## Course Guide

## NEWARK VALLEY HIGH SCHOOL 2024-2025

TABLE OF CONTENTS
Page Number
Graduation Requirements ..... 2
Senior Rank, Honor Roll \& Advanced Placement ..... 3
Dual Enrollment Courses ..... 4
Career and Technical Programs ..... 5
New Visions Academies ..... 6Art7
Business ..... 11
English ..... 14
Health / Physical Education ..... 21
Mathematics ..... 23
Music ..... 26
Science ..... 28
Social Studies ..... 32
Technology ..... 35
World Languages ..... 39

# New York State Graduation Requirements 

## All students must earn 22 credits to graduate

| SUBJECT <br> AREA | REQUIRED <br> CREDITS FOR <br> REGENTS <br> DIPLOMA | REQUIRED <br> NYS <br> REGENTS <br> EXAMS <br> FOR <br> REGENTS <br> DIPLOMA | REQUIRED <br> CREDITS FOR REGENTS <br> DIPLOMA W. <br> ADVANCED <br> DESIGNATION | REQUIRED <br> NYS REGENTS <br> EXAMS FOR |
| :--- | :---: | :---: | :---: | :---: |
| English | 4 | 1 | 4 | REGENTS DIPLOMA W. <br> ADESANCED <br> DESIGNATION |
| Social Studies | 4 | 2 | 4 | 1 |
| Mathematics | 3 | 1 | 3 | 2 |
| Science | 3 | 1 | 3 | 3 |
| Art/Music | 1 |  | 1 | 2 |
| Health | .5 |  | 2 |  |
| Physical <br> Education | 2 |  | 3 |  |
| Foreign <br> Language | 1 |  | 1.5 |  |
| Electives | 3.5 |  |  |  |

## Senior Ranking

Final grades are calculated by averaging grades for all four quarters plus the final examination. The highest grade given is 100 and the minimum passing grade is 65 . An unweighted GPA and weighted GPA are both reported on the transcript.

Class rank is based on a weighted average using the following formula:
AP/Honors: 1.10
Regents: 1.05
Local: 1.0

## Honor Roll

The Newark Valley High School, in recognition of the following factors, institutes three levels of honoring academic achievement:

Merit Roll 84.5-89.49
Honor Roll 89.5-94.49
High Honor Roll 94.5-100

## Advanced Placement

The following courses are offered for Advanced Placement (AP) credit. Please refer to departmental listings for course descriptions and prerequisite requirements. To receive AP weighting, students must take the AP Exam.

Biology
Calculus AB
English Language and Composition
English Literature
U.S. History

## Dual Enrollment Courses

The following offerings allow students to take courses designed for the college freshman. Please refer to departmental listings for course descriptions and prerequisite requirements.

| Beginning Animation ART 228 | SUNY Broome Community College |
| :---: | :---: |
| Beginning Drawing ART 115 | SUNY Broome Community College |
| Intro to Digital Photography ART 118 | SUNY Broome Community College |
| Beginning Sculpture ART 120 | SUNY Broome Community College |
| AP Biology BIOL 104 \& 105 | Tompkins Cortland Community College |
| AP Calculus AB MATH 201 | Tompkins Cortland Community College |
| Ceramics ART 130 | Tompkins Cortland Community College |
| Painting I ART 115 | Tompkins Cortland Community College |
| Painting II ART 116 | Tompkins Cortland Community College |
| Personal Money Management BUAD 109 | Tompkins Cortland Community College |
| Academic Writing ENGL 101 | Tompkins Cortland Community College |
| Senior Composition ENGL 101 \& 102 | Tompkins Cortland Community College |
| German IV GERM 102 | Tompkins Cortland Community College |
| Spanish III SPAN 102 | Tompkins Cortland Community College |
| Spanish IV SPAN 201 \& 202 | Tompkins Cortland Community College |
| Pre-Calculus MATH 120 \& 138 | Tompkins Cortland Community College |
| Statistics MATH 200 | Tompkins Cortland Community College |
| Introduction to Environmental Science ENVS 101 | Tompkins Cortland Community College |
| US History Honors <br> HSTY201-American History to 1877 <br> HSTY202 -American History Since 1877 | Tompkins Cortland Community College |
| Principals of Animal Science ANSC 100 | SUNY Morrisville |

## Career and Technical Programs at Broome-Tioga BOCES

The CTE programs at Broome-Tioga BOCES are designed to offer 11th and 12th grade students the opportunity to learn job skills through instruction and hands-on experience. Successful students are prepared to enter the workforce, earn a technical degree, and/or advance to college with credits earned through articulation agreements. Courses are grouped into 3 categories:

Introductory -These two-year courses are designed to expose students to these career fields and prepare them for entry-level jobs.

Intermediate-These two-year courses are designed to challenge students and provide the foundation to develop a lifelong career. The courses are geared toward students on track to receive a Regents diploma.

Advanced Placement -These two-year courses challenge motivated students on track to earn Regents/Adv. Diploma.

## INTRODUCTORY COURSES

Building Trades/Plumbing Careers
Business Mgt \& Computer Careers
General Automotive Services
Hospitality Industry Careers

## INTERMEDIATE COURSES

Agricultural Science
Auto Body Repair
CAD \& 3D Animation
Carpentry
Clean Energy \& Battery Storage
Cosmetology
Culinary Arts

Electricity
Heavy Equipment Repair \& Operation
Masonry
Video Production
Welding

## ADVANCED COURSES

Auto Technology
Criminal Justice
Graphics \& Gaming Design
Health Science
IT Specialist
Manufacturing

## New Visions Academies

New Visions is an academically rigorous program offered by Broome-Tioga BOCES. It is geared towards college-bound high school seniors interested in a career in business, education, health, engineering, or law \& government. Students spend each morning taking classes and working side-by-side with professionals, observing, and participating in real-life experiences. Students have the option of taking their Social Studies 12 credit via Syracuse University Project Advance. In addition, all students participate in Honors English 12, which is taught seminar style and focuses on college preparedness. It is recommended that applicants must have a minimum GPA of $90 \%$. The application process includes an essay and interview. Upon completion, students earn 4 high school credits.

## Business Academy

Students will focus on the areas of finance, business management, marketing, and human resources. In their placements, students will work with local business and industry partners.

## Education Academy

For high school seniors interested in careers in teaching. Students work side by side with educational professionals, observing and participating in real classroom experiences.

## Engineering Academy

Students will get a broad overview of the engineering disciplines, including bioengineering, chemical, electrical, mechanical, industrial, aerospace, computer engineering and computer science.

## Heath Careers Academy

This is an exciting and challenging program for high school seniors interested in a wide variety of health careers. Students work with doctors, surgeons, physician assistants, nurses, therapist, pharmacists, and other health care professionals.

## Law \& Government Academy

For students curious about exploring careers in legal and public service. Students get the opportunity to work with professionals such as lawyer, judges, and politicians. Students will learn about government, election process, trial law, incarceration, and international organizations.


#### Abstract

ART

\section*{STUDIO IN ART}

Studio in Art is a yearlong introduction in beginning drawing, painting, and two-dimensional work. The course will concentrate on stirring your interest and your creativity in a variety of mediums. Students will also explore art history and how artists have affected the work of today. Critiques will play an important part in the evaluation process. Sketchbook work will be mandatory. Sketchbooks will be needed by the 2nd week of school.

1 Unit of Credit


## STUDIO IN CRAFTS

Studio in Crafts is a fundamental 3-dimensional design course for the creation of contemporary and historical craft-based projects, including various drawing techniques. Students will explore a variety of artistic mediums and techniques including basic drawing skills and working with clay and found objects. Sketchbooks are required for this course and there will be a significant amount of drawing involved.

1 Unit of Credit

## STUDIO IN DRAWING

This is an advanced course offering an exploratory experience in drawing with emphasis on Figure/Life drawing. The course will introduce the student to a wide variety of experiences in black and white drawing mediums. Color drawing will be emphasized in the latter part of the course as students mature in their drawing abilities. Students will be reviewing important artists, their styles in drawing, and give both written and oral presentations.

PREREQUISITE: Grades 10, 11, 12. Previously taken Studio in Art or Permission of Instructor.
1 Unit of Credit

## BEGINNING DRAWING (ART 115)

This is a concurrent enrollment course offered to juniors and seniors through SUNY Broome with an emphasis on classical drawing training including working from the figure and from still-life. The course will introduce the student to a wide variety of media such as charcoal, graphite, pastels and more throughout the year. Students will be reviewing important artists, movements, and styles of art.

PREREQUISITE: Grades 11 \& 12 (Required by SUNY Broome).
1 Unit of Credit; 3 SUNY Broome Credits

## PAINTING I (ART 115)

College Painting is a concurrent enrollment class offered in conjunction with Tompkins Cortland Community College and will involve the major painting mediums of watercolor and acrylic. Emphasis will be placed on merging traditional and contemporary painting theories, styles, and techniques. Included in this course will be an in depth look at composition, color theory, and history. This course is designed to get you comfortable with painting fundamentals.

PREREQUISITE: Grades 10, 11, 12. Previously taken Studio in Art \& Drawing or permission from the instructor.

1/2 Unit of Credit; 3 TC3 Credits

## PAINTING II (ART 116)

This is a continuation of the painting fundamentals course offered in conjunction with Tompkins Cortland Community College. This course will introduce students to oil painting and mixed media projects that are designed to hone problem solving skills and to help the students develop an artistic voice. Projects will be largely conceptually based and will focus on using reference materials and well as life studies to build a final portfolio of work in different painting mediums.

PREREQUISITE: Grades 10, 11, 12. Previously taken Studio in Art \& Drawing or permission from the instructor.

1/2 Unit of Credit; 3 TC3 Credits

## BEGINNING SCULPTURE (ART 120)

This half-year course is offered in conjunction with SUNY Broome and will introduce students to the creation of sculptures as an artistic expression. Students will work in a variety of mediums as they study various artists from the past and learn from their art works. Students will focus on conceptual ideas and make them into three-dimensional works of art. Written evaluations and studies of other artist's sculptural work from history and contemporary sculpture are a part of this course.

PREREQUISITE: Grades 10, 11, 12. Previously taken Studio in Art or Crafts.
1/2 Unit of Credit; 3 SUNY Broome Credits

## CERAMICS (ART 130)

This half-year Ceramics course will explore the creation of pots and vessels from pinch, coil, slab, \& wheel throwing building techniques. Students will learn step by step processes to design, build, \& glaze Clay projects. Students are expected to watch videos, complete sketches, and work outside the class as well as in the studio. Drawing will be used throughout as ideas are explored both in the design and construction shapes of the projects..

PREREQUISITE: Grades 10, 11, 12. Previously taken Studio in Art or Crafts.
1/2 Unit of Credit; 3 TC3 Credits

## BEGINNING ANIMATION (ART 228)

Beginning Animation is a course taught in conjunction with SUNY Broome's FastForward program and is a concurrent enrollment college class. In this course we explore the roots of animation an as artistic medium and how it has changed over the last two centuries into contemporary animation styles. We will create animations using a variety of mediums including stop motion, hand drawn, and digital animation.

PREREQUSITE: Students must have completed 1/2 Unit of Credit; 3 SUNY Broome Credits one elective in art or photography.

## DIGITAL PAINTING

Digital painting is a course designed to mix traditional painting techniques with contemporary computer software such as Adobe Photoshop and Corel Painter to create original digitally painted images. Emphasis will be placed on color theory, composition, and displaying artwork.

## 1/2 Unit of Credit

## ILLUSTRATION

Illustration will focus on using design and creative/critical thinking along with developing each student's technical style. Projects will consist of illustrating the main idea from articles, books, etc. in different mediums. Preparation and sketches will be completed outside of class. Class time will be used for studio work and critiques. Students will be expected to use a sketchbook and meet critique deadlines.

PREREQUISITE: Grades 11\& 12.

## 1/2 Unit of Credit

## INTRODUCTION TO DIGITAL PHOTOGRAPHY (ART 118)

This course focuses on how to use digital cameras and software to make visual art. We will use a variety of cameras, including cell phone cameras, to study photography techniques. Emphasis will be placed on composition and personal reflection as well as compositing images in Adobe Photoshop and other programs. Students will gain the technical skills to create excellent photographs, and practice conceptual skills to make stunning visual art.

1/2 Unit of Credit; 3 SUNY Broome Credits

## ADVANCED STUDIES

Offered to art majors only, students must have successfully completed three studio classes and earned a minimum grade of 90 . Advanced studies are available in crafts, drawing, painting, sculpture, ceramics and studio art and media arts.

PREREQUISITE: Successfully completed three studio classes earning a minimum grade of 90 . Approval from the instructor.

1 Unit of Credit

## PORTFOLIO DEVELOPMENT

This half-year course will focus on portfolio development for college submission with a focus on design and presentation of artwork. Students must provide a portfolio to transport their work, and a sketchbook. While not necessary, students who are applying to colleges are encouraged to invest in a professional grade portfolio. This course will work in conjunction with the final slide portfolio required from all art majors, and written evaluation will be a major part of this course.

PREREQUISITE: Grades $11 \& 12$.
1/2 Unit of Credit

## BUSINESS

Thinking of going where the money is? How about exposure in the areas of accounting, finance, or some form of business management \& marketing. The business department has courses that will prepare you for these college majors or prepare you for entry-level jobs when you graduate from high school.

Through Concurrent Enrollment with TC-3, it is now possible to take many of the courses we offer for college credit. Are you interested in saving money for college? Even if you choose not to become a business major, our courses can be used as electives.

## Recommended Business Sequence

1. Customer Service ( $9^{\text {th }}$ or $10^{\text {th }}$ grade students)
2. Marketing ( $10^{\text {th }}$ or $11^{\text {th }}$ grade students)
3. Entrepreneurship \& Business Law or Principals of Accounting ( $11^{\text {th }}$ or $12^{\text {th }}$ grades students) $*$ These classes are offered every other year*

Personal Money Management is open to students in grades 10-12

## PERSONAL MONEY MANAGEMENT (BUAD 109)

As Americans assume greater responsibility for their own long-term financial security, the importance of making sound financial decisions becomes obvious. Enroll in Personal Money Management, and you will be on your way in making sound financial decisions!

What Is This Class All About?
Are you interested in learning about handling a checking account?
Why can't I obtain credit? Credit card? Car Loan? Credit Score???
Who stole my IDENTITY?
Do you have to pay your own car insurance? What's the purpose of insurance?
I just got paid, where did my money go??? What is a budget??
Do you have a savings account? Why do you need to save your money?
What is the difference between simple and compound interest?
Will Social Security be available when you're ready to retire? What do you need to do to start planning for your future retirement?

Rule of 72. What's that all about?
Do you know how to file taxes? We will be covering this topic in class.

1 Unit of Credit, 3 TC3 Credits

## CUSTOMER SERVICE FOR RETAIL BUSINESS

If you do any type of shopping in stores or online, I'm sure you have noticed that customer service very important to the customer and to the business. A Customer Service Representative attracts potential customers by answering product and service questions; suggests information about other products and services; processes orders promptly, prepares correspondences and fulfills customer needs to ensure customer satisfaction, and deal with customer complaints.

Students enrolled in this class will learn how to be successful working in the field of customer services. Students will be able to use the skills they learn in the classroom by working in the Nest Café.

## 1/2 Unit of Credit

## MARKETING

Do you ever see a commercial and think "I could do that!" Are you creative and want to let your creativity shine? Then marketing is the class for you. Learn about all of the aspects of marketing including advertising and promotion. Let your creativity shine through your creation of advertising and promotional materials. Learn how to create and conduct surveys along with the market.

1 Unit of Credit

## ENTREPRENEURSHIP \& BUSINESS LAW

Have you ever wanted to start your own business? Do you dream of being your own boss?
Entrepreneurship will help you learn the basics of running any business whether it is your own mechanic shop or owning your own restaurant. This class will give you the basics and a foundation in many aspects of business that will make you more prepared to own and operate your small business. Business law covers a wide range of topics including contract law and legal basics which are essential to any business owner. Not interested in a career in the legal field, but you do want to learn a few things? Learn some of your rights as a consumer and citizen by taking business. This class is a benefit to anyone.

1 Unit of Credit

## THE NEST

The Nest allows students to gain work experience and receive scholarships while working in our studentran cafe. This is a great way to help add to your resume and receive local credit. Students who are interested must apply in order to be considered. Employment is not guaranteed.

## Credit dependent on number of days worked.

## PRINCIPLES OF ACCOUNTING

This course is for you if you are considering majoring in the following areas: accounting, business management, finance, business administration, sports management, owning your own business, etc. Accounting will give you the basic skills and knowledge to keep financial records for a service and merchandising business using double-entry accounting system while following Generally Accepted Accounting Principles (GAAP). Where are the jobs of the future? Try Accounting. According to the NYS Department of Labor (Career Zone), an entry level position starts at $\$ 51,960$, and an accountant with experience, could earn $\$ 103,080$. Authentic Learning Experience:

Students enrolled in this class will be recording/calculating financial information for The Nest. Recommended for 11th \& 12th graders. This course can also fulfill a third math credit requirement.

1 Unit of Credit

## ENGLISH

## ENGLISH 9

The ninth grade English program is designed to provide a variety of writing, reading, speaking, and basic skills activities that will prepare students for the study of more advanced literature and writing.

- The Christensen Rhetoric Program is introduced for the first time with an emphasis on writing complex sentences. All writing begins with an understanding of how to write an effective sentence, and one of the goals of this course is to teach students how to express themselves in writing with more maturity and complexity.
- The literature program exposes students to literary giants, including Harper Lee, William Shakespeare, Homer, and John Steinbeck. Each piece of literature read in English 9 is a tool used to

1. improve the ability to closely read text and analyze writing choices made by writers;
2. provide tools to help students write sentences that are more complex and mature; and
3. provide the tools needed to professionally present textual evidence in a written argument.

- Students will maintain a writer's notebook in conjunction with the study of writing and literature. Students will use the notebook to take notes, to practice implementing writing concepts, and to demonstrate the depth to which they understand the reading and writing taught in class.
- Skill work in vocabulary, grammar, and spelling is presented as problems are identified during the year.
- Regents Exam preparation is incorporated throughout the literature and writing units.


## 1 Unit of Credit

## ENGLISH 9 HONORS

The ninth grade English Honors program is designed to provide a variety of writing, reading, and speaking activities that will prepare you for the study of more advanced literature and writing.

In comparison with their English 9 counterparts, Honors 9 students read more advanced selections, discuss and write about literature at a deeper level, are taught more advanced writing lessons, and are expected to produce more complex and mature writing. This program is designed for those who are capable of this advanced work, and who are motivated to both learn at a higher level and produce top quality work on strict deadlines. A minimum grade requirement of 85 is required to remain in the course.

- The Christensen Rhetoric Program is introduced for the first time with an emphasis on writing complex sentences. All writing begins with an understanding of how to write an effective sentence, and one of the goals of this course is to teach students how to express themselves in writing with more maturity and complexity.
- The literature program exposes students to literary giants, including Harper Lee, William Shakespeare, Homer, and John Steinbeck. Each piece of literature read in English 9 is a tool used to

1. improve the ability to closely read text and analyze writing choices made by writers.
2. provide tools to help students write sentences that are more complex and mature; and
3. provide the tools needed to professionally present textual evidence in a written argument.

- Students will maintain a writer's notebook in conjunction with the study of writing and literature. Students will use the notebook to take notes, to practice implementing writing concepts, and to demonstrate the depth to which they understand the reading and writing taught in class.
- Skill work in vocabulary, grammar, and spelling is presented as problems are identified during the year.
- Regents Exam preparation is incorporated throughout the literature and writing units.

PREREQUISITE: Teacher recommendation.
1 Unit of Credit

## ENGLISH 10

Students enrolled in this course begin their year by analyzing political cartoons, advertisements, and propaganda in order to understand how images are used to persuade and inform others. This concept of power and persuasion is then studied further in the reading of Orwell's Animal Farm and Wiesel's Night. Students continue the year with units that study global literature in Asia, Africa, and Latin America, including two novels (The Kite Runner and Things Fall Apart) and a variety of short stories, poetry and nonfiction. Students also read Shakespeare's Macbeth and study tragedy. Students learn to analyze and discuss content at the critical level, which are skills necessary to successfully complete the English Regents exam given in 11th grade.

1 Unit of Credit

## ENGLISH 10 HONORS

Students enrolled in this course begin their year by analyzing political cartoons, advertisements, and propaganda in order to understand how images are used to persuade and inform others. This concept of power and persuasion is then studied in the reading of Orwell's Animal Farm and Wiesel's Night. Students continue the year with a unit studying tragedy (Macbeth), and units of global literature, including The Kite Runner, and a variety of short stories, poetry and nonfiction. Students learn to analyze and discuss content at the critical level, which are skills necessary to successfully complete the English Regents exam given in 11th grade. Throughout the year, students will be assigned parallel texts, to be read independently, at home, while they are reading in-class texts, including Fahrenheit 451 and Things Fall Apart. Students will be required to participate frequently in in-class discussions, group and individual presentations and Socratic Seminars. In preparation for the potential to enter Advanced Placement courses, the frequency and rigor of writing assignments will increase. Students are expected to produce high quality work and to actively participate in the rigorous and intellectually challenging discussions and activities that make this class unique.

PREREQUISITE: Teacher recommendation. Students are expected to maintain a minimum of 85 average to stay in this course.

1 Unit of Credit.

## ENGLISH 11

The curriculum begins by applying what was learned from the Christensen Rhetoric program to students' writing, focusing on literary analysis. Our focus is on the United States from the Colonial period to the present, especially our relationship with the government. Students are expected to work to improve their essay writing skills, including expository essays, argumentative essays, literary analysis, etc. Students will continue refining their research skills, utilizing MLA documentation in all work and completing a research paper. Listening skills, speech, drama, poetry, and memoirs are also a part of the English 11 curriculum. All of the curricula will concentrate on meeting the Common Core State Standards and preparing students to take the ELA regents exam.

1 Unit of Credit

## ENGLISH 11 HONORS \& ACADEMIC WRITING (ENGL 101)

## Taken during the Fall Semester.

Students must be recommended for the English 11H class. Students must maintain an 85 average or better to remain a part of this unique experience. Students must also score 85 or better on the ELA regents exam to qualify for the dual credit with TC-3. The curriculum begins by applying what was learned from the Christensen Rhetoric program to students' writing, focusing on literary analysis. Required works of study in this course include Arthur Miller's The Crucible, Nathaniel Hawthorne's Handmaid's Tale, William Shakespeare's Hamlet, and Mark Twain's The Adventures of Huckleberry Finn. Students are expected to produce high quality work and to actively participate in the rigorous and intellectually challenging discussions and activities that make this class unique. Blogs and Wikis will be used to extend the discussion beyond the classroom. This class is a 20 -week course. Once students have successfully completed all expectations, they will be provided with the opportunity to take ENG 101, Academic Writing, for college credit through TC-3.

PREREQUISITE: Students enrolled based on teacher recommendation.

## 1/2 Unit of Credit

## Taken during the Spring Semester.

Students enrolled in Academic Writing have the opportunity to take the course for high school credit or for dual credit with TC-3. At the beginning of the semester, students will work on personal narrative writing, including a college application essay. Students develop and refine an effective writing process of planning, invention, drafting, and revision in an academic context. Throughout the course, students will also work on developing a thesis to guide their writing, working through the process of writing logical, unified, well-developed papers that will defend their thesis. Students will engage and respond to challenging texts as they develop critical thinking skills, including a study of F. Scott Fitzgerald's The Great Gatsby and Tim O'Brien's The Things They Carried. Students will learn to support their ideas with credible, authoritative information from academic sources and to recognize audience, purpose, and bias. Our study of writing will continue throughout the semester, leading to writing an academic research paper and presentation.

1/2 Unit of Credit; 3 TC-3 Credits

## ADVANCED PLACEMENT ENGLISH LANGUAGE AND COMPOSITION

AP English Language and Composition is a year-long college-level course offered to 11th grade students. Students learn to read complex texts with greater understanding and develop richness, clarity, and complexity in your own writing. The primary focus is on non-fiction - personal essays, narratives, and argumentation - although some fiction will also be studied including, but not limited to: The Things They Carried, In Cold Blood, Devil in the White City, The Jungle, One Flew Over the Cuckoo's Nest, The Adventures of Huckleberry Finn, The Scarlet Letter, and Into Thin Air.

All students in this course are expected to take the AP language and Composition Examination given in May. Timed AP writings as well as AP multiple choice tests will be interspersed throughout the semester. This practice, combined with your focused engagement, will enhance your ability to do well in the course, to perform ably on the exam, and to move forward in your personal and academic lives with confidence, both formally and creatively.

PREREQUSITE: Teacher recommendation.
1 Unit of Credit

## ENGLISH 12

This language arts course will stress the reading, writing, listening, viewing, and speaking competencies needed for entry-level success on the job and at institutions of higher learning. Students will explore selections from all genres of Literature, as well as various types of essays. Grammar and vocabulary skills will be reinforced through daily language activities as well as formalized assignments. An integrated research paper/project will also be required to demonstrate proficiency in computer-based research and publication. Students will take inventory surveys to explore interests and strengths to assist with career readiness. Students will create resumes and letters of interest to use to apply for employment, they will explore interview etiquette and participate in mock interviews. They will create an online resume and explore job search engines and tools for securing opportunities.

1 Unit of Credit

## CREATIVE WRITING

The goal of this senior elective is to combine all the elements of past English work and to have fun with them, while also giving culminating academic experience that will prepare students for future endeavors. The class is designed to foster better student expression, stimulate imagination, clarify thinking, enhance critical awareness, explore the value of reading and writing, and to help students creatively problem solve through poetry, children's stories, short story, play writing.

Students in this course will produce a publishable piece of writing, which will be submitted to available writing contests and scholarship programs. Student work will also appear in a course-end creative writing catalogue, which will be designed and developed by the students so that they can see their final products in print and share them with their families, peers, and the community at large. The curriculum includes the study of tone, imagery, theme, and setting and character development through poetry, children's books, and short stories all of which students will study and then create. If time allows, parody will also be studied.

PREREQUSITE: Seniors only.

## 1/2 Unit of Credit

## SPEECH

Speech is offered as a twenty-week elective for juniors and seniors. Students gain experience in a variety of speech-delivering situations, including impromptu, which will be culminated in a mock interview experience. We will also learn the importance of rhetoric in gaining the influence you want over an audience during speaking situations. This elective gives students an opportunity to refine their speaking skills.

PREREQUSITE: Seniors only.

## 1/2 Unit of Credit

## SENIOR COMPOSITION (ENGL 101 \& 102)

## Taken during the Fall Semester

English 101 is the first of a two-course sequence of Senior Composition. Students enrolled in English 101 will take the course for high school credit or for dual credit with TC-3. At the beginning of the semester, students will work on personal narrative writing, including a college application essay. Students develop and refine an effective writing process of planning, invention, drafting, and revision in an academic context. Throughout the course, students will also work on developing a thesis to guide their writing, working through the process of writing logical, unified, well-developed papers that will defend their thesis. Students will learn to support their ideas with credible, authoritative information from academic sources and to recognize audience, purpose, and bia. Our study of writing will continue throughout the semester, leading to writing research papers and preparing presentations using MLA citation. Students must earn a grade of C or better to take the second course in the sequence, English 102.

PREREQUSITE: Students must score 85 or above on ELA Regents.
1/2 Unit of Credit; 3 TC3 Credits

## Taken during the Spring Semester

This second half of the school year students will take English 102, which provides a comprehensive introduction to the major aspects of literary studies. Students will develop an appreciation and understanding of fiction, non-fiction, drama, and poetry as forms of literary expression. Some of the works studied include Beowulf, Hamlet, Heart of Darkness, Into the Wild, The Stranger, and A Streetcar Named Desire. Students will also learn to utilize different lenses or types of literary criticism as well as the major characteristics of literary movements to help analyze different literary works. Utilizing journaling, class discussion and literary analysis papers, students will respond and analyze the different works and genres studied, focusing on properly using MLS citation and textual evidence.

1/2 Unit of Credit; 3 TC3 Credits

## ADVANCED PLACEMENT LITERATURE AND COMPOSITION

AP English Literature and Composition is a year-long college-level course for 12th grade students. Students in this course will learn to read complex texts with greater understanding and develop richness, clarity, and complexity in your own writing and oral presentations. We focus on drama, novels, short fiction, and poetry, striving to achieve maturity of analysis, and skills which each of you can utilize in your own work. Works may include but are not limited to: Othello, Paradise Lost, Candide, Frankenstein, Billy Budd Crime, Crime and Punishment, Heart of Darkness, The Awakening, The Metamorphosis, The Great Gatsby, Beloved, Invisible Man among others.

All students in this course are required to take the AP Literature and Composition Examination given in May. With this in mind, timed AP writings as well as multiple choice tests will be interspersed throughout the year. This practice, combined with your focused engagement, will enhance your ability to do well in the course, to perform ably on the exam, and to move forward in your personal and academic lives with confidence.

PREREQUSITE: Teacher recommendation.
1 Unit of Credit

## FILM AS LITERATURE

In a world where we are inundated by visual media, this class is designed to show students how film is also a form of literature. By viewing film, students will learn that all films, like all literature, have certain elements in common. They will also be able to better "read" their visual world and the manipulations that exist within it. Students will be expected to understand motifs, symbols, metaphors, allusions, characterization, setting, plot, theme, and other literary elements as they relate to both film and literature. We will also study satire, allegory, the hero's journey, horror, suspense, science fiction, and mythology, Additionally, students will develop an appreciation for the interaction of film elements such as scripting, lighting, sound, music, framing, and cinematography. Students will use their knowledge of the various elements of cinema to analyze and critique films studied in class. Assessments will include class discussions, film journals, film reviews, oral film critiques, hands-on projects, and a create-yourown film final project. Films include, Batman Begins, Pan's Labyrinth, The Truman Show, Jojo Rabbit, and others.

PREREQUSITE: Grades 10-12
1/2 Unit of Credit

## THE GRAPHIC NOVEL

Students in the course will explore visual texts as a mode of communicating story to expand their understanding of literacy. Students will consider graphic novels as literature, analyze formal structure as it relates to content, trace the development of theme, and use some research and history to understand the content of the graphics. The course will increase critical thinking and critical reading skills as we examine both form and theme. Students will work on various projects over the course of the semester that will increase knowledge of literary terms and the ability to apply them which will enhance writing skills. Students will analyze the special effects created in sequential art narrative and construct a variety of graphic narratives both independently and collaboratively. Texts include Maus, Harlem Hellfighters, and others.

## PREREQUSITE: Grades 11-12

1/2 Unit of Credit

## HEALTH/ PHYSICAL EDUCATION

## HIGH SCHOOL HEALTH

Students will learn to use many skills to help them make healthy decisions, while maintaining or improving their current health status. The skills include self-management, relationship management, stress management, communication, coping skills, decision making and advocacy. The goal of this course is for students to develop the skills necessary to live healthy, active lives, and to empower students to use the skills they have gained to make informed decisions that will enhance the quality of their life. Earning a half credit in Health is a New York State graduation requirement.

## Course Topics:

Nutrition and body image
Human sexuality and reproduction
Mental health
Stress
Sleep
Communicable/non-communicable diseases
Substance abuse
Relationships and domestic violence
Peer pressure
1/2 Unit of Credit

## SENIOR SEMINAR

This class will look at a variety of different life skills that are required as students transition from high school to adulthood. Students will learn different skills including but not limited to further education, employment, automobile maintenance, housekeeping, health care, self-care and self-management.

For seniors only
1/2 Unit of Credit

## HIGH SCHOOL PHYSICAL EDUCATION

Physical Education is designed to give students the necessary skills and knowledge to develop and maintain a healthy lifestyle. A variety of units will be offered to help students gain competence and confidence in their abilities. The main focus is on acquiring an appreciation and respect for physical fitness and the importance of lifelong involvement in physical activities.

Students are required to participate at every grade level (8th-12th) every other day for a $1 / 2$ credit for each school year. Passing Physical Education is required for graduation.

## Activities Offered

## Dance and Aesthetic Activities:

Aerobic Dance
Line Dance
Team Passing Sports:
Football
Soccer
Lacrosse
Ultimate Frisbee
Basketball
Floor Hockey
Team Handball
Speedball
Net and Wall Sports:
Tennis
Badminton
Volleyball
Pickleball
Ping Pong
Outdoor Activities:
Hiking
Nordic skiing
Challenge/Adventure Activities
Personal Performance Activities:
Strength Training
Track \& Field
Circuit Training
Jump rope
Pilates
Yoga
Target Sports:
Golf
Frisbee Golf
Striking/Field Sports:
Softball
Baseball

## MATHEMATICS

## ALGEBRA I

The purpose of the class is to teach students how to effectively solve a wide range of problems using mathematics, develop their mathematical reasoning and communication skills, and to show the connection between mathematics and the rest of the world. This course prepares students for the Regents exam in Algebra I, a requirement for graduation. At the completion of the class, students are prepared to take either Geometry or Foundations of Geometry. Some students may choose to enroll in Foundations of Geometry to prepare themselves for Geometry. Algebra I include a math lab which meets once every 4 days. Math lab parallels the concepts being taught in class and applies them to real world problems. Math lab students explore a variety of problem-solving techniques (algebraic \& non-algebraic) with hands on activities which model the algebraic \& geometric representations being taught in math class.

1 Unit of Credit

## ALGEBRA A

## ALGEBRA B

This is the common core Algebra course broken up and taught over two years. Students will complete the first $60 \%$ of the course during year one and will complete the additional $40 \%$ of the course in year two. During year two, students will also focus on regents exam preparation.

1 Unit of Credit each

## GEOMETRY

Geometry covers the following units throughout the year: Unit 1, we introduce students to Congruence using a variety of techniques including Construction, Isometric Transformations (Rigid Motions), Algebra, and several styles of proof (with an emphasis on two column-style). Unit 2 involves concepts of similarity, right triangle relationships, and introductory trigonometry. Unit 3 focuses on area and volume relationships as well as density and geometric modeling of 2-D and 3-D figures. Unit 4 is all about circles using new terms such as tangent, secant, radian measure, and developing arc and segment relationships. Algebra and coordinate graphing and equations are incorporated into all 4 units. Students will be assigned and learn to use the TI-NSpire graphing calculators. The course will conclude with a regents exam in June that also counts as a final exam.

1 Unit of Credit

## FOUNDATIONS OF GEOMETRY

Foundations of Geometry has an orientation consisting of the application and practice of mathematical concepts and skills. This course is also designed to prepare the student for future education at a junior college or they will be prepared to go directly into the workplace. The course will focus on topics that
involve problem solving using trig functions, simplifying algebraic expressions and solving quadratic equations by factoring. It also involves recognizing the four conic sections, using functions and patterns, and solving a system of equations and inequalities. Graphing calculators will be used for graphing and solving problems.

1 Unit of Credit

## ALGEBRA II

Algebra II is designed to prepare students to use advanced algebraic skills and concepts through the study of functions. With the use of graphing technology, students study a wide variety of functions and their applications. Some of these functions include linear, quadratic, polynomial, exponential, logarithmic and trigonometric
functions. Algebra II also introduces the students to trigonometry - a branch of mathematics that studies angles and their connection to two dimensional shapes. Students will also be using the TI-Nspire calculator from Texas Instruments. The school allows student to sign these out and use them at home. At the completion of this course, students will take the Algebra II regents exam and are prepared to take Precalculus.

1 Unit of Credit

## FOUNDATIONS OF ALGEBRA II

Foundations of Algebra II is a continuation of Foundations of Geometry. Students continue their study of mathematics used in the workplace. The course includes further exploration of geometry (2-dimensional and 3-dimensional), logic, trigonometry, complex numbers, and statistics as they relate to Quality Assurance and Process Control. Foundations of Algebra II demonstrates how mathematics is used in the fields of health, business, agriculture, and technology.

1 Unit of Credit

## PRECALCULUS MATHEMATICS (MATH 120 \& MATH 138)

This is a 1-year elective course for seniors and advanced juniors, which summarizes, unifies, and extends the concepts of mathematics studied in grades 9,10 , and 11 . The primary goal of Precalculus is to provide the student with a solid foundation in the more advanced topics of algebra, trigonometry, and analytic geometry to prepare him/her for their future study of college mathematics and calculus. This course also gives students the opportunity to register for two 4-credit concurrent enrollment courses through TC-3. Eligible students may register for Math120-College Algebra during the Fall semester and, if earning a C or better, then register for Math138-Precalculus during the Spring Semester. Successful completion of both semester courses will earn the student 8 college credits.

1 Unit of Credit; 8 TC3 Credits

A course on studying the application of statistical procedures to the analysis of experimental data. Topics covered include methods of presenting data, measures of central tendency and dispersion, sampling techniques, elementary probability, hypothesis testing, confidence intervals, and linear regression and correlation. Use of the binomial, normal, T, and chi-square distributions are also part of the course. TINspire calculators are used for calculations and spreadsheets are also used to analyze data.

1 Unit of Credit; 3 TC3 Credits

## ADVANCED PLACEMENT CALCULUS AB (MATH 201)

The outline sequentially covers content so that the calculus students can apply the concepts of calculus to solve problems. We start with functions and limits, then the techniques of differentiation, followed by their application. The techniques of integration are then presented, followed by their application. The course teaches all topics associated with functions, graphs, and limits; derivatives; integrals; and polynomial approximations, as delineated in the AP Calculus Course Description. Each student is assigned a college level calculus textbook and a TI-Nspire CAS calculator, for use in and outside the classroom.

The course is offered to serious-minded high school math students with the expectation that the students who enroll are curious about the different mathematical strategies of problem solving. The course offers a variety of techniques to solve rigorous, real-world problems in physics, biology, chemistry, economics and environmental sciences. Problems are solved analytically and supported graphically, followed by discussions of the most effective/efficient technique to use and under what constraints. Formal algebraic technique is a necessity for success on the AP exam.
The goals of this course are to have students realize and appreciate the power of calculus and to earn credits for college while still in high school. New for 2022: We are now a College Now course with TC3 and so you have the opportunity to earn 4 college credits with the potential for 8 , depending on what you want to do after the AP Exam.

1 Unit of Credit; 4 TC3 Credits

## MUSIC

## BAND

Band is available to students in grades 8 through 12 who are interested in continuing or learning to perform on a band instrument. Symphonic Band and Concert Band meet every other school day. Symphonic Band is comprised of students displaying a higher proficiency and performance level on their instruments. Participation in Symphonic Band is upon recommendation of the band director. Concert Band is comprised of developing students who are working towards a higher degree of performance. Concert Band is open to anyone who plays a band instrument. Students will read and perform concert style music in large and small ensembles and as soloists. Students are required to attend music lessons scheduled throughout the school day, concerts, and extra performances such as graduation.

## 1/2 Unit of Credit; Full Year Course

## JAZZ BAND AND JAZZ ENSEMBLE

Jazz Band and Jazz Ensemble are provided for students who are members of the Concert and Symphonic Band that wish to pursue the idiom of jazz music. Both groups meet every other day. In this ensemble students will perform as an ensemble and as a soloist in order to explore different styles of jazz and pop. Both groups will perform at concerts and school functions throughout the school year.

PREREQUSITE: Students in this course are required to audition and/or have prior approval from the band director.

Students enrolled in a Jazz Ensemble and Jazz Band must also be enrolled in Concert or Symphonic Band.

1/2 Unit of Credit; Full Year Course

## CHORALE

Chorale is an opportunity for students to sing in a large group setting. Meeting every other day, Chorale students will receive $1 / 2$ credit for each year. Students will learn basics of singing and how the human voice works. They will also learn how to sing in both unison and harmony across a varied and diverse array of musical repertoire. Students will explore singing in various styles and genres and learn about the history and context of musical traditions both familiar and unfamiliar. Along with a rehearsal every other day, Chorale includes periodic small group lessons. The goal of Chorale is to improve singing, to learn new skills and to perform for various concerts and functions throughout the school year. This course is open to any student in grades 9-12.

Chorale is a mixed chorus for students in upper grade levels. Students will be prepared to study music at a more advanced level and will become secure in the voices of Soprano, Alto, Tenor and Bass. Must perform in all required concerts each year.

1/2 Unit of Credit; Full Year Course

## CARDINAL CHORDS

Members of this ensemble are auditioned and accepted at the director's discretion. Students will sing more advanced music. All students enrolled in Cardinal Chords MUST be dual registered in Chorale. Selection is chosen based on singer abilities, as demonstrated through an audition, as well as voice part needs for the school year to fill out a balanced ensemble. It is expected that students in this course will perform at many school and music department events outside of the major required concerts.

1/2 Unit of Credit; Full Year Course

## MUSIC THEORY 1

Music Theory is designed to familiarize students with the fundamentals of music theory, music history, and multicultural music. It also assists students in developing basic music skills. The course develops specific skills necessary for the student to improve his aural and visual perception of the art. In addition, a heightened awareness of the fundamental concepts such as notation, rhythm, music listening, musical terms, dictation, chord progression, modes, intervals and beginning composition, students will study the development of music throughout history and musical cultures from around the world.

PREREQUSITE: Must be in grade 10-12
1 Unit of Credit; Full Year Course

## SCIENCE

## EARTH SCIENCE

Earth Science is a laboratory-based course for Regents credit. It is the science that considers the earth, its material, processes, history, and environment in space. Matter, energy, space, and time can be put into perspective through an inquiry-centered study of the student's environment on Earth. In addition to the major high school sciences of biology, chemistry, and physics, sciences such as astronomy, geology, geography, sustainability, and meteorology play major parts in the development of Earth Science. Each student will be scheduled into a separate laboratory class that meets every other day. Successful completion of the lab component of the course is required to be eligible to take the Earth Science regents exam.

1 Unit of Credit

## LIVING ENVIRONMENT

Students of biology will investigate major unifying themes in their study of living things. These themes include the components of living things, the interaction of living things and the environment, the relationship between the structures and functions of various parts of living organisms, the continuity of life, and biologic change. In addition to a class period every day, each student is enrolled in a separate laboratory class that meets once every other day. Successful completion of the lab component of the course is required to be eligible to take the Living Environment Regents exam. If the mandated labs are not successfully completed, the student is not eligible to take the Living Environment regents exam.

1 Unit of Credit

## CHEMISTRY

Chemistry is a laboratory science course in which students investigate the composition of matter and the physical and chemical changes it undergoes. Students use science process skills to study the fundamental structure of atoms, the way atoms combine to form compounds, and the interactions between matter and energy. Additional topics include limiting reagents, percent yield, equilibrium, reaction rates, and thermochemistry and pH logarithms. Each student will be scheduled into a separate laboratory class that meets every other day. All Chemistry students will take the NYS regents exam at the completion of the course.

PREREQUSITE: Students must pass one science regents examination. In addition, the student must be concurrently enrolled in Algebra II, and have passed the NYS geometry regents exam. Students are expected to have a scientific calculator.

1 Unit of Credit

## PHYSICS

The study of physics like art, literature, and music attempts to understand the Universe. It includes content areas on mechanics, energy, electricity and magnetism, wave phenomena and modern physics. Students will gain an appreciation for the workings of the world around them. Each student will be scheduled into a separate laboratory class that meets every other day. Laboratory experiments include several computer-based exercises and graphing using Excel ${ }^{\text {TM }}$.

PREREQUSITE: Must pass Chemistry or obtain permission from the instructor before entering Physics. In addition, the student should have a working knowledge of Algebra and Trigonometry.

1 Unit of Credit

## FOUNDATIONS OF LIVING ENVIRONMENT I \& II

Foundations of Living Environment I and II are sequential introductory biology courses that engage students in scientific exploration of the diverse world of living organisms. Throughout this course, students will explore how biology fits into their everyday life. This includes gaining knowledge about the human body, the millions of other organisms that we share planet earth with, and the effects that we have on each other. Most importantly, we will learn how scientists solve problems they encounter while utilizing the science inquiry process. In addition to a class period every day, each student is enrolled in a separate laboratory class that meets every other day. Successful completion of the lab component of the course is required to be eligible to take the Living Environment regents exam. If the mandated labs are not successfully completed, the student is not eligible to take the Living Environment regents exam. Foundations of Living Environment I students do not take the regents exam until year two, at which point they will be enrolled as Foundations of Living Environment II students and will take the Living Environment regents exam in January. A second attempt at this exam will be available in June if a student needs it.

1 Unit of Credit each

## REAL WORLD CHEMISTRY

A development of the fundamental principles of chemistry and their application. Chemical nomenclature, stoichiometry, atomic structure, bonding theories, thermochemistry, periodic properties, solution calculations, gas laws and the properties of solids and liquids are among the topics discussed in depth. Emphasis will be placed on problem solving skills to better prepare students for careers in chemistry and related life science fields (i.e. nursing, phlebotomy, radiology, etc.)

PREREQUSITE: Passing grade on one science regents exam and students must purchase a scientific calculator.

1 Unit of Credit

Learn about the core scientific principles, theories, and processes governing living organisms, biological systems, and natural phenomena. Understand key science practices you can use to develop explanations and predictions of natural phenomena, which you will test and refine through laboratory investigations. Develop advanced reasoning and inquiry skills as you design experiments, collect, and analyze data using mathematics and other methods, and interpret that data to draw conclusions. All students are expected to take the Advanced Placement exam in May as well as final exams for SUNY Tompkins Cortland in January and June.

1 Unit of Credit; 8 TC3 Credits

## ASTRONOMY

Have you ever looked up in the sky at the stars and wondered what all is out there? We are just a small blip on the radar in the cosmos! Astronomy is a full year elective course that meets every day and expands about topics covered in Earth Science such as our solar-system, current events, space colonization, inner and outer planets, space debris, life cycles of stars, black holes, spacetime theory, and The Big Bang. The course is designed to be an exploratory course for students that focuses on criticalthinking, inquiry skills and class discussions amongst peers about phenomena observed in space. The course will be mostly hands-on with a focus on projects, readings, writings, videos, and discussions about topics.

PREREQUISITE: Grades $11 \& 12$.

1 Unit of Credit

## AGRICULTURAL SCIENCE OFFERINGS:

## INTRODUCTION TO AGRICULTURE, FOOD, \& NATURAL RESOURCES (AFNR)

This course introduces the agricultural industry and the opportunity for students to develop their potential for premier leadership, personal growth, and career success. Improving/developing technological, leadership, transferrable, and workplace skills will be a focus. Students will learn about the impact of agriculture on our society and the variety of careers it offers. Basic concepts in animal science, plant science, agronomy, natural resources, agribusiness management, horticulture, and agriculture mechanics will be presented. While surveying the opportunities available in agriculture, students will learn to solve problems, conduct research, analyze data, work in teams, and take responsibility for their work, actions, and learning. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration, and reinforcement of class concepts.

1 Unit of Credit

Explores the biological dimensions of natural-resource management issues. A basic introduction to evolutionary and ecological principles help support discussions of topics such as human population dynamics, human health and toxicology, wildlife biology and management, food production, pest control, and maintenance of biodiversity. Both local and global issues are addressed. The key topic areas include the application of scientific process to environmental analysis; ecology; energy flow; ecological structures; earth systems; and atmospheric, land, and water science. Topics also include the management of natural resources and analysis of private and government decisions involving the environment. This full year course will fulfill a physical science credit toward graduation.

1 Unit of Credit; 3 TC3 Credits

## COURSES OFFERED DURING THE

2025-2026 SCHOOL YEAR

## INTRODUCTION TO FOOD SYSTEMS (ENVS 110)

Food Science is the study of the nature of foods, the causes of deterioration, the principles underlying food processing, and the improvement of foods for the consuming public. Food Science is designed to give students an understanding of the chemical aspects of food composition, giving emphasis to the functional properties and chemical reactions of the major components of foods: carbohydrates, lipids, proteins, and water. The course also provides an integrated picture of the field of food microbiology, which encompasses issues of food safety, food preservation, and food production. In food science, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Introduction to principles of food processing, food chemistry and physics, nutrition, food microbiology, preservation, packaging and labeling, food commodities, food regulations, issues and careers in the food science industry help students understand the role that food science plays in the security of a safe, nutritious, and adequate food supply.

## 1 Unit of Credit; 3 TC3 Credits

## PRINCIPLES OF ANIMAL SCIENCE (ANSC 100)

An introduction to fundamental principles of animal science, including the economic impact of animal agriculture upon the United States and the world, animal genetics, anatomy and physiology, growth, reproduction, artificial insemination, lactation, egg laying, nutrition, animal disease, animal research; will include visits to animal industries in the area. To help students prepare for careers in the field of animal science, students need to attain academic skills and knowledge, acquire knowledge and skills related to animal systems, and develop knowledge and skills regarding career opportunities, entry requirements, and industry standards. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings. This course examines the interrelatedness of human, scientific, and technological dimensions of livestock production.

1 Unit of Credit; 3 SUNY Morrisville Credits

## SOCIAL STUDIES

## GLOBAL STUDIES 1

## Honors Global I is available by teacher recommendation only.

Global Studies I begins with a brief look at world geography, and then follows world history (excluding the United States) all the way up until 1750 . We will look at ancient cultures, belief systems, political structures, and historical events.

1 Unit of Credit

## GLOBAL STUDIES II

## Honors Global II is available by teacher recommendation only.

This course is an important link between the 9th grade study of various cultures of the world and the analysis of American institutions in grade 11. It is an historical examination of the modern world in which the student has an opportunity to examine how various aspects of today's societies developed. Attention is focused on all areas the world from approximately 1700 until present. The emphasis is on important political, economic, and social concepts as well as common issues that can be identified throughout history. At the end of this course, students must pass a New York State regents exam.

1 Unit of Credit

## UNITED STATES HISTORY AND GOVERNMENT

US History studies American history from the Pre-Columbian era to present. Emphasis is placed on the rights and roles of students as American citizens. Using primary and secondary documents as well as current events, students learn about the various political, social, religious, and economic developments that have shaped and continue to shape the United States. The course concludes with a regents exam in June.

1 Unit of Credit

## HONORS U.S. HISTORY AND GOVERNMENT (HSTY201 HSTY202)

US History Honors bears up to 6 college credits through Tompkins Cortland Community College. The course is reading and writing intensive and surveys American History from Native American History through present day. Students should be prepared to read, write, and discuss content and topics regularly. Students considering US Honors should have an 85 average or higher in Global 10, score higher than 85 on the Global Regents, and have the recommendation of their Global 10 teacher.

PREREQUISITE: Teacher recommendation.
1 Unit of Credit, 6 TC3 Credits

## ADVANCED PLACEMENT UNITED STATES HISTORY

Advanced Placement US History is a yearlong college-level course in which you study and analyze history at a college level. This course is reading and writing intensive and will prepare you not only for a history or humanities major, but for the rigors of analysis and critical thinking necessary in any college course of study. You will learn to assess historical materials-their relevance to a given interpretive problem, reliability, and importance-and to weigh the evidence and interpretations presented in historical scholarship. Students will develop the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in essay format. All students in this course are
required to take the AP United States History Examination given in May and take and pass the US History and Government regents exam in June. Students are expected to complete work over the summer which will be submitted the first week of school. In addition, timed AP writings and multiple-choice tests will be interspersed throughout the year. This practice, combined with your focused engagement, will enhance your ability to do well in the course, to perform ably on the exam, and to move forward in your personal and academic lives with confidence.

PREREQUISITE: Teacher recommendation.
1 Unit of Credit

## PARTICIPATION IN GOVERNMENT

Participation in Government is one half of the social studies requirement during the senior year. This course provides the student with a basic knowledge of the duties and responsibilities of an effective citizen. Students will research and present a working knowledge of their government to the class. Following the citizenship portion of the class, students will then take a look at a number of issues that face society and governments today. The course also requires a community service component to be performed during their senior year. The course stresses real world problems and possible solutions. Topics include: 3 branches, political parties, voting, the electoral process, court system, legislative process, public policy, and current events.

1/2 Unit of Credit

## ECONOMICS

Economics is one half of the social studies requirement during the senior year. Students will gain an understanding of their role in the economy as consumers, producers, and investors. The impact on the economy of certain institutions, such as banks, corporations, unions, schools, and governments will also be studied. Students will understand basic economic concepts such as scarcity, trade-offs, markets, supply and demand. A larger emphasis will be placed on personal finance and real-life economics.

## 1/2 Unit of Credit

## PSYCHOLOGY

This introductory course will present the student with the challenge of increasing their knowledge and understanding of themselves. The student will learn about those factors that influence human behavior so that they will be able to cope with and accept themselves and others. The fundamentals of the field of psychology will be surveyed. These include the scientific method, theories of personality, perception, biology and the brain, thinking and intelligence, memory, learning, and psychological disorders and treatment.

PREREQUISITE: Seniors only.
1/2 Unit of Credit

## SOCIOLOGY

This introductory course will be a contemporary study of people living in groups along with the basic concepts, theoretical principles, and methods used within the discipline of sociology. Main topics to be studied will be culture, deviance, social stratification, groups and organizations and family. Current issues such as crime and punishment, the elderly, racism, violence, and the changing role of women are topics to be investigated.

PREREQUISITE: Seniors only.

## 1/2 Unit of Credit

## MODERN AMERICAN SOCIETY

Modern American Society examines how society in America has changed from the end of the World War II to present day. The class primarily focuses on what is permissible in American culture, the shifting dynamic of the American family, and how society has adjusted to these changes. Movies, television programs, and music serve as the main method for analysis of these changes.

PREREQUISITE: $11^{\text {th }} \& 12^{\text {th }}$ grade students
1/2 Unit of Credit

## TECHNOLOGY

## DESIGN AND DRAWING FOR PRODUCTION (DDP)

This course may be used to meet the Art/Music graduation requirement. This is an excellent backbone course for any student planning on studying engineering or architecture and a must for future Tech Ed courses, or any technical areas. Students will be exposed to sketching, the tools and materials used in drawing: lettering, and dimensioning. Students will practice doing view or working drawings, pictorial drawings, and some sectioning and auxiliary views. During the second half of the year, students will work in groups and design from scratch, a project, produce all necessary drawings, and then build the project to those specifications. The last part of the year students will be introduced to computer aided drafting (CAD). Students will learn basic commands and get the feel for drawing without a pencil.

1 Unit of Credit

## COMPUTER AIDED DESIGN \& COMPUTER AIDED MAUFACTURING (CAD/CAM)

This is an introductory course in Computer Aided Design and Computer Aided Manufacturing including theory and application. Students will learn to create using 2D and 3D models. They will utilize CAD/CAM systems, mechanical tolerancing, process planning and tool path generation to design and create or machine the parts or products. Providing real world application and skills.

PREREQUISITE: Successful completion of DDP or permission from the instructor.
1 Unit of Credit

## MATERIALS PROCESSING

Students will learn about different materials and ways to process them by building their favorite projects. Students will work with wood, metals (welding, forging and sheet metal) and plastics (polyester casting, vacuum forming and/or acrylic sheet). Learn just about every tool and machine the shop has. This class is typically followed up by Production Systems.

## 1/2 Unit of Credit

## PRODUCTION SYSTEMS

Students will build on the skills you just learned in Materials Processing. Students will learn what it takes to turn an idea into a mass-produced product. This is a great class to learn about the various aspects of manufacturing, company start up, designing and building a product, and testing the market to see how valuable the product is. The majority of the work done in Production Systems is hands-on.

1/2 Unit of Credit

## WOOD AND METAL

Students will design and build a product of their choosing, involving either/both a wood product or metal. Each product will provide the student with the chance to learn techniques/skills and use all the tools and equipment in the shop.

PREREQUISITE: Grades $11 \& 12$ and have successfully completed 1-2 technology courses.
1 Unit of Credit

## CYBER LITERACY I

Cyber Literacy is a hands-on curriculum that builds a strong cyber foundation for high school students. The course introduces students to cyber by blending robotics, programming, electricity, and elements of liberal arts. Students will learn about the opportunities, threats, responsibilities, and legal constraints associated with operating in cyberspace. Throughout the course, students learn the basics of electricity, programming, and networking as well as develop critical thinking skills. Cyber Literacy lays a foundation for further exploration into STEM and Cyber related topics. Electricity shows the students the fundamentals of electricity from the very basic movement of electrons to practical and engaging experiments that include chemistry, circuitry, and magnetism concepts. Robotics uses a microcontroller as the platform for teaching the students robotics fundamentals. Students assemble their robots to perform various functions through the implementation of sensors and application of their programming knowledge. Liberal Arts illustrates real world applications and implications of computers and the internet in our society today. Students are challenged to intensely deliberate the historical and societal context of cyber.

1 Unit of Credit

## DIGITAL ELECTRONICS

You are surrounded by electronic devices ranging from the very simple (clocks) to the very complex (computers). By taking this course students will learn the fundamentals of how they work. Students will be introduced to basic electronic components including switches, resistors, capacitors, diodes, transistors and more! Students will also explore the relationship between voltage, current and resistance. They will learn Boolean logic and how digital logic gates may be combined to make 'decisions' like a computer does and may even get to build and program a microcontroller! Throughout this full-year course students will build numerous practical circuits in a circuit simulation program, physically on an electronics breadboard and on soldered prototyping boards through which students will learn basic soldering techniques.

1/2 Unit of Credit

## INTRODUCTION TO ROBOTICS

The Introduction to Robotics course will teach students the basics of robotics. In addition, this course will cover such topics as design, construction, operation, and use of robots.

1/2 Unit of Credit

## INTRODUCTION TO CYBER SECURITY

Cybersecurity is more than just a course on "how to hack," Cybersecurity lays a foundation of understanding cyber law and policy, Linux, networking technology basics, risk assessment, cryptography, and a variety of essential cybersecurity tools - all the essential knowledge and skills needed to begin a future in the cyber workforce. The Cybersecurity course provides the rigor and relevance expected for top quality cybersecurity education. Not only does Cybersecurity introduce real-world cybersecurity concepts and skills, but it also prepares students to verify their technical know-how through the CompTIA Security+ certification.

1 Unit of Credit

## NETWORKING

Networking provides the rigor and relevance expected for top quality networking education. Networking lays a foundation of understanding network connectivity, network documentation, network activity, hardening techniques, configuring network infrastructure, and a variety
of essential networking tools - all the essential knowledge and skills needed to begin a future in the cyber/networking workforce. Not only does Networking introduce the breadth of networking concepts and skills, but it also prepares students to verify their technical know-how through the CompTIA Network+ certification.

1 Unit of Credit

## PRINCIPALS OF DIGITAL INFORMATION TECHNOLOGY

This class is designed to help prepare students for a future career in information technology (IT). This class explores the basics of information technology, progresses to computer applications commonly used in the workplace, and concludes with a discussion of the interconnectivity of technology in daily life. This class affords an opportunity to build knowledge and skills in the IT world and prepare students for college and career. Students will learn the principles and concepts important to information technology, which can help them become more valuable employees, better citizens, and knowledgeable consumers. Content: 1. Introduction to Information Technology 2. Hardware 3. Software 4. File Management 5. Purchasing, Maintenance, and Troubleshooting 6. Common Office Application

1 Unit of Credit

## COURSES OFFERED DURING THE

## 2025-2026 SCHOOL YEAR

## ARCHITECTURAL DRAWING/INTERIOR DESIGN

In architectural class students will design, draw (by hand and/or on the computer) and build a scale model of their dream house or summer home. Students will learn all the major architectural concepts, as well as teaching modeling and computer drafting. This course will be tailored to student interests, by concentrating on the building trade, or the interior design aspect of architecture. Taking DDP and/or CAD course(s) prior to enrolling in this course will be helpful.
1 Unit of Credit

## TRANSPORTATION SYSTEMS

Like to race? Try your skill at CO2 cars. Build them and race them in the hall. The $1^{\text {st }}$ place winner gets a prize. This course explores the transportation industry with three units: land, marine, and aerospace transportation. In this class the student will build a cool custom CO2 car, experience flight with controllable airplanes and build the coolest model rocket that Newark Valley has ever seen. All this and more in this transportation class.

## 1/2 Unit of Credit

## LAND TRANSPORTATION

Lean to rebuild your Briggs, Honda, or Kohler engine. Students will study how engines work; 4 stroke and 2 stroke. The best part is that students bring in used engines that need repair and work on them in teams. They will disassemble, clean, check tolerances, repair and reassemble the engine to a running condition. Students may work on car engines if time permits.

## 1/2 Unit of Credit

## CONSTRUCTION SYSTEMS

This course is the practical application of the building industry. You will learn about the building of homes and buildings from the foundation to the roof. Electrical circuits, plumbing and masonry techniques will be discussed and practiced. Students will make a scale model of a building using all of the proper techniques that would be used to make a full-size structure. The emphasis of instruction will be to train contractors, not building crews.

1 Unit of Credit

## WORLD LANGUAGES

## GERMAN I

German I is the first year of language instruction required by New York State and a continuation of the curriculum taught in 8th grade. Students will learn skills to help them communicate about a variety of topics. Students will listen, speak, read, and write in German, as well as explore and make comparisons to German-speaking cultures. The primary focus of German I will be on communication in German.

1 Unit of Credit

## GERMAN II

This course will emphasize grammar and the use of grammar with vocabulary for communication. Students will communicate through listening, reading, writing, and speaking the German language. Students will be introduced to more advanced aspects of the language and culture and should be able to use the language more fluently overall. Students will work on strengthening vocabulary, grammar, speaking, pronunciation, and structure.

1 Unit of Credit

## GERMAN III

This course emphasizes and improves on vocabulary, grammar, culture, pronunciation, and structure learned in German II. Students will continue to do various writing, reading, and speaking activities. Students will delve further into German culture and will be able to work with authentic texts and materials from German speaking countries. Students will also learn about German-speaking countries geography.

1 Unit of Credit

## GERMAN IV (GERM 102)

This course is a Concurrent Enrollment Course with Tompkins Cortland Community College. Students with a combined first and second quarter average of 85 or above at the end of the second quarter of German IV, will be eligible to enroll in Tompkins Cortland Community College. Students will receive three college credits in June with successful completion of this course. It is imperative that students have the desire, appropriate study, reading, writing, and speaking skills to be successful at this level. Students will read authentic texts, contemporary literary works, and poems, have debates and discussions, listen to music, watch movies, and look at famous musicians such as Bach, Beethoven, Haydn, and Mozart, artists and people. This class will have a strong emphasis on using German $90 \%$ of the time.

1 Unit of Credit; 3 TC3 Credits

## SPANISH I

Spanish I is the first year of language instruction required by New York State and a continuation of the curriculum taught in 8th grade. Students will learn skills to help them communicate about a variety of topics. Students will listen, speak, read, and write in Spanish, as well as explore and make comparisons in Spanish-speaking cultures. The primary focus of Spanish I will be on communication in Spanish.

1 Unit of Credit

## SPANISH II

This is a full year course designed to develop a competency in the foreign language standards in listening, speaking, reading and writing. More advanced grammar, vocabulary and topics will be taught. Students are introduced to more detailed aspects of the language and Hispanic culture. Students are expected to respond with a greater fluency to topics already discussed. Supportive vocabulary, pronunciation, grammar, syntax and structure will be taught.

1 Unit of Credit

## SPANISH III (SPAN 102)

Spanish III completes the 3-year language requirement. Spanish III is also a Concurrent Enrollment Course with Tompkins Cortland Community College. Students with a combined first and second quarter average of 85 or above at the end of the second quarter of Spanish III, will be eligible to enroll in Tompkins Cortland Community College. Students will receive three college credits in June with successful completion of this course. Spanish III is a continuation of grammar and thematic vocabulary. Reading, writing, speaking and listening are practiced. The study of geography and culture is continued. This class will have a strong emphasis on using Spanish $90 \%$ of the time.

1 Unit of Credit; 3 TC-3 Credits

## SPANISH IV (SPAN 201 \& 202)

Spanish IV is a comprehensive class consisting of extensive grammar strengthening lessons, as well as exposure to Spanish, in multiple genre forms. It is a Concurrent Enrollment Course with Tompkins Community College (TC-3), where students can receive up to six college credits. It is imperative that students have the desire, appropriate study, reading, writing, and speaking skills to be successful at this level. Comprehensive literary studies of famous Hispanic writers and poets will be supplementing the course, along with movies and music. Artists such as Salvador Dali, Pablo Picasso, and Frida Kahlo will also be studied. This class will be conducted mostly in Spanish.

PREQUISITE: 80 or above on the Spanish III final.
1 Unit of Credit; 6 TC3 Credits

SPANISH V (SPA 280 \& SPA 281)
Spanish V is a course designed to continue the development of accuracy and variety of the spoken and written language. Students continue to develop an understanding of grammatical concepts and cultural aspects of the Spanish speaking world. The course includes advanced vocabulary and many interactive activities to build upon the productive language skills. Upon successful completion of this full year course, students will fulfill TC-3 Dual Enrollment requirements to receive 6 college credits. There is no cost attached to these college credits.

Prerequisite: An average of 85 or above in Spanish IV
1 Unit of Credit; 6 TC3 Credits

