

***McGraw Middle/SR
High School
Course Description Guide***

Grades 6-12

10 W. Academy Street

McGraw, NY 13101



NYS GRADUATION REQUIREMENTS

SUBJECT	REGENTS DIPLOMA *Score 65 or above on all required Regents exams	ADVANCED REGENTS DIPLOMA *Score 65 or above on all required Regents exams
English	4 Credits	4 Credits
Social Studies	4 Credits	4 Credits
Mathematics	3 Credits	3 Credits
Science	3 Credits	3 Credits
World Languages	1 Credit	3 Credits
Physical Education	2 Credits	2 Credits
Art or Music	1 Credit	1 Credit
Health	½ Credit	½ Credit
Electives	3 ½ Credits	1 ½ Credits
TOTAL	22 Credits	22 Credits

To earn the advanced designation, the student must complete one of the following:

1. A language other than English (3 credits)
2. Career and Technical Education Program (5 credits) with Algebra II Regents 65+

Mastery of Math

Students who meet requirements for an Advanced Regents Diploma and who pass with a score of 85 or better on three Regents examinations in math will earn an annotation on the diploma that denotes **Mastery in Math**.

Mastery of Science

Students who meet requirements for an Advanced Regents Diploma and who pass with a score of 85 or better on three Regents examinations in science will earn an annotation on the diploma that denotes **Mastery in Science**.

NYS Assessment Requirements

[All exams require a score of 65 or above]

Regents Diploma

Required Regents Exams

English Language Arts
Algebra I (CC)
Global History & Geography
U.S. History & Government
Science (one exam)

Regents with Adv. Designation Diploma

Required Regents Exams

English Language Arts
Algebra I (CC), Geometry (CC), and Algebra II
Global History & Geography
U.S. History & Government
2 Science (one Living Environment and one Physical Setting)
LOTE ** (local exam)

Local Diploma: Student needs to meet with School Counselor to determine eligibility.

*Regent's scores varied during the COVID time period.

NYS ASSESSMENT REQUIREMENTS

Diploma	Grade	Number of Regents Exams Required
Regents Diploma	65 or higher on all required Regents exams	5 Regents exams: 1 English 2 Social Studies (Global History & U.S. History) 1 Science 1 Math
	OR	OR
	Successful completion of 4 required exams and 1 pathway option (ELA, Math, SS, Science)	Students have the option to earn a Regents diploma by passing four Regents examinations and complete a pathway course of study/exam. As there are several options, a student must meet with counselor to determine a pathway.
Regents Diploma with Honors Designation	Students must earn an average of 90 or higher on all required Regents exams.	Students must earn an average of 90 or higher on all required Regents exams.
Regents Diploma with Advanced Designation	65 or higher on all required Regents exams	8 Regents exams and *LOTE Checkpoint B 1 English 2 Social Studies (Global History & U.S. History) 2 Science (Physical & Life Science) 3 Math (Algebra I, Geometry, Algebra II) 1 LOTE Checkpoint B
Regents Diploma with Advanced Designation with Honors	Must have average score of 90 or higher on all required Regents exams	8 Regents exams and *LOTE assessment aligned to Checkpoint B 1 English 2 Social Studies (Global History & US History) 2 Science (Physical & Life Science) 3 Math (Algebra I, Geometry, Algebra II)
Local Diploma	Students should meet with counselor to see if eligible	5 regents Exams 1 English 2 Social Studies (Global History & U.S. History) 1 Science 1 Math
<u>Exiting Credentials</u>		
CDOS Commencement Endorsement		This can serve as a credential for students with a documented disability who are unable to earn a high school diploma.

*LOTE Checkpoint B is locally developed Regents equivalent.

ENGLISH LANGUAGE ARTS (ELA)

In Grades 6,7 and 8 students are administered the NYS ELA State Assessment. This assessment is scored according to levels 1-4 (4 is highest). If a student scores a level 1 or a low level 2 the school strives to provide an intervention to help that student increase their knowledge of ELA. McGraw has ELA AIS (Academic Intervention Service) to help students in Reading and/or Writing.

ELA AIS – also known as ELA lab, students are scheduled for ELA AIS as a result of their score on a state assessment, final grade in ELA course, teacher recommendation, and student STAR scores. The purpose of AIS is to improve reading and writing skills necessary to pass assessments as well as regent's exams. If there is no NYS assessment score for a student the STAR ELA scores, their final average in ELA will determine if ELA lab is necessary.

English 6

Length of Course: 1 year

Grades allowed in course: 6

The 6th grade English Language Arts/Reading program is designed to meet the developmental and educational needs of 6th grade students through the study of reading, writing, listening and speaking. Data driven instruction is used based on formative, informative, and summative assessments. Course components include the usage of close reading, scrutinize the development of central ideas and themes, and cite textual evidence to support all analysis. The ability to read passages to determine figurative and connotative meanings of words, and how tone impacts the story are included in this course. Students will also analyze author's point of view and vocabulary development. Our focus includes building knowledge from content-rich nonfiction while responding to text grounded in evidence while using complex informational text (925-1185LL) and academic language. Multiple forms of informational texts are presented with three high-interest novels. This course is aligned with the Common Core Curriculum Standards.

English 7

Length of Course: 1 year

Grades Allowed in Course: 7

Students will read, write, speak, and listen for information. They will begin to learn to write in process form. Students will learn how to write structured paragraphs and essays that include clear examples, support, and analysis of information. Forms of essay writing may include but are not limited to: narration, persuasion, literary analysis, compare, contrast, and research writing. Students will also be exploring their writing through creative writing. Students will become familiar with techniques and terminology associated with aspects of the writing process. Students will also read novels, short stories, and a variety of non-fiction pieces. In class, students will discuss their readings, and they will also be asked to engage in various activities that are designed to help them assimilate the reading material. Students will practice for the seventh grade English Language Arts (ELA) state assessment. Students will learn a variety of test taking methods and strategies.

English 8

Length of Course: 1 year

Grades Allowed in Course: 8, 9

Prerequisite: English 7

As they prepare to take the eighth grade ELA state assessment, students will build on the skills that they focused on in seventh grade English. They will become more proficient writers in all of the forms that they practiced writing in seventh grade English. They will also engage in more advanced synthesis of class readings. Students will continue building on analytical skills that were developed in seventh grade English. Students will practice for the eighth grade English Language Arts (ELA) state assessment by completing numerous parallel assessments throughout the year.

English 9

1 CREDIT

Length of Course: 1 year

Grades Allowed in Course: 9, 10

Prerequisite: English 8

Short stories, novels, and poems are read for meaning and analysis using literary elements, story elements, and poetic elements. Journal writing is used for critical thinking and analysis in conjunction with reading assignments. In writing, students use the steps in the writing process to formulate their writing. Essays similar to the 11th grade Regents are taught, including the Controlling Idea and Critical Lens, as well as comparison/contrast, persuasive, expository, and descriptive writing. A folklore unit includes the reading and writing of ballads and folktales. Projects include mini-research papers, a character analysis project, and a song as poetry project. Oral reports include presentations on novels, a paraphrasing project on Romeo and Juliet, and Book Talks. In literature, Shakespeare is studied along with the poets Frost, Dickinson, Coleridge, and Levy. Students also read novels by Ernest Hemingway, Ray Bradbury, and Gary Paulsen. A writing folder is required as part of the 9th grade curriculum.

English 10

1 CREDIT

Length of Course: 1 year

Grades Allowed in Course: 10, 11

Prerequisite: English 9

In English 10 novels, poems, and short stories are read for meaning and analysis using literary elements and rhetorical strategies. Students will learn and utilize effective reading comprehension strategies to enhance their understanding of literature. In writing, the concentration is on using the steps in the writing process to develop sophisticated expression of ideas. Students will complete written assignments ranging from personal narratives to compare/contrast essays. In addition, writing tasks modeled after the Common Core ELA Regents exam will help prepare students for the rigors of that exam, which will be taken in 11th grade. Students will also complete oral presentations, group projects, book talks, and writing assignments on the novels, short stories, and poetry read in class. Literature includes an in-depth analysis of works by Harper Lee, George Orwell, Amy Tan, and William Golding. Grammar and vocabulary are incorporated within each unit throughout the year.

English 11

1 CREDIT

Length of Course: 1 year

Grades Allowed in Course: 11, 12

Prerequisite: English 10

This class continues the skills begun in previous grades in preparation for the NYS Regents exam as well as the PSAT's and SAT's. Several novels will be studied for Regents preparation. Using novels, short stories, poetry, informative articles, and graphs and tables, students will plan, draft, and write several essays: essays incorporating information from one or more sources, essays of persuasion, thematic essays, compare and contrast essays, and critical lens essays. Students will work on advanced writing skills, advanced listening skills, following written directions, and understanding and analyzing literary elements and techniques. Required assignments will also include public speaking, Internet research, poster projects, career preparation projects, public writing projects, and an in-depth study of one of the plays of Shakespeare. Vocabulary acquisition in preparation for the PSAT's and SAT's will include vocabulary from novels and short stories as well as learning vocabulary in conjunction with contextual clues, analogies, and central ideas.

Honors English 11

1 CREDIT

Length of Course: 1 year

Grades allowed in the course: 11

Prerequisite: A in 10th grade English and teacher recommendation

This class will continue the skills begun in previous grades in preparation for the Common Core ELA Regents Exam as well as the PSATs and SATs. However, expectations will be different from both the previous years and the regular English 11 class. The goal of this class is to take the students who excelled in English 10 and prepare them to achieve mastery level on the Regents Exam. This will still be a Regents preparatory class. Students will still be expected to read novels, short stories, poetry, and informative articles. They will also plan, draft, and write several essays including argumentative papers, thematic essays, and various analytical responses. In addition, students will write personal narratives and craft their own original short stories. Throughout the year, students will develop skills relating to public speaking, research, and grammar while building their vocabulary through intensive word study. This course moves at a quick pace, and there will be higher expectations and greater accountability for all students. Participation is a major component of the class, as students will be required to engage in thoughtful conversations daily.

English 12

1 CREDIT

Length of Course: 1 year

Grades Allowed in Course: 12

Prerequisite: English 11

Novels, short stories, plays poems, lyrics, newspaper, and magazine articles are read for meaning and analysis using literary terms and poetic devices. Students will learn the necessary steps for writing logical, clear essays and analysis of the information within those essays. Students will write a variety of thematic essays that include but are not limited to: narration, persuasion, literary analysis, compare/contrast, college based, and research writing. Students will also respond to literature through the use of journal writing and public speaking. Students will be discussing themes within the literature and reflecting on those themes in relation to larger societal issues. A portfolio will also be compiled which contains their writing. The year will culminate with the creation of a Senior Journal.

College Level English

1 CREDIT

Length of Course: 1 year

College Course Credit: 6 college credits upon successful completion and registered through Tompkins Cortland Community College

Prerequisite: minimum of 85 on the Common Core ELA Regents and as a final English 11 grade

Part I: Academic Writing II (English 101-3 College credits) Students practice basic strategies of academic discourse: planning, drafting, revising, and editing expository essays in response to readings on significant issues. Students will learn to summarize, paraphrase, quote, and document sources as they analyze, evaluate, and synthesize ideas. The course will enable students to choose appropriate rhetorical and stylistic approaches to respond effectively to writing assignments with clarity, coherence, and sound reasoning.

Part II: Introduction to Literature (English 102-3 College credits) Students will learn a broad introduction to the major aspects of literature. Students will develop an understanding and appreciation of fiction, drama, and poetry.

Students will be able to express understanding of the examined literature in discussion and through writing. Writing assignments include analysis of literary technique and creative writing.

Public Speaking

1 CREDIT

Length of Course: 1 year

Grades Allowed in Course: 10,11,12

Prerequisite: None

Public speaking is designed for students from any discipline at any level to improve skills for speeches and oral presentations. Analyzing and adapting to different audiences, purposes, and situations is required. A primary focus of the course will be selecting and organizing information into effective and ethical speeches while using available technology to enhance presentations. The course offers an opportunity for practice and discussion of the role of research, civility and diversity in public discourse, and delivery strategies. ENGL 201 fulfills the SUNY General Education Basic Communication requirement for oral skills and can be used as a Liberal Arts, Humanities, or Unrestricted Elective in any program.

Literature and Film: Great Adaptations

.50 CREDIT

Length of Class: ½ year/20 Weeks

Grades Allowed in course: 12

Prerequisite: None

This course will focus on famous pieces of short fiction and their film adaptations. Students will read and analyze various works of literature including short stories, novellas, children's books, plays, and graphic novels. Additionally, students will watch film versions of these texts and evaluate how the films interpret the source material. Throughout the course, students will learn about the possibilities and limitations of storytelling in different mediums. An emphasis will be placed on vocabulary expansion, analytical writing, and effective strategies for comparing and contrasting two or more subjects.

SOCIAL STUDIES

Social Studies 6

World History

Length of Course: 1 year

Grades allowed in course: 6

This course will examine the history of the world from ancient civilizations to the end of the 20th century. We will be reviewing geographic content such as hemispheres, latitude and longitude, map projections and world regions. We will be exploring the ancient civilizations such as Mesopotamia, the Indus Valley, China, Greece and Rome, and learning about how these cultures have influenced our world today. We will be exploring the cultures of Medieval Europe, the Renaissance, and the ancient empires of Africa, Asia and the Americas. We will explore the concepts and consequences of European expansion on the rest of the world. We will be studying revolutions throughout the world; examining causes and effects. We will finish the year by looking at the 20th century, specifically the World Wars and other military conflict. We will conclude by learning about how the history of the world has brought us to where we are today.

Social Studies 7

American History I

Length of Course: 1 year

Grades Allowed in Course: 7

This course will focus on American History from the discovery and exploration of the "New World" to the events leading up to the Civil War. More specifically, we will be looking at how the Europeans colonized in North America and what life was like for these Puritans and other settlers. We will study the American Revolution; the events leading up to it, the causes and the Revolution itself. We will learn about the creation of our new nation and our attempts with government, leading into the Constitution. We will learn about this "living document" of our country/government. We will finish up the year looking at the expansion of our nation and the beginnings of our country's political and geographical division prior to the Civil War.

Social Studies 8

American History II

Length of course: 1 year

Grades Allowed in Course: 8

This course will focus on American History from the Civil War to the present. Specifically, we will examine the causes and effects of the Civil War, as well as our Nation's period of Reconstruction. We will examine the ages of industry and growth as well as the Progressive Era. We will be looking at U.S. expansionism around the turn of the century. We are going to spend time studying the changes in America during the 20th century including the roaring 20's, the era of the Great Depression, America's role in the World Wars and other military conflicts. We will spend a great deal of time looking at the Civil Rights Movement. We will conclude our year by examining the current position of the United States in the world today.

Global History & Geography R

1 CREDIT

Length of Course: 1 year each

Grades allowed in course: 9, 10

Prerequisite: Social Studies 8

Global History is a two-year required course for all freshmen and sophomores. All students are required to pass the Regents examination in their second year of study. This course follows a chronological approach to Global History. Study focuses on common themes (geography, change, movement of peoples and goods, urbanization, diversity, interdependence, nationalism, science and technology, economic and political systems, belief systems justice and human rights) that recur throughout eight historical eras. The eight historical areas identified are: The Ancient World: Civilizations and Religion, Expanding Zones of Exchange and Encounters, Global Inter-action, The First Global Age, An Age of Revolutions, A Half Century of Crisis and Achievement, The 20th Century Since 1945, and Global Connections and Interactions.

US History & Government R

1 CREDIT

Grades allowed in course: 11, 12

Length of Course: 1 Year

Prerequisite: Global History & Geography

U.S. History and Government is a mandated course for all juniors and students are required to pass the Regents examination in U. S. History and Government in order to graduate. As its name implies, the course stresses U. S. Government, Constitution and its political system. U. S. History is taught chronologically with emphasis on the Post-Civil War period to the present.

Economics

.50 CREDIT

Grades Allowed in Course: 12

Length of Course: ½ year/20 weeks

Prerequisite: U.S. History and Government

Economics is a one semester required course for all seniors. The purpose is to provide an understanding of basic economic concepts and the U S. economic system and how it operates. The interdependence of the world's economics is stressed while learning the basic differences between the various types of economic systems and their operation. The political and social impact of economic decisions and impact of political and social decisions is discussed. This course is a requirement for NYS graduation.

Government

.50 CREDIT

Grades allowed in course: 12

Length of Course: ½ year/20 weeks

Prerequisite: U.S. History and Government

Politics in Government is a one semester course required for all seniors. The purpose is to provide understanding of the various institutions, groups, beliefs, and ideas that constitute U.S. government and politics. Including the study of facts, concepts, and theories used to interpret U.S. government and the analysis of political processes/behavior and their consequences. This course is requirement for NYS graduation.

SCIENCE

Science 6

Length of Course: 1 Year

Grade allowed in course: 6

This Science course is designed to introduce students to Life Science, Physical Science, Earth Science, and Human body systems. In the Life Science Units, students learn about food webs and chains, and producer's/consumers symbiotic relationships. This course familiarizes students with the Scientific Method and nurtures active participation through beginning laboratory experiments and demonstrations. In the Physical Science Units students learn about electromagnetism, circuits, and the force, work and energy needed to building and fly rockets. Topics in Earth Science include pertinent weather and energy studies. The human body systems' unit spring boards to a multi-faceted cooperative learning experience.

Science 7

Length of Course: 1 Year

Grade allowed in course: 7

Prerequisite: Science 6

This course focuses on life science processes. At the start of the year, students are introduced to the human body and its many systems. After that, students look deeper into cells, their parts, and their functions. Next comes the unit of Genetics, where students learn about the mixing of traits and how they are passed down over many generations. Students will then learn about the Theory of Evolution and how organisms have developed over time. This leads into a unit on ecology and how different organisms interact. The course will end with an introduction to human impacts on the environment and how we all play a part in making the world a better place.

Science 8

Grade allowed in course: 8

Length of Course: 1 Year

Prerequisite: Science 7

The first part of the year is spent on basic geology. Students will learn about Plate Tectonics, earthquakes, volcanoes, minerals and rocks. The second half of the year is dedicated to basic physics. Topics include motion, forces and energy. In May, students will take the Science 8 Performance test, which will include 3 lab activities. Also in May, all 8th Graders will take the Science 8 Written Test.

Discovering Agriculture

Length of Course: 10 Weeks

Grades Allowed in Course: 8th Grade

This course introduces the concepts and theory. Whether your goal is to be directly involved in the agriculture industry and natural resources or not, we are all daily consumers and users of agricultural and mechanical products. Being knowledgeable about food, fiber, and natural resources will benefit you throughout your life. This course introduces students to advanced concepts about horticulture and landscape design. This is a middle school course a student should take within Agricultural Education before the completion of Introduction to Agriculture. Topics to be covered include Animal Science, Plant Science, Soil Science, Landscape Design, Food Processing, Animal Handling, and Supervised Agricultural Experiences.

Earth Science R

1 CREDIT

Length of Course: 1 Year

Grades Allowed in Course: 9

Prerequisite: Science 8

This course is based on New York State Physical Setting curriculum. Students are encouraged to develop a broad understanding of geological principles through the study of topics such as measurement and mapping, rocks and minerals, earth's internal structure, surface processes, earth's history, weather, astronomy, and the earth's environment. There is a strong emphasis on the process of scientific inquiry and laboratory work, including written lab reports which are required to take the June regents exam. This class entails more challenging activities and provides a greater depth of content knowledge.

Living Environment (Biology) R

1 CREDIT

Length of Course: 1 Year

Prerequisite: Completion of Earth Science

Grades Allowed in Course: 10, 11, 12

This course is based on the New York State Living Environment Core curriculum. Students are encouraged to develop a broad understanding of biological principles through the study of topics such as the unity and diversity of organisms, genetics, reproduction and development, dynamic equilibrium, and ecology. There is strong emphasis on the process of scientific inquiry and laboratory work, including written lab reports which are required to take the regents exam in June. This class entails more challenging activities and provides a great depth of content knowledge and is recommended for any student who needs or desires a more rigorous biology class, especially those planning to attend college. The final exam for this course is the Living Environment Regents.

Chemistry R

1 CREDIT

Length of Course: 1 Year

Grades Allowed in Course: 11 & 12

Prerequisite: Algebra I R

Regents Chemistry offers an introduction to each of the major topics in this essential science and provides for a sound basis for further study for students intending to pursue a technical career. Completion of Integrated Algebra is a Prerequisite. However, students who have successfully completed Geometry will be better prepared to deal with the mathematics of Chemistry. Chemistry is usually taken as the third year of a sequence in Regents sciences and upon successful completion counts toward the three required credits of science required for graduation.

The course is structured around a basic core curriculum. Major topics included are: matter and energy, atomic structure, chemical bonding, periodic table, mathematics of chemistry, kinetics and equilibrium, acids and bases, electrochemistry, organic chemistry, and nuclear chemistry. As in each of the Regents science courses, a strong emphasis is placed on each student's satisfactory performance of laboratory exercises throughout the year. The final exam for this course is the Chemistry Regents.

Physics R

1 CREDIT

Length of Course: 1 Year

Grades Allowed in Course: 12

Prerequisite: Successful completion of Geometry

This course, based on the New York State Core Curriculum for Physics, will help students to develop a greater understanding of the physical world around them. Major topics of study for this class are Scientific Method, Measurement, and Mathematics, Mechanics, Energy, Electricity and Magnetism, Waves and Light, and Modern Physics. Students enrolled in this class will be required to solve algebra-based physics problems, collect and analyze laboratory data, and think critically about the physical world. They will also gain much practice with data processing and graphing using Google Sheets and Microsoft Excel. Additionally, students will complete at least three significant projects utilizing major principles of physics and engineering. Physics can complete a three-year regent's sequence or may be taken as an optional fourth science. The final exam for this course is the Physics Regents. Course only runs if enrollment is sufficient.

College Biology

1 CREDIT

Length of Course: 1 year

Pre-Requisite: Regents Living Environment and Regents Chemistry

Grades Allowed in Course: 12

College Course Credit: 8 college credits upon successful completion when registered through Tompkins Cortland Community College for General Biology I (BIOL 104) and General Biology II (BIOL 105)

College Biology is designed to be the equivalent of a two-semester introductory college-level biology class. This class is rigorous and students are expected to perform at the academic level of a college freshman. Assignments, projects, readings, and laboratories are conducted at the college-level and are designed to give students a better understanding of the science of biology. A strong emphasis is placed on the relevance between class content and real-life scenarios, as well as the relationships between different biological concepts. This class focuses heavily on three major topics: Molecules and Cells, Heredity and Evolution, and Organisms and Populations. Course only runs if enrollment is sufficient.

Anatomy & Physiology I

1 CREDIT

Length of Course: 1 year

Grades Allowed in Course: 11 & 12

Prerequisite: Living Environment Regents grade of 80 or higher, Regents Chemistry or concurrent enrollment in Regents Chemistry

College Course Credit: 4 college credits when registered through concurrent enrollment with Tompkins Cortland Community College in BIOL 131

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. This course requires reading of scientific literature, formal written laboratory reports, written research projects, basic math skills and studying skills including previewing of course materials and intensive review of covered material in preparation for but not limited to completion of written in class laboratory experiences/ practical exams/quizzes which will require mastery in order to obtain college credit. BIOL 131 fulfills the SUNY General Education Natural Sciences requirement. This course may be used to fulfill the Anatomy and Physiology requirement for students in the Tompkins Cortland Nursing AAS degree program. It may also be appropriate for individuals pursuing a career in chiropractic, physical therapy, recreation, or physical education, among others, depending on evaluation by the intended transfer institution.

Environmental Science

1 CREDIT

Length of Course: 1 year

Grades Allowed in Course: 11, 12

College Course Credit: 6 college credits upon successful completion and registered through Tompkins Cortland Community College for ENVS 101 and ENVS 102.

Prerequisite: Successful completion of Regents Earth Science and Regents Living Environment

This interdisciplinary, college level, introduction to environmental science course will explore the major concepts pertaining to environmental science, while incorporating field exploration, laboratory technique, data analysis, and scientific literacy/researching skills. Biological concepts pertaining to biodiversity, human population dynamics, sustainable agriculture, and human toxicology will be explored. Technological issues related to the environment will also be covered such as natural resource management, air and water pollution, climate change, radiation, and alternative energies. Local and global challenges pertaining to these topics will be addressed throughout. Upon successful completion This 1 course credit counts toward the three required credits of science required for graduation.

Introductory Meteorology

1 CREDIT

Length of Course: 1 year

Grades Allowed in Course: 11, 12

Prerequisite: Successful completion of Regents Earth Science, Regents Biology, and Algebra I.

College Course Credit: 3 college credits upon successful completion and registered through Tompkins Cortland Community College for METR 101.

A study of weather around us. Topics include the structure of the atmosphere, heat balance of the earth, air masses, circulations, fronts, cyclones, severe weather, and climate and its change. The laboratory will emphasize mathematical calculations for atmospheric physics and processes, gathering meteorological data, analysis of weather systems, and short-term weather forecasting.

Introduction to Agriculture

1 CREDIT

Length of Course: 1 Year

Prerequisite: Dual Enrollment Earth Science or Biology

Grades Allowed in Course: 9-12

This course introduces the concepts and theory and application of agricultural science practices used today and reflects upon past history, methodology, and its impact on our environment and standard of living. Students will explore opportunities in the FFA to develop personal leadership skills and career development skills to prepare them for life after graduation. General topics covered include: Animal Science; NYS Agriculture, US Agriculture, and International Agriculture; Horticulture; Hydroponics; Aquaculture; Environmental Science; Agronomy, Agriculture Mechanics (woodworking and welding); Agriculture Business; and, careers and college opportunities within these areas of interest. Labs will be included within this course.

Animal Science

.50 CREDIT

Length of Course: 1/2 Year, 20 weeks

Grades Allowed in Course: 10, 11, 12

Prerequisite: Introduction to Agricultural Science

In this course, students will expand the animal husbandry unit from the Agriculture Science course. Students will focus on the care and nutrition of small animals. Students will gain a full understanding of all small animal's digestive systems, skeletal systems, reproductive systems, and to be able to identify breeds and parts of small animals. This class will focus on the small animal industry throughout the county and neighboring counties and tech job opportunities within the small animal science industry. Upon successful completion this half course credit counts toward the three required credits of science required for graduation.

Veterinary Science

.50 CREDIT

Length of Course: ½ Year, 20 weeks

Grades Allowed in Course: 10, 11, 12

Prerequisite: Introduction to Agricultural Science

In this course, students will expand the animal husbandry unit from the Agriculture Science course. Students will focus on the care and nutrition of large animals. Students will gain a full understanding of all large animal's digestive systems, skeletal systems, reproductive systems, and to be able to identify breeds and parts of large animals. This class will focus on the large animal industry throughout the county and neighboring counties and the job opportunities within the large animal science industry. Upon successful completion this half course credit counts toward the three required credits of science required for graduation.

Horticulture and Landscape Design

1 CREDIT

Length of Course: 1 year

Grades Allowed in Course: 11, 12

Prerequisite: Introduction to Agricultural Science

In this course students will expand the plant growth and reproduction and hydroponics topics. It will also introduce a fast growing field in the agriculture industry, landscape design. A component of this course will be for students to focus on managing the school garden, various landscaping projects on and off school grounds. Students will also visit local greenhouses and attend one regional horticultural exposition. Students will learn to care for outdoor and indoor plants, discuss the differences of asexual and sexual reproduction of a plant, and run a school plant sale. All students enrolled in the class will advertise the annual plant sale and learn teamwork and team building skills. Interested students will have the opportunity to gain supervised work experience.

Students will also explore the many aspects of production horticulture and basic elements of business management associated with operating a greenhouse. Propagation techniques of vegetables, fruits, houseplants, ornamental flowers, herbs will be grown using different techniques such as soilless gardening via hydroponics, greenhouse management, agronomy and manipulating light and climate controls to maximize production. There will be opportunities for students to participate in contests offered by the FFA and local garden clubs. This course is recommended for students who are interested in working with plants both ornamental and food enterprises e.g., plant scientist, landscaper, field crop production, etc.) Upon successful completion this 1 course credit counts toward the three required credits of science required for graduation.

Wildlife Conservation and Fishery Management

1 CREDIT

Length of Course: 1 year

Grades Allowed in Course: 11, 12

Prerequisite: Introduction to Agricultural Science

This course involves a hands-on approach to studying wildlife species of New York. Topics include habitat requirements, behavior, biology, management, hunting, trapping, fishing, identification, and research of wild mammal, fish, bird, and reptile species. Students will participate in research projects and other activities (e.g., developing a land use plan, deer population surveys, etc.) involving the properties in the county and/or neighboring counties. Game laws, wildlife rehabilitation, and taxidermy will be covered. Components of the course may include fishery and domestic fish farming practices. Students interested pursuing a career in wildlife management, conservation law enforcement, marine biology, or biology would find this course interesting. Upon successful completion this 1 course credit counts toward the three required credits of science required for graduation. (Course runs in the schoolyear 2024-25.)

Agricultural Business

.50 CREDIT

Length of Course: 1 year

Grades Allowed in Course: 11 & 12

Prerequisite: Introduction to Agricultural Science

This course is a CASE (Curriculum for Agricultural Science Education) course focused on business management decisions revolving around agriculture. Students will have the opportunity to create business plans, participate in risk management activities, and have the opportunity to navigate financial documents relevant to agricultural businesses.

International Agriculture

.50 CREDIT

Length of Course: 1 year

Grades Allowed in Course: 11 & 12

Prerequisite: Introduction to Agricultural Science

This course is designed to give students the opportunity to look beyond the agricultural industries found in McGraw. Focusing on one question, how are we as a world going to meet the growing demands of 2050 when our world is supposed to double in population. Opening students up to the supply chain, genetically modified crops and the impact it has worldwide. Using the 17 sustainable development goals students will work through a series of complicated questions that science is still scratching the surface on and have the opportunity to participate in GLAG (Global Learning in Agriculture) Virtual Conference. Hopefully, finding ways to create a more sustainable and resourceful world along the way.

Ag Mechanics

1 CREDIT

Length of Course: 1 year

Grades Allowed in Course 11&12

Prerequisite: Introduction to Agriculture & 2 Credits of Agricultural Science Courses

Agricultural Technology is a year-long course that students will be eligible for enrollment upon the completion of the Introduction to Agriculture course. This course will act as the capstone course, giving students the opportunity to dive into the technology that powers all of the diverse industries within agriculture. Students will study content such as small gas engines, woodworking and craftsmanship, electrical as well as plumbing circuits, and end the course sustainable agricultural practice utilizing green energy.

MATHEMATICS

In Grades 6-8 students are administered the NYS Math State Assessment. This test is scored according to levels 1-4 (4 is highest). If a student scores a level 1 or a low level 2 the school strives to provide an intervention to help that student increase their knowledge of Math to help them pass the Regents exams. If there is no NYS assessment score for a student the STAR Math scores plus their final average in Math will determine if Math lab is necessary.

Math Lab – Students are placed in Math AIS as a result of their score on a state assessment or from failing a Math course. If there is no NYS assessment score for a student the STAR Math scores plus the student's final average in Math will determine if Math lab is necessary. The purpose of AIS is to improve the skills necessary to pass these assessments as well as Regent exams.

Math 6

Length of Course: 1 year

Grades Allowed in Course: 6

This math course builds on skills and concepts taught in 4th and 5th grade. Math 6 is designed to develop mastery of New York State 6th Grade Math Curriculum concepts and skills related to: Number Sense and Operations, Algebraic Expressions and Equations, Geometry, Statistics and Probability. Topics include: ratios and proportions, review of decimals and fractions, finding percentages, written expressions and equations and graphs. Using math skills to problem solve are integrated throughout the curriculum. Students will be preparing for success on the New York State Math test given in grade 6.

Math 7

Length of Course: 1 year

Grades Allowed in Course: 7 & 8

Prerequisite: Math 6

This course reinforces skills and concepts taught in 5th and 6th grade. Algebraic concepts are introduced and integrated throughout the curriculum. There is blending of the units throughout the year. Topics include: decimals, whole numbers, statistics and probability, graphs, number theory, fractions, geometry, measurement, ratio, proportion and percent, integers, coordinate geometry, and inequalities. Students will be preparing for the New York State Math test given in grade 7.

Math 8

Length of Course: 1 year

Grades Allowed in Course: 8

Prerequisite: Math 7

This course is a preparation for Algebra I. An introduction to several new concepts with reinforcement of skills and concepts presented in 7th grade. Topics include: algebra, integers, equations and inequalities, number theory, rational numbers, ratio, proportion, percentages, statistics and probability, geometry, measurement, right triangles, trigonometric ratios, and graphing. Students will be preparing for the New York State Math test given in grade 8.

Algebra I

1 CREDIT

Length of Course: 1 year

Grades Allowed in Course: 9

Prerequisite: Math 8

This is the first course in a 3-year Sequential Math Regents curriculum. Topics discussed are introduction to functions and structures of expressions, solving equations and inequalities, descriptive statistics, linear and exponential functions, transformations of functions and using functions and graphs to solve problems, polynomial and quadratic expressions and equations, graphs of polynomial and quadratic functions, modeling with equations and functions. The Common Core Algebra Regents will be given in June.

Algebra A

1 CREDIT

Length of Course: 1 year

Grades Allowed in Course: 9

Prerequisite: Math 8

This is the first year of a 2-year course which will lead to the Algebra I Regents in June of 10th grade. Topics covered will include half of those taught in Algebra I. Students will be placed in this class based only on teacher recommendation.

Algebra B

1 CREDIT

Length of Course: 1 year

Grades Allowed in Course: 10 & 11

Prerequisite: Algebra A

This course is the 2nd year of a 2-year course preparing students to take the Common Core Algebra Regents in June. The curriculum of this course will consist of a review of materials from Algebra A, along with transformations of functions and using functions and graphs to solve problems, polynomial and quadratic expressions and equations, graphs of polynomial and quadratic functions, modeling with equations and functions. The last month will consist of a general review of all course material.

Geometry R

1 CREDIT

Length of Course: 1 year

Grades Allowed in Course: 10, 11, 12

Prerequisite: Students must have successfully completed Integrated Algebra

Geometry is the second Regents level math course offered in the high school math curriculum. The topics covered include geometric relationships, constructions, locus, transformational geometry, proofs, and coordinate geometry. The main topic of the course will be writing formal and informal proofs.

Geometry NR

1 CREDIT

Length of Course: 1 year

Grades Allowed in Course: 10, 11, 12

Prerequisite: Completion of Algebra B, students with an average below 75 in Integrated Algebra, teacher recommendation.

Geometry is the second Regents level math course offered in the high school math curriculum. The topics covered include geometric relationships, constructions, locus, transformational geometry, proofs, and coordinate geometry. The main topic of the course will be writing formal and informal proofs. Students will take a local final exam at the end of the course.

Algebra II

1 CREDIT

Length of Course: 1 year

Grades Allowed in Course: 11, 12

College Course Credit: 4 college credits upon successful completion when registered through Tompkins Cortland Community College for MATH 120-College Algebra.

Prerequisite: Students must have successfully completed Geometry R.

This is the third Regents level math course offered in the high school math curriculum. The main topics considered are sets and operations, real numbers, imaginary numbers graphing, solving higher degree equations, logarithms, trigonometric functions, applications, identities, and graphs, probability, and statistics. Successful completion of this course and the regent's examination are one of the requirements for the Advanced Regents Diploma.

PreCalculus

1 CREDIT

Length of Course: 1 year or ½ year

Grades Allowed in Course: 11 & 12

Prerequisite: Successful completion of Algebra II

College Course Credit: 4 college credits upon successful completion when registered through Tompkins Cortland Community College for MATH 138 – PreCalculus Math.

The goal of this course is to strengthen conceptual foundations in a variety of advanced topics as a preparation for college level math. The curriculum starts with a more in-depth treatment of several topics introduced in Algebra II, including functions (polynomial, exponential, logarithmic, and trigonometric), and complex numbers. Conic sections and polar coordinates are also introduced in this section of the course. The remainder of the year is devoted to a selection of topics from the field of “discrete mathematics” including matrices, probability, statistics, and data analysis.

**Students interested in taking Calculus I as a senior can take PreCalculus Math in the summer of their Junior Year (dependent upon enrollment) or take the PreCalculus for a half year and Calculus for a half year.

Calculus

.50 CREDIT

Length of Course: ½ year (20 weeks)

Grades Allowed in Course: 12

College Course Credit: 4 college credits upon successful completion when registered through Tompkins Cortland Community College for MATH 201-Calculus I.

Prerequisite: Successful completion of Pre-Calculus

This advanced level Calculus course can earn students four college credits at Tompkins County Community College. Topics covered are a review of pre-calculus, limits, derivatives, and integrals. Application problems cover topics dealing with engineering, physical sciences, business, economics, and life sciences.

College Algebra

1 CREDIT

Length of Course: 1 year

Grades Allowed in Course: 11, 12

Prerequisite: Successful completion of Geometry NR or Geometry R

College Course Credit: 4 college credits upon successful completion when registered through Tompkins Cortland Community College for MATH 120-College Algebra.

This course covers college algebra between beginning algebra and pre-calculus. Topics include linear, quadratic, absolute value, polynomial, rational, exponential, and logarithmic expressions/equations, logarithmic functions, function notation, graphing functions, transformations of functions, inverses, complex numbers, and linear, absolute value, and quadratic inequalities. A specified model of a scientific calculator is recommended. MATH 120 fulfills the SUNY General Education Mathematics requirement.

Math for Personal Financial Management

1 CREDIT

Length of Course: 1 year

Grades Allowed in Course: 11, 12

Prerequisite: Successful Completion of Algebra I Regents/Department Approval

In this course, students will understand principles of money management and personal finance using mathematical calculations. This course is designed for students to improve their financial literacy while looking at real world applications. Students will look through personal, business, and consumer perspectives to understand the financial decision making process required in everyday life. Students will have the opportunity to take the Precision Exam: Math of Business & Personal Finance as part of the potential CTE Agriculture Innovation Resources Career Pathway.

Sports Statistics

.50 CREDIT

Length of Course: 20 weeks

Grades Allowed in Course: 10,11,12

Prerequisite: Successful Completion of Algebra I

Grading: Pass/Fail

Introduces the basic principles of statistics and probability, with an emphasis on understanding the underlying concepts, real-world applications, and the underlying story that the numbers tell. Sports, games, and common everyday life examples will be used to illustrate statistical concepts. This course provides an introduction to probability and descriptive/inferential statistics. Statistics is the study that deals with the collection and analysis of data. It is mostly used to keep records, calculate probabilities, and provide knowledge. Basically it helps us understand the world a little bit better through numbers and other quantitative information. There will be various assignments and projects throughout the course.

FOREIGN LANGUAGE DEPARTMENT

Spanish/ French 8

Length of Course: 1 year

New York State requires that all students take 2 years of a foreign language to receive a high school diploma. At McGraw the students begin in 8th grade and will cover half of the topics required to achieve Checkpoint A standards. In 8th grade students will learn the basic structures and vocabulary through reading, writing, listening and speaking. We encourage the students to work conscientiously during this first year to achieve a mastery level since they will be building the foundations for future development in learning a foreign language.

Spanish I/ French I

1 CREDIT

Length of Course: 1 year

Prerequisite: Spanish/French 8

In the second year, students are required to pass and receive 1 credit in a foreign language to satisfy the Regents diploma requisite. The students will finish the remaining topics and grammatical structures required to achieve Checkpoint A standards and review previously learned material. Culture will continue to be incorporated in the presentation of each topic. Students who achieve mastery in the course will be encouraged to continue onto French II and French III to secure an Advanced Regents diploma.

Spanish/ French II

1 CREDIT

Length of Course: 1 year

Prerequisite: Spanish/French I

Students who wish to obtain an Advanced Regents Diploma will continue on to the intermediate level. Students will begin to prepare for mastery of Checkpoint B in a foreign language. The 12 basic topics will be recycled and developed with more extensive vocabulary and new grammatical structures. Culture will incorporate idioms and idiosyncrasies of the target language to give the student a deeper insight into the foreign world. Success at this level is imperative to continue with this sequence.

Spanish/ French III

1 CREDIT

Length of Course: 1 year

Prerequisite: Spanish/French II

By the end of Level III, the student will try to achieve mastery in Checkpoint B of a foreign language. It is required that the students pass the course to receive credit for an Advanced Regents Diploma. The student is expected to achieve a certain degree of fluency in all four aspects of the target language: reading, writing, listening and speaking, all four areas are major components. Cultural enrichment is continually emphasized. The final average of the level 3 course is what determines entry into college level foreign language and what colleges will use to determine placement at each individual institution.

Spanish/ French IV

1 CREDIT

Length of Course: 1 year

Prerequisite: Spanish/French III

College Course Credit: 6 college credits upon successful completion and when registered through Tompkins Cortland Community College.

This is a concurrent enrollment course through TC3 in which students will earn college credit for FL 201 and 202, provided that they earn at least an 85 in the course. The main focus of the course is developing and mastering communication skills tying in all previously learned grammar and vocabulary. Literature, civilization and art will be incorporated into class discussions and activities. Oral participation in the target language will be expected at all times.

HEALTH

Health 7

Length of Course: 1 year (every other day)

Prerequisite: Student must be in the 7th Grade

Junior High Health is a mandated course required by the New York State Education Department. It is a full year class. Areas of study include Human Growth and Development, Nutrition, Family Life, Alcohol/ Tobacco/ other Drugs, Safety and First Aid, Disease Prevention, Sex Education, Mental Health, and Skeletal and Muscular Systems. This course also includes Career Orientation.

Health 11

.50 CREDIT

Length of Course: ½ year/20 weeks

Grades Allowed in Course: 11 & 12

The Health curriculum explores: Community health, nutrition, chronic and communicable disease, wellness and fitness, mental health, chemical substances, sexuality and family dynamics, AIDS education, personal safety, and life skills for the future. The successful completion of Health 11 is a New York State graduation requirement.

Female Empowerment and Leadership

.50 CREDIT

Length of course: 10 weeks everyday or 20 weeks every other day

Grades Allowed in Course- 11th and 12th Grade Female Students

Prerequisites: None

A leadership development program for female students that empowers, builds confidence, grit, and determination, while creating a positive mind-shift towards a better future. This program will help guide and prepare female students for life after high-school. The goal is for these students to become rising women leaders and develop key leadership skills and tools they need for success. These aspiring female leaders will have potential opportunities to;

- Listen to profound women leaders speak and tell their stories.
- Support their community by volunteering their time and energy to help make a difference.
- Connect with local companies for job shadowing opportunities.
- Visit a 2 and 4-year college.
- Engage in 1:1 conversations with a professional that relates to their career interest.

PSYCHOLOGY

Introduction to Psychology

.50 CREDIT

Length of Course: 20 weeks either every other day for full year or half year for one semester.

Grades Allowed in Course: 11 & 12

College Credit: 3 credits upon successful completion of Psych103 when registered concurrently at Tompkins Cortland Community College

This course provides students with a basic understanding of psychology. Theories and research relating to emotions and stress, abnormal behavior, motivation, learning, personality, methods of therapy, biology and behaviors, developmental psychology, and social psychology are discussed. PSYC 103 fulfills the SUNY General Education Social Sciences requirement.

STEM

STEM (Science, Technology, Engineering, and Mathematics) Exploration

Length of Course: 10 weeks

Grades Allowed in Course: 8

Prerequisite: None

Students have the opportunity to further explore topics in science, technology, engineering, and mathematics. Students will be involved in project-based learning to develop real-world applications and expand their problem-solving expertise. Collaboration, communication, and critical thinking skills are fostered through various activities involving computer science discoveries, experiments within science and the engineering design process, and exploring careers and employment opportunities.

FAMILY AND CONSUMER SCIENCE

Family and Consumer Science (FACS)

These home and career modules (one taken in grade 6 and the other in grade 8) are a requirement of middle school. FACS teaches students home and career skills through a program of instruction primarily through applied activities that are designed to prepare students to meet their responsibilities and understand their opportunities as parents and other members of families, consumers, home managers, and wage earners.

Child Development

.50 CREDIT

Length of Course: ½ year/20 weeks

Grades Allowed in Course: 9, 10, 11, 12

Prerequisite: None

This half-year course provides students with a comprehensive overview of child development from birth through adolescence. It includes the physical, emotional, social, and intellectual development by “ages and stages”. This course is designed to prepare students to meet their responsibilities and understand their opportunities as parents, caregivers, and teachers of young children.

Healthy Cooking for Nutrition and Fitness

.50 CREDIT

Length of Course: ½ year/20 weeks

Grades Allowed in Course: 9, 10, 11, 12

Prerequisite: None

This is a 20-week hands-on course that will focus on the concepts of nutritional awareness, and making healthy dietary choices that will improve as overall sense of well-being. Together we will work as a team to develop healthy habits for life long wellness not only for ourselves but our future families. We will explore healthy versions of our old time favorites by doing recipe make-overs as well as explore new foods, food preparation techniques, and meal planning.

BUSINESS EDUCATION

Computer Skills 7

Length of Course: 1 year

Computer Skills is a course designed to assist seventh grade students in acquiring and applying knowledge of technology to create, edit, enhance, and organize information to use in all genres at school and at home. Students will actively participate in projects and research to enhance their knowledge of not only computer components and processes, but also to apply their skills in maintaining profiles and creating documents for use in other academic areas.

College Level Accounting/ACCT101

1 CREDIT

Length of course: 1 year

Grades Allowed in Course: 11 & 12

Prerequisite: Successful completion of Geometry/application and department approval

College Credit: 4 college credits upon successful completion and registered through Tompkins Cortland Community College for ACCT101.

This course introduces basic accounting concepts and principles for the sole proprietorship. Emphasis will be given on the accounting cycle and the preparation of accounting statements, along with the supporting schedules. Special journals, subsidiary ledgers, and valuation accounting will also be recognized and used. This course is collaborative with Tompkins Cortland Community College (TC-3) and carries four college credits upon successful completion.

Career & Academic Success

1 CREDIT

Length of course: 1 year

Grades Allowed in course: 11 &12

Prerequisite: application and department approval

College Course Credit: 7 college credits upon successful completion and registered through Tompkins Cortland Community College.

The Computer Applications course integrates a variety of software applications to better prepare students for active participation and commitment in postsecondary studies and the educated work force. Students who choose to participate in the course will become active users of: Microsoft Word, Microsoft Access, Microsoft Excel, Power Point, a digital camera, scanner, Internet explorations, as well as integrations and multimedia use of the programs listed. Students will also have the opportunity to take the course as a concurrent enrollment course through TC3 for (4) college credits with Word, Excel, Access, and PowerPoint. Through active participation students will work to create a “Portfolio” of projects which will demonstrate creative writings, multimedia projects, and computer experiences. Students will also have the opportunity to apply for and earn (3) college credits in ACAD 150 – College Success.

Money & Banking/ BUAD 222

1 CREDIT

Length of Course: 1 year

Grades Allowed in Course: 11 &12

Prerequisite: Successful Completion of Algebra I Regents/application and department approval.

College Course Credit: 3 college credits upon successful completion and registered through Tompkins Cortland Community College for BUAD 222.

This is a study of financial institutions and topics include the characteristics of money, structure of the commercial banking system, creation of bank deposits, cash assets of banks, secondary reserves, earning assets, the Federal Reserve System, Federal Reserve credit, sources and uses of member bank reserves, the money market, interest rates and liquidity, Federal Reserve policies and operations in the money market, Treasury operations in the money market, money and incomes, money and the price level, and international finance. Students will also participate in Project InVEST which links them with a national program and local insurance agencies. This course can be used as the third required Math credit for graduation. This course is collaborative with Tompkins Cortland Community College (TC3) and carries 3 college credits upon successful completion.

Business Law/BUAD 201

.50 CREDIT

Length of Course: ½ year/20 weeks

Grades Allowed in Course: 9, 10, 11, 12

Pre-Requisite: None

College Course Credit: 3 college credits upon successful completion and registered through Tompkins Cortland Community College for BUAD 201.

Business law can be one of your most valuable subjects. Throughout this course, students will study how business and personal law impacts each one of us on a day-to-day basis. Business Law introduces an understanding of law through its forms, classifications and sources. Students will also study the impact of law as influenced by political, social and economic needs; legal rights and their enforcement; federal and state courts systems; and functions of administrative agencies. Real case study analysis and research will be part of the course. Students will apply the knowledge acquired to their own lives and experiences. At the successful completion of the course, students will earn (3) college credits through TC3.

Career & Financial Management/BUAD 109

1 CREDIT

Length of Course: ½ year/20 weeks

Grades Allowed in Course: 9, 10, 11, 12

Pre-Requisite: None

College Course Credit: 3 college credits upon successful completion and registered through Tompkins Cortland Community College for BUAD 109.

This course addresses finance at a personal and practical level. Students examine current economic conditions focusing on how they can impact their personal economic situations. Ethics, personal management of cash, debt, credit, investments, insurance, and home buying are examined.

Document Processing/CAPS 100**1 CREDIT**

Length of course: 1 year

Grades Allowed in course: 9, 10, 11, 12

Prerequisite: None

College Course Credit: 1 college credit upon successful completion and registered through Tompkins Cortland Community College for CAPS 100.

This course develops computer usage skills with emphasis on correct keyboarding techniques for entering, tabulation, rough drafts, letters, memos, outlines, and reports with or without resources. Keyboarding provides instruction for introductory and advanced document processing competencies using technology for use in school, work, and personal environments. Students will have the opportunity to utilize the computer to complete not only assignments, letters, memos, reports, and tables, but also desktop publishing projects using the integrated software packages.

Web Page Design/CAPS 152/Yearbook**.50 CREDIT**

Length of Course: every other day all year/ 20 weeks

Grades Allowed in course: 9, 10, 11, 12

Prerequisite: None

College Credit: 1 college credit upon successful completion and registered through Tompkins Cortland Community College for CAPS152.

Student creation, design and editing of the school yearbook. Additionally, an introduction to the development of web pages for the Internet. Topics include XHTML tags, including links, graphics, backgrounds, and colors.

Entrepreneurship**.50 CREDIT**

Length of Course: 20 weeks

Grades Allowed in course: 9-12

Prerequisite: None

The entrepreneurship course allows students to design a comprehensive business plan with the goal of starting their own business. Students will learn about market research, advertising, promotion, forecasting, financial statements, and the legal environment. This course will include discussions about business opportunities, feasibility studies, market analysis, legal issues facing start-ups, pricing strategies and promotional strategies. Presentations, speakers, and computer applications are instructional tools used to meet the educational goals of this course.

TECHNOLOGY

Technology 7

Length of Course: ½ year/ 1 semester

Grades Allowed in Course: 7

In this course, students will develop an understanding of design. Students will be involved in hands-on activities while learning safety procedures in the shop. The students will be provided activities that will help them solve different design problems. Some of the equipment that the students will be using is files, router, drill press, jigsaw, and power sanders.

Technology 8

Length of Course: ½ year/ 1 semester

Grades Allowed in Course: 8

In this course students will design and create products from raw materials. Students will utilize the drawing board, T-square, compass, and triangles during the design process. While working with the raw materials the students will be using the drill press, jigsaw, power sanders, lathe, and router. The students will design and make a project with the mass production process.

Mechanical Drawing

.50 CREDIT

Length of Course: ½ year/Fall Semester

Grades Allowed in Course: 9, 10, 11, 12

Prerequisite: 7th and 8th Grade Technology

Students will develop an understanding of basic to intermediate technical drawing skills. To support these skills, students will work to complete various tasks in multi-view projection, oblique and isometric projection, and dimensional and sectional views. Students will then take the skills from the drawing board into the computer aided drawing world of AutoCAD. This program will teach students how draftspersons and engineers communicate in today's highly technical world.

Computer Aided Drawing (CAD)

.50 CREDIT

Length of Course: ½ year/Spring Semester

Grades Allowed in Course: 9, 10, 11, 12

Prerequisite: Mechanical Drawing

Students will develop an understanding of basic intermediate Computer Aided Drawing skills using AutoCAD Lite. To support these skills, students will work to complete various tasks learning the function of different CAD commands. Students will then take the skills from the drawing board into the computer aided drawing world of AutoCAD. This program will teach students how draftspersons and engineers communicate in today's highly technical world.

Design, Drawing and Production (DDP)

1 CREDIT

Length of Course: 1 Year

Grades Allowed in Course: 10, 11, 12

Prerequisite: Mechanical Drawing (MD) and Computer Aided Drawing (CAD)

Students will develop an understanding of basic skills in design and technical drawing. To support these skills, students will work in a team based projected oriented environment to complete design tasks. Prototype modeling will be used to define design solutions with outcomes based on successful completion of assigned brief. This course may substitute the Music/Art credit required for graduation.

Computer Programming

1 CREDIT

Length of Course: 1 Year

Grades Allowed in Course: 9,10,11,12

Prerequisite: None

Students will be introduced to the elements of computer science through a hands-on, project-based curriculum. Projects will involve writing programs to complete tasks, create games, and make things move. Topics include: programming in Python, programming in C++, electronic circuits, robotics, the “internet of things”, and ethical considerations related to artificial intelligence. This course is part of the CTE pathway.

Aerospace Tech and Flight Operations

1 CREDIT

Length of Course: 1 Year

Grades Allowed in Course: 9,10,11,12

Prerequisite: None

Become a drone pilot! Students will be introduced to the world of flight through a hands-on, project-based curriculum. Projects will practice flying on a daily basis and will receive ‘ground-school’ training on the F.A.A. rules for U.A.V. flight. Students will prepare for the 14 CFR part 107 exam, which (at age 16) will enable them to fly commercial drone operations. Students will learn how quad-rotor drones work as well as radio control and FPV (first person view) technology. In addition, students will investigate the history of aerospace technology and the process to become a pilot of full-sized aircraft as well. This hands-on program will give students skills that employers are looking for in today’s highly technical world.

MUSIC DEPARTMENT

General Music

Length of Course: 1 Year

Grades Allowed in Course: 6, 7

Prerequisite: None

Middle School General Music is open to all sixth and seventh grade students to fulfill the music requirement for Junior High School (grades 6 and 7). This non-performing music class will meet every other day for two semesters of the year and is designed to be a music appreciation course that teaches students about the basic musical elements in music such as melody, harmony, notation, texture, style, rhythm, and form. Students will explore these music fundamentals as well as sing, perform on classroom instruments, explore music in film, and listen to various examples of music from around the world including musical theater. Students have the opportunity to practice, perform, create, analyze and reflect in each unit of the course. General music also introduces students to music technology and how to use it as a vehicle for creation, practice and enjoyment. This middle school general music class is for students in grades 6 and 7 that need a music class as per NYS law but who do not wish to sing in a junior chorus ensemble and performance-based setting.

Junior High Select Chorus

Length of Course: 1 Year

Grades Allowed in Course: 6, 7, 8

Prerequisite: None

Middle School Chorus is open to all sixth, seventh and eighth grade students to fulfill the music requirement for Junior High School (grades 6 and 7) or as an elective. A student does not have to have an exceptional voice, but the desire to make music is of the greatest importance. A varied repertoire is covered, ranging from standard works through contemporary choral literature. Instruction in music reading and writing, as well as a study of the various music genres and styles is also included. In addition to rehearsals, which are held every other day in school, other requirements include regular attendance at weekly small-group lessons and attendance at the following public performances: Annual Fall Music Department Performance/Fundraiser, Holiday, and Spring Concerts. Opportunities for participation in All-County, Area All-State, and NYSSMA Solo Festivals are available based upon individual student performance levels and experience.

Jr. High Concert Band

Length of Course: 1 Year

Grades Allowed in Course: 6,7,8

Prerequisite: Teacher Recommendation

Jr. High Concert Band is open to all sixth through eighth grade students to fulfill the music requirement for Junior High School (grade 7), or as an elective. A varied repertoire is covered, ranging from standard works through contemporary band literature. In addition to rehearsals which are held every other day in school, other requirements include regular attendance at weekly small-group lessons and attendance at the following public performances: Annual Fall Music Department Performance/Fundraiser, Holiday and Spring Concerts and the Cortland County All-County Band Clinic. Opportunities for participation in Elementary All-County Band (as a 6th grade student) and NYSSMA Solo Festivals are available based upon individual student performance levels and experience. Participation in Jr. High Concert Band is required when participating in extracurricular ensembles such as Jazz Band or Parade Band.

Senior High Chorus

.50 CREDIT

Length of Course: 1 Year

Grades Allowed in Course: 9,10,11,12

Prerequisite: None

High School Chorus is open to all ninth through twelfth grade students to partially fulfill the arts requirement for the High School Diploma (grades 9-12 for .50 credit/year), or as an elective. A student does not have to have an exceptional voice, but the desire to make music is of the greatest importance. A varied repertoire is covered, ranging from standard works through contemporary choral literature. In addition to rehearsals which are held every other day in school, other requirements include regular attendance at weekly small-group lessons and attendance at the following public performances: Annual Fall Music Department Performance/Fundraiser, Holiday and Spring Concerts. Opportunities for participation in All-County, Area All-State, Conference All-State, and NYSSMA Solo Festivals are available based upon individual student performance levels and experience.

Sr. High Concert Band

.50 CREDIT

Length of Course: 1 Year

Grades Allowed in Course: 9,10,11,12

Prerequisite: Junior High Band or Teacher Recommendation

Sr. High School Concert Band is open to all ninth through twelfth grade students to partially fulfill the arts requirement for the High School Diploma (grades 9-12 for .50 credit/year) or as an elective. A varied repertoire is covered, ranging from standard works through contemporary band literature. In addition to rehearsals which are held every other day in school, other requirements include regular attendance at weekly small-group lessons and attendance at the following public performances: Annual Fall Music Department Performance/Fundraiser, Holiday and Spring Concerts and the Cortland County All-County Band Clinic. Opportunities for participation in All-County Jazz Band, Area All-State, Conference All-State, and NYSSMA Solo Festivals are available based upon individual student performance levels and experience. Participation in Senior High Concert Band is required when participating in extracurricular ensembles such as Jazz Band or Parade Band.

Intro to Ukulele Course

.25 CREDIT

Length of Course: ½ year/20 weeks

Grades Allowed in Course: 9,10,11,12

Prerequisite: None

At the end of this elective/fine arts credit course, each student will realize they can be a ukulele player. This course will meet every other day for 1 semester. This course serves as an introduction to the ukulele instrument and instant access to making music on it. Students will explore strumming, rhythms, reading music, improvising and beginning songwriting. Students will also learn basic music theory and each class will utilize the four National Music Standards of Creating, Performing, Responding, and Connecting.

Course Objectives:

1. Students will be able to identify the parts of the ukulele and their uses.
2. Students will develop finger dexterity and strumming abilities.
3. Students will perform exercises such as playing scales, chord charts, strumming patterns, rhythms, fingerpicking, and practice and perform independently within a group setting.
4. Students will be able to read basic music notation.
5. Students will learn basic music theory skills to aid in instrument learning.

Bucket Drumming

.25 CREDIT

Length of Course: ½ year/20 weeks

Grades Allowed in Course: 9,10,11,12

Prerequisite: None

Bucket Drumming is open to all ninth through twelfth grade students to partially fulfill the arts requirement for the High School Diploma (grades 9-12 for .25 credit/semester), or as an elective. This course serves as an introduction to bucket drumming as a percussion instrument and gives students instant access to making music on it. Students will explore basic sticking technique, rhythms, reading music and improvising. Students will also learn basic music theory as an introduction to beginning songwriting. Each class will utilize the four National Music Standards of Creating, Performing, Responding, and Connecting. At the end of this course, each student will realize they can be a percussionist.

Course Objectives:

1. Students will learn rhythmic notation skills which will allow them to read, identify and play rhythms.
2. Students will move sticks with basic coordination and will learn proper hits and patterns on the bucket drums
3. Students will learn basic music theory skills to aid in instrument learning.
4. Students will learn to play multiple patterns in a group for a virtual performance.

Music Theory I

Length of Course: 1 Year

Grades Allowed in Course: 10, 11, 12

Prerequisite: None*

Music Theory I is open to all tenth through twelfth grade students to partially fulfill the arts requirement for the High School Diploma (grades 9-12 for .50 credit/year), to partially fulfill a music sequence, or as an elective. This is a course intended for students who have found themselves interested in the how and why of music. While using the National Music Standards of Creating, Performing, Responding, and Connecting, this course takes a beginning approach to the concepts of theory and analysis. It will introduce basic aural training skills, including rhythmic, harmonic, and melodic dictation and sight singing. Students enrolled will learn the proper tools to create music of their own and will have a better understanding of the music they listen to, the music they perform and the music they study.

Course Objectives:

1. Students will be able to identify notes on various musical staves.
2. Students will learn the differences among simple, compound, and odd meters and the appropriate counting for each.
3. Students will learn about scales and how they are created.
4. Students will learn all major and minor key signatures as well as the circle of fifths.
5. Students will be introduced to melodic intervals found in music (major, minor, perfect, augmented and diminished).
6. Students will learn basic aural skills that will help them sight-read, sight-sing and identify intervals.
7. Students will learn how to create basic musical compositions of their own.

*Note: While no prerequisites have been established, it is recommended that only students with a musical background enroll in this course.

ART

Art 6

Length of Course: ½ year/20 weeks

Grades Allowed in Course: 6

Prerequisite: None

The goal of this exploratory course is to begin to develop art skills and is designed to give the sixth grade students a short introduction to art. Students will incorporate the basic skills of writing, listening, and speaking through hands-on projects. These projects may incorporate the areas of painting, drawing, sculpture, ceramics, printmaking, collage and art appreciation. Lessons in art history are incorporated into the curriculum. Students will develop an appreciation of art by studying and analyzing different artists and styles of art. They will be able to create and utilize a range of subject matters, symbols, and ideas in their work as well as understand and apply art elements and principles of design in their artwork. They will also be able to utilize their art skills and techniques in a variety of 2-D (two dimensional) and 3D (three dimensional) art to communicate personal meaning. Last, students will be able to reflect, revise and refine their work in problem solving and critical thinking skills and to reflect about their experiences and processes in art.

Visual Art 7

Length of Course: ½ year/20 weeks

Grades Allowed in Course: 7

Prerequisite: None

This is a required seventh grade course that includes lessons on a wide variety of art techniques, skills, and mediums involving composition, design, drawing, painting, sculpture, crafts, and the practical applications of these bodies of information. Rather than focusing on art production alone, equal attention is spent on art history, art culture, art criticism, and the aesthetics of art in which all are integrated into each project rather than presented as separate entity.

Studio in Art

1 CREDIT

Length of Course: 1 year
Grade Level: 9, 10, 11, 12
Prerequisite: None

This first-year fine arts 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. They will learn to express themselves by creating a wide variety of both two-dimensional (drawing, painting, printmaking, collage, etc.) and 3 dimensional (sculpture, clay, and some crafts) art forms. In this class they will work with materials such as graphite, charcoal, colored pencil, pen and ink, watercolor, acrylic paint, oil pastels, chalk pastels, linoleum, and clay. Careers in art, interpretation of art, cultures and history of art, aesthetic awareness, and art criticism will also be incorporated. This course is open to all students and fulfills the NYS Fine Art requirement.

Studio in Art II

1 CREDIT

Length of Course: 1 year
Grade Level: 10, 11, 12
Prerequisite: Studio in Art I

This Advanced Art course is an expansion of the skills and techniques learned in Studio in Art. In this year long course students will continue to work and experiment with a wide variety of materials and subject matters. At this level, students are highly encouraged to work more independently on projects as well as research, plan, and execute their ideas with increased self-discipline. Students will be creating more in-depth drawings, paintings, sculptures, mixed-media, and printmaking projects. They are also expected to participate in class critiques and are encouraged to participate in art shows.

Ceramics and Sculpture

.50 CREDIT

Length of Course: ½ year/20 weeks
Grades Allowed in Course: 9, 10, 11, 12
Prerequisite: Visual Art 7

Students will learn the basic skills and techniques of traditional hand building pottery and sculpture. They will explore pinched forms, coil, slab construction and casting techniques using ceramic slip molds. Students will also become familiar with decorating, glazing, and firing methods. Sculpture is designed to develop skills for building 3-D artwork with a variety of media. Materials explored include plaster, wood, stone, metal, wire, paper mache', glass, fabric, and fibers.

Media Arts

.50 CREDIT

Length of course: ½ year/20 weeks
Grades Allowed in Course: 9, 10, 11, 12
Prerequisite: Visual Art 7

This class is a semester long elective taught in the rapidly growing field of computer art/graphics and video communication. Students will use computers, video camcorders, and digital cameras as an artistic medium to develop skills through instruction and hands on experiences by exploring the new possibilities that computers offer artists. This course is designed to develop artistic creativity and gain knowledge on how technology is integrated into Art. We will explore how the artist uses the elements of art, principles of design, visual appeal, graphics, animation, and sound to create spectacle effects. During this course we will also focus on how artists use their skills for promoting a product and or service in order to make a profit for the employer. Some examples of the projects covered in this curriculum are as followed: Introduction to Video, Introduction to Photoshop, Making Commercials, Poster Designs, Magazine Covers, Theme Movies, Movie Trailers, Photomontage, Music Videos, CD Covers, and Animation.

Drawing 1/ART 120

.50 CREDIT

Length of Course: ½ year/20 weeks

Grades Allowed in Course: 10, 11, 12

Prerequisite: Studio in Art

College Course Credit: 3 college credits upon successful completion and when registered through Tompkins Cortland Community College for Art 120.

Drawing I focuses on the process and function of drawing, and developing the powers and observation in art. This includes the study of how materials and techniques affect drawing, the role of perception and observation in drawing, and the analysis of basic design elements and principles. Students draw from observation in order to understand the role of perception in creating illusion. Time is spent analyzing master drawings for information on materials, composition, art elements, and principles and functions of drawing. Students participate in weekly critiques of their drawings. In addition to basic linear perspective, problems of drawing still life and landscape objects are explored. ART 120 fulfills the SUNY General Education requirement.

Painting 1/ART 115

.50 CREDIT

Length of Course: ½ year/20 weeks

Grades Allowed in Course: 10, 11, 12

Prerequisite: Studio Art and Drawing 1

College Course Credit: 3 college credits upon successful completion and when registered through Tompkins Cortland Community College for Art 115.

Painting I provides an introduction to the methods and techniques of various painting media. Principles of color, form, and composition are studied with an emphasis on experimentation. ART 115 fulfills the SUNY General Education requirement.

PHYSICAL EDUCATION

New York State requires participation in the physical education each year a student is in attendance.

There are three key learning standards a student will follow:

1. Students will have the necessary knowledge and skills to establish and maintain physical fitness, participate in physical fitness, participate in physical activity, and ability necessary to create and maintain personal health.
2. Students will acquire the knowledge and ability necessary to create and maintain a safe and healthy environment.
3. Students will understand and be able to manage their personal and community resources.

Physical education classes are held every other day to all students. The development of skills and activities that allow the student to continue a personal program of physical education and recreation throughout their entire life is a major goal. The development of a healthy lifestyle is a prime importance to the students' future physical fitness as well as their social and emotional well-being. Positive interaction and integration is an important goal.

The disciplines of physical education enable students to become competent and confident adults. These disciplines focus on the development of the whole person. Through active participation and hands-on learning, students develop a better understanding of themselves and their world that enables them to analyze their academic, physical, social, and emotional well-being. By studying these disciplines, students set goals, make informed decisions and balance the demands of daily living.

Students will demonstrate responsible personal and social behavior while engaged in physical activity. They will understand that physical activity provides the opportunity for enjoyment, challenge, self-expression and communication. Students will be able to identify safety hazards and react effectively to ensure a safe and positive experience for all participants.

Junior High Physical Education

- ☐ Skill work becomes more in depth from elementary grades.
- ☐ Safety awareness

- ❑ More individual/team activities – such as project adventure, dancing, cross-country skiing, weight training, lacrosse, etc.

Senior High Physical Education

.50 CREDIT

- ❑ Games/activities – Students more advanced in skills. Get to play games quicker.
- ❑ Safety awareness

Advanced PE

Length of Course: 10-20 weeks/schedule varies

Grades Allowed in Course: 10, 11, 12

Prerequisite: must have 85 or higher PE average and permission of course instructor

Physical Education in a competitive and fun environment. Students who enjoy PE will be surrounded by others who share the same intensity and enthusiasm towards sports and games.

This will be a half year, pass/ fail course.

Intro to Weight Lifting and Lifefit

Length of Course: 10 weeks

Grades Allowed in Course: 11, 12

Pre0requisite: None

An introductory elective course designed to help each student: improve muscular strength; gain knowledge and understanding of weight training theory and practice; develop a personalized weight training program.

DRIVER EDUCATION

Driver Education (Summer Only)

.50 CREDIT

Length of Course: 6 Weeks

Grades Allowed in Course: 12th, 11th, 10th (dependent upon class size restriction)

Prerequisite: Must be 16 on or before July 1 w/ parental permission

The student taking Driver Education will develop and practice good driving skills, habits and techniques, become knowledgeable of laws and regulations regarding motor vehicles and their operation. Upon successful completion of the course the student receives a “Blue Card” which allows senior operator privileges on their 17th birthday. Students may obtain a 10 to 15% reduction in insurance premiums from 16-25 years of age depending on the insurance company.

BOCES

The Board of Cooperative Educational Services

Career and Technical Education

A student of Junior status has the opportunity to attend BOCES in the following areas:

Automotive Collision Technology
Automotive Technology NATF
Computer Technology
Construction Technology
Cosmetology (Appearance Enhancement Profession)
Culinary Arts & Pastry
Early Childhood Education
Graphic Communications
Health Occupations Technology
Heavy Equipment Repair, Operation & Diesel Technology
Physical Therapy Professions
Welding Technology
New Visions – Environmental Science (Seniors only)
New Visions – Health (Seniors Only)

Automotive Collision Technology

Automotive Collision Technology is a two-year program in which students learn the essential skills needed to begin a career in the auto body and collision industry. As specialists in the automotive industry, Automotive Collision students gain real-world and hands-on experience working in an industry-standard collision lab setting. Students will learn the fundamentals of vehicle refinishing, metal work, unitized body and frame alignment, painting and finishing, welding, plastics repair, body repair/replacement, cost estimation and customer service skills. Students are provided with internship experiences and the opportunity to earn a Career and Technical Endorsement on their diploma by successfully passing an industry-standard technical assessment.

Academic Credits:

3 CTE credits per year

1 science or math credit per year

Automotive Technology

Automotive Technology is a two-year program designed to provide students with basic mechanical knowledge and skills. As an Automotive Service Excellence (ASE) program certified by the National Automotive Technicians Education Foundation (NATEF), students gain knowledge and skills through a combination of theoretical study and hands-on lab work, including the repair of customer vehicles in brake systems, engine performance diagnosis, suspension and steering, electronic control systems, and on-board computerized engine control systems diagnosis on automobiles and light trucks. This program, which is state and nationally certified, is the first step in preparing an individual for a career in the technical repair field. Over the course of the program, students are provided with internship experiences and the opportunity to earn a Career and Technical Endorsement on their diploma by successfully passing the industry-standard ASE NATEF technical assessment.

Academic Credits:

3 CTE credits per year

1 science or math credit per year

Computer Technology

The Computer Technology program is designed to prepare students for the ever-changing world of information technology. Through a combination of theory and hands-on work, this two-year, Ciscocertified program provides students with the essentials of computer IT repair and IT support in the first year, before transitioning to the fundamentals of computer networking in year two. Students are afforded the opportunity to earn the industry recognized Cisco Career Certification, which also serves as a gateway to the industry-recognized CCNA Certification. Moreover, the CompTIA A+ Certification is yet another key offering that helps fulfill a comprehensive program for students who are preparing for entry level work or have post-secondary aspirations. Students are also introduced to computer programming and robotics. Prior to completion, students are also provided with internship experiences and the opportunity to earn a Career and Technical Endorsement on their diploma, which they can achieve by successfully passing the industry- standard technical assessments.

Academic Credits:

- 3 CTE credits per year
- 1 science or math credit per year
- 6 TC3 college credits available

Construction Technology

The two-year Construction Technology program teaches students the essential skills needed to begin a career in the building and construction trades. Through the construction of a new house, students will gain real-world knowledge and hands-on experience in the fundamental components of carpentry, drywall, painting, framing, roofing, floor installation, door and window installation, blueprint reading, siding, electrical wiring, plumbing, proper tool use, and OSHA safety training. Students will develop and demonstrate integrated academics and employability skills through class activities, projects, live clinic, community service and professional development. Students are also provided with the opportunity to earn a Career and Technical Endorsement on their diploma by successfully passing an industry-standard technical assessment.

Academic Credits:

- 3 CTE credits per year
- 1 science or math credit per year

Cosmetology

Cosmetology is a two-year program that instructs students in the theory and practical skills necessary to prepare them for a career in the cosmetology field and/or post-secondary education. Students are provided with hands-on training and experience to pursue employment opportunities in such roles as cosmetologists, nail technicians, estheticians, hair stylists, salon managers and small business owners. As part of the required 1,000 hours of instruction over a two-year period, students are provided with clinical experiences in addition to the opportunity to apply for their New York State Cosmetology License and earn a Career and Technical Endorsement on their diploma by successfully passing a technical assessment.

Academic Credits:

- 3 CTE credits per year
- 1 science or math credit per year

Culinary and Pastry Arts

Culinary and Pastry Arts is a hands-on food preparation program that provides students with broad exposure to the science of cooking and the art of pastry design. Through an academic partnership with the National Restaurant Association, students will develop their culinary and pastry skills learning the ProStart curriculum in food production, dining etiquette, customer service, food safety and sanitation. As part of the required 1,000 hours of instruction over a two-year period, students are provided with internship experiences and the opportunity to earn a Career and Technical Endorsement on their diploma by successfully passing the industry-standard ProStart exams and NOCTI performance assessment. Academic Credits:

- 3 CTE credits per year

- 1 science or math credit per year

Early Childhood Education

The Early Childhood Education program is offered to students who want to pursue a career working with young children. Students learn about the characteristics, needs and behaviors of three- and four- year old children and study best practices on how to guide and teach them in a nursery school setting. Each high school student in the program is provided the opportunity to participate in all phases of operating the preschool. Students are responsible for the planning, preparation and presentation of activities for young children functioning as student teachers under the supervision of a certified teacher. Students are provided with embedded internship experiences and the opportunity to earn a Career and Technical Endorsement on their diploma by successfully passing an industry-standard technical assessment. Academic Credits:

- 3 CTE credits per year

- 1 science or math credit per year

- 6 TC3 college credits available

Graphic Communications

Graphic Communications is a two-year, project-based program for students who want to develop 21st century career and communication skills in graphic design and artistry. Macintosh computers and Adobe software are featured, as are projects in the form of multimedia advertisements, logo design, business cards, computer illustrations, digital imaging, multimedia and web design. Field visitations to advertising agencies, printing companies and colleges are embedded into the program. Dual credit courses are an integral component of the program and are offered through Tompkins Cortland Community College, where students may earn up to six college credits in Art and Communications. Prior to completion, students are also provided with internship experiences and the opportunity to earn a Career and Technical Endorsement on their diploma by successfully passing an industry-standard technical assessment.

Academic Credits:

- 3 CTE credits per year

- 1 science or math credit per year

- 6 TC3 college credits available

Heavy Equipment Repair, Operation and Diesel Technology

Located at Morey Towing & Recovery in Homer, the two-year Heavy Equipment Operations and Diesel Repair Technology program is designed to offer students essential skills in the maintenance and repair of heavy equipment and heavy-duty diesel trucks using the latest techniques and computerized diagnostic equipment. Students gain daily practical experience working with a variety of engines and equipment that will prepare them for employment opportunities or furthering their education at college and technical schools. Students may be eligible to earn industry certifications in safety training and equipment operation. A Career and Technical Endorsement on their high school diploma will signify that students have met rigorous industry standards upon successfully passing a technical assessment.

Academic Credits:

3 CTE credits per year

1 science or math credit per year

Health Occupations

Health Occupations is a two-year program offering theory and practical experience for students interested in the medical and health care professions. Students are introduced to multiple facets of long-term care, basic nursing procedures, patient rights, ethical practices, medical terminology, and body systems. Students will have the opportunity to earn a NYS license as a Certified Nursing Assistant and CPR & First Aid certification. This training includes a minimum of 108 hours in a long term care clinical setting. As a post-secondary partner, Tompkins Cortland Community College provides onsite dual credit courses allowing students to begin building their college transcript. Students are provided with embedded internship experiences and the opportunity to earn a Career and Technical

Endorsement on their diploma by successfully passing an industry-standard technical assessment.

Academic Credits:

3 CTE credits per year

1 science or math credit per year

9 TC3 college credits available

Physical Therapy & Rehabilitative Professions

Physical Rehabilitative Professions is a two-year program designed for highly motivated students (with an 85 GPA) who are interested in gaining a post-secondary edge in pursuing a career in the rehabilitative field. Located at Fadden Associates, students will study the fundamentals of therapy, including the elements of movement, anatomy and physiology. As a post-secondary partner, Tompkins Cortland Community College provides onsite dual credit courses allowing students to begin building their college transcript. Another important component of the program is providing students with opportunities to shadow health-care professionals in the field. Students are also able to earn a Career and Technical

Endorsement on their diploma by successfully passing an industry standard technical assessment.

Academic Credits:

3 CTE credits per year

1 science or English 12 credit per year

19 TC3 college credits available

Welding

Skilled welding technicians have multiple employment options and are a vital link in the manufacturing, construction and facilities maintenance industry. As a two-year program, Welding Technology provides students the skills of arc welding, resistance welding, brazing and soldering, as well as cutting, heat-treating and metallurgy. Students gain knowledge of electrical systems, power sources and different welding technologies, welding systems, print interpretation and measurement, as well as the use and interpretation of visual symbols related to welding. This course will give the student knowledge and technical skills that will prepare them for positions as an entry-level welder or advanced placement in post-secondary education. Work-based learning sites are developed in the second year to allow the opportunity to intern at many local businesses. Students are provided with internship experiences, the opportunity to earn industry-recognized AWS certifications, OSHA safety training and a Career and Technical Endorsement on their diploma by successfully passing an industry-standard technical assessment. Academic Credits:

3 CTE credits per year

1 science or math credit per year

For Seniors ONLY

New Vision Environmental Science

Prerequisite: Chemistry R

New Vision Environmental Science is a one-year program offered to highly motivated high school seniors. Located at Lime Hollow Nature Center, students will explore environmental issues in a real world setting on nearly 430 acres consisting of forests, fields, streams, bogs, ponds, flora and fauna with access to numerous trails. As the classroom moves from outdoors to inside, students will learn in a state-of-the-art environmental education center as they conduct research and study environmental topics in depth. Topics include forestry, fish, wildlife, maple production, environmental issues, soil, water, land use and outdoor recreation. Students interact with professionals in the field and use time in the classroom to analyze current trends in careers. Class visitations by professionals in the field, community service projects and field trips are integral components of the program. Students will also fulfill their English 12, Participation in Government, and Economics requirements toward graduation.

Academic Credits:

2 credits Environmental Science

1 credit in English 12

½ credit in Participation in Government

½ credit in Economics

3 TC3 college credits available

Location: Lime Hollow Nature Center

New Vision Medical Professions

Prerequisite: Chemistry R

New Vision Medical Professions is a one-year program offered to highly motivated high school seniors. As a healthcare field immersion program, students will explore related career pathways as they participate in scheduled rotations at Cortland Regional Medical Center. Students will experience firsthand the medical profession working with physicians, nurses and other health professionals. Through a combination of research and hands-on projects, students will learn about medical ethics, patient rights, human anatomy and physiology, governmental regulations, and health careers. Another integral component of the program is the dual credit course in English 101 through Tompkins Cortland Community College, in addition to CPR certification. Students will also fulfill their English 12, Participation in Government, and Economics requirements toward graduation. Eligibility requirements: Interested students must be in their senior year of high school, in good academic standing and on target with all graduation requirements. Eligible candidates should exhibit self-motivation, enthusiasm and maturity, and must be willing to work both independently and as a team member in diverse settings.

Academic Credits:

- 1 credit Medical Professions
- 1 credit English 12
- ½ credit in Participation in Government
- ½ credit in Economics
- 1 credit Anatomy & Physiology
- 6 TC3 college credits available

Location: Guthrie Medical Center

CollegeNow through McGraw High School

New: College Credits from Delaware Valley University

University credits earned through this Articulation Agreement will offer students additional flexibility in course selection and allow students to earn credits that can be transferred to Delaware Valley University and applied toward their degree requirements.

McGraw High School students who successfully complete the CASE courses, can receive university credit from Delaware Valley University for the following courses:

CASE- ASA- **Animal (3 credits)** — restricted elective in the Animal Science major.

CASE- ASP- **Plant (3 credits)** — restricted elective in the Plant Science major.

CASE- ABF- **Ag. Business Foundations-** (2 credits)- restricted elective in Ag. Business.

Acceptance of the curriculum by Delaware Valley University for these credits is based on the following:

- McGraw High School students must successfully complete the Agriculture Science curriculum with a "B" average or better (3.0 GPA on a 4-point scale). Submit an official transcript to the Delaware Valley University Office of Undergraduate Admissions listing the courses and grades received by the student.

Tompkins Cortland Community College

Students are eligible for **concurrent enrollment with Tompkins Cortland Community College** (TC-3) for the courses listed below. Students begin a transcript at TC-3 when they enroll. The courses follow the TC-3 guidelines for curriculum, attendance, and testing requirements. Each concurrent enrollment teacher helps students become enrolled at TC-3 and students are made aware of the course drop dates which come from the college.

Once students graduate from McGraw High School they need to request a TC-3 transcript to send to the college they plan on attending to see if that college will grant credit for the concurrent enrollment courses taken in high school. Receiving college credit at an institution depends on the college choice and the grade received in the class. If students intend to attend Tompkins Cortland Community College financial aid may be effected. More information is available at

<https://www.tc3.edu/CollegeNow/>

See next page for Concurrent Enrollment (College Now) Course List

Pending college courses for 2023-24

Introductory Meteorology

Painting I

College Biology

Entrepreneurship

Concurrent Enrollment (Dual Credit)

Tompkins Cortland Community College

MCGRAW COURSE NAME	WHEN OFFERED	TC-3 COURSE NAME	TC-3 CREDITS
Algebra II	Spring	MATH 120 – College Algebra	4
College Algebra	Spring	MATH 120 - College Algebra	4
PreCalculus	Fall	MATH 138 - PreCalculus Mathematics	4
PreCalculus	Full Year*	MATH 138 – PreCalculus Mathematics	4
Calculus	Spring	MATH 201 - Calculus I	4
French IV	Fall	FREN 201 - Intermediate French I	3
	Spring	FREN 202 - Intermediate French II	3
Spanish IV	Fall	SPAN 201 - Intermediate Spanish I	3
	Spring	SPAN 202 - Intermediate Spanish II	3
College Level English	Fall	ENGL 101 - Academic Writing II	3
	Spring	ENGL 102 - Approaches to Literature	3
Drawing	Fall	ART120 – Drawing I	3
Introduction to Psychology	Full Year*	PSYC103 - Introduction to Psychology	3
Environmental Science	Fall	ENVS 101 - Intro to Environmental Science	3
	Spring	ENVS 102 – Technology & the Environment	3
Anatomy & Physiology I	Full Year*	BIOL 131- Principles of Human Anatomy and Physiology I	4
Career & Academic Success/Tech Prep	Fall	CAPS 111 - Introduction to Word Processing	1
	Fall	CAPS 121 - Introduction to Spreadsheets	1
	Spring	CAPS 131 - Introduction to Databases	1
	Spring	CAPS 141 - Presentation Software	1
	Spring	ACAD 150 - College Success Seminar	3
College Level Accounting	Full Year*	ACCT 101 - Principles of Accounting I	4
Career & Financial Management	Spring	BUAD 109 - Personal Money Management	3
Money & Banking	Full Year*	BUAD 222 – Money and Banking	3
Business Law	Fall	BUAD 201 – Business Law I	3
Foundations of Business	Fall	BUAD 106 - Foundations of Business	3
Doc Processing/CAPS 100	Full Year*	CAPS 100 – Keyboarding For Computers	1
Yearbook/CAPS 152	Full Year*	CAPS 152 - Webpage Design	1
*Full Year Courses are deemed Spring Semester enrollment			

