

*GRADUATION REQUIREMENTS
&
COURSE GUIDE*

2019 - 2020



CANDOR HIGH SCHOOL

CANDOR HIGH SCHOOL

COURSE GUIDE 2019-2020

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Candor Central School Mission Statement

The mission of the Candor Central School Community is to challenge students to become responsible, knowledgeable, contributing citizens within a caring environment where lifelong learning is valued and differences are accepted.

Candor High School

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Candor Central School Guidance & Counseling Mission*

The mission of the Candor Junior/Senior High School Guidance & Counseling Department is to provide a comprehensive counseling program that addresses the academic, career, and personal/social development of all students. Within a positive educational environment, we, as School Counselors will provide support for all students to reach their highest potential. In collaboration with all stakeholders, our goal is for students to gain the skills to be successful in school, to become lifelong learners, and develop into positively contributing members of society.

**Our program is aligned with the New York State Learning Standards and the American School Counselor Association National Standards for school counseling programs.*

MESSAGE FROM YOUR CANDOR COUNSELOR:

The education of a student is the shared responsibility of the parent/guardian, the student, and the school. It is very important to be fully informed of the academic requirements and educational choices available. It is our job to work together to create and develop an appropriate academic program for each student. In the eighth grade, students will develop a tentative high school plan with a school counselor and each year the student's progress and goals will be re-evaluated.

Any major changes to a course of study will need to be approved in writing by the student's parents/guardians and teacher(s). The school counselor is available to answer any questions a student may have about achieving educational and career goals. Please keep this booklet as a reference to aid in your understanding of graduation requirements and high school courses and thank you for taking an active part in your student's education.

Mr. Jason Banks, Counselor

Mrs. Beth Gance-Virkler, Counselor



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NOTE:

Your teachers, counselors, and administrators are very willing to assist you in developing a schedule that will meet diploma requirements. It is our hope to offer all classes listed in this course guide, however, in the event that enrollment does not meet minimum class size requirements, the course will not be taught and students will be encouraged to take another course. **Students are required to take a minimum of 5.5 credits each year unless otherwise advised or approved by their school counselor and an administrator.**

THE SCHOOL

Candor High School is a comprehensive public high school of approximately 420 students encompassing grades 7-12. It is accredited by the New York State Department of Education. The school day begins promptly at 7:47am and ends at 2:20pm. There are 8 instructional periods of 42 minutes each day with core academic classes meeting 5 times a week for 40 weeks.

GRADING SYSTEM

Candor High School uses a numeric grading system with 65% as the passing grade for all subjects. Honor Roll status requires a grade of 87 to 92.9. High Honor Roll status requires a grade of 93 or higher. Final averages are computed by averaging all four quarter grades, plus the final exam or Regents exam.

Candor High School weighted grade policy The rationale for implementation of a weighted grade policy is to encourage, recognize and reward students for taking rigorous coursework. For select courses, quarterly grades are weighted by a factor of 5 points. Weighted grades will be used when determining honor roll, GPA, NHS academic status, and class rank.

Listed below are the courses which are currently weighted:

AP English Composition	English 101/102 (CE)
AP US History	Algebra 2 / Trig
Advanced Algebra (CE)	Statistics (CE)
Calculus (CE)	Chemistry (Reg. & CE)
Advanced Biology (CE)	Physics (CE)
Spanish 4/5 (CE)	

*as course offerings expand in the future, new courses may be added to this list

REPORT CARDS

Report cards are issued 4 times a year and are sent home with each student. Report cards can be expected at 10 weeks, 20 weeks, 30 weeks, and 40 weeks. Progress reports are issued halfway in between each report card period. Progress reports can be expected at 5 weeks, 15 weeks, 25 weeks, and 35 weeks. School counselors will send letters home for students who are failing classes and who are in jeopardy of attending summer school.

SPECIAL PROGRAMS

An Advance Placement (AP) course is offered in US History & Government. Concurrent enrollment courses with Tompkins-Cortland Community College are offer in English, Math, Science, Technology, and Spanish.

GRADUATION REQUIREMENTS

New York State offers 2 accredited diploma options: Regents Diploma and Advanced Designation Diploma. Both diploma options require a student to obtain 22 credits. A student obtains a credit by passing a class with a 65%. Students will also be expected to pass State Regents exams in specific subject areas in order to graduate.

Regents Diploma	Advanced Designation Diploma
English----- 4	English----- 4
Social Studies----- 4	Social Studies----- 4
Math ----- 3	Math----- 3
Science----- 3	Science----- 3
Foreign Language---- 1	Foreign Language---- 3
Art/Music----- 1	Art/Music----- 1
Phys. Ed----- 2	Phys. Ed----- 2
Health ----- .5	Health ----- .5
Electives----- 3.5	Electives----- 1.5

REGENTS EXAMINATIONS

New York State requires students to pass specific subject tests before graduating with a minimum score of 65%. For a Regents Diploma a student must pass 5 examinations. For an Advanced Designation Diploma a student must pass 8 examinations. These examinations are taken in January, June, and August. Regents examination scores are used in the calculation of state and local scholarship opportunities.

Regents Diploma (5) *

Math (Integrated Algebra or Geometry)
Science (Biology or Earth Science)
Global Studies II
U.S. History
English 11

Advanced Designation Diploma (9)

Math (Integrated Algebra and Geometry)
Math (Algebra II/Trigonometry)
Science (Biology)
Science (Earth or Chemistry or Physics)
Global II
U.S. History
Spanish 3**

**Starting June of 2015 the New York State Education department has decided to implement a 4+1 regents exam graduation policy. Students will need to pass 1 Math exam, 1 science exam, 1 history exam, 1 English exam in addition to a second history, math, science exam or approved CDOS pathway.*

NOTE: A student will earn a credit by completing a course with a 65%. If a student fails the class but passes the Regents exam for that class they will still be expected to take the class again. If a student passes a class but does not pass the Regent's exam, the student will receive a credit for the class but must retake the Regent's exam. Credits are only earned by passing classes and in many cases a student's Regents exam score is used as a final exam grade for a class.

SEQUENCING OF 5**

Students may attempt to acquire 5 sequenced credits in Art, Music, Technology or Vocational Education (BOCES) to become exempt from the additional 2 credits necessary to earn the Advanced Designation Diploma. At the discretion of the principal and the student's counselor, a student may be allowed to combine 2 areas of study to complete the 5 credit sequence. The requirements for the 5 credit sequences are as follows:

- Art: requires students to pass Studio Art
- Music: requires students to pass Music Theory (*offered every other year*)
- Technology: requires students to pass Design & Drawing for Production (DDP)
- Vocational Ed.: requires students to complete a 2- year program at TST BOCES

GUIDANCE & COUNSELING EVENTS

INDIVIDUAL STUDENT PLANNING

SCHEDULING (Grades 9-12) Scheduling takes place each spring for all grade levels. Parents/Guardians are encouraged to participate in the scheduling process and are more than welcome to schedule an appointment with their student's designated counselor to discuss course selection and graduation requirements.

POST-SECONDARY EXPLORATION

BOCES ORIENTATION (Grade 8 & Grade 10) Students will have an opportunity to visit and experience classes at BOCES as 8th graders. Students must stay on track and have enough credits by their junior year to attend the Career & Tech program. Students who are on track to attend and who have shown great interest in BOCES will have the opportunity to visit their desired program in the Spring of their 10th grade year.

CAREER GUIDANCE (Grades 9-11) Students will have the opportunity to participate in a variety of career exploration opportunities including taking the ASVAB exam, career values survey and a career interest profile.

COLLEGE FAIR (Grade 11) In fall of Junior year students will have the opportunity to visit Tompkins Cortland Community College for their annual college fair. Students will meet with representatives from a variety of colleges and universities. College fairs allow students to collect basic information about different institutions through personal discussions with college reps. This is a great starting point for juniors to start thinking about their future education plans.

COLLEGE ENTRANCE EXAMS

PSAT (Grade 10) In fall of Junior year students have the opportunity to take the PSAT exam. The PSAT is a standardized test that provides firsthand practice for the SAT. It also gives you a chance to enter National Merit Scholarship programs and gain access to college and career planning tools. For more information check out the College Board website at www.collegeboard.org

SAT (Grades 11 or 12) The SAT is a standardized test designed to assess your academic readiness for college. The exam is typically taken in the spring of a student's Junior year and can be retaken in fall of senior year. Some colleges and universities use the SAT to aid in the admissions process. Students should refer to specific colleges to determine if standardized test are required for admissions. For more information on SAT go to the College Board website at www.collegeboard.org

ACT (Grades 11 or 12) The ACT is a standardized exam used to measure college readiness. Students should refer to specific colleges to determine if standardized test are required for admissions. For more information on the ACT go to <http://actstudent.org>

EVENING PROGRAMS

9th GRADE ORIENTATION NIGHT (Grade 8) Students and parents/guardians will be given an overview of graduation requirements and courses their students will be taking their 9th grade year. Parents/guardians will have a chance to ask any questions about high school requirements and students will get some high school survival tips from current high school students.

FINANCIAL AID NIGHT (Grade 12) Late fall of Senior year students and their parents/guardians are encouraged to attend the Financial Aid Night. This event is a collaborative presentation between the student service office and a financial aid representative from a local college. The presentation is an overview of the financial aid process including FAFSA, student loans, parent loans, scholarships and grants.

COLLEGE INFORMATION NIGHT (Grade 11) In the spring of junior year students and parents/guardians are encouraged to attend a presentation about the college admissions process. This presentation provides an overview of the college admissions timeline, common application, letters of recommendation, college essay, admissions exams (SAT/ACT), college search and more.

SENIOR HIGH AWARDS NIGHT (Grades 9-12) Students and parents/guardians are invited each June to an awards night in which scholarship winners are announced and individual teacher awards are distributed.

IMPORTANT TERMINOLOGY

ELECTIVE- An elective is a course you choose to take because you are particularly interested in its content. Elective courses are intended to help a student explore areas of interest, develop special skills, and/or to develop appreciation of new areas.

PREREQUISITE- A prerequisite course is a course that is required before a more advanced course can be taken in the same subject area. (*For example, Spanish II is a prerequisite for Spanish III*)

REGENTS- A Regents Program follows a course of study developed by the New York State Department of Education. Certain final exams are state-wide and are prepared by the State to be administered at prescribed times.

SEQUENCE- A sequence at Candor consists of 5 units in one field of knowledge. Students may take a sequence of Music, Art, Technology, or Career/Tech BOCES to fulfill Advanced Regents Diploma requirements.

UNIT OF CREDIT- One unit of credit is earned for a passing grade in each subject taken for a full year. If a subject is only taken for half a year, one-half unit is earned (.5).

TRANSCRIPT- This is a copy of a student's permanent academic record. Transcripts will not be available until the first quarter of a student's 10th grade year, unless a student needs a printed transcript for address verification. Transcripts can be requested by contacting Ms. Anderson in the Office of Student Services. **Please note transcripts may not be available the same day they are requested.**

CONCURRENT ENROLLMENT- This is a program in which students earn college credit for courses taken in high school. Such courses are marked with a # symbol on the Candor Course Guide.

RANK AVERAGE- The calculation of the average of all of a student's grades for all marking periods and courses completed up to a given academic term. Students should be careful to take into account ½ credit courses. (*For example, if a student has a final grade of 98 in a ½ credit course, the student should multiply the final grade by .5 before computing the rank average.*) Class rankings begin at the end of a student's 10th grade year.

SCHEDULE PLANNING

PLANNING YOUR SCHEDULE CHECKLIST

- ✓ You must take an English course each year of high school.
- ✓ You must take a Social Studies course each year of high school.
- ✓ Have you met the mathematics and science requirement?
- ✓ Have you met the Art/Music requirement?
- ✓ All students will take Health their sophomore year.
- ✓ All students will take Physical Education each year of high school.
- ✓ Have you fulfilled the Spanish requirement for the diploma type that you are seeking?
- ✓ If you are seeking an Advanced Designation Diploma have you taken the necessary subjects? If not, what classes do you still need?
- ✓ If you are planning on attending BOCES, will you have enough credits by your junior year?
- ✓ If you are planning on attending BOCES for a Career & Tech or New Visions program have you made sure that you are registered for that program through your counselor?
- ✓ Have you passed all of the required Regents exams? If not, have you met with your counselor to discuss your options for retaking the needed Regents exams?
- ✓ If there is room in your schedule you should consider taking additional electives.



THINGS TO REMEMBER DURING SCHEDULING

- ✓ Design & Drawing for Production (DDP) can all fulfill the Art requirement.
- ✓ Art or Music should be taken prior to 11th grade.
- ✓ BOCES programs may be taken in 11th and/or 12th grade.
- ✓ An integrated course in Math/Science/Technology may be used as the third required unit of credit in Math or Science.

PLANNING YOUR PROGRAM

The Candor High School departments have listed their course offerings in the Candor High School Course Guide. This course guide is available online or in the Office of Student Services. Following each course title, the recommended grade level and units of credit are given. Some courses indicate that there is a prerequisite which means that a student must first complete a required course prior to entering the intended course. Please note that the availability of elective courses depends on the number of students signing up for the course.

Before beginning course scheduling, please read and understand the course requirements which are indicated on the 4-year plan worksheet available through your school counselor. Please note that the worksheet is a general plan and that there could be exceptions, some of which would include Honors, Advanced Placement, Concurrent Enrollment, or BOCES courses. Your counselor will help you understand these exceptions should they arise.

When selecting courses, it is suggested that core courses be written in before elective courses. Elective courses are intended to help a student explore areas of interest, develop special skills, and/or to develop appreciation of new areas. Students must take a minimum of 5.5 units of credit each year of high school, but may take up to 8 units of credit with the approval of their designated counselor.

Each schedule represents a contract between the student and the school. The school will endeavor to provide classes that meet the needs to the student. When this is done, there is a commitment on the part of the student to follow through with the completion of the courses selected.

CANDOR HIGH SCHOOL

4- YEAR EDUCATIONAL PLAN WORKSHEET

Name: _____

Class of: _____

Tentative Type of Diploma

___ NYS Advanced Regents Diploma

___ NYS Regents Diploma

GRADE 9	CREDIT
ENGLISH	1
GLOBAL I	1
MATH	1
SCIENCE	1
LOTE	1
ART/MUSIC/TECH	1
PHYSICAL EDUCATION	½
ELECTIVE: _____	_____
ELECTIVE: _____	_____

TOTAL CREDITS _____

GRADE 10	CREDIT
ENGLISH	1
GLOBAL II	1
MATH	1
SCIENCE	1
HEALTH	½
PHYSICAL EDUCATION	½
ELECTIVE: _____	_____
ELECTIVE: _____	_____

TOTAL CREDITS _____

GRADE 11	CREDIT
ENGLISH	1
US HISTORY	1
MATH	1
SCIENCE	1
PHYSICAL EDUCATION	½
ELECTIVE: _____	_____
ELECTIVE: _____	_____
ELECTIVE: _____	_____

TOTAL CREDITS _____

GRADE 12	CREDIT
ENGLISH	1
PARTICIPATION IN GOV'T	½
ECONOMICS	½
PHYSICAL EDUCATION	½
ELECTIVE: _____	_____
ELECTIVE: _____	_____
ELECTIVE: _____	_____

TOTAL CREDITS _____

Students are required to be schedule for 5.5 units of credit each year unless otherwise approved by their counselor and principal.

COURSE GUIDE 2013-2014

Courses marked with an () will be offered only if a significant number of students register to support the classes in the master schedule. Course offerings are subject to change. Courses marked with an (#) are Dual Credit with Tompkins Cortland Community College.*

ART

STUDIO ART – 0901 (Grades 9-12) – 1 Credit

A beginning course designed for any student to gain basic art skills. This class is an exploration of all of the advanced art available. Students will study drawing and painting, pottery, art history, crafts, photography and much more with a focus on developing your creativity. Studio Art is required as a foundation before other art courses are taken.

PHOTOGRAPHY * - 0801 (Grades 11 or 12) – ½ Credit

Black and White photography as an art form will be taught as a beginning level class. Students will learn the technical mechanics of taking and printing photographs. Aesthetics and standards of photography as art will be covered.

Prerequisite: Studio Art

STUDIO IN DRAWING & PAINTING – 0902 (Grades 10-12) – 1 Credit

Students will be encouraged to find a personal expression in their work while learning a basic understanding of drawing and painting. We'll explore favorite artists and paintings and create drawing and paintings in many mediums.

Prerequisite: Studio Art

BASIC POTTERY * # - 0903 (Grades 10-12) – 1 Credit

A ceramics course designed for students interested in working with clay. Traditional techniques of wheel throwing, hand building, glazing and firing will be explored. **Prerequisite:** Studio Art

2-D DESIGN-0904 (Grades 10-12)- ½ credit

This course will further discuss the foundations of design. Using hand-on exercises and projects, students will explore concepts of color and composition to create complex designs. Students will use a variety of mediums and also learn the basics of Photoshop and Illustrator. Students will complete typography illustrations, utilize symbolism, and utilize photography to communicate visual concepts. *Prerequisite: Studio Art*

3-D DESIGN- 0905 (grades 10-12) – ½ credit

This course will further discuss the creation of art in a 3-dimensional space. Utilizing the principles of design, students will create a variety of artworks. Working with paper, cardboard, clay, and other materials, students will create a variety of projects, both small and large scale. Concepts discussed in Studio art will be discussed and elaborated on in this course. *Prerequisite: Studio Art*

PRINTMAKING -0906 (Grades 10-12) – ½ credit

This course introduces students to the production of multiple images from a single design. Emphasis will be on design and composition as well as the creative use of the materials. Students will learn about how printmaking has shaped society and create a body of work through several different printmaking methods including techniques of the relief, monoprint, and silkscreen printing processes. *Prerequisite: Studio Art*

CANDOR PUBLIC RELATIONS- 0907 (Grades 10-12) – ½ credit

Candor Public Relations explores the role of public relations in different organizations. Students will learn the basics of recording and editing a news show. Students will understand the role of social media in a modern day company. Students will assist with our weekly news show. Additionally, students will complete an independent project where they explore a topic of their choosing. *Must be a member of the CPR Club*

DESIGN AND DRAWING FOR PRODUCTION – 0701 (DDP) # (Grades 9-12) – 1 Credit

This is an introductory course in the area of mechanical drawing and manufacturing can be taken in place of a student's art credit. It provides the student with some basic skills and knowledge that can be expanded by taking other courses in the drawing curriculum. Students will gain an understanding of three dimensional sketches and refined drawings using isometric oblique and perspective techniques. Concepts that are included in this course include: technical drawing instruments and techniques for using them, lettering for technical drawing, measurement, orthographic projection and procedures for dimensioning. In the second semester students will expand knowledge and develop skills while using a laser cutter, computer controlled router, computer controlled milling machine and vinyl cutter as well as other machines in the shop. Students will use these advanced machines to create student generated designs. *Concurrent enrollment through TC3 is available.*

BUSINESS

CISCO I & II – 0616 (COMPUTER NETWORK DESIGN) (Grades 11 or 12) – 1 to 4 Credits

Using the Cisco Networking Academy program, students will learn to design, build, and troubleshoot small computer networks. This course spans two school years (11th - 12th), meets for either one or two class periods a day, and can result in an industry standard certification upon completion. Class size is limited and/or prerequisites may be required. Students will go through a selection process.

INTRO TO ENTREPRENEURSHIP (11 or 12)- 1 credit

This one semester course is designed to give students a foundation of the business world and an introduction to meaning of being an entrepreneur. The course will cover micro-economical and private/public business concepts as well as focus on components of a profitable business and attributes of a successful entrepreneur. The course's culminating project will transform the classroom into the boardroom where each student will work collectively for the betterment of the small business but also take on individual roles and responsibilities that will mimic the duties and functions of an entrepreneur running their own company. The class is also designed to specifically prepare students for an opportunity to gain college credit in the field. Upon successful completion students will have the opportunity to enroll in a Tompkins County Community College online course in their Business Administration discipline. Current 100 level online courses available for credit include "Entrepreneurship I" and "Foundations of Business".

CAREER ELECTIVES

HEALTH SERVICES

HEALTH CAREERS I – 1500 (Grades 9, 10, 11 or 12) – ½ Credit

This course introduces students to the Health Services and Careers curriculum. Upon completion of this course the students will be able to apply critical thinking skills, understand basic medical terminology, learn about a plethora of careers in the health service field, their basic job function, and their interaction with healthcare consumers and co-workers, salaries, education required etc. Students will be able to obtain a certificate in Adult, Infant and Child CPR, basic first aid, and AED (automated external defibrillator). This course will lay the groundwork necessary for the students to progress into an extended health services/career program.

HEALTH CAREERS II/ANATOMY & PHYSIOLOGY – 1501 (Grades 10, 11 or 12) – 1 Credit

Anatomy and Physiology is the second course in the four-year Health Services Program. The students study the anatomy of the human body in the first semester complete with a fetal pig lab. The second semester is studying the physiology of the human body.

HEALTH CAREERS III – 1502 (Grades 10, 11 or 12) – 1 Credit

This course is broken down into four 10 week segments following the marking period schedule. They are: (1) Ethics of Health Care, (2) Nutrition and Diet Therapy, Essentials of Health and Wellness (3) sports medicine/athletic training and (4) (a) Students will obtain American Red Cross Adult, Infant and Child CPR, basic first aid, and AED (automated external defibrillator).; and (b) time spent focusing on your chosen career. It is not required, but encouraged to pursue a job shadow in your chosen field of study.

Advance Health Careers- 1503 (grades 11 or 12)- 1 credit

This course will teach students some of the skills required to become a patient care technician and/or medical assistant. The focus will be on patient care such as phlebotomy, therapy, surgical services (to include suturing), nutrition, patient comfort, admissions, transfers and discharging of patients, infection control, and obtaining American Red Cross HealthCare Provider CPR/AED and First Aid certification. It is preferred that the students have taken Anatomy and Physiology (HS 2) prior to this class.

Advanced Medical Careers 2/Certified Medical Administrative Assistant (Grade 12 only - as you must be graduating high school within 12 months to sit for the exam) - 1 credit–

Upon completion of this course, you can become a Certified Medical Administrative Assistant (Medical Office Assistant) and have the opportunity to go straight into the workforce. The coursework provides the information necessary to take a national certification exam. This career is responsible for keeping healthcare offices running efficiently, effectively, and smoothly. The CMAA is often the first to greet and help patients and can help set the stage for the patient's experience. This is one of the fastest growing careers in America.

FOOD SERVICES

FOOD SERVICES I – 1400 (Grades 11 or 12) – 1 Credit

If want to learn how to cook for fun, prepare for culinary college, or get a job after high school, then this class is for you! The course is offered to upper classman with priority given to Seniors. All aspects of food preparation and presentation are taught ranging from appetizers to desserts. Business management, organizational skills, sanitation are also covered.

AGRICULTURAL (Spencer High School)

Intro to Ag., Food, & Natural Resources: How do they make grapes that taste like cotton candy? Why can't I hunt deer all year long? These questions and more will be addressed in this project-based, hands-on introductory course! Come learn about the different agricultural industries including: plant systems, natural resources, animal science, food science, business, and mechanics.

Small and Large Animal Care: Do you love animals and wish you knew why your dog acted the way he does? In Small and Large animal care, students can expect to learn about companion animals (such as dogs, cats, rabbits, guinea pigs, and other pets) and livestock species including cows, horses, pigs, sheep, goats, and chickens. This class will compare animal behaviors and body systems across all of these species and will require students to interact with live animals on a regular basis.

Veterinary Assisting and Grooming: This course is designed for the student who is interested in pursuing a career related to animals and/or medicine. Students will learn how to properly and safely handle animals while also developing skills that would be useful in an animal hospital like taking an animal's pulse, restraint methods, and bandaging techniques. On the grooming side of the class, students will study the recommended 'styles' for different animal breeds and will learn the ins and outs of running a grooming operation. Please note that students will work with live animals on a regular basis and successful completion of 'Small and Large Animal Care' is *strongly encouraged*.

Environmental and Natural Resources: What is our most valuable natural resource? Is a Liger actually real? These questions and more will be answered in this broad scope of environmental science and natural resources. Students in this course will complete independent and group projects in order to better understand the natural world around us. Case studies will be used to compare our environment in New York to places around the world. This class will spend some time outdoors and projects will include invasive species studies, aquatic ecosystems, soils, and GPS tracking.

Fish and Wildlife Management: This course is designed for students considering careers related to fish and wildlife management. Students will actively participate in project-based assignments that will have students assuming roles that can be found in our local community. Planned units include stream ecology studies, population management, tracking, wildlife management and rehabilitation and more. Students will work with live animals on a regular basis and will be outdoors fairly regularly. The completion of 'Environmental and Natural Resources' is encouraged.

Agricultural Mechanics: This foundations class will cover small engine repair, electricity, plumbing, and structures. Students will have the opportunity to work on Briggs and Stratton engines and see what's 'behind the walls' by learning AC and DC current electricity through the use of breadboard circuits. If you're looking for a hands-on course, look no further! Be prepared to incorporate many science and mathematics principles in this hands-on introduction to agricultural mechanics. Students may have the opportunity to bring in equipment to work on as well.

ENGLISH

ENGLISH 9 – 1109 (Grade 9) – 1 Credit

Ninth grade English encompasses the two broad areas of reading and writing. The writing component emphasizes sentence structure and usage with an eye toward improving the students' abilities to think and write logically and clearly; as well as studies in vocabulary enrichment, citation styles, and basic grammar and rhetoric. In literature, the students interpret short stories and poetry, read nonfiction articles, a modern drama, a Shakespearean play, and two novels. Throughout the year, the students learn and apply various literary elements and write compositions, which demonstrate their understanding of the different types of literature and areas of writing that they have studied.

ENGLISH 10 - 1110 (Grade 10) – 1 Credit

English 10 encompasses the components of composition, literature, reading, language skills, listening skills and speech. Descriptive, narrative, expository and persuasive writing skills will be emphasized. Students read short stories, non-fiction articles, poems, plays, and novels. In reading, students are expected to demonstrate literal comprehension, interpretive thinking and meaning acquisition skills. The language component covers the skills of grammar, usage, mechanics, vocabulary, and spelling. In addition, students prepare for the 11th grade Regents Exam by analyzing literary excerpts and composing multiple essays.

ENGLISH 11- 1111 (Grade 11) – 1 Credit

English 11 is comprised of study in four areas: reading, writing, speaking, and listening. Students will study literary works, expand and enrich vocabulary, and refine their grammar skills to enhance their abilities and prepare for college entrance exams such as the PSAT, the SAT, and the ACT. Students will read and study a variety of literary genres with an emphasis on American literature. Throughout the year, students will become more collaborative learners and improve their oral communication skills as they engage in paired and group discussion formats. Regents writing (argumentative writing, writing for critical analysis, and reading and writing for information) will be emphasized in order to prepare students to pass the English Regents Exam. Successful completion of both English 11 and the English Regents Exam is a graduation requirement.

ENGLISH 12 - 1112 (Grade 12) – 1 Credit

English 12 emphasizes the study of world literature. Students read and analyze short stories, essays, dramas, novels and at least one -Shakespearean-play. Vocabulary development, critical thinking skills and communication skills are stressed. Emphasis is also placed on advanced composition skills. Student writing includes, but is not limited to, literary analysis, personal narratives, satire, various essays, poetry and cited essays. Students will be guided through all phases of the cited essays from using a computer to gather data to the correct bibliographic format. Methods of note taking to avoid plagiarism will be emphasized.

ENGLISH 101 * # - 1121 (1st Semester Grade 12) – ½ Credit

English 101 is a composition-based course required of all college freshmen, regardless of their major field of study. Qualified Candor seniors may opt to take English 101 and English 102 in place of English 12. Those who successfully meet or exceed TC3's requirement will receive both high school and TC3 college credit for the course. Students who do not meet TC3's requirements but who do satisfy all English 12 requirements will receive high school credit for the course. English 101 requires that students write a minimum of five cited essays (in response to readings on significant current issues) and a six to eight page research paper. Students must demonstrate the ability to gather, organize, interpret, evaluate and synthesize information from various sources. Students who successfully complete this course will write with clarity, coherence, and sound reasoning. Students who opt to take English 101 semester one will take the literature-based English 102 course semester two.

Prerequisite: Students must first attain an average of 90 or higher in English 9 and English 10. The mid year average for English 11 must also be 90 or higher. Students must maintain a 90 average in English 11 throughout the rest of the year. Students must score a minimum grade of 85 on the English 11 Regents exam administered in January.

ENGLISH 102 * # - 1122 (2nd Semester Grade 12) – ½ Credit

Approaches to Literature

Approaches to Literature requires students to develop an appreciation and understanding of fiction, drama, and poetry as forms of literary expression, and to clearly articulate their appreciation and understanding in well-written analytical essays. **Prerequisite:** Successful completion of English 101.

SENIOR SEMINAR – 1265 (Grade 12) – ½ Credit

Senior Seminar is a college-preparation elective. Students focus on self-directed self-discovery. The year-long course concludes in a dissertation-style abstract and presentation to a panel of professional adults (administrators, board of education members) where each student responds to a question of their own invention using self-guided research, technology, professional/expert sources, creativity, visuals, and presentation skills. Students are generally self-directed in keeping with the collegiate expectations and atmosphere of the class.

MATHEMATICS

ALGEBRA I – 0414 (Grade 9) – 1 Credit

This is a required course for all students. This course will cover the Algebra I standards from the New York State Common Core Learning Standards. The Algebra I Regents Exam will be taken in June after one year of instruction. Enrollment in Grade 9 is based on Jr. High teacher recommendation and performance on the Math 8 final and Intermediate Level NYS Mathematics Exam.

ALGEBRA 9– 0409 (Grade 9) - 1 Credit

This is a required course for all 9th graders. It covers the first half of the curriculum of Algebra I, based on the New York State Common Core Learning Standards. The second half is concluded with Algebra 10 which is taken as a sophomore. The Algebra I Regents Exam will be taken in June following two years of instruction.

GEOMETRY– 0406 (Grades 10 or 11) - 1 Credit

This is the second of three required courses in mathematics for high school students to obtain a Regents Diploma with Advanced Designation. This course will cover the Geometry standards from the New York State Common Core Learning Standards. Geometry is meant to lead students to an understanding that reasoning and proof are fundamental aspects of mathematics and something that sets it apart from the other sciences. The Geometry Regents Exam will be taken in June after one year of instruction.

Prerequisite: Successful completion of Algebra I

ALGEBRA II - (Grades 11 or 12) - 1 Credit

This is the third of three required courses in mathematics for high school students to obtain a Regents Diploma with Advanced Designation. It covers the major topics of the real number system, complex numbers, functions, exponential functions, logarithmic functions, trigonometry, series & sequences, probability, and statistics. The TI-83+ graphing calculator will be used extensively in this course. This course requires considerable math aptitude. The Regents exam is given in June after one year of instruction. *Concurrent enrollment is available through TC3.* **Prerequisite:** Successful completion of Geometry

APPLIED MATH – 0607(Grades 11 or 12) - 1 Credit

This course will provide you with the math you need for everyday life. Topics will include personal finance, taxes, computer programming, geometry applications, and statistics and digital literacy, and investing.

Prerequisite: Algebra I

STATISTICS # – 0409 (Grade 12) – 1 Credit

This course involves the application of statistical procedures to the analysis of experimental data. Topics covered include methods of data presentation, measures of central tendency and dispersion, sampling techniques, probability, linear regression and correlation, normal distributions, and elementary probability hypothesis testing. The TI-83 calculator and spreadsheets will be used in the course. *Concurrent enrollment through TC3 is available.* **Prerequisite:** Successful completion of Algebra II

CALCULUS – 0408 (Grade 12) - 1 Credit

This is a first course in calculus for all disciplines. Topics include limits, continuity, derivatives and anti-derivatives of algebraic, trigonometric, logarithmic, and exponential functions, and the definite integral. Applications include curve sketching, optimization problems, and related rates. This course requires considerable math aptitude. *Concurrent enrollment through TC3 is available.*

Prerequisite: Successful completion of Algebra II

MUSIC

BAND – 1005 (Grades 9, 10, 11 or 12) – 1 Credit

Senior Band members will continue developing the skills learned in Junior Band at an advanced level. Requirements for this elective include rehearsals every other day and instrumental lessons once per six day cycle. Members are also required to participate in all concerts. Additional practice at home is necessary to meet the demands of this performing group. **Prerequisite:** Any student that is currently enrolled in band and any student with at least two years experience performing on a woodwind, brass or percussion instrument, whether at the junior high and/or elementary level, may participate in this group. Students wishing to participate in band without prior experience are welcome, but must receive approval from the instructor before signing up for the course.

MIXED CHORUS – 1006 (Grades 9, 10, 11 or 12) – 1/2 Credit

This class is a continuation of the basics of singing taught in Junior Chorus, with more emphasis on note reading and development of individual vocal technique. Requirements for this class include rehearsals every other day and vocal lessons once per six day cycle. Members are also required to participate in all concerts. Song selections include compositions from a variety of genres. New members are always welcome.

MUSIC THEORY *- 1010 (Grades 11 or 12) – 1/2 Credit

This course addresses the structural elements of music with units on the acoustics of sound, rhythmic and metric structure, key signatures, modes, intervals, harmonic structure and related topics. Woven through the course will be work on ear training and musical dictation. The class must be passed in order to receive the 5 credit sequencing in music.

Please note this class is offered every other year.

MUSIC TECHNOLOGY * - 1011 (Grades 9, 10, 11 or 12) – 1/2 Credit

Students will study basic music literacy, sound properties, acoustics, microphone design and use, audio hardware, analog and digital sound, basic audio software, signal processing and effects, MIDI (Musical Instrument Digital Interface) technology, synthesis, sampling and computerized notation. **Prerequisite:** Basic music literacy as demonstrated through current participation in an ensemble *or* approval from the instructor before signing up for the course. **Please note this class is offered every other year.**

PHYSICAL EDUCATION

PE: TEAM & STRATEGY ACTIVITIES – 0202 (Grades 9-12) – ½ Credit

Instruction and practice is provided in the following activities: soccer, flag football, volleyball, basketball, badminton, table tennis, softball, track and field, lacrosse, racquetball, project adventure, individual fitness and other units conducted by the staff. All students need to be prepared for PE with appropriate clothes and shoes to safely participate in the activities. Students who are unable to physically participate for a period of three consecutive weeks or longer are required to enroll in an alternative Physical Education curriculum.

HEALTH – 0101 (Grades 10) – ½ Credit

The high school health classes go beyond the basic knowledge level in looking at health as a state of complete physical, mental and social well-being. This course emphasizes that we are all responsible for our own health and well-being and the choices and decisions we make. Health behaviors may influence not only how long we live but also the quality of our lives. In addition to basic knowledge, students will look at reasons why we make those decisions and how we apply them, improving our own personal health and life.

Strength and Conditioning- (Grades 11 or 12) ½ credit

Strength and conditioning class will provide an opportunity for development of strength and conditioning for various sports and fitness related activities. Students will be introduced to free weights, exercise machines and conditioning activities will be incorporated to promote improvement in strength, endurance, balance, agility and speed.

SCIENCE

LIVING ENVIRONMENT (BIOLOGY) – 0303, Lab 0353 (Grade 9) – 1 Credit

This course covers the requirements for the program provided by the state. It gives a general background in most fields including cell structure, systems of maintenance for survival, reproduction and development, genetics, evolution and ecology. Laboratory investigations are coordinated with the course topics. As in all Regents science courses, successful completion of lab work is required in order to take the Regents exam.

ADVANCED BIOLOGY * # - 0309, Lab – 0359 (Grades 11 or 12) – 1 Credit

The advanced biology course is designed for the student who has completed the Regents Living Environment course with a mastery of content- usually indicated by a final grade of 85 or higher. The course is offered a concurrent enrollment course through Tompkins County Community College. The course is designed to be an introductory college level biology course, focusing on genetics, cell structure and function, biochemistry, human body systems and ecology. Emphasis will be placed on developing attitudes and work ethics necessary for the “independence” of college education. There is a laboratory component of the course, with great focus on scientific processes and thought. **Prerequisite:** Regents Chemistry-0306

EARTH SCIENCE – 0302, Lab – 0352 (Grade 10) – 1 Credit

Physical Setting/ Earth Science satisfies part of the science requirement for graduation. The course emphasizes processes, properties and relationships of the parts of the Earth in the fields of geology, weather, plate tectonics, mapping, landscape features and astronomy. Much of the course will focus on how these concepts and processes have shaped the world around us and how they continue to affect New York State. The lab is integral to the course and completion of the proper number of lab credits is a requirement for entry into the Regent’s Exam at the end of the year. Students will learn to observe, collect and organize data to gain a better understanding and appreciation of the Earth and its resources.

CHEMISTRY – 0306, Lab – 0356 (Grade 11) – 1 Credit

This course is taught following the New York State Regents curriculum and is a gateway to college admission. The course includes units on the math of chemistry, gas laws, matter and energy, atomic and molecular structure, bonding, kinetics, equilibrium, acids and bases, redox and electrochemistry, and organic chemistry. A major emphasis of this course is to discuss chemistry as a science and to help students develop scientific literacy in chemistry. Laboratory work is an integral part of this experience, and as in all Regents science courses, successful completion of lab work is required in order to take the Regents exam. Prerequisites: Grade of 85 or higher in any Regents science course and successful completion of an algebra based math course. It is highly recommended that students take both Living Environment and Earth Science prior but not required.

DUAL CREDIT CHEMISTRY # - 0316, Lab – 0357 (Grades 11 or 12) – 1 Credit

This Chemistry course has concurrent enrollment for college credit with Tompkins-Cortland Community College. It follows the TC3 CHEM 101 and 102 curriculum which is a two-course sequence that studies the basic principles of chemistry. Topics include measurement, atomic structure, bonding, mole concept, stoichiometry, chemical formulas and equations, phases, chemical equilibrium, electrochemistry, aqueous solutions, organic chemistry, acids and bases. It is intended for students who have not had a chemistry course. Laboratory experiments are hands-on, wet-lab, performed in a traditional chemistry lab under supervision of a chemistry professor. CHEM 101/102 fulfill the SUNY General Education Natural Sciences requirement. Combined, the courses surpass all curriculum content and skills as required by the NYS Core Teaching Guide for Physical Setting: Chemistry. As a result, all students taking this 2 part course will successfully complete a minimum of 1200 minutes of laboratory experiences and are required to take the NYS Regents exam in June. Prerequisites: Regents Biology and Regents Earth Science both with a minimum 85% on their respective Regents exams and/or recommendation of CSD Guidance Department and approval of instructor

PHYSICS – 0308, #Lab – 0358 (Grade 12) – 1 Credit

This Physics course has concurrent enrollment for college credit with Tompkins-Cortland Community College. It follows the TC3 PHSC 104/105 curriculum which is an algebra based two-course sequence that studies the basic principles of physics. Topics include but are not limited to motion, statics, dynamics, conservation of energy and momentum, rotational motion, waves, fluid behavior, vibrations, sound, electricity, magnetism, electromagnetic induction, optics, modern physics theories. Where it is useful, throughout each unit, diagrams, schematics and vector mathematics are applied. In the required laboratory sessions, error analysis and graphical analysis are emphasized. The course is intended for students with an interest in physics and requires a comfortable fluency with algebra. Trigonometric functions will be taught as needed. PHSC 104 and 105 fulfill the SUNY General Education Natural Sciences requirement. Prerequisites: A grade of 85 or higher on the Living Environment Regents Exam, a grade of 85 or higher in a chemistry course and successful completion of Regents Algebra II/Trigonometry.

SCIENCE IN A TECHNICAL WORLD (STW) – 0314 (Grades 11 or 12) – 1 Credit

This non-Regents course satisfies part of the science requirements for graduation. A series of real-world problems in industry are simulated. The course emphasizes laboratory investigation, reinforcing key concepts in science and showing applications in the world of work. The course is divided into 3 modules. Two ten week modules might include carbonated beverage industry, polymers, wastewater treatment or polymer research. The last 20 weeks, students will complete a forensics module.

PRINCIPLES OF TECHNOLOGY – 0707 (Grades 11 or 12) – 1 Credit

Principles of Technology is a course in applied physics for students who plan to pursue careers as technicians, engineers, or who want to keep pace with physics in a practical applied setting. This course blends an understanding of the basic principles of physics with practice. *Principles of Technology* is the study of the ideas that technology is built upon. Students will learn the concepts of force, work, rate, resistance, energy and power. Units explain how these concepts relate to one another in mechanical, fluid, electrical and thermal systems. During this course students will put theory into practice as they conduct experiments that relate to real life scenarios. These real life scenarios will take the form of problem solving activities that will include but not be limited to a fully functional go-kart. Students may be asked to come to school on a weekend to conduct experiments revolving around the go-kart. *This course fulfills a third science credit.*

SOCIAL STUDIES

GLOBAL STUDIES I & II – 1210 (Grade 9–10) – 1 Credit

The program for grades 9 & 10 is a two-year Global Studies course organized along a time continuum beginning with pre-history and the earliest peoples and ending with the world in the present-day. Grade 9 includes units on early civilizations, ancient empires, regional civilizations and early modern times. Grade 10 focuses on Enlightenment and Revolution, Industrialism and the New Global Age, World Wars and Revolutions, and the World today. A Regents exam will be given at the end of Global Studies II.

US HISTORY – 1211 (Grade 11) – 1 Credit

This is a chronologically organized course in United States history. The emphasis is on the United States as an industrial nation. Constitutional and legal issues are developed as well as issues of international involvement. A Regents exam is required at the end of this course.

AP US HISTORY– 1214 (Grade 11) – 1 Credit (Online or Spencer High School)

AP History is an honor-level course designed to provide students with the skills and knowledge necessary to critically evaluate problems and materials in United States history from the colonial era to the present. Students learn to assess and weigh historical evidence and interpretations. In May, students will take the AP Exam in History, which may permit them to earn college credit or advanced placement in college. Students are still required to take the Regents Exam in US History, which will count as the final exam for the course. *Enrollment is based on a minimum grade of 87% in both Global I and II and have the recommendation of their Global I and II teachers.*

PARTICIPATION IN GOVERNMENT – 1212 (Grade 12) – ½ Credit

One semester of the grade 12 program is a course in Participation in Government. This course emphasizes the interaction between citizens and American political, economic and social policies and institutions in this country and other countries. The development of student citizenship is fostered through participation in local government and community service.

ECONOMICS – 1213 (Grade 12) – ½ Credit

One semester of the grade 12 program is a course in economics and economic decision making. This course includes the basic economic concepts and understandings which all persons need to function effectively and intelligently as citizens and participants in the economy of the United States and the world.

PSYCHOLOGY * - 1202 (Grade 12) – ½ Credit

This course offers a basic introductory look into the field of psychology. It will introduce you to the theories of some of the great psychologist: Gestalt, Piaget, Skinner, Erikson and Freud. Other topics introduced include sensation, perception, research methodologies, intelligence and personality testing and abnormal psychology to name a few. This course is designed to give any college bound senior a head start to understanding what psychology is really about.

SPANISH

SPANISH I – 0501 (Grades 9-12) – 1 Credit

Pupils concentrate on concrete situations set in their immediate environment or in an environment at their age level set in a foreign country. Emphasis is placed upon the students' acquiring a basic level of skill in listening, understanding and speaking the foreign language, with secondary emphasis on reading and writing.

SPANISH II – 0502 (Grades 9-12) – 1 Credit

In Spanish II, students will study grammar and vocabulary in the context of attaining [Novice High](#) ACTFL proficiency in speaking, reading, writing, and listening skills in the target language (TL). Main topics for this course include vocabulary and grammar necessary to identify oneself and others, express greetings and leave-takings in culturally appropriate contexts, identify important parts of the school environment, identify and describe various members of one's family, explain which hobbies and pastimes one enjoys, discuss food and order meals at a restaurant, describe and negotiate meaning in shopping situations, provide and obtain information regarding health and wellbeing, describe the current weather, one's vacation plans and tourist attractions, identify important pieces of technology in one's life, and describe one's house, home, and chores. Students will continue working with regular and irregular verbs in the present tense and begin discussing the preterite and imperfect tenses to explain events that have happened in the past.

Prerequisite: Score of 65 or higher on the Checkpoint A Proficiency Exam

SPANISH III – 0503 (Grades 9-12) – 1 Credit

Spanish III is a review and continuation of the concepts introduced in Spanish II but in an accelerated and more profound style. Students will study grammar and vocabulary in the context of working toward attaining [Novice High](#) / [Intermediate Low](#) ACTFL proficiency in speaking, reading, writing, and listening skills in the target language (TL). The main topics for this course include vocabulary and grammar necessary to express one's daily routine, discuss food and order meals at a restaurant, describe and negotiate meaning in shopping situations, provide and obtain information regarding health and wellbeing, describe the current weather, one's vacation plans and tourist attractions, explain holidays and traditions in both the US and the Spanish-speaking world, discuss plans for the future, and identify facets of the working world. This course will be conducted 75-90% of the time in Spanish. Students with a YTD grade-point average of 85 or better at the midterm point will be afforded the opportunity to earn credit for SPAN 102 offered through Tompkins Cortland Community College (TC3). Prerequisite: Successful completion of Spanish II.

SPANISH IV # - 0504, 0505 (Grades 11 and 12) – 1 Credit

Spanish IV (SPAN 201) reviews the fundamentals of structure and continues to develop the four language skills in Spanish: listening, speaking, reading and writing. These four skills are correlated within a practice associated within the five core competency goals for foreign language learning: Communication, Cultures, Connections, Comparisons, and Communities. **This course is conducted entirely in Spanish, and students are expected to speak in the target language (TL) 90 to 100 percent of the time.** For this reason, this course will be challenging and is recommended only for those willing to dedicate significant time and effort. Successful completion will result in one "local" credit from Candor High School and three credits from Tompkins Cortland County Community College (TC3). Successful completion of Spanish IV / 201 will often fulfill the foreign language requirement at many two and four-year colleges. Students will work toward [Intermediate Low](#) / [Intermediate Mid \(ACTFL\) proficiency](#). Assignments will focus on grammar and vocabulary in the context of growing language proficiency, as well as the cultural landscape of the Spanish-speaking world, including the United States. The course culminates with a 5-7 minute final presentation in lieu of an exam. Prerequisites: Successful completion of SPAN 102 dual credit enrollment through TC3.

SPANISH V # 0505 – 1 Credit

Spanish V (SPAN 202) is a continuation of Spanish IV (SPAN 201). As such, this course will also focus on developing the four language skills in Spanish: listening, speaking, reading, and writing. These four skills will continue to be correlated within a practice associated within the five core competency goals for foreign language learning: Communication, Cultures, Connections, Comparisons, and Communities. **This course is conducted**

entirely in Spanish, and students are expected to speak in the target language (TL) 90 to 100 percent of the time. For this reason, this course will be challenging and is recommended only for those willing to dedicate significant time and effort. Successful completion will result in one “local” credit from Candor High School for Spanish V and three credits from Tompkins Cortland County Community College (TC3) for SPAN 202. Students will work toward [Intermediate Mid \(ACTFL\) proficiency](#). Assignments will focus on grammar and vocabulary in the context of growing language proficiency, as well as the cultural landscape and influence of the Spanish-speaking world, including the United States. The course culminates with a 5-7 minute final presentation in lieu of an exam. Prerequisite: Successful completion of Spanish IV / SPAN 201.

TECHNOLOGY & DRAFTING

DESIGN AND DRAWING FOR PRODUCTION (DDP) – 0701 # (Grades 9-12) – 1 Credit

This is an introductory course in the area of mechanical drawing and manufacturing. It provides the student with some basic skills and knowledge that can be expanded by taking other courses in the drawing curriculum. Students will gain an understanding of three dimensional sketches and refined drawings using isometric, oblique and orthographic techniques. Concepts that are included in this course include an introduction to the language of the engineer, multi-view drawing, pictorial drawing, drafting equipment, ANSI drafting standards, dimensioning and tolerance, and drafting room procedures. Students will expand their knowledge, and develop skills and understanding of complex technical drawings while completing several design problems and a brief tour of an advanced computer aided drawing program. The class will culminate in the construction and mass production of a student generated project. *Concurrent enrollment through TC3 is available.*

HIGH SCHOOL TECHNOLOGY ACTION LABS (Grades 10-12) -Credit

Explore modules in a variety of technological areas. Action labs provide self-directed learning in the areas of video production, digital music, alternative energy, environment and ecology, CAD, architecture, computer graphics and animation, and flight. Each module has hands on activities to help students gain a deeper understanding of the topic area. Each module leads to career exploration and continuing educational opportunities. Students will explore up to 6 different areas over the course of the year.

ARCHITECTURAL DRAWING – 0703 #(Grades 10-12) – 1 Credit

In this course students will develop proficiency in basic drafting techniques used in building and construction drawings. After learning basic fundamentals of design, layout, and print reading students will use a combination of freehand sketching techniques as well as use the CAD program ArchiCAD to complete the following types of Architectural Drawings: floor plans, window and door schedules, foundation plans and details, and elevations. Students will gain knowledge and understanding of construction techniques, related to light construction principles, as well as mechanical layout of a residential structure. After learning basic fundamentals of construction, students will complete mechanical drawings, including electrical layouts, plumbing layouts, heating layouts, truss types, window and wall sections, room finishing schedule, and three dimensional rendering of their final design. Upon completion of this course, students will have a complete set of plans for a residential structure. *Concurrent enrollment through TC3 is available. Prerequisite: DDP*

COMPUTER AIDED DRAWING & DESIGN (CADD) # - 0705 (Grades 11 or 12) – 1 Credit

This is an introduction to the use of computer application software for creating engineering drawings. Any student with a desire to enter an engineering or medical field will benefit from this course. This course is project oriented with all drawings being produced using industry standard CAD software. In addition to three dimensional drafting, students will apply three dimensional visualization techniques to create computer code similar to that used in industry for the operation of a CAD-CAM system. Upon completion of code generation students will operate CNC milling machines, CNC router and a CNC plasma cutter, converting computer designs into a tangible product. *Concurrent enrollment through TC3 is available.*

MANUFACTURING DRAWING – 0706 (Grades 10-12) – 1 Credit

The focus of this class is to gain an understanding of how a mass produced product is designed, taking into account material conservation, jigs and fixtures as well as advanced assembly techniques. Students will be asked to use a wide variety of machines and tools to build and perfect small and large manufactured items. Time in class will be spent on learning the safe use power tools and techniques to build metal and woods projects in an industrial setting. **Prerequisite:** DDP

PRINCIPLES OF TECHNOLOGY – 0707 (Grades 11 or 12) – 1 Credit

Principles of Technology is a course in applied physics for students who plan to pursue careers as technicians or who want to keep pace with the advances in modern technology. This course blends an understanding of the basics and principles with practice. Principles of Technology is the study of ideas that technology is built upon. Students will learn the concepts of force, work, rate, resistance, energy and power. Units explain how these concepts relate to one another in mechanical, fluid, electrical and thermal systems. During this course students will put theory to practice as they conduct experiments that relate to real life scenarios, including but not limited to a fully functional go-kart.

DIGITAL ELECTRONICS AND ROBOTICS- 0710 (Grades 10 - 12) 1 Credit

Students will learn the basics of electronics and how it is applied to digital circuitry. Using digital trainers and a variety of projects, students will gain hands on experience working with integrated circuits. Applying their knowledge of digital circuitry students will construct and program a working robot during the 2nd half of the course. This course may be offered as a dual credit course with TC3.

VIDEO PRODUCTION (Grades 11 and 12) – 1 Credit

Using digital technologies, students will work with digital video to create and edit a variety of productions. Students will gain experience in script writing and operating professional quality digital video equipment. Adobe Premier Pro software is used to edit video and to add special effects to their work. Students will gain experience in front of and behind the camera, and will be exposed to the demands and constraints that creating a production for airing entails. DVDs of final productions will be created for portfolio use. Enrollment is limited to 10 students with preference given to seniors.

TST BOCES

CAREER & TECH/VOCATIONAL EDUCATION (Grades 11 and 12)

The programs offered at the occupational and technical center at TST BOCES are an integral part of the high school curriculum. A two year program at BOCES not only serves as a foundation for developing a lifelong trade or vocation but also meets 6 units (3 units per year) of high school credit*. Students wishing to enter occupational program should declare their interest early by consulting their school counselor. Fieldtrips will be taken in the fall of 8th grade and in the spring of 10th grade to visit the Career & Tech facilities. A detailed course description of any occupational course may be obtained in the Office of Student Services.

The programs offered at Career & Tech match a wide variety of interests. Students who choose to attend Career & Tech come from the mind-set that active learning is a better approach for them.

ANIMAL SCIENCE

AUTO BODY

AUTO TECHNOLOGY

COSMETOLOGY

COMPUTER TECHNOLOGY

CRIMINAL JUSTICE

CULINARY ARTS

DIGITAL MEDIA TECHNOLOGY

EARLY CHILDHOOD OCCUPATIONS

WELDING

HEAVY EQUIPMENT/CONSERVATION

CERTIFIED NURSING ASSISTANT

EXERCISE SCIENCE

NEW VISIONS (Grade 12)

New Visions is a full-year program that offers seniors a non-traditional challenging senior year. Accepted students attend this full-day program off-site at the various locales according to the program that they are participating in.

HEALTH SCIENCES PROGRAM

LIFE SCIENCES PROGRAM

PRE-ENGINEERING PROGRAM

**The number of credits earned depends upon a students course load each year. Please see your designated school counselor for questions regarding the number of credits that can be obtained through BOCES.*