SHERBURNE EARLVILLE
CENTRAL SCHOOL DISTRICT

Sherburne-Earlville Senior High School

Course Descriptions 2023-2024

Principal: *Mr. Michael Waters*

Counselors: *Mrs. Amanda Burns, grades 10 & 12*
Mrs. Candice Poyer, grades 9 & 11

Strive for excellence
Expect the best
Have confidence in yourself
Succeed through hard work

www.secsd.org

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Note: Courses earning TC3 credit are through Tompkins Cortland Community College.

LETTER TO STUDENTS & MISSION STATEMENT

Dear Students:

The Sherburne-Earlville Senior High School Course Selection Catalog has been prepared to help you and your parents/guardians better understand the high school programs and to make informed selections during the scheduling period. These decisions will determine courses of study for next year and will impact your future educational and career options.

I recommend that you read this catalog carefully and seek guidance from parents/guardians, counselors, and teachers in developing a course of study. Please consider your abilities and interests before establishing challenging and rewarding goals.

Sincerely,

Mr. Michael Waters

HS Principal

HIGH SCHOOL MISSION STATEMENT

We at Sherburne-Earlville High School are responsible to our young adults. Through educational challenges, we provide the skills which allow for choice and opportunity, enabling our graduates to fulfill their lifelong expectations and to become valuable participating members of a democratic society.

NOTE

This booklet lists courses which may be taught during the next school year. Actual offerings will be based on student interest and available staffing.

COUNSELING DEPARTMENT

The Sherburne-Earlville High School Counselors are available to assist every student with such concerns as career planning, college placement, educational planning, testing, social, and academic needs. Students may stop in the Counseling Office before school, between classes, during non-instructional time, or after school to schedule an appointment with their counselor.

COURSE LOAD

All students must be enrolled in a minimum of 6.5 courses or course equivalents (i.e. AIS, Resource Room, mentoring, etc.) each year.

REPEAT POLICY

To receive credit for a course failed, a student must satisfy one of the following.

1. Attend and pass an approved summer school course.
2. Repeat the course during the next school year.

COURSE DOUBLING POLICY

Students wishing to take two required courses in a given department simultaneously (i.e. "Double-up") must fulfill the following requirements:

1. Attend a meeting with a parent/guardian and a counselor to discuss the doubling-up policy.
2. Sign a contract agreeing to this policy.
3. Maintain a passing average in each of the two courses.

Student progress will be evaluated at the end of each quarter. Students who are failing either course at the end of a quarter will be dropped from the higher level course.

CLASS STATUS

In order for students to progress to the next grade level they must earn a minimum number of credits as indicated below. Credits are earned by passing courses.

YEAR	CREDITS
Freshman	0
Sophomore	5
Junior	10
Senior	15

GRADUATION REQUIREMENTS

22 Units of Credit Required for All Students
15 Hours Community Service Required for All Students (see next page)

Regents or Local Diploma	Core Requirements	Advanced Designation Regents Diploma
4 Units (1 Regents Exam)	English	4 Units (1 Regents Exam)
4 Units (Global Studies & US History Regents Exams)	Social Studies	4 Units (Global Studies & US History Regents Exams)
3 Units (1 Regents Exam)	Math	3 Units (2 Regents Exams)
3 Units (1 Regents Exam)	Science	3 Units (3 Regents Exams)
1 Unit	Foreign Language	3 Units (1 Exam)
1 Unit	Fine Arts	1 Unit
½ Unit	Health	½ Unit
2 Units	Physical Education	2 Units

**Physical Education must be taken and passed every year.*

**A minimum of 3.5 elective credits must be taken.*

Diploma Types

A. Regents Diploma

In addition to the required courses, the following Regents exams must be passed with a 65 or higher:

One Math
One Physical or Living Science
Global Studies
US History and Government
Common Core English

B. Advanced Designation Regents Diploma

In addition to the required courses, the following examinations must be passed with a 65 or higher in:

Common Core English Regents
Global Studies Regents
US History and Government Regents
Three Math Regents
Two Science Regents
Local Foreign Language Exam

C. Advanced Designation Regents Diploma with Honors

Requires a cumulative average of 90% or higher on:

The Regents examination in Common Core English
The Regents examination in Global Studies
The Regents examination in US History and Government
Three Regents Exams in Math
Two Regents Exams in Science

D. Local High School Diploma

The local diploma is awarded to special education students who score be- tween 55 and 64 on one or more of the Regents exams listed below or who meet the compensatory safety net option:

Common Core English
Global Studies
US History and Government
One Math Exam
One Physical or Living Science

E. Career Development and Occupational Studies (CDOS) Commencement Credential

Awarded to students who demonstrate attainment of commencement level CDOS learning standards. Students must have 216 hours of CTE coursework including at least 54 hours of supervised, work-based learning. In addition, students must complete a career plan and have a satisfactory employability profile.

Rank and Average Procedure

Final passing averages in all high school courses are used to determine students' grade point averages (GPA). All AP courses will be given a weight of 1.10 and honors courses a weight of 1.05 for ranking purposes only. Beginning in the 2018-2019 school year, all honors courses will be given a weight of 1.05 for ranking purposes only.

In determining rank, Advanced Designation Regents Diploma candidates will be ranked above Regents and Local Diploma candidates. GPA will be carried to the third decimal point (ex: 95.136). Final rank and average to determine valedictorian/salutatorian and the top ten will be calculated at the end of seven semesters (January of the senior year). Students must have completed three semesters at SECSD in order to be ranked and eligible for the top ten awards, including valedictorian and salutatorian.

Community Involvement Requirement

Fifteen (15) hours of community involvement must be completed at a non- profit organization. Students can begin their hours in September of their Freshman year. **Prior approval forms, located in the high school office, must be completed, and signed by an administrator before the hours are completed.** Total hours completed must be verified by a site supervisor. To receive credit for hours served, the completed form must then be submitted to the high school office.

Community Involvement Guidelines:

- Activities to accumulate hours are to commence beginning September of freshman year and must be completed prior to May 1 of the graduation year.
- No monetary compensation (pay, tips) may be accepted.
- Students may not ask to do activities for relatives or private businesses owned by relatives.
- All activities must be pre-approved. Submit ***Request for Approval of Community Involvement*** forms to the high school office.
- Completion of the Community Involvement Requirement is the student's responsibility. Failure to complete the requirement will bar the student from graduation.
- Activities are to be conducted within the Sherburne-Earlville District, unless otherwise approved.
- Students are not allowed to conduct community service during their regularly scheduled classes.

NCAA Freshman – Eligibility Standards

DIVISION I - 16 CORE-COURSE RULE

4 years of English
3 years of Mathematics (Algebra 1 through Algebra 2)
2 years of Natural/Physical Science (one must be a lab science)
1 year of additional English, Mathematics or Science
2 years of Social Studies
4 years of additional core courses (from any area listed above, or from foreign language, non-doctrinal religion or philosophy)

* Division I uses a sliding scale to match test scores & core GPA (the higher the GPA, the lower the test score can be for eligibility and vice versa - a minimum GPA of 2.3 is required)

See the website for more details.

DIVISION II - 14 CORE COURSES

(16 Core Courses for Class of 2013 and beyond)

3 years of English
2 years of Mathematics (Algebra 1 through Algebra 2)
2 years of Natural/Physical Science (1 year of lab if offered by high school)
3 years of additional English, Mathematics or Natural/Physical Science
2 years of Social Science
3 years of additional courses from any area above, foreign language or non-doctrinal religion/philosophy (4 years for Class of 2013 and beyond)

* Minimum combined ERW + Math score of 820 on the SAT or an ACT sum score of 68.

Please note: For students entering any college or university on or after August 1, 2005, **computer science** courses may only be used for initial eligibility purposes if the course receives graduation credit in mathematics or natural/physical science and is listed as such on the high school's list of NCAA-approved core courses.

Academics and Athletes rules on Eligibility and Recruiting
www.ncaa.org
www.eligibilitycenter.org
Toll-Free 317-917-6222

Art

Studio in Art

1 credit

This course is designed to provide students with the basic drawing skills and language of art necessary to explore and express individual ideas and techniques in art. The primary components include learning to draw what we see through visual analysis while understanding and creating art through the elements of art and principles of design. Learning how to express our feelings and emotions through the medium of art and our differing perspectives of interpretation are also encouraged. This course helps to provide some fundamental insight into the extensive amount of information that is conveyed visually in our society and other cultures. Students will also focus throughout the year on visual thinking strategies; a specific observation-based process that encourages students of all levels to be able to perceive and interpret their visual culture. Careers in art, interpretation of art, history of art, and art criticism will also be addressed. Sketchbook assignments will also be given in addition to class work. Some of the materials used during the course will be graphite, charcoal, watercolor, acrylic paint, chalk pastel, papier-mache, linoleum, and clay. This course is open to all students and is the primary basis for advanced elective courses in art.

Ceramics 1

Prerequisite: Studio in Art or DDP **½ credit**

Ceramics I is designed to introduce students to the basic techniques of hand-built pottery and sculpture. They will explore pinch, coil, and slab construction. Students will become familiar with a variety of construction, glazing, and firing methods.

Ceramics 2

Prerequisite: Ceramics 1 **½ credit**

Students in Ceramics II will continue working with hand building techniques and sculpture and will begin learning to throw on the potter's wheel. Students will also begin using casting techniques using ceramic slip molds.

Advanced Studio Art

Prerequisite: Studio in Art & Teacher Recommendation **1 credit**

This course is designed for serious students who wish to investigate art problems of a more individual and complex nature. The exploration of all mediums is possible. The development of an individual portfolio of high-quality work showing growth in and understanding of the principles of design is the primary goal of this course. A focus on life drawing will be emphasized. During this course, students build up a portfolio which may be used when applying to art colleges, etc. Weekly sketchbook assignments will be given.

Art Explorations

Prerequisites: Studio in Art **1 credit**

This unique arts course will enable students the opportunity to participate in collaborative art experiences, hands-on craft making, media arts, exploration of all forms of art like music, films, plays, etc. Students will make connections to other disciplines and current events, while gaining experience with visual problem solving and project-based inquiry.

Drawing and Painting- College Credit

Prerequisites: Studio in Art & Advanced Studio Art **1 credit**

Art 115 ***(semester 1):***

This course introduces the methods, techniques, and process of paintint through a variety of media, but primarily acrylic painting. The elements and principles of art, color theory, form, light, and composition are explored. Executing conceptual and aesthetic solutions through the creative process, ideation, and experimentation is emphasized. Students are introduced to various styles, techniques, and artists through examples of professional work, demonstrations, and class activities. Students learn the process of developing a painting from sketches and studies to building compositions for final rendering. ART115 fulfills the The Arts SUNY General Education Knowledge and Skills Area.

Art 116 ***(semester 2):***

This course is a continuation of Painting 1 and focuses on the creative use of both acrylics and oils with an emphasis on oil painting. Developing expressive, conceptual, and aesthetic solutions through the creative process, ideation, experimentation are emphasized. Students will examine various styles, techniques, and artists and improve their use of the elements and principles of art, color theory, form, light, and composition in their work. Mixed media techniques are also explored. ART116 fulfills The Arts SUNY General Education Knowledge and Skills Area.

Drawing and Design for Production

(This course can be used to fulfill mandatory fine art credit.) **1 credit**

Students will find solutions to design problems through design, drafting, modeling, and construction of products. This course has incorporated many project-based activities and is geared around hands-on learning. After students become competent in design and drawing, the technology laboratory will be heavily used. Students will be capable of working with all lab tools to complete assigned and independent projects.

Photography

Prerequisites: Studio in Art or DDP **1 credit**

This course will introduce student to the medium of black and white photography as well as digital photography. Students will learn how to operate a manual 35 mm camera and develop their own film and prints. They will also explore new digital techniques. Course topics will include the art of photographic composition, lighting concepts, dark room techniques, and Masters of Photography. The scope of the course will focus on reinforcing good visual design skills and on the utilization of new technologies such as digital cameras, scanners, digital editing software, and various digital output formats. Students who complete the course will have a digital portfolio of their images that could aid them in entering a college program or the job market.

English

Basic course requirements: A minimum of 7 **successfully completed** pieces of writing and one **successfully completed** term paper must be completed to receive course credit for each English class. Any student not meeting this requirement will not be allowed to repeat the course at summer school unless they attend summer school at S-E. All students must pass the Regents Common Core Exam in English before graduation. R level students who wish to move up to H level courses must see the H level teacher before submitting their course selection form to Counseling.

NOTE: *Basic course requirements must be met in order to be approved for summer school.*

English 9

1 credit

This course is designed to begin the student's preparation for college, careers and the Common Core English Regents exam in eleventh grade, as well as to prepare the student for further study in English. Students will improve their reading, writing, listening, and speaking skills through study of classic literature, contemporary works, and nonfiction. Vocabulary, spelling, and grammar study are also emphasized. Students will practice techniques of close reading at various points during the course. The writing process will be modeled and followed for each work: outlining, drafting, proofreading, editing, and revising for a final copy. Students will be writing a minimum of seven papers plus a research term paper per the SE Writing Folder requirement.

English 9 Honors

Prerequisites: 1) recommendation by the English Dept. and **1 credit**
2) successful completion of a summer assignment

This rigorous class begins the student's preparation for college, careers, and the Common Core English Regents exam in eleventh grade. Students will spend much time reading and analyzing traditional world literature, contemporary works, and nonfiction with an average reading assignment of twenty-five pages a night. Students will also write numerous essays and a term paper and will practice the techniques of close reading at various points during the course. In addition, the course includes regular instruction in grammar, usage, and vocabulary. Honors students must maintain an average of 80+ to stay enrolled in the Honors section.

English 10

Prerequisite: English 9 **1 credit**

English 10 Regents is a course designed to continue improvement of reading and writing skills and preparation for the Common Core English Regents exam. Students read a variety of classic and contemporary literature. The writing process continues to be stressed, and students will practice academic writing through various assignments, including a research paper and a literary analysis paper. Vocabulary, grammar, and usage are emphasized.

English 10 Honors

Prerequisites: 1) recommendation by the English Dept. and **1 credit**
2) successful completion of a summer assignment

This course is designed to continue the student's preparation for the Common Core English Regents Exam and study of English according to the rigorous demands of the Common Core NYS Standards. This course emphasizes a thematic approach to world literature. Students will read classic as well as contemporary literature in a variety of genres. Students will continue to practice formal academic writing. Vocabulary, grammar, and usage are emphasized. Honors students must maintain an average of 80+ to stay enrolled in the Honors section.

English 11

Prerequisite: English 10 **1 credit**

This course is a study of American literature which includes both classic and contemporary novels, poetry, and short stories. Vocabulary, grammar, and spelling are stressed, and research skills are taught through a major project. A special emphasis is placed on preparing students for the Common Core English Regents Examination given to all grade 11 students.

English 11 Honors (ENG100 Academic Writing 1)

Prerequisites: 1)A grade of 80+ in English 10H &/or a recomm. by an English 10 teacher
2) College-level reading skills are required (Requires reading of mostly beginning college-level materials and some higher college-level materials)
3) College-level writing skills are required

1 credit (3 College Credits)

This course will combine common elements of English 100: Academic Writing (a TC3 concurrent enrollment class) and typical 11th grade honors curriculum to enhance both critical reading skills and college-level writing skills.

Students will read rigorous texts from various eras and in different genres, analyzing the big ideas of rhetorical situation, claims/evidence, reasoning/organization, and style. Students will also learn how to write a variety of essays, usually in response to readings. They will review grammar and basic writing skills, learn about the writing process, begin to engage and respond to academic texts, and be introduced to research and documentation of sources appropriate for introductory-level college essays. English 100 is the first of a 2-course sequence of academic writing.

English 12

Prerequisite: English 11 **1 credit**

This course emphasizes skill improvement in reading comprehension and writing. The literature is specially selected to involve students in analysis of themselves and their roles in society. Writing tasks include essays, creative writing assignments, and a research project. The course is designed to meet the needs of those students who may still need to pass the Common Core Regents, as well as those who plan to continue their education, enter the work force, or join the Armed Forces upon graduation.

English 12 Honors (ENG101 Academic Writing 2)

Prerequisites: 1)A grade of 80+ in English 11H &/or a recomm. by an English 11 teacher
2) College-level reading skills are required (Requires reading of mostly beginning college-level materials and some higher college-level materials)
3) College-level writing skills are required

1/2 credit (3 College Credits)

This course develops and refines student writing in an academic context. Students engage and respond to challenging texts as they develop critical thinking skills. They learn to support their ideas with credible, authoritative information from academic sources and to recogninze audience, purpose, and bias. Students will learn to develop criticala thinking skills by reading fiction and non-fiction texts critically for both form and content. Students will practice different writing processes and rhetorical strategies in order to write esaasys that are purposeful, thoughtful, coherent and that conrom to the conventions of Standard Written English. They will understand writing as a social and collaborative process, as a mode of personal expression and as a rhetorical act. Students will engage in peer editing, group discussion, and individual confereces with the instructor as they build writing skills.

English 12 Honors (ENG102 Approaches to Literature)

Prerequisites: 1)A grade of 80+ in English 11H &/or a recomm. by an English 11 teacher
2) College-level reading skills are required (Requires reading of mostly beginning college-level materials and some higher college-level materials)
3) College-level writing skills are required

1/2 credit (3 College Credits)

Students will read works representing different literary genres, learn different approaches to their interpretation, and practice the process of literary analysis in oral and written forms, use careful reading strategies to learn about current trends in literary theory and criticism, do close reading and analysis of short stories, novels and poetry and pay attention to the relationships among author, text, reader and context in the making of meaning.

NOTE: The following electives will be offered on a rotating basis, dependent on staff availability and student enrollment. Also, English electives are intended as enrichment and elective credit, not as credit toward the four required units of English.

SPECIAL TOPICS IN LITERATURE

Graphic Novels

½ credit

The graphic novel has recently become one of the fastest growing categories in the library. In this semester-long course, students will read approximately six graphic novels and research the history and growth of this popular cultural phenomenon. Students will explore the medium of the graphic novel as a format through which authors can tell fictional stories. Students will also study how the graphic novel can be used to convey messages about history, justice, heroism, gender, race, equality, or other themes in a manner that speaks to everyone through its use of images and texts.

Heroes from Mythology

½ credit

Thor, Beowulf, Gilgamesh, Hercules: the names conjure images of great strength, great power, and great problems. What is the definition of a hero? Why is there a resurgence of interest in heroes and superheroes today? This semester-long course will examine heroes from various mythologies around the world and compare them to countless superheroes on the movie screen today. Students will analyze stories about heroes and how they have been depicted in films both old and new.

Young Adult Literature

½ credit

Students sometimes wonder why they can't read works by Suzanne Collins, John Green, Sarah Dessen, or Veronica Roth in their classes. This semester-long elective allows students the opportunity to read young adult authors while earning credit! Young adult literature provides students with the opportunity to learn about themselves as they read about characters who are transitioning from late childhood to adulthood.. The protagonists are teenagers, the conflicts are relevant to the students, and the literature is entertaining while still maintaining literary merit. The young adult genre has been surging in popularity since the mid-1990's, and in this course, students will read, discuss, and analyze some of the best "YA" novels on the market.

Creative Writing

½ credit

This class will focus on the creation of poetry and story writing. Students will read, analyze, and emulate major writers in poetry, short story, memoir, and drama. Topics to be studied include audience, style, literary devices, and effective written communication. Along with focusing on the creative process, students will produce original works. Each student will produce a portfolio of works with options that include poems, short stories, memoirs, and one-act plays. In Creative Writing, the projects are student driven so each course is uniquely catered to what the young artists want to work on.

Languages

Spanish 1

1 credit

Students develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures. This communication is evidenced in all four language skills - listening, speaking, reading and writing - with emphasis on the ability to communicate orally and in writing. Students begin to explore and study themes like Personal and Family Life, School Life, Social Life, and Community Life. Each topic addressed in the course has progress indicators defining what students will be able to do. Essential vocabulary and language structures are presented to students within the context of the themes and topics.

Spanish 2

Prerequisites: 1) successful completion of Spanish 1 or equivalency test and 2) teacher recommendation **1 credit**

Students continue to develop proficiency in all four language skills - listening, speaking, reading, and writing - with emphasis on the ability to communicate orally and in writing. They learn to function in real-life situations using more complex sentences and language structures.

Spanish 3

Prerequisites: 1) successful completion of Spanish 2 **1 credit**

Students continue to develop and refine their proficiency in all four language skills - listening, speaking, reading and writing - with emphasis on the ability to interact orally and in writing. They communicate using more complex language structures on a variety of topics, moving from concrete to more abstract concepts. At this level, students comprehend the main ideas of the authentic materials that they read and hear and are able to identify significant details when the topics are familiar. Each topic addressed in the course has progress indicators defining what students will be able to do. Essential vocabulary and language structures are presented to students within the context of the themes and topics. A comprehensive exam will be administered after course completion, which is required for an Advanced Regents diploma. This is a concurrent enrollment course which provides students the opportunity to earn 3 college credits through Tompkins Cortland Community College.

Spanish 4 (HS Credit)

Prerequisites: 1) Average of 85+ in Spanish 3 and
2) teacher recommendation **1 credit**

Students develop more sophisticated communication skills in all four areas - listening, speaking, reading and writing with emphasis on the ability to interact orally and in writing. The authentic reading selections are emphasized at this level. Students communicate using more complex language structures and express abstract ideas with reasonable fluency. Students are able to create and listen with understanding to reports and presentations. They are also able to describe, summarize and discuss selected targeted themes and topics. Each topic addressed in the course has progress indicators defining what students will be able to do. Essential vocabulary and language structures are presented to students within the context of the themes and topics that will adapted to student need and ability.

Spanish 4 (College Credit)

Prerequisites: 1) Average of 85+ in Spanish 3 and
2) teacher recommendation **1 credit**

Grammatical structures will be reviewed and reinforced through writing. Reading and discussion of a variety of literature - short stories, plays, newspaper articles, novels, poetry, etc. Reinforcement of grammatical structure and practice in writing. Cultural topics are covered in the readings and student projects. This course will further increase student's fluency in speaking, reading, writing and understanding the Spanish language. Students are expected to increase their fluency by using Spanish as the main medium of conversation. Students will be required to work independently on reading, writing, speaking, and listening activities assigned over an extended period of time. This is a concurrent enrollment course which provides students the opportunity to earn 6 college credits through Tompkins Cortland Community College. It is recommended that only highly motivated students who have maintained at least an 85 average in their language studies register for this course. This course is open to juniors and seniors only.

French 3

Prerequisites: French 2 **1 credit**

Structural patterns from the previous levels are reinforced and expanded. Comprehension of the French language is further developed through the reading of longer and more difficult passages. Emphasis is on active use of the language in conversation and composition. A comprehensive exam will be administered after course completion, which is required for an Advanced Regents diploma.

Math

Algebra 1 (Common Core)

1 credit

This course will formalize and extend the mathematics that students learned in middle school, and will include the following topics: middle school review (subsets of the real numbers, operations with square-root radicals, simplifying numerical expressions, and dimensional analysis), algebraic expressions (interpret, create, evaluate, add, subtract, multiply, and factor), linear equations and inequalities in one variable, linear equations and inequalities in in two variables, quadratic equations in one variable, functions (in general, and many different kinds of functions including linear, quadratic, square-root, absolute value, piecewise, and exponential), arithmetic and geometric sequences, univariate and bivariate statistics.

Pre-Algebra

Prerequisites: 8th grade teacher recommendation **1 credit**

This course is the first year of a two-year course, in which the material in Algebra 1 is taught over two years. Students will take a final exam (non-Regents) and go to Algebra B the following year.

Algebra B

Prerequisites: Algebra A **1 credit**

This course is the second year of the two-year course, in which the material in Algebra 1 is taught over two years. Students will take the New York State Regents Examination in Algebra 1 (Common Core).

Financial Literacy

Prerequisites: Passing grade on the NYS Algebra 1 Regents Exam (Common Core) (required for graduation) or enrolled in AIS **1 credit**

All the topics covered in this class will be information that you will need to know during and after high school days. The class lays a foundation through active-learning classroom activities and discussion by using a project-based learning model. Topics include, but not limited to, money management, borrowing, earning power, investing, financial services, and insurance. There will be both individual and group in-class and out-of-class assignments.

Geometry

Prerequisites: Algebra 1 or Algebra A/B **1 credit**

This course will formalize and extend students' geometric experiences from middle school. Students will explore more complex geometric situations and deepen their explanations of geometric relationships. A major emphasis is on rigid motions and formal/informal proofs. Topics include congruence, proof, constructions, rigid motions, similarity, right-triangle trigonometry, geometry in three dimensions, circles, properties of geometric figures, formulas relating to geometric figures, and others. Students will take the New York State Regents Examination in Geometry (Common Core).

Algebra 2

Prerequisites: 1)Algebra 1 or Algebra A/B
2)Geometry, and
3)a passing score on both Regents exams **1 credit**

Algebra 2 is the final math course required for an Advanced Regents Diploma, and concludes with the NYS Algebra 2 Regents Exam (Common Core). This course is highly recommended for those students seeking to continue their education at the college level. Building on their work with linear, quadratic, and exponential functions, students extend their repertoire of functions to include polynomial, rational, and radical functions. Students work closely with the expressions that define the functions, and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. The Mathematical Practice Standards are applied throughout the course.

Pre-Calculus

Prerequisites: 1)Algebra 2
2)a passing score on NYS Algebra 2 Regents Exam **1 credit**

This course will give the student a review of the material covered in Algebra 2, a preparation for the PSAT Exam, and a solid beginning with the basic ideas of Calculus. It is not intended to replace the college course (AP Calculus), but to ease the transition from high school to college mathematics. Major topics of study include various Functions and their graphs, Matrix Theory, Limits, Derivatives of functions, Implicit Differentiation, Applications of the derivative, and Integration of Algebraic functions (time permitting).

Calculus/Advanced Placement Calculus

Prerequisites: 1)90 average or better in Intro to Calculus and
2) 85 or better on the Alg 1, Geometry, and Alg 2Regents **1 credit**

Students have the option of taking this course and earning 4 TC3 credits. These credits may be transferable to other colleges/universities.

This course provides students with a fifth year of mathematics. This is a rigorous course meant for the highest performing math students. Topics covered include limits, differentiation, applications of the derivative, differential equations, integration, and applications of the integral. Students will take the AP Calculus Exam (AB) in the beginning of May. Student's progress will be evaluated at the end of the 2nd quarter to determine eligibility to sit for the AP Exam in May.

Foundations of College Mathematics

Prerequisites: 1)successful completion of Algebra
2) senior standing **1 credit**

This course is designed to prepare college-bound students for entering their college with the ability to take a credit-bearing math course. This class will be an in-depth review of high school mathematics that is often seen during the first and second semester of college mathematics. Successful completion of this course should allow a student to enter directly into a credit-bearing, general education fulfilling math course. Topics include: The real number system, working with polynomials, factoring, rational expressions, rational exponents, radicals, linear equations and inequalities, functions, solving quadratic, exponential, absolute value, and radical equations. Topics will also include modeling with all varieties of equations, introduction to Exponential and Logarithmic functions, solving systems of linear equations, and linear/quadratic systems.

Music

Mixed Chorus

1 credit

This course is for all students in grades 9 through 12. Students will be expected to participate in rehearsals and all scheduled concerts (Winter and Spring). Mixed chorus will also participate in special events such as High School Graduation Senior Awards Night. Assessment will be based on participation in rehearsals, lessons and concerts.

Mixed Chorus

Prerequisite: 1 year High School Band or Chorus **1 credit**

This course is required for students who want a sequence in music. Music Theory offers training in theory, harmony, sight-reading, dictation, and music appreciation.

Concert Band

Prerequisite: 1 year High School Band or Chorus **1 credit**

Concert Band is designed to give the student involved understanding of ensemble fundamentals such as tone quality, blend, and intonation. In addition, the student will be exposed to a wide variety of musical styles. Small group lessons given each week on a rotating basis are also part of the band course. Technicality through scales, and individual sound production are stressed in lessons. Students also participate in parades, evening concerts, and play at football games. Besides Concert Band, instrumental music students can choose from many optional musical experiences. Among these are Jazz Ensemble, Dixieland Band, Chamber Ensembles (i.e., Brass Choir) and NYSSMA solos.

Physical Education/Health

Minimum 2 Credits required for Graduation* **½ credit per year

The physical education curriculum is designed to:

A. Promote physical activity and the attainment of physical fitness, and a desire to maintain physical fitness throughout life

B. Attain competency in the management of the body and useful physical skills

C. Emphasize safety practices

D. Motivate expression and communication

E. Promote individual and group understanding

F. Provide knowledge and appreciation of physical education activities

G. Make each individual aware of the effect of physical activity upon the body

H. Provide opportunities for the exercise of pupil initiative, leadership and responsibility

I. Reinforce basic learnings of other areas of the total school curriculum

This curriculum will include experiences in the following:

A. Basic and creative movement

B. Rhythm and dance

C. Games

D. Perceptual motor skills

E. Individual and team sports

F. Aquatics

G. Lifetime sports

H. Outdoor living skills

I. Aerobics

J. Other activities adapted to meet the differentiated needs of pupils who are unable to participate in general Physical Education class

Lifeguard Training

Prerequisites: must be able to pass the required PE swim test

1 credit (2 College Credits)

This course is open to any High School student who is at least 15 years of age (NOTE - must be 15 by June 2023) and has successfully passed the Physical Education eighth grade swim test. There is a maximum enrollment of 14 students per class with priority to 11th and 12th graders. The primary purpose of the American Red Cross Lifeguard program is to provide lifeguard candidates and lifeguards with the skills and knowledge necessary to keep the patrons of aquatic facilities safe in and around the water. During the course, students will teach elementary students basic swimming and safety skills. End of course assessment will include a skills test and a written exam. A minimum grade of 80% is required for certification. Any new student entering S-E from another district must pass the required Physical Education swim test prior to taking lifeguarding.

Athletic Training/Team Management

1/2 credit

This course is for 11th and 12th grade students who are interested in the principles of athletic training and topics in sports management. Students will be introduced to information concerning preparing an athlete for practice and competition to minimize injuries, strapping and wrapping procedures, and techniques to aid in the recovery of athletic injuries with the focus of returning the athlete to practice and competition. Additionally, sports management concepts will be presented, including scorekeeping, statistics, and timekeeping. Guests from the fields of athletic training and sports management will speak to the class. Students will be required to pass weekly quizzes, give a class presentation, and pass a final exam.

Health

1/2 credit

This course provides information in an attempt to influence students to take positive actions about their own health. Students learn that good health habits can improve the way they look, they way they perform in school, the way they interact with others, and the way they feel about themselves. As students acquire knowledge and decision-making skills, they also gain in the confidence they need to take responsibility for their own health.

Science

Regents Living Environment

1 credit

It is the intent of this course to give understanding and awareness of the living portion of the world. A basic understanding of the biological processes (photosynthesis, respiration, reproduction, digestion) will be attempted through lab investigations and inductive reasoning. A theme throughout the course will be human relationship to both the living and nonliving world. Living Environment will culminate with a Regents exam. Regents lab requirements must be completed in order to take the Regents exam.

Regents Earth Science

1 credit

This course is designed to help students gain awareness and understanding of the natural processes that operate in, on, and around the Earth. Lab investigations form the framework for exploring concepts that underlie such topics as the rock cycle, weather, planetary motion, plate tectonics, and geologic history. Students must complete the Regents lab requirement prior to taking the Regents exam.

Regents Chemistry

Prerequisites:
Science: 1) completion of Living Environment and
2) completion of Earth Science. [Special circumstances (and teacher approval) may allow Earth Science to be taken at a later time.]
Math: 1) successful completion of Algebra,
2)passing Algebra Regents, and
3)completion or current enrollment in Geometry **1 credit**

Regents Chemistry is a challenging course, designed to prepare students for taking science in a 4-year college program, and available to Sophomores, Juniors and Seniors (not Freshmen). The course covers 11 units of study and 30 lab hours must be completed and written up in a satisfactory manner before the student can take the Regents exam. The topics covered include Matter and Energy, Physical and Chemical Changes, Mathematics of Chemistry, Organic Chemistry, and others. The goal is to provide students with an understanding of the application of chemical principles to make decisions about their lives and world issues. There is a strong emphasis on writing and math skills as well as relating lab observations to chemical theories. Students should have a healthy scientific curiosity and be independent thinkers in order to receive the maximum benefit from the course.

Honors Chemistry

Prerequisites: 1) successful completion of Regents Living Environment
2)and Earth Science, and
3)completion or enrollment in Algebra 2 **1 credit**

This concurrent enrollment course is the equivalent of two introductory level college Chemistry courses in which students can receive 4 credits each for CHEM 107 and 108 through Tompkins Cortland Community College. Basic principles of chemistry including measurement, atomic structure, bonding, mole concept, stoichiometry, and

chemical formulas and equations will be covered. Laboratory experiments are hands-on, wet-lab, performed in a traditional chemistry lab under supervision of a chemistry professor. Students must maintain an 80 average to remain in this course.

Regents Physics

Prerequisites: 1) successful completion of Geometry,
2) at least 80% on the Algebra and Geometry Regents exams
3)completion or enrollment in Algebra 2
4) successful completion of at least 2 other Regents science classes

1 credit

Emphasis will be placed on preparation for college level science courses. This course presents a modern view of physics with a major emphasis placed on the fundamental concepts underlying this basic science. The role of physical science in our world is stressed through a study of the laws of motion, energy, waves, light, electricity, magnetism, and particle physics. There is a strong emphasis in this course on laboratory skills and the writing of laboratory reports. Students are expected to relate the principles of physics to their applications in our world. This requires independent thinking and a natural curiosity about the physical world. The student must complete 30 laboratory activities prior to taking the Regents exam in June.

Honors Physics

Prerequisites: 1) at least 80% on the Algebra and Geometry Regents exams
2) completion or enrollment in Algebra 2
3) successful completion of at least 2 other Regents science classes

1 credit

This concurrent enrollment course is the equivalent of two introductory level college physics courses in which students can receive 4 credits each for PHSC 104 and 105 through TC3. Topics include those covered in Regents Physics, as well as fluids, thermodynamics, electromagnetic induction, geometric optics, Einstein's special theory of relativity, quantum theory, and others. Students will need to do extensive lab work, write college level lab reports, take detailed exams, prepare and present information during class discussions, and complete work outside of class meetings. In lab sessions, error analysis and graphical analysis are emphasized. Students considering taking this class must be well organized, responsible, and have disciplined work habits. Dual Enrollment students must maintain an average of 80+ to stay enrolled for college credit.

Astronomy

Prerequisites: successful completion of Earth Science **1 credit**

This is an introduction to the study of celestial objects and phenomena. Students will develop an understanding of the science behind mapping and studying the night sky. Astronomy and stargazing can develop into lifelong passions for amateurs and professionals alike. Students should be prepared to complete lab work and research-based projects as part of their coursework. Topics to be covered include historical and modern perspectives on stars, constellations, our solar system, and deep-sky objects such as nebulae, galaxies, and black holes.

Biology: AP/College Credit (BIO104)

Prerequisites: 1) successful completion of the Living Environment Class with an overall average of 85% or higher, and
2) a score of at least 85% on the Living Environment Regents Exam, and
3) successful completion or current enrollment in Chemistry

1/2 credit

[BIOL104] This course is designed as an introductory level college biology course and successful completion will earn the student 4.0 college credits from TC3. Living organisms are studied from the molecular level all the way through the interactions of the entire organism with its environment. This is the first semester class in a series of two TC3 biology classes that we offer here at S-E. This fall semester class will focus on biochemistry, cellular biology, and genetics. The students will watch nightly podcasts that they will be quizzed on in class the next day. Students will also need to do extensive lab work, maintain a college level laboratory notebook, participate in class discussions, and successfully complete written assignments and exams. Any students considering taking this class must be well organized, focused, responsible, and have disciplined work habits. Dual Enrollment students must maintain an average of 80+ to stay enrolled for college credit. *Note: Students planning to take the AP Biology Exam in May must also enroll in the second semester course, BIOL 105.*

Biology: AP/College Credit (BIO105)

Prerequisites: 1) successful completion of the Living Environment Class with an overall average of 85% or higher, and
2) a score of at least 85% on the Living Environment Regents Exam, and
3) successful completion or current enrollment in Chemistry

1/2 credit

[BIOL105] This course is designed as an introductory level college biology course and successful completion will earn the student 4.0 college credits from TC3. Living organisms are studied from the molecular level all the way through the interactions of the entire organism with its environment. This is the second semester class in a series of two TC3 biology classes that we offer here at S-E. This spring semester class will focus on evolution, the history of life on earth, ecology, and botany. The students will watch nightly podcasts that they will be quizzed on in class the next day. Students will also need to do extensive lab work, maintain a college level laboratory notebook, participate in class discus- sions, and successfully complete written assignments and exams. Any students considering taking this class must be well organized, focused, responsible, and have disciplined work habits. Dual Enrollment students must maintain an average of 80+ to stay enrolled for college credit. *Note: Students planning to take the AP Biology Exam in May must also enroll in the first semester course, BIOL 104.*

Marine Biology

Prerequisites: 1) successful completion 1 Regents science class **1 credit**

This course will focus on the study of life processes of organisms inhabiting saltwater environments. Students will explore the organisms that inhabit the ocean as well as their physiology, genetics, ecosystem functioning and more.

Anatomy & Physiology

Prerequisites: 1) successful completion of Regents Living Environment **1 credit**

This course is designed for the Junior or Senior who has an interest in human anatomy and physiology and may wish to enter a health-related field, including nursing, physical therapy, medicine, etc. All organ systems will be covered from basic cellular structure to gross anatomy. Lab work is extensive and dissections involving a preserved cat are mandatory. The course emphasizes a cooperative learning environment with respect to both lab and testing situations.

Honors Anatomy & Physiology - College Credit

Prerequisites: 1) successful completion of the Living Environment Class with an overall average of 85% or higher, and
2) a score of at least 85% on the Living Environment Regents Exam, and
3) successful completion of at least 2 Regents science classes

1 credit

This is a college-level course where students are introduced to the basic organization of the human body, basic biochemistry involved in physiological interactions, basics of tissue organization, and histology. In addition, the course surveys the integumentary, skeletal, muscular and nervous systems of the human body. Students will be expected to engage in the material outside of class by reading, watching videos, taking notes, and more outside of class time. Lab work will be extensive and will include mandatory dissections and college-level lab reports. The exams will be detailed. Any students considering taking this class must be well organized, focused, responsible, and have disciplined work habits. Dual Enrollment students must maintain an average of 80+ to stay enrolled for college credit.

Forensic Science

Prerequisites: 1) successful completion of Living Environment **1 credit**

CSI. NCIS. Criminal Minds. Entertainment has exploded around the concept of forensic science and often the shows made about these scientists are topping charts. What is forensic science really though? How does it work? Are these scientific principles good enough to trust for convictions, and sending people to prison? This class aims to answer these questions and more. We will systematically cover each of the major branches of forensic science and look at how the science is really done. The course will include classwork and laboratory work, extensive writing, mathematical analysis, and field work.

Natural History of the Northeast

1 credit

An introduction to the study of natural history, with a particular focus on the natural history of the northeastern United States. Students will use the disciplines of ecology, geology, geography, and climatology to better understand the natural and human factors that have shaped the Northeast into what we see today. Topics to be covered include geologic history, paleoclimate, forest ecology, and the geography of glaciers.

Social Studies

Global History & Geography 1

1 credit

Global History and Geography I is the first-year foundation course of the two-year Global History and Geography program. This program is based on the New York State Learning Standards for the Social Studies. Many aspects of the various world civilizations are covered, from the rise of mankind through the fall of Napoleon. A broad range of cultural elements are emphasized including art, architecture, religion, education, family life, roles of women as well as geography are addressed. It is necessary to take this course before taking Global History and Geography II.

Global History & Geography 2

Prerequisites: Global History & Geography 1 **1 credit**

Global History and Geography I is the first-year foundation course of the two-year Global History and Geography program. This program is based on the New York State Learning Standards for the Social Studies. Many aspects of the various world civilizations are covered, from the rise of mankind through the fall of Napoleon. A broad range of cultural elements are emphasized including art, architecture, religion, education, family life, roles of women as well as geography are addressed. It is necessary to take this course before taking Global History and Geography II.

Global History & Geography Honors

Prerequisites: Recommendation on 8th grade team **1 credit**

This course is designed to complete the pre-Renaissance and non-European content of the New York State Core Curriculum for Global History and Geography. All nine historic eras identified in the state's core curriculum will be covered by this course. Students who successfully complete this course will be required to take Advanced Placement European History during their Sophomore year. Placement in this course will be made by recommendation of the 8th grade team.

Advanced Placement European History

*Prerequisites: 1) Global History and Geography I Adv. Studies **or***
*recommendation of the Social Studies Department **and***
2) completion of the summer assignments prior to staring class

1 credit

This program corresponds to the most recent developments in history curricula at the undergraduate level. Students are expected to demonstrate a knowledge of basic chronology and of major events and trends from approximately 1450 to the present. Students will then be expected to take the national Advanced Placement test in May. Students who fail to meet the district requirement for the course must repeat the course or take a summer school course which corresponds to Global History and Geography II.

United States History & Government

Prerequisites: 1) Global History **1 credit**

This course is designed to complete the New York State requirement for United States History and Government. This course covers seven major content areas. This is a 40-week course, and will culminate with the Regents Exam in June. Students who fail to meet the district requirement for the course must take summer school or repeat the course.

Advanced Placement US History

Prerequisites: 1) 85 or above on the Global Studies Regents, ***OR*** *a 90 or above average in Global Studies 1 & 2, or Accelerated Global Studies,* ***OR*** *recommendation by the Social Studies Department and*
2) summer reading & paper

1 credit

This is an accelerated course designed for gifted Social Studies students in their junior or senior years. Emphasis will be placed on the interpretation of primary historical documents, which the student will be expected to analyze and discuss in class. In addition to class work, there will be a significant number of outside readings. Papers of various lengths will be assigned. Specific preparation will be given for the A.P. exam in May. A high enough score on this AP exam may be accepted by many colleges for college credit. Students will also take the Regents exam in U. S. History and Government at the end of this course.

Economics and Economic Decision Making

Prerequisites: 1) Global History and
2) US History & Government **1/2 credit**

This one semester course includes the basic economic concepts and understandings which all individuals need to function effectively and intelligently as citizens and participants in the economy of the United States and the world. Local examinations and/or projects will be used to determine the student's mastery of the course objectives.

Microeconomics: Advanced Placement/College Credit

Prerequisites: 1) 90 or above on Global History & Geography Regents exams and
2) fulfill summer assignment requirement **1 credit**

This course will provide students with the knowledge and skills to empower them as actors in the economy. Study will include basic economic concepts, comparative economic systems, and principles microeconomic analysis. A year-long final project will be undertaken each year. Students will take the A.P. Microeconomics Exam in May.

Civics: Participation in Government

Prerequisites: 1) Global History and
2) US History & Government **1/2 credit**

This one semester course emphasizes the interaction between citizens and government at all levels-local, state, and national. The development of student participation in the process of government will be encouraged. Local examinations and/or projects will be used to determine the student's mastery of the course objectives.

Psychology

1 credit

Psychology is a full-year course for average and above average students in which the fundamentals of psychology are taught learning, memory, perception, physiological bases of behavior, motivation, emotions, intelligence, human development, and abnormal behavior. This class emphasizes the integration of theory through experimentation to daily living. In addition to furthering personal growth and insight into human behavior, the main objectives of the course are college preparatory reading and writing skills.

Advanced Placement Psychology

Prerequisites: 90% or above in English and Social Studies **1 credit**

The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology, and learn the ethics and methods psychologists use in their science and practice.

History Seminar – The Holocaust

1/4 credit

Explore the causes, consequences and meaning of the Nazi effort to exterminate Europe's Jews and others between 1933-1945.

History Seminar – Sports & Leisure in America

1/4 credit

A broad exploration of sports and leisure pursuits and their role in American society. Will attempt to follow historical development and include such topics as the meaning of leisure in a working society, the role of team sports in American life; professionalization and professional leagues; sports and commerce, and much more.

History Seminar – Protest in Modern America

1/4 credit

A closer look at the role of protest movements in the shaping of the nation from the late 19th century to the present day. This course will explore struggles for equality and dignity undertaken by the working class, African Americans, Hispanic Americans, women, LGBTQ+, and youth.

History Seminar – War: Past, Present, Future

1/4 credit

A survey of war in the modern period of civilization. Course will explore uses, methods and consequences of warfare from the 17th century to the present day, seeking understanding of the motivations and lessons learned (or not learned) by societies that never seem to stop choosing war as an option. Students will attempt to bring into focus the future impact and the meaning of war.

Occupational Education

Accounting 1

1 credit (4 College Credits)

Introduces basic accounting concepts and principles for the sole proprietorship with an emphasis on the accounting cycle and the preparation of financial statements along with their supporting schedules. Emphasis is also placed on the use of special journals, subsidiary ledgers, and valuation accounts.

Marketing

1 credit

Marketing is one of the tools that has allowed the United States economy to be one of the most successful in the world. This class will take you on a journey through the world of marketing.

Building & Construction Trades

3 credits

Offering instruction in the construction of residential homes from foundation to finish. No prerequisite. Additional program training will include forest management, timber harvesting and sawmill operations. Lumber produced in program will be used for various projects including post and beam construction.

Computer Applications

½ credit (4 College Credits)

This course will cover basic machine operations of the computer, the touch-typing system of inputting the alphabet, numbers, and symbols with speed and accuracy, and an introduction to operation and uses of word processing, spreadsheet, and presentation software using the MS Office Suite and Google platforms. Students will develop skills that can be used in other high school classes, as well as in college and in their careers. Skills learned will be transferable to other applications and software.

Desktop Publishing (Yearbook)

Prerequisite: Application and teacher recommendation required

½ credit per semester

Capture the school year with words and pictures and provide your classmates with a memorable yearbook they will have for a lifetime. If you have experience with photography, computer design or journalism – or just a strong desire to make the yearbook great – this may be the class for you. Students who are accepted into this class will be expected to work during free mods, after school, evenings, weekends, and required to sell ads during Regents Week and may be required to attend a work session during the summer (dates will be set before the end of the school year).

Drawing and Design for Production

(This course can be used to fulfill mandatory fine art credit.) **1 credit**

Students will find solutions to design problems through design, drafting, modeling, and construction of products. This course has incorporated many project-based activities and is geared around hands-on learning. After students become competent in design and drawing, the technology laboratory will be heavily used. Students will be capable of working with all lab tools to complete assigned and independent projects

Introduction to CAD (Computer-Aided Design)

Prerequisites: 1) DDP or Studio Art
2) grade level Math **½ credit**

(Students have the option of taking this course & earning 2 TC3 credits. These credits may be transferable to other colleges/universities.)

This course introduces students to Computer-Aided Design (CAD). CAD is the most modern way to create and develop technical drawings for manufacturing, industry, and construction. Students in this class will learn the basics of Inventor Professional. The software available to students in this class is modern, and most importantly, used in industry today. 3D printing and CNC milling will be integrated into this course.

Residential Design and Construction

Prerequisites: 1) DDP or Studio in Art and
2) grade level Math **1 credit**

(Students have the option of taking this course & earning 3 TC3 credits. These credits may be transferable to other colleges/universities.)

Students will learn the process of building a residential structure from start to finish. Designing a moderate sized home using an industry leading software (Autodesk Revit) and building a small wood framed structure will make this course interactive, hands-on, and fun!

Engineering Graphics

Prerequisite: Intro to CAD **½ credit**

(Students have the option of taking this course & earning 2 TC3 credits. These credits may be transferable to other colleges/ universities)

This course is a continuation of the Introduction to CAD Course. Students in Engineering Graphics will work with three-dimensional software to model threads & fasteners, gears, cams, springs, & bearings. Assembly & presentation file creation is also discussed. Students will have full access to the 3D-printer for prototype designs. Creating a part using the 3D-printer is a course expectation.

Introduction to Coding

1 credit

Introduction to Coding covers a basic introduction to the principles of programming, including algorithms and logic. Students engage in hands-on programming tasks in the Python programming language as they write and test their own code using the approaches real programmers use in the field. Students will program with variables, functions and arguments, and lists and loops, providing a solid foundation for more advanced study as well as practical skills they can use immediately.

Digital Information Technology

1 credit

This course introduces students to the essential technical and professional skills required in the field of Information Technology (IT). Through hands-on projects and written assignments, students gain an understanding of the operation of computers, computer networks, Internet fundamentals, programming, and computer support. Students also learn about the social impact of technological change and the ethical issues related to technology. Throughout the course, instructional activities emphasize safety, professionalism, accountability, and efficiency for workers within the field of IT.

Small Unmanned Aerial Systems (Drones)

1 credit

This course is an introduction to Small Unmanned Aerial Systems (SUAS), commonly called drones. The course will cover the uses of drones, the electronic and mechanical systems used by drones, FAA regulations related to drones, and drone flight with applications.

Introduction to Agriculture: Food & Natural Resources

1 credit

This course introduces students to the various segments of the agricultural industry. Plant science, farm and land maintenance, and the study of local agriculture trends and needs will be the focus. This is a hands-on course that will use the multiple resources our school and community have to offer to create a "learning by doing" educational environment.

Agriculture Mechanics & Technology Systems

Prerequisite: Intro to Agriculture: Food & Natural Resources **1 credit**

This course is designed to cover concepts from a wide variety of skilled trades-including building construction, electricity, welding, and power systems-in true to life agricultural contexts. Any student interested in a trades-based career should consider taking this introductory course to better understand foundational knowledge of the trades. This course would also appeal to any future homeowner or DIY enthusiast.

Natural Resource / Environmental Science

Prerequisite: Junior or Senior Standing **1 credit**

Agriculture (and Natural Resource Development) is a problem solving, research and report-oriented class. Students will research a variety of farm production enterprises in order to find information about the science, economics and production issues of the enterprise. Information gathering from appropriate research and experience-based sources along with budgeting and planning will be emphasized. Reports will be written and shared with the class. Activities like dairy and beef production, maple syrup and vegetable crops will be explored. We will attempt to find out why and how people farm successfully in Central New York and around the USA.

Agriculture: Animal Science / Plant Science

Prerequisite: Intro to Agriculture: Food & Natural Resources **1 credit**

This course is designed as a foundation level course that will teach students the form and function of plant and animal systems. Students will experience the major concepts of plant and animal science. Students will discover the value of plant production and its impact individually, locally, and globally. Students should be prepared to be involved in the study of animal anatomy, physiology, behavior, nutrition, reproduction, health care, selection, and marketing in the agriculture industry.

Foods

½ credit

This course is for students who want to learn about food and nutrition. It is designed to help students understand the principles of food preparation techniques, nutrition and maintaining a healthy lifestyle. Information covered in the class will help students make informed decisions about nutrition, food selection, preparation, menu planning and purchasing.

Intro to Robotics

Prerequisites: *1) successful completion of Robotics in middle school*
2) or junior or senior standing
3) or teacher recommendation

1 credit

This course exposes students to various digital technologies. The following topics will be covered through the course: introduction to programming, digital electronics, and robotics. The course is hands on with several project-based activities that include using mico-controllers, sensors, and VEX robotics.

Advanced Robotics

Prerequisite: successful completion of Introductory Robotics **1 credit**

This course focuses on the competitive aspect of VEX robotics and allows students to learn and apply advanced techniques to plan, build, program and operate a competition robot. Students will be entered in competitions based on availability.

DCMO BOCES

Occupational Courses available at
Delaware-Chenango-Madison-Otsego BOCES

All occupational courses at BOCES are **4 credits**

Eligibility for BOCES

To attend BOCES in 2023-2024, students must be a certified junior or senior unless placement is made by the committee on Special Education**.**

Automotive Collision/Refinishing Technology

Looks are everything in the world of Auto Collision. This program offers an in-depth training in repairing, restoring, refinishing and detailing motor vehicles. Students learn skills such as frame straightening, glass replacement, custom painting and business management in our state-of-the-art auto collision shop. Making cars shine, whether repairing damage or restoring an oldie, is the goal of the students enrolled in this program. High School Core Academic Credit may be available in Math and Science.

Automotive Technology

High-tech diagnostic equipment helps enhance learning in the Automotive Technology program. Students gain experience in traditional automotive repair methods as well as state-of-the-art computerized diagnostic equipment and repair. Some of the areas students explore may include automotive electronics, exhaust systems, suspension and emission control. High School Core Academic Credit may be available in Math and Science.

Carpentry And Building Construction

Students perfect and refine their skills as they participate in our Carpentry and Building Construction program. Students gain valuable skills as they collaborate in the construction of a site-based modular home. Students master skills in masonry, framing, plumbing, roofing and finishing to name a few. Students also explore the rules and regulations governed by local code enforcement agencies. High School Core Academic Credit may be available in Math and Science.

Nurse Assisting

Here is a chance for students to get started in the exploding health care profession. Students learn CPR, emergency first aid, medical terminology, anatomy and physiology, and communication skills necessary for success in the health care field. Students who meet course requirements may take the Certified Nurse Assistant exam which will prepare them to work in community health centers, hospitals, nursing homes and hospitals. Many students go on to LPN and RN programs. High School Academic Credit may be available in Math and Science. College credit is available.

Computer Technician/Networking

Today's fastest growing career areas are computers and computer related fields. Students join the action through lab experiments and live projects that help them learn basic and advanced computer skills. Students will be involved in the construction, operation, and repair of PC systems and devices. Networking PC systems on the Internet is implemented by using routers, switches, and cable installations. Industry certifications (A+ and CISCO Networking) are attainable. High School Core Academic Credit may be available in Math and Science. College credit is available.

Conservation And Equipment Technology

This program offers heavy equipment operations and maintenance, aquaculture, landscape management, and forestry. Real life projects are used to teach skills. These include surveying, forestland use regulations, management (fisheries, watershed), and sanitary systems. Basic repair and maintenance of heavy equipment and operation of bulldozers, backhoes, loaders, and excavators are some of the skills taught in this program. Students also run a successful maple syrup production business. High School Core Academic Credit may be available in Math and Science. College credit is available.

Cosmetology

In our 1,000-hour program, students obtain skills necessary to qualify for their New York State licensing exam. Students will master skills in hair cutting and styling, skin care and make-up, nail artistry, permanent waving, hair coloring and salon business. Students will practice their skills in our professional campus-based salon. Additional skills in communication, team building, professional ethics and problem solving are integral parts of the program. High School Core Academic Credit may be available in Math and Science.

Culinary Arts

Students enter the world of Culinary Arts in our state-of-the-art commercial kitchen. Students learn the necessary skills to be successful in the food services business. Students master skills such as menu planning, creative cooking, catering, short-order cooking and production baking. Work experience is an integral part of this program offering exciting experiences both on and off campus. Students have the opportunity to obtain Serve Safe certification offered through the National Restaurant Association (NRA). High School Core Academic Credits may be available in Math and Science. College credit is available to Culinary Arts students.

Early Childhood Education

The Early Childhood Education Program offers students the opportunity to be trained in a variety of related areas targeting children. As students participate in our site-based nursery school/pre-school program, they gain valuable skills in child development, teaching, and learning, as well as the importance of proper nutrition for healthy children. The program also offers students the opportunity to obtain their Child Development Associate (CDA) credential. Early Childhood Education offers a positive stepping stone into further education for students interested in teaching.

Human and Retail Services

This program helps students develop basic skills necessary for the world of work. Students obtain valuable skills in communication, daily living, household management and food services. Students gain confidence as they participate in off-campus work experiences and on-the-job training.

Security and Law

The Security and Law Program is designed to give students an opportunity to explore Public and Private Security employment. The overview of the Criminal Justice system will guide the student to effective career choices and provide the employability and academic skills necessary in this high technology job market. The extensive work experience program gives the students connections to area employers and also leads to a Career and Technical Endorsement. High School Core Academic Credit may be available in Math and Science. Many colleges and universities will offer college credits for completion of the first and second year of the course.

Welding

Welders are in demand. Our students learn skills established by the American Welding Society. You will learn skills needed for entry level employment in shielded metal arc welding, gas tungsten arc welding, gas metal arc welding, submerged arc welding, gas welding and metal fabrication on both plate and pipe. Students also learn how to read blueprints. Fundamentals of the machining process, which increases employment and advancement options, are also covered. Students can work toward obtaining their AWS and DOT certifications. Customized programs are available.

Visual Communications and Graphic Design

What a great way for students to put their creativity or artistic interests to work! Students learn about graphic printing, 3-D design, animation, multi-media, and the visual communications industries. They get hands-on experience in computer graphics, photography, commercial art, advertising, and layout. Students will state of-the-art color scanners, CD writers, and digital cameras. Students will have work experience opportunities locally, leading to a network of contacts for future job possibilities. High School Core Academic Credit may be available in Science. College credit is available to Visual Communications and Graphic Design students.

Senior Programs

New Vision Allied Health

BOCES offers high school seniors an interdisciplinary curriculum with an Allied Health career focus and practical experiences in professional settings. Housed at local hospitals, this program will provide students with broad, transferable knowledge required in today's Allied Health careers. An exploration for students interested in pursuing postsecondary study in health careers, this innovative program will include immersion experiences that will meet credit requirements in Career and Technical Education and senior English and Social Studies. This program is designed to ease the transition from high school to postsecondary education in the health field.

New Vision Law and Government

Designed for students interested in exploring careers in law and government, this program combines academic course work in senior English and Social Studies with in-depth exposure to a wide variety of experiences in courtrooms, law offices, government agencies, and other related facilities. The classrooms are located in the Chenango County Courthouse in Norwich, and the Delhi Town Hall in Delhi. Students will have regular placements in other law and government offices and courtrooms in the community also. Each day, students will have the opportunity to meet, observe, and participate with representatives of the county's legal and government community. The central focus of this program is the interdisciplinary approach to English and Social Studies that relates the academic content to structured experiences in law and government. Students will have an opportunity to read literature related to legal issues, write research papers using legal cases, and develop solutions to community legal problems. Students with a specific career in mind are given the opportunity to see people involved in that career. In addition, students will be exposed to many similar and related career opportunities that they may never have realized existed. The New Vision model increases student awareness of the demands and rewards of careers in the legal and governmental fields.