u>	p.9
<u>English Language Arts</u>	p.13
<u>Foreign Language</u>	p.15
<u>Health</u>	p.16
<u>Math</u>	p.17
<u>Music</u>	p.19
<u>Physical Education</u>	p.20
<u>Science</u>	p.20
<u>Social Studies</u>	p.22
<u>Technology</u>	p.23
<u>BOCES Career and Tech Programs</u>	p.25
<u>BOCES New Visions</u>	p.36
<u>BOCES World of Work</u>	p.40

Note for Both Parents and Students

High School Transition:

The guidance counselors make classroom visitations in the spring to talk with all current eighth grade students to plan their high school program. These visitations bring to focus State Education assessments that all students are required to pass. Academic planning is extremely important as students transition from eighth to ninth grade. Parents will be notified by mail of an information night to be scheduled sometime in the month of April. Attendance is strongly encouraged.

The Board has defined the following for a student's class standing by the number of credits earned. The following table illustrates the credit cutoffs:

Minimum Number of Credits Needed	Class Standing
5 ½	Sophomore
11	Junior
16 ½	Senior

Class standing in September is retained for the entire year regardless of course load. The exception pertains to fourth year students who hold Junior status at the beginning of the year. A revised credit count will take place in February to determine Senior status and graduation eligibility.

Graduation Requirements

Awarding of Diplomas and Participation in Graduation Ceremony

In order to participate in the graduation ceremony, the Building Principal must certify that the student has met the graduation requirements listed below:

The NYS Department of Education (SED) still mandates 22 units of credit to meet diploma requirements (see chart). There are currently no changes with respect to credit requirements.

SED has implemented two significant changes with respect to exam requirements for graduation.

1. The “4+1” pathway which still requires five exams to be completed. However, the American History or Global Studies exam (not both) may be substituted with an alternative exam (see #1 in notes). This would typically include a second math (Geometry) or science (Biology) exam.
2. SED is currently phasing in Common Core examinations as a substitute for the old Regents exams. The phase-in has begun with math exams and English (ELA). Grade levels affected by this transition are outlined in the accompanying chart.

The Local Diploma will still be awarded for students receiving special education services or students possessing a 504 accommodation plan where a low pass option is specified. In both cases a score of 55 is recognized as a passing score on all SED exams. Five exams are still mandated to meet graduation requirements. Other Safety Net options for special education students are outlined in the chart titled “Examination Requirements.”

2024-25 South Seneca Course Offerings Overview

Agriculture

Agriculture, Foods &
Natural Resources
(AFNR)
Animal Studies
Floriculture
Plant Studies

Art

Studio Art
TC3 Drawing & Painting
Printmaking
Photography

Business

TC3 DMP
ADV DMP
TC3 Animation & 3D
Modeling
TC3 Web Design
TC3 Programming
TC3 Accounting
TC3 College Success
Foods & Business
Introduction to Business
Marketing
Broadcasting
Photoshop
Work Study Program

English Language Arts

English 9
English 10
English 11
English 12
TC3 English 12

Health

High School Health
Stress Reduction
TC3 Responding to
Emergencies

Foreign Language

Spanish 1
Spanish 2
TC3 Spanish 3
TC3 Spanish 4
TC3 Spanish 5

Math

Algebra 1
Geometry
Algebra 2
TC3 Pre-Calculus
TC3 Calculus
TC3 Statistics
Business Math
Consumer Math

Music

High School Band
High School Chorus
Jazz Ensemble
Vocal Jazz

Physical Education

P.E 9/10
P.E 11/12
Strength & Conditioning

Science

Earth Science
Living Environment
Chemistry
TC3 Physics
Zoology
Bioethics

Social Studies

Global 1
Global 2
American History
TC3 American History
Government/Economics
TC3 Political Science

Technology

DDP Wood
ADV DDP Wood
3D Printing
Auto Systems 1
Auto Systems 2

Dual Credit Classes At South Seneca

South Seneca maintains a current articulation agreement with Tompkins-Cortland Community College (TC3). This agreement enables high school students to concurrently earn high school and college credit at the same time. Credits earned through TC3 are transferable to other institutions of higher learning. The following table outlines current dual credit course offerings at South Seneca:

	Course Title	TC3 Equivalent Code	Credit Hours
Art Department	TC3 Ceramics	ART 130, ART 131	6
	TC3 Drawing & Painting	ART 115, ART 116, ART 120	9
Business Department	TC3 College Success Seminar	ACAD 150, CAPS 100/111/121	6
	TC3 Accounting	ACCT 101	4
	TC3 Web Page Design	CAPS 152	1
	TC3 Digital Media Production	COMM 145	1
	TC3 Advanced DMP	COMM 111	1
	TC3 Animation & 3D Modeling	COMM 112, COMM 115, COMM 111	3
	TC3 Intro to Programming	CSCI 160	3
Math Department	TC3 Pre Calculus	MATH 120/138	8
	TC3 Calculus	MATH 201	4
	Business Math	BUAD 109	3
	Statistics	MATH 200	3
Language Department	TC3 Spanish III	SPAN 102	3
	TC3 Spanish IV	SPAN 201/202	6
	TC3 Spanish V	SPAN 280/281	6
English Department	TC3 English 12	ENGL 101/102	6
Science Department	TC3 Physics	PHSC 104	4
History Department	TC3 American History	HSTY 201/202	6
	TC3 Political Science	POSC 103/104	6
Health Department	TC3 Responding to Emergencies	HLTH 205	3

With proper planning, course selection, and work ethic, a South Seneca student can easily complete a year's worth of college credit prior to graduation. Please review TC3's bulletin on further benefits from enrolling in these courses.

Agriculture

Course Title: Agriculture, Foods, & Natural Resources (AFNR)

Credit: ½

Introduction course to Agriculture that gives a brief overview of Agriculture, Food Systems, and Natural Resources. Students will learn the basics of scientific principles relating to global and local agriculture through hands-on activities, readings, class discussions & field trips. Students will learn about community gardens, greenhouses, and indoor growing systems.

Course Title: Animal Studies

Credit: 1

Students will learn about different types of animals in this course. This includes companion animals and farm animals, and wild animals. What do they eat? What kinds of habitats do they need? Students will also learn about the animals & their body systems, reproduction, and health conditions.

Course Title: Floriculture

Credit: ½

Learn about flowers in this course. What are different types of flowers? What are they used for? Where do they grow? What are different reasons that people use flowers? This will include creating floral arrangements and growing flowers.

Course Title: Plant Studies

Credit: ½

Learn about plants. How do they grow? How do you propagate them? What are plants used for? Get an in-depth look at plants. Similar to Garden Studies, but more focused on the plant itself.

Art

All art courses require work time outside of class. As an artist, you will discover that the level of your artistic ability and satisfaction grows with your participation, effort, and time commitment.

Course Title: Studio Art

Credit: 1

Studio Art is a beginning level, full-year art course, for grades 9-12. This course meets the Regents' Fine Arts requirement for graduation, is a prerequisite for all advanced level elective art courses, and is a required course for all art majors.

Studio Art introduces a variety of art materials, tools, processes, vocabulary, resources, history and culture. Explore drawing, painting, printmaking, sculpture, and ceramics. Develop technical skills, personal expression and style, and creative thought processes. Analyze and reflect upon your own artwork, as well as the works of your peers and other artists. In addition to projects, Studio Art includes sketchbook assignments, critiques, a portfolio, and an art museum field trip. **All art courses require work time outside of class.**

Students of all artistic and ability levels are able to be successful with adequate participation and effort. Studio Art will give you the basic background necessary to create, understand, assess and appreciate visual art, and to successfully continue on into other art courses.

Course Title: Printmaking

Credit: 1

Prerequisite(s): Studio Art

Printmaking is an advanced level, full year elective art course for grades 10-12. Studio Art is a prerequisite for this class.

Explore different types of printmaking processes and materials to create monotype, relief, drypoint, collagraph, etching, gum transfer, and/or silkscreen prints. Develop your artistic skills and creativity as you transform idea sketches into final artworks.

In addition to projects, Printmaking includes critiques, a sketchbook, a webfolio (digital portfolio), a field trip, a guest artist, and a final project.

Course Title: TC3 Drawing and Painting*

Credit: 1

Prerequisite(s): Studio Art

Drawing and Painting is an advanced level, full year elective art course for grades 10-12. Studio Art is a prerequisite for this class. Students who have previously taken Drawing and Painting, and passed with at least a final grade of 85 or better, may opt to take this course at the more advanced level.

Drawing and painting are fundamental skills for artistic expression in all media. Explore a variety of drawing and painting materials and techniques. Develop your creativity as you transform idea sketches into final artworks. Learn how to accurately represent what your eyes see, develop composition skills and increase your understanding of color theory. The course will begin with drawing and then transition into painting.

In addition to projects, Drawing and Painting includes critiques, a sketchbook, a webfolio (digital portfolio), and a final project. A field trip and/or guest artist may also be included.

Course Title: Photography A*

Credit: ½

Prerequisite(s): Studio Art

Photography A is an advanced level, half-year elective art course for grades 10-12. Studio Art is a prerequisite for this class.

Discover the evolution of photography and how it is both an art and a science. Explore and use both a 35mm camera with film and a digital SLR camera to take photographs. Explore the darkroom chemicals and equipment to develop your negatives and print fine art black and white photographs. Explore the use of Adobe Photoshop to edit and enhance digital photos. Professionally finish off your prints with a dry-mounting press. Develop the eye and style of a photographer by learning about a variety of techniques and famous photographers. Emphasis will be placed on composition, lighting, and expression.

In addition to projects, Photography A includes critiques, reading and homework assignments, a webfolio (digital portfolio), a field trip, and a final project.

NOTE: Photography A requires the purchase of some supplies, which totals approximately \$80 for the semester. You do NOT need to pay this all at once. You will need \$30 at the start of the course. Cash only; no checks or charging.

Course Title: Photography B*

Credit: ½

Prerequisite(s): Photography A

Photography B is an advanced level, half-year elective art course for grades 10-12. Photography A is a prerequisite for this class.

Continue taking, developing, printing, and mounting photographs, while you also learn about and use filters, tinting, toning, coloring, and other creative and experimental techniques. In addition to projects, the course includes a video series, critiques, a webfolio, and a final project.

NOTE: Photography B requires the purchase of some supplies, which totals approximately \$80 for the semester. You do NOT need to pay this all at once. You will need \$30 at the start of the course. Cash only; no checks or charging.

Course Title: Creative Crafts - 1st Semester*
Creative Crafts - 2nd Semester*

Credit: ½ each

Prerequisite(s): Studio Art, DDP, or DMP

Creative Crafts is an advanced level, half year elective art course for grades 10-12. Studio Art is a prerequisite for this class. Students have the option of taking this course for one semester (either in the fall or spring) and earn ½ credit, or for both semesters and earn 1 credit.

Explore traditional and contemporary crafts by working with a variety of techniques and materials, such as clay, metal, wood, paper, glass, textiles, and/or fibers. Express your creativity as you learn about two- and three-dimensional design and hand crafted objects from cultures around the world. Different projects and content will be covered during each semester.

In addition to projects, Creative Crafts includes critiques, a webfolio (digital portfolio), a field trip, and a final project.

*This course will not be offered in the 2024-25 school year.

Course Title: TC3 Ceramics

Credit: 1

Prerequisite(s): Studio Art

Ceramics is an advanced level, full year elective art course for grades 10-12. Studio Art is a prerequisite for this class.

Explore hand-building and wheel throwing tools and techniques to create bowls, mugs, plates, containers, and other vessels from clay. Work with glazes, stains, and engobes to decorate and finish your ceramic pieces. In addition to projects, Ceramics includes critiques, a sketchbook, a webfolio (digital portfolio), a field trip, and a final project.

NOTE: Since Ceramics requires drying and kiln firing time, students work on 2 to 3 projects simultaneously. Good planning and time management skills are necessary.

*This course will not be offered in the 2024-25 school year.

Business and Computer Science

“The Mission of the Business Education Department at South Seneca High School is to provide all students with a fundamental understanding of how the business world functions, and how they, as students, can use this information to make more educated decisions as they relate to their future beyond high school so that they will have the ability to make a positive contribution to our community and society.”

Course Title: Introduction to Business

Credit: ½

Prerequisite: None

Students will learn business terminology, business concepts, how businesses are set up and organized. Students will learn about the various economic systems used throughout the world and how they fit into our mixed market economy. Students will explore various career areas and explore what interests they have so that they may make better decisions as they relate to what classes they may want to pursue in high school and beyond. Students will be introduced to how financial markets are set up and operate. Entrepreneurship will also be introduced. An emphasis will be placed on the role that money plays in our economic system.

Introduction to Business should be taken prior to taking any other business courses as it introduces the majority of the terminology and concepts used in other advanced business courses.

Course Title: TC3 Digital Media Production

Credit: 1

This course serves as an introduction to and exploration of media based communication. Its objective is to provide students with hands-on production experience while also familiarizing them with relevant and controversial debates surrounding media issues. Students will develop basic technical and conceptual skills for production and take a critical look at computer applications and media culture. A variety of media examples including television program excerpts, commercials and movies will be presented for analysis.

Areas of exploration include media literacy, audio editing, storytelling, camera/tripod operation, video editing, animation, and DVD production. **This course may be applied as either business or art credit. Students successfully completing the DVD portion of this course can earn 1 college credit hour from TC3. This credit can often be transferred from TC3 to other institutions.**

Course Title: Advanced Digital Media Production

Credit: 1

Prerequisite(s): None

This course continues exploration begun in the basic Digital Media Production class. Students will be expected to build upon concepts and skills learned in previous coursework and to advance both their understanding of, and skills in producing, electronic media-based communication. Students will be given increased project design authority, working in both teams and individually to produce media relevant to themselves, our school, and the local community. Advanced editing and special effects techniques will be explored. Completed projects will be formally presented to an appropriate audience. **This course may be applied as either business or art credit.**

Course Title: TC3 College Success Seminar

Credit: 1

Prerequisite: Senior Level Student or Guidance Recommendation

*** Students completing this course with an 85 or better will earn 3 credit hours toward college from TC3 (ACAD 150 equivalent).**

This course promotes students' personal adjustment and academic success in their first college semester. Students will conduct interest surveys and research colleges that may interest them. Topics of the course will include adjusting to college life, developing essential learning and time management strategies, developing goal setting and decision making strategies, learning about college resources, and placement testing. Course material will also include information about the Financial Aid Process.

Through this course students will become familiar with the various applications of Microsoft Office 2013. Students will learn about the Windows 8 Operating System. Application Software will include Internet Explorer, Microsoft Word, and Excel. Students will gain an insight as to how the various applications can work together. Students will also gain an insight as to the various internal and external parts of a personal computer and how they operate.

*** Students completing this course with an 85 or better will earn 6 credit hours toward college from TC3 (ACAD 150 and CAPS 100/111/121 equivalent).**

Course Title: TC3 Web Design

Credit: ½

Web Design is a hybrid course bringing together technical computer skills, business-related marketing concepts, and the aesthetics of design appeal. Students will explore the planning process of web page design including the establishment of logically arranged hierarchies. They will gain an understanding of the mechanics of web page construction including the manipulation of text and graphics, use of hyperlinks, and arrangement of structural frames and forms. In addition, students will demonstrate effective use of the principles of design. Students will develop a familiarity with the html and CSS markup languages. Over the course of the semester, students will work individually to design a personal web page.

Students completing this course with at least an 85 can earn 1 college credit hour from TC3. This credit can often be transferred from TC3 to other educational institutions

Course Title: TC3 Introduction to Programming

Credit: ½

With the increased use of computers, smartphones, and other electronic devices, interest in program and application development has grown. In addition, the computer and robotic automation of many traditional manufacturing jobs today frequently requires some knowledge of programming. This is a course for students who wish to learn the basics of computer programming either for their own curiosity or as part of a career plan; no prior programming experience is required. The course will introduce basic programming terminology, concepts, and best practices. Students will learn to write programs in the JAVA language using such constructs as variables, statements, functions, loops, arrays, and classes. Good programming habits and problem solving strategies will be covered, as well as program design, flow charting and architecture, and debugging techniques.

Course Title: Economics

Credit: ½

This class is intended to give students an opportunity to examine topics in some depth, applying analytic techniques of the discipline. An attempt has been made to give the course some flexibility with respect to the abilities and previous preparation of students as well as to the resources available in the school. Business Economics represents half of the senior year Social Studies requirement.

This course consists of two sections: Personal Finance and an introduction to how the basic principles of economics apply to you and how they relate to your personal finances and your life beyond high school. This course will give you a better understanding of how not just our economic system works but others as well.

Course Objectives:

- Provide you with an understanding of your own personal finances so that you may make wise decisions regarding your financial future.
- Provide you with an understanding of how our economic system works.
- Provide you with an understanding of how you fit into the economy.
- Provide you with an understanding of how other economic systems work and their basic principles.

Course Title: TC3 Accounting

Credit: 1

Prerequisite(s): Recommended for Juniors & Seniors

Content of this course will parallel the first semester of a college introductory accounting course and involves more analysis than the traditional high school accounting class. The course introduces basic accounting concepts, principles, and practices for a service or merchandising business at an accelerated pace. Students are introduced to accrual based accounting. Emphasis is placed on adjustments, special journals, and financial statements. **Students completing this course with at least an 85 and passing a TC3 exam can earn 4 credit hours from TC3. This credit can often be transferred from TC3 to other educational institutions.** As this course is given with college-level expectations, consistent study habits and high motivation are required. Students who are comfortable working independently and who get satisfaction from being accurate can expect to do well in this class.

Course Title: TC3 Animation & 3D Modeling

Credit: 1 credit

Prerequisite(s): None

This course is designed to give students an introduction to the art and science of animation. After an initial introduction to the principles of animation in two dimensions, students will explore the manipulation of objects in three dimensional space through use of Blender, an open-source modeling and animation software. In addition to evaluating a variety of animation examples, course topics will include character/story development, special effects, motion graphics with keyframes, and finally rendering.

This course may be applied as either business or art credit.

Course Title: Hospitality Business and Foods Management

Credit: 1

Prerequisite(s): None

The objective of this course is to provide the student, through practical experience and lecture, a basic understanding of food production and principles, industry terminology, and the care and use of food service equipment. The student, upon satisfactorily completing the course, should be able to judge food preparation and recognize a standard product. Students will also be exposed to a number of food products, qualities, and industry trends. Students will be taught these principles through utilizing reading comprehension, math skills, note taking, and practical experience through actual food preparation. Careers related to the Food and Hospitality Industries will also be explored. Proper sanitation and safety practices will be emphasized. **Safety will be priority number one.**

Course Title: Game Design

Credit: 1

Prerequisite: Sophomore standing

This cutting-edge course is meant for creative and analytical exploration of the principles and technical production of video game design. A brief introduction of the theory of successful game design through game play and analysis will be followed by instruction and tutorial lessons in the use of Unreal Engine software. As a culminating project, students will be creating and improving an original game through iterative design. Because of the intricacy of the software used, enrollment preference will be given to motivated and disciplined students.

Course Title: Marketing

Credit: 1

Prerequisite(s): None

This course introduces students to the important role that marketing plays in our economic system and examines its effect on our daily lives. Content revolves around the basic marketing functions: selling, promotion, pricing, purchasing, product/service, and idea planning and distribution. Projects, including marketing research, are developed to give students hands-on experience using these functions. Students will be introduced to career opportunities in marketing and the training necessary to obtain them.

Course Title: Photoshop and Commercial Arts

Credit: 1

This course is designed to increase student understanding of various manual and digital image techniques that are used by designers in commercial art settings. A major focus will be on creative problem solving, and how designers develop ideas for clients that communicate a desired message to a specific audience. Units explored include principles of design and layout, design history, advertising, logo design, typography, and package design, among others. In addition, students will explore professional work-related skills and various careers related to the graphic arts industry. Students will learn different ways to communicate their ideas through discussion, journal writing, critiques, and projects.

This course may be applied as *either* business or art credit.

Course Title: Business Law*

Credit: 1

Prerequisite(s): None

The course emphasis is on the individual as he/she encounters business law in personal, family, and occupational life. It is introduced with an overview of what law is, why it is needed, and how it affects both society and the individual. By studying true situations and cases, students will learn how business and personal law impacts the real lives of young people and adults as well. The remainder of the course is a study of the legal rules applicable to business contracts with special emphasis on personal/business liability, sales, payments, renting and owning property, wills, and family law. This is a good preparatory course for a student planning to follow a college business management program. **Business law can be applied towards a 5th credit social studies sequence.** Students will be graded on tests, homework assignments, class participation, case studies, and projects.

***This course will not be offered in the 2024-25 school year.**

Course Title: Small Business Management*

Credit: 1

Prerequisite: None

This course is designed to provide the student with an introduction to the concepts of business management. The intent is to balance economic and regulatory considerations with management skill development. Through a variety of activities the course content should enable the student/entrepreneur to successfully start and maintain a small business. As a final project, students will develop a real business plan.

***This course will not be offered in the 2024-25 school year.**

Course Title: Digital Literacy*

Credit: ½

Prerequisite: None

Near universal use and increasing reliance on the internet for research, global collaboration, media creation and distribution of information offers a wealth of new possibilities. This course serves as an introduction to these resources and how they can be harnessed to improve academic performance. Students will use free internet tools to collect, evaluate, synthesize, share and comment on resources from the web and the work of others as well as their own. An overview of internet safety will be followed by a unit exploring effective and varied internet searching with particular emphasis on determining site reliability and relevance. A deeper understanding of copyright and creative commons rules will be developed. Finally, web 2.0 tools such as wikis, blogs & microblogs, podcasts, RSS feeds & aggregators, web portals, social networking, and social bookmarking will also be examined and tested in a safe and secure environment. Students will educate others in the school and/or greater community by sharing through the internet using the tools explored in class. Grading will be based on electronically gathered resources, reflections, collaboration /contribution, class participation and quizzes.

***This course will not be offered in the 2024-25 school year.**

Course Title: Advanced Programming*

Credit: ½

Prerequisite(s): Introduction to Programming

This course is for students who would like to explore concepts in programming beyond the introductory level. Specifically, students will be looking at ways to develop code that works interactively with the world around us, either through the internet or with physical objects. An overview of Javascript will be followed by more in-depth exploration of the Python programming language. Students will be encouraged to work towards the solution of an originally conceived, functional and purposeful programming problem.

***This course will not be offered in the 2024-25 school year.**

English Language Arts

Course Title: English 9

Credit: 1

Freshman students complete a Regents program that follows NYS Standards and culminates in a Regents exam during their Junior year. Students study a variety of literature, which may include *The Pearl*, *Killing Mr. Griffin*, *A Raisin in the Sun*, *Romeo and Juliet* and numerous short stories and poems. Reading will be accompanied by related discussions, written assignments (Close Reading, Analysis Questions, Response Questions, Extended Response), quizzes and projects.

Course Title: English 10

Credit: 1

Tenth grade English explores a variety of works from American and World Literature, such as *Macbeth*, *Of Mice and Men*, *Dreamland Burning*, *Hiroshima*, and various poems and short stories. Writing assignments will include Regents practice essays and academic research projects. All assignments are designed to continue developing essential skills in the areas of reading, writing, speaking, and listening.

Course Title: English 11

Credit: 1

English 11 explores a variety of literary genres. Extensive readings are completed using short stories, novels, and articles that will be distributed to students. Students will also be extending their vocabulary in preparation for college testing (SAT and ACT) and to enhance their understanding of the materials read in class. All students are required to take and pass the Regents Examination in English Language Arts. Activities and assignments given throughout the year prepare the students for this exam. Students are required to keep a notebook, digitally access class materials, and remain current on assignments. Writing assignments are varied and include short and extended responses.

Course Title: English 11 Honors

Credit: 1

Prerequisite: Successful completion of English 10 Honors or teacher recommendation

English 11H explores a variety of literary genres. Extensive readings are completed using short stories, novels, and articles that will be distributed to students. Students will also be extending their vocabulary in preparation for college testing (SAT and ACT) and to enhance their understanding of the materials read in class. All students are required to take and pass the Regents Examination in English Language Arts. Activities and assignments given throughout the year prepare the students for this exam. Students are required to keep a notebook, digitally access class materials, and remain current on assignments. Writing assignments are varied and include short and extended responses.

Students in the Honors section can expect to take their thinking to the next level, often producing work created to analyze and evaluate the given reading material. Students in the Honors English program will need to maintain an average of at least an 85 throughout the year.

Course Title: English 12

Credit: 1

In an effort to prepare senior English students for the real world they are about to enter, students in English 12 will examine the role that literacy plays in everyday life. Students will read a variety of genres in order to discover new ideas and develop their own. Students will write with purpose creating essays for college applications, resumes, and cover letters to potential employers. Finally, students will speak and listen to peers, to parents, to community members, and to teachers all in an effort to enhance their communication skills.

Course Title: TC3 English 12: College Writing and Literature

Credit: 1

Prerequisite: Successful completion of English 11 Honors or teacher recommendation

Through a comprehensive introduction to the major aspects of literature, students develop and refine an effective writing process of planning, invention, drafting and revision. Various rhetorical modes including, but not limited to, literary analysis, persuasive, research (APA & MLA), narrative, descriptive, and process help

students understand fiction, drama, and poetry as forms of literary expression, as well as a variety of non-fiction forms covering diverse topics. The student is responsible for nightly in-depth assignments, organizing his/her ideas in written form, and active participation in classroom discussion. The course is taken for English credit and college credit through TC3. Students have the option to take the AP English exam in May, for which voluntary review classes will be offered.

Course Title: Mythology

Credit:

This engaging and thought-provoking class invites students to explore the rich tapestry of human culture through the lens of diverse mythological traditions. This course combines classical scholarship with interactive activities, discussions, and creative projects to deepen students' appreciation for the enduring power of mythology. By the end of the course, students will not only possess a comprehensive understanding of diverse mythological traditions but will also develop critical thinking skills and a broader cultural perspective. Join us on a journey through the realms of gods, monsters, and heroes as we unravel the mysteries of the human imagination.

Course Title: Creative Writing

Credit:

This dynamic course invites aspiring writers to explore the craft of storytelling, develop their unique voice, and hone their skills in various genres of creative writing. Throughout the course, students will engage in a series of writing exercises, workshops, and collaborative activities aimed at fostering a supportive and inspiring writing community. Whether you're passionate about crafting short stories, poetry, plays, or novels, this course provides a platform for you to experiment, refine your style, and receive constructive feedback.

Foreign Language

Course Title: Spanish I

Credit: 1

This full year introductory course is for students who have never taken Spanish before OR who took Spanish in middle school but did not pass the Checkpoint A examination. Students enrolled in this course have little or no proficiency in the language. The students will learn basic high frequency vocabulary topics, verbs in the present tense and other basic grammar points. *Successful completion of this course meets the mandatory one credit requirement for high school graduation.*

Course Title: Spanish II

Credit: 1

Prerequisite(s): Spanish I

This course is offered to students who have passed the Checkpoint A Exam in 8th grade or who have successfully completed Spanish I. It emphasizes listening and speaking skills in the target language. The primary goal this year is for the student to become more proficient in Spanish and to increase the students' knowledge and understanding of the language. Many grammar concepts and verb tenses will be practiced. Students are expected to communicate predominantly in Spanish.

Course Title: TC3 Spanish III

Credit: 1

Prerequisite(s): Spanish II

TC-3 Dual Credit Option: SPAN 102 (3 Credits)

This course is offered to students who have successfully passed Spanish II. Spanish III prepares students for the Checkpoint B examination. Students will enhance their reading, writing, listening and speaking skills within the context of NYS World Languages Checkpoint B thematic vocabulary units. More complex grammar concepts and verb tenses will be practiced. Students are expected to communicate predominantly in Spanish.

Course Title: TC3 Spanish IV

Credit: 1

Prerequisite(s): Spanish III

TC-3 Dual Credit Option: SPAN 201/202 (6 Credits)

This class is offered to students who have successfully completed Spanish III. This is a CollegeNow concurrent enrollment course with TC3. Successful course completion will give them credit for Intermediate Spanish 201 and 202 (6 credits total). The majority of the instruction will be conducted in Spanish. Students will be expected to contribute to class discussions on a variety of topics. A review of all major verb structures will be incorporated into the units. Students will interact with various readings, produce projects and make presentations to enhance their knowledge and understanding of Spanish.

Course Title: TC3 Spanish V

Credit: 1

Prerequisite(s): Spanish IV

TC-3 Dual Credit Option: SPAN 280/281 (6 Credits)

This class is offered to students who have successfully completed Spanish IV. This is a CollegeNow concurrent enrollment course with TC3. Successful course completion will give them credit for Intermediate Spanish – Hispanic Literature & Culture 280 and 281 (6 credits total). Major emphasis is placed on helping students improve their oral communication skills and reading comprehension. Students will explore different aspects of the cultures, history, and current events of the Spanish speaking world. The majority of the instruction will be conducted in Spanish.

Health

Course Title: High School Health

Credit ½

Prerequisite(s): Health 8

The general purpose of Health is to teach, re-teach and allow students to practice lifetime skills that will promote physical, social and mental well-being. There is an emphasis on challenging students to go beyond viewing health as just “being free of disease”. The main focus of this class is to promote prevention of physical, social and mental problems so that “Quality of Life” can be optimized.

Course Title: TC3 Responding to Emergencies

Credit ½

Prerequisite: Health

This fun and active class will teach you what to do in an emergency before medical help arrives. This course will prepare you to make appropriate decisions regarding first aid care and to act on those decisions. After

completing the class students will be certified by the American Red Cross in CPR, AED, and First Aid. Dual credit is offered in conjunction with TC3.

Course Title: TC3 Personal Health and Wellness*

Credit ½

Prerequisite: Health

The purpose of this course is to improve student awareness concerning those issues governing our health. This course will isolate some of the most confusing health-related problems and provide data and facts to help students to make decisions that will optimize their personal health. Topics include healthy relationships, tobacco use, alcohol, nutrition, fitness, disease and managing stress. Dual-credit is offered in conjunction with TC3.

Course Title: Child Growth and Development*

Credit ½

Prerequisite: Health

Child Growth and Development studies the physical, intellectual, social and emotional development of a child from conception to five years of age. Students will learn positive ways to care for children and meet their needs during these formative years.

***This course will not be offered in the 2024-25 school year.**

Math

Course Title: Algebra I Regents

Credit: 1

Prerequisite: Successful completion of Math 8 or Pre-Algebra

This course leads to the mandated Algebra I Regents Exam. Topics include linear, quadratic, and exponential functions, solving equations and inequalities, and statistics, as outlined in the NYS Common Core standards. Algebra Regents exam in June.

Course Title: Geometry Regents

Credit: 1

Prerequisite: Successful completion of Algebra I CC and Algebra I regents

This course is the second of three leading to a Regents Diploma with Advanced Designation. Topics of study include Euclidean geometry (including an emphasis on formal proof), trigonometry, analytic geometry, transformations and additional topics as outlined in the New York State Common Core standards. Geometry Regents Exam in June.

Course Title: Topics of Geometry

Credit:1

Prerequisite- students who passed the Algebra I class but failed the regents

This course is for students who have not passed the Algebra I Regents exam but passed the Algebra I class and need additional math support to pass the Algebra I regents. Topics include linear, quadratic, and exponential

functions, solving equations and inequalities, and statistics, as outlined in the NYS Common Core standards. Students will be taking the Algebra I regents in January. During the second semester, students will be introduced basic geometry skills and their applications to real-life situations. Local final or project in June.

Course Title: Algebra II Regents

Credit: 1

Prerequisite: successful completion of Geometry CC/ Geometry CC Honors

This course is the third of three leading to a Regents diploma with Advanced Designation. This is a fast-paced, rigorous course and the level of abstraction required is much higher than that of previous math courses. Topics of study include algebra, rational expressions, complex numbers, functions, trigonometry, logarithms, probability, statistics, series and sequences. Regents in June.

Course Title: TC3 Statistics

Credit: 1

Prerequisite(s): Geometry or Algebra II

This is a general introductory course that will give each student knowledge of statistics through descriptive and inferential concepts. Each student will be exposed to real-world applications in many fields. Some of the topics that will be covered in the twenty weeks are: graphic presentation of data, measures of central tendency, measures of dispersion, art of deception, bivariate data, linear correlation and regression, probability concepts and distributions, sample variability hypothesis testing, and making inference on one and two populations. Students successfully completing this course will earn both high school and college credit. Class enrollment needs to be with teacher recommendation. Dual-credit is offered in conjunction with TC3. 3 credits

Course Title: TC3 Pre-Calculus

Credit 1

Prerequisite(s): Successful completion of Algebra II/Trigonometry Course and Regents Exam

This course is a continuation of topics from all previous math courses and provides the algebraic foundation for students intending to take a Calculus course. Topics include linear and quadratic equations, absolute value, inverse and composite functions, exponential and logarithmic functions, analytic geometry, and trigonometry. Class enrollment is dependent upon teacher recommendation. Dual-credit is offered in conjunction with TC3 for two separate College Courses: Math 120 College Algebra and Math 138 Precalculus. 8 total credits.

Course Title: TC3 Calculus

Credit: 1

Prerequisite(s): Successful Pre-Calculus course completion

Calculus I is a college course that is a necessary prerequisite for many professional fields such as Science, Math, Technology and Engineering. Students enrolling in Calculus need to possess a strong math background to successfully access the content and concepts of the course. Students will strengthen quantitative skills and build a firm foundation in calculus. Topics included are Limits, Differentiation, Integration and Applications of Calculus. Class enrollment is dependent upon teacher recommendation. This course is taken for math credit and college credit through TC3. Students have the option to take the AP Calculus exam in May, for which voluntary review classes will be offered.

Course Title: Business Math

Credit: 1

Prerequisite(s): Integrated Algebra

The course is designed to develop a thorough understanding and mastery of the arithmetic processes of business with an emphasis on the application of principles to typical business problems. Topics included are: Solving for Unknowns, Percents, Discounts, Markups and Markdowns, Payroll, Simple and Compound Interest, Credit Cards, Home Ownership, Depreciation, Inventory, Stocks, Bonds and Mutual Funds. Business Math is a fourth year offering for seniors who have completed a sequence in applied math. This course addresses finance at a personal and practical level. Students examine current economic conditions focusing on how they can impact their personal economic situations. Ethics, personal management of cash, debt, credit, investments, insurance, and home buying are examined. Dual-credit is offered in conjunction with TC3. BAUD 109. 3 credits

Music

Course Title: Senior High School Band

Credit: ½

The Instrumental program is intended to further develop students' individual and group skills in music instruction. Performances as large groups, small ensembles and solos are part of the performance opportunities offered. The concert band performs music that will challenge and expose students to a variety of styles and genres.

Course Title: Senior High Jazz Band

Credit: ½

Prerequisite(s): Instrumental type is a consideration – permission by the instructor prior to registration in this course.

The Jazz Ensemble introduces students to a progressive and modern level of music devoted to Latin, jazz, rock styles. Students will be encouraged to explore improvisation skills in this ensemble setting.

Course Title: Senior High Chorus

Credit: ½

The general purpose of the senior high chorus is to further a love of singing while gaining skill in vocal technique and music literacy in a choral setting by performing a wide variety of quality vocal music covering all musical styles.

Course Title: Senior High Vocal Jazz Ensemble

Credit: ½

Prerequisite(s): High School Chorus is a co-requisite /Screened Audition Process Required in the Spring before the school year.

Students will gain experience with a variety of styles ranging from pop standards to swing, etc. Members will work on improvisational skills, arranging music, solo singing, and choreography.

Physical Education

Course Title: Physical Education for Grades 9 – 12

Credit: ½

For all students in grades 9 – 12. Designed to improve physical fitness at all levels, it includes general education in a variety of sports, games and activities involving group and individual participation.

Science

A NOTE REGARDING SCIENCE COURSE REQUIREMENTS:

Students will need to complete three credits in science. Two of these credits must include Living Environment and one from Earth Science, Chemistry, or Physics. Students must also pass one Regents examination or approved alternative for a Regents Diploma. Regents Exam scores of 65 or higher are required in Living Environment, plus two additional exams from any combination of Earth Science, Chemistry or Physics are required for the Advanced Diploma with Distinction.

All core-based courses (Earth Science, Living Environment, Chemistry and Physics) require a minimum of 1200 minutes of laboratory time with satisfactory lab reports prior to entry into any part of a State Regents examination in science.

Course Title: Earth Science Regents

Credit: 1

Regent's Earth Science is a full-year laboratory course. Generally, 9th grade students register for this course. Astronomy, geology, oceanography, and meteorology are studied. It is recommended that students complete the Physical Settings portion of the graduation requirement with the Earth Science Regents exam.

Course Title: Living Environment Regents

Credit: 1

This is a full year laboratory based course that is required for graduation. The topics that are covered include: **evolution, cell structure and function, maintaining homeostasis, human biology, reproduction and heredity, ecology, biotechnology and environmental issues.** Laboratory skills that include the application of the scientific methods and the application of laboratory techniques and procedures, including **dissection**, will be emphasized in this course.

Course Title: Honors Chemistry Regents

Credit: 1

Regents Chemistry is an introduction to the serious study of chemistry. Technical language is utilized throughout the course, as are quantitative methods of interpretation of information. The topics covered include: the study of matter, atoms, chemical bonding, periodicity, stoichiometry, moles, kinetics, redox reactions, acid-base chemistry, organic chemistry, and nuclear chemistry. **The course integrates a high deal of mathematical concepts, and successful completion of Algebra I, as well as Earth Science and Biology is recommended.** Laboratory skills that include the application of the scientific method and the application of laboratory techniques and procedures will be emphasized in this course.

Course Title: TC3 Physics*

Credit: 1

Prerequisite(s): Algebra II/Trigonometry or teacher approval

Minimal skills needed for successful completion of this course include: good quantitative skills for solving problems, training in both algebra and trigonometry, ability to read and interpret mathematical problems given in words rather than symbols, and the will to strengthen skills in both disciplines. This course covers the NYS Regents curriculum. The student completing this course should be able to understand the terms and concepts of the topics covered, solve quantitative problems of moderate difficulty, manipulate and comprehend data using quantitative, estimation, graphical and error analysis and using the measuring tools and devices of a physics laboratory in prescribed as well as inventive modes for studying physical concepts. Classes will be conducted in several formats. Interactive lecture, discussion sessions, problem solving sessions, laboratory exercises, student assisted demonstrations, and individual help sessions. This is a dual credit course with TC3.

Course Title: Bioethics

Credit: 1

Bioethics is the field of study concerned with ethics and philosophical implications for certain biological and medical procedures. We will look into the details and ethical dilemmas produced by the newest medical technologies and treatments. Genetic engineering, care of the terminally ill, physician assisted suicide, stem cell therapies, cloning, and therapeutic cloning are all topics that will be covered. Additional topics will include hunting, overhunting, and trophy hunting, animal testing in medicine, historical bioethics challenges like abortion, contraception, eugenics, and medical experimentation on mental patients and convicted criminals.

Course Title: Environmental Conservation I (Fall Semester)

Credit: ½

Course Title: Environmental Conservation II (Spring Semester)

Credit: ½

Prerequisite(s): Living Environment and Earth Science

Environmental science is a laboratory course that will identify and analyze environmental problems both natural and human made, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them. This section of environmental science will integrate key concepts of physics, chemistry, biology, and Earth science with the social sciences (conservation, demography, economics, politics, and ethics). The first semester will emphasize the role of the social sciences and understanding the parts of our environment. The second semester will look closer at environmental issues facing resources and ways at attaining ecological sustainability. Independent projects will be in lieu of final exams at the end of each semester.

Students enrolling for only the spring semester of the science electives need to get instructor permission for enrollment. And realize because they are entering midway through a curriculum, may need to do additional outside class work to get caught up.

Course Title: Zoology I (Fall Semester)

Credit: ½

Course Title: Zoology II (Spring Semester)

Credit: ½

Prerequisite(s): Living Environment

This laboratory course will emphasize the concepts learned in biology as they pertain to animal life. This course will focus on anatomical and morphological differences between animals. **The collection and examination of animal specimens as well as the dissection of animals is a requirement of the course as it is essential to the comparative study of anatomy.** Concepts in animal behavior, ecology, embryology, and genetics will be integrated into the course. The first semester will emphasize behavior and morphology. The

second semester will look closer at classification and the identification of various animal groups based on morphology with **heavy emphasis on dissection**. An independent project (first semester) with an examination (second semester) will be used for the final examination scores for the classes.

Students enrolling for only the spring semester of the science electives need to get instructor permission for enrollment. And realize because they are entering midway through a curriculum, may need to do additional outside class work to get caught up.

***This course will not be offered in the 2024-25 school year.**

Social Studies

Course Title: Global History I

Credit: 1

Grade 9 begins with the Paleolithic Era and the development of the first civilizations, continues with an examination of classical societies, and traces the expansion of trade networks and their global impact. The course emphasizes the key themes of interactions over time, shifts in political power, and the role of belief systems.

Course Title: Global History II Regents

Credit: 1

Grade 10 provides a snapshot of the world circa 1750. The course continues chronologically up to the present. Several concepts are woven throughout the course including industrialization, nationalism, imperialism, conflict, technology, and the interconnectedness of the world. The last three Key Ideas focus on global issues, applying a more thematic approach. Students will take the Regents Global History Exam at the end of the year. Successful completion of this course is a graduation requirement.

Course Title: American History Regents

Credit: 1

Prerequisites: Global History I & II

This is a survey of U.S. History with concentration on the birth of our nation and the Civil War to the present. It is intended for high school juniors. Students will take the Regents exam in American History at the end of the year.

Course Title: TC3 American History

Credit: 1

TC3 American History incorporates all aspects of the Regents-based curriculum at a greater depth. Students are still responsible for taking the Regents exam in June as part of their graduation requirement. This course is designed to provide a learning experience equivalent to that of an introductory college course. Students will acquire analytic skills and factual knowledge necessary to deal critically with topics pertaining to U.S. History. Students in this course have the opportunity to acquire TC3 credit. TC3 Exams will be given at the conclusion of each semester. Students have the option to take the AP American History exam in May. There is an increased workload and expectation for college readiness for students in this class.

Course Title: Participation in Government

Credit: ½

Prerequisite: Senior standing

Participation in Government is a half-year, 12th grade Social Studies course **required for graduation**. This course will serve as an insight to the government and create a group of informed citizens as they enter the real world. This course will discuss the basics of the Constitution, but then branch out to look at different hot topics in government. Students will be able to research a number of governmental topics, gain insight on how the government handles these issues/topics, and form an opinion based on their research.

Course Title: TC3 Political Science*

Credit: 1

Prerequisite: Senior standing and teacher recommendation

POSC 103:

An examination of the essentials of the American constitutional system, the function of political parties, the concept of the federal system, the role of administrative agencies, the methods by which foreign affairs are conducted, and the manners in which conflicting ideals are resolved in a democratic system. POSC 103 fulfills the SUNY General Education Social Sciences requirement and .5 NYSED Social Studies Grade 12 requirement. This will be part of your college transcript.

POSC 104:

This course is designed to study the forms, function, and services of state governments and representative local governments. The dynamics of state and local governments are also considered. POSC 104 fulfills the SUNY General Education Social Sciences requirement. and .5 NYSED Social Studies Grade 12 requirement. This will be part of your college transcript.

Course Title: History v Hollywood

Credit: ½

Technology

Course Title: Drawing and Design for Production I

Credit: 1

Prerequisite(s): Willingness to work safely and cooperatively

This course focuses on creative design development to solve problems in engineering. It is an essential course for all students interested in engineering, technical construction, mechanics and related fields. Students learn basic drawing skills, one and two-view drawings, orthographic projection, dimensioning, and freehand sketching in multiple views. Prototypes and mock ups of original designs are created by the student. Students will be introduced to hand and power tools to build designs.

Course Title: Automotive Systems

Credit: 1

Prerequisite(s): Transportation and/or Small Engines. Sophomore, Junior, or Senior status

Automotive Systems is for those students who own cars or will be purchasing one in the near future. Students will gain a basic knowledge of vehicle operations and how to maintain vehicles to insure a safe and long

ownership. It is also for those students who wish to explore automotive technology as a possible profession. It will cover in depth all of areas that make a vehicle function.

Course Title: Advanced Automotive Systems

Credit: 1

Prerequisites: Automotive Systems and Junior or Senior status

Students in this course will continue to enhance knowledge and skills developed in the Automotive Systems course.

Course Title: Advanced DDP Wood

Credit: 1

Prerequisite(s): DDP I, Willingness to work safely and cooperatively -- Sophomore or older

This course is an introduction to the wood industry. An overview of the products, processes, structure and organization including solid wood, sheet goods and engineered wood products used in industry will be given. An introduction to furniture/cabinet layout, construction and the safe use of wood processing machines and tools will be covered.

Course Title: Residential Building and Maintenance*

Credit: 1

Prerequisite(s): DDP

This course will explore the basic skills and knowledge that someone would find useful as a homeowner or someone interested in a career in the skilled trades. Topics covered will include (but not limited to) carpentry, basic home wiring, building materials, plumbing, drywall, roofing, insulating, masonry and hand/power tool operation. The purchase of a home will most likely be one of the biggest investments you make someday. This course will be a huge benefit when it comes time to look at homes, make repairs, hire someone to do work for you and to just make wiser decisions in regards to your home in general.

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://nthshs.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: percents, 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.tstbooces.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.