

LANSING
HIGH
SCHOOL

2023
2024

COURSE
GUIDE





Lansing High School

300 Ridge Road
Lansing, NY 14882
Telephone: 607-533-3020
Fax: 607-533-3546
lansingschools.org

Administration

Chris Pettograsso
Superintendent
CPettograsso@LCSD.k12.ny.us

Pat Hornbrook
Principal
PHornbrook@LCSD.k12.ny.us

Katie Crandall
AP/Athletic Director
KCrandall@LCSD.k12.ny.us

Counselors

Beth Evener
School Counselor, A-K
EEvener@LCSD.k12.ny.us

Kara Catino
School Counselor, L-Z
KCatino@LCSD.k12.ny.us

The Mission of Lansing Central School District

We will inspire our students to be knowledgeable, responsible, healthy and compassionate citizens.

Student Services Department

The counselor's role is to assist all students with achieving their academic, career and personal/social success.

Counselors assist students with all of the following:

- Social/emotional issues
- Crisis intervention
- Academic concerns/planning
- Career exploration
- College search and application process
- College readiness testing

Naviance College & Career Planning

Naviance is a website where students and parents/caregivers can use to make decisions regarding courses, colleges, careers, majors, and future goals. Students should see their counselor in Student Services to receive their activation code. If students have already activated their account and have forgotten their password they should go to the website and request it be re-sent.

student.naviance.com/lansinghs



Graduation Requirements

Diploma requirements apply to students depending upon the year in which they first enter grade nine. A student who takes more than four years to earn a diploma is subject to the requirements that apply to the year that student first entered grade nine. Students who take less than four years to complete their diploma requirements are subject to the provisions relating to accelerated graduation.

Regents Diploma		Regents Diploma With Advanced Designation
4 Credits	English	4 Credits
4 Credits	Social Studies	4 Credits
3 Credits	Math	3 Credits
3 Credits	Science	3 Credits
1/2 Credit	Health	1/2 Credit
1 Credit	Art and/or Music	1 Credit
1 Credits	World Language	3 Credits
2 Credits	Physical Education	2 Credits
3 1/2 Credits	Electives	1 1/2 Credits

Regents Diploma Notes

- Students who complete Checkpoint A (Spanish 1 or French 1) and two units of study in a single language other than English no later than the end of grade 8 must pass the *locally developed* second language proficiency examination in order to earn one unit of credit toward the high school diploma.
- An integrated course in mathematics/science/technology may be used to satisfy the requirement for a third unit of credit in mathematics or science.

Regents with Advanced Designation Diploma Notes

- Students who complete Checkpoint A and two units of study in a single language other than English no later than the end of grade 8 must pass the *locally developed* second language proficiency examination in order to earn one unit of credit toward the high school diploma.
- To earn the advanced designation, students must complete one of the following:
 - A language other than English (total of 3 credits).
 - A five-credit sequence in Career and Technical Education, plus one credit in a language other than English.
 - A five-credit sequence in The Arts, plus one credit in a language other than English.
- All students pursuing the advanced designation must, in addition to passing the regents assessment requirements for a regular regents diploma, also pass a second regents examination in science and must pass all 3 regents exams in mathematics.

Correspondence/Online/Independent Study Courses

Students who wish to take classes for graduation credit outside of the traditional classroom by taking either an online, correspondence, or independent study class must fill out the appropriate form in the Student Services Office. **This must be approved by the building principal before registering for the course.** This procedure must be followed for replacing any high school graduation requirement, elective credit, or accelerating in a subject.

Course Load

In order to make sure students are making progress towards graduation, a minimum number of 5 units plus Physical Education are required.

Accelerated Graduation

Students interested in graduating early should consult with their school counselor as soon as possible to discuss potential options. Students seeking to complete the diploma requirements in less than four years shall be subject to the following diploma requirements:

- Must meet requirements of the class of the student's graduation year.
- The fourth year of PE will be waived, but students must meet 22 credits.



Assessments

In addition to course and credit requirements students must meet minimum competencies by passing a New York State exam in each of the four subject areas of English, social studies, math, and science. The chart below indicates which tests will be required for each diploma to demonstrate the necessary competency.

	Local	Regents	Regents with Advanced Designation
English	For specific requirements, please see your student's counselor.	Regents Exam with Score of at Least 65%	Regents Exam with Score of at Least 65%
Math		Regents Exam with Score of at Least 65%	3 Regents Exams with Score of at Least 65%
Global Studies		Regents Exam with Score of at Least 65%	Regents Exam with Score of at Least 65%
US History		Regents Exam with Score of at Least 65%	Regents Exam with Score of at Least 65%
Science		Regents Exam with Score of at Least 65%	2 Regents Exams with Score of at Least 65%
World Language	Local Exam	Local Exam	Local Exam
			*Mastery - Meets all requirements for the Regents with Advanced Designation and, in addition, scores 85 or better on each of 3 Regents Examinations in Mathematics and/or Science .
		*Honors - 5 required Regents exams with a computed average score of 90 or better.	*Honors - 8 required Regents exams with a computed average score of 90 or better.

*Diploma/Credential Requirements: <http://www.p12.nysed.gov/part100/pages/1005.html>

***There are a variety of pathways and graduation requirements. Please see your counselor for specific requirements/options that pertain to your path.**

Course Planning

	Grade 9	Grade 10	Grade 11	Grade 12	Additional
English					
Social Studies					
Math					
Science					
World Language					
Health					
Art/Music					
Physical Education					
Elective					
Elective					
Elective					
Total Credits Earned					

Local or Regents Diploma

Regents Passed

English Language Arts _____
 Global History _____
 US History _____
 Math _____
 Science _____

Regents Diploma with Advanced Designation

Regents Passed

English Language Arts _____
 Global History _____
 US History _____
 Math _____
 Science _____
 World Language _____ *(Approved Local Exam)

To earn the Advanced Designation, a student may substitute the 3 credits of world language for one credit of world language plus a 5 credit sequence in either Art/Music, Career and Technical Education or Business. **5 credit sequence** in place of world language sequence: _____

NCAA Requirements

If you are planning to enroll in college as a freshman and you wish to participate in intercollegiate athletics, you may be required to be certified by the NCAA Clearinghouse. You must take a prescribed core curriculum and obtain the necessary SAT or ACT scores to be eligible. The list of NCAA-approved courses at Lansing High School is indicated below. Please review this list prior to enrolling in your courses. **See your counselor for more details regarding participation in intercollegiate athletics. Also, check out the NCAA Eligibility Center at www.eligibilitycenter.org . Not all classes listed are offered every year and may include previous course offerings.**

English

AP English
English 9
English 10
English 10H
English 11
English 11H
English 12

Mathematics

AP Calculus
Algebra I
Geometry
Algebra II
College Algebra/Pre-Calc.
Pre-Calculus AB
AP Statistics

Social Studies

Economics
Global History 1
Global History 2
U.S. Government
U.S. History

Natural/Physical Science

Earth Science (Lab)
AP Biology (Lab)
Biology (Lab)
Chemistry (Lab)
Physics (Lab)
Astronomy

Additional Core Courses

AP Spanish
Spanish 5
Spanish 4H
Spanish 3
Spanish 2
Spanish 1
AP French
French 5
French 4H
French 3
French 2
French 1

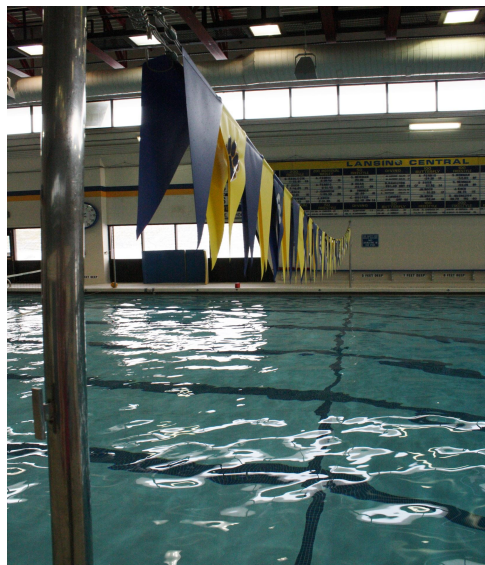


Photo by Antonya Crescenzi

English

Graduation Requirements

4 credits of English + Regents Exam

Honors Criteria

An honors program in the English Language Arts is open to all students beginning in grade 10. Students who express interest in the honors program should sign up with their counselor during the course selection process. Although this course is available to any student wishing to seek enrichment in the English Language Arts area, student performance will be monitored throughout the add/drop period (first 10 weeks) to ensure satisfactory progress towards course completion. All students who enroll in an honors level class must complete a summer assignment prior to the first day of classes.

English 9

40 Weeks, 1 Credit

Students in this course read and analyze works from a variety of genres including short stories, novels, poetry, drama, and nonfiction. Grammar and vocabulary skills are refined through various writing assignments, both creative and analytical. The MLA research format is introduced, and a research paper is required. Students will also participate in class presentations and discussions. All components of the ELA Common Core Standards are addressed in this course. The final exam is a local exam.

English 10

40 Weeks, 1 Credit

This course is designed to build on the foundational knowledge and skills acquired in ninth grade. Students continue to read and analyze various types of literature, including short stories, novels, poetry, drama, and nonfiction. Students will practice and develop writing techniques and skills through the use of creative and analytical writing. Students will also continue to develop speaking and listening skills through classroom presentations, speeches, and Socratic discussions. A formal research paper is required. All components of the ELA Common Core Standards are addressed in this course. The final exam is a local exam.



English 10 Honors

40 Weeks, 1 Credit

Students must sign up for this class in the spring of their 9th grade year and should seriously consider the recommendation of both their school counselor and 9th grade English instructor.

This course is for advanced students who have a strong interest in and aptitude for English. Students will study short stories, novels, poetry, drama, and nonfiction. All literature units will emphasize elements of genre, stylistic devices, comprehension, vocabulary, and figurative language. Narrative and descriptive writing will complement readings and journal writings, while exposition will include critical analysis and research. Grammar, usage, and mechanics will be taught throughout the course. Students will be expected to take part in discussions and give one formal speech. A summer assignment must be completed prior to the beginning of the course. All components of the ELA Common Core Standards are addressed in this course. The final exam is a local exam.

English 11

40 Weeks, 1 Credit

This course is designed around the reading and analysis of full-length novels, short stories, poetry, essays and articles. Speaking/dialogue about the works we read is encouraged. Composition, critical reading and thinking skills and productive classroom discussion are taught through the integrated, literature-based curriculum. A major research paper is required for the second semester. Awareness of college entrance testing format and preparation for the PSAT examination occur within this course. All components of the ELA Common Core Standards are addressed in this course. The final exam is the NYS ELA Common Core Regents exam.

English 11 Honors

40 Weeks, 1 Credit

Students must sign up for this class in the spring of their 10th grade year and should seriously consider the recommendation of both their school counselor and 10th grade English instructor.

English 11 Honors is a rigorous study of literature and rhetoric. The course emphasizes close examination of literary works of various genres. Students are expected to think, read, and speak independently and critically. Students practice expository and creative writing and receive instruction in vocabulary, usage, and the standard conventions of written English. A major research paper is required for the second semester. A summer assignment must be completed prior to the beginning of the course. Awareness of college entrance testing format and preparation for the PSAT examination occur within this course. All components of the ELA Common Core Standards are addressed in this course. The final exam is the NYS ELA Common Core Regents exam.

English 12

40 Weeks, 1 Credit

This is a full-year course for seniors. Students will study world literature from Greek drama to contemporary works. Writing assignments, both creative and expository, will be based primarily on the literature. In the fall, attention will be paid to college application essays and test-taking skills. A formal research paper is required. All components of the ELA Common Core Standards are addressed in this course. The final exam is a local exam.

AP English Literature and Composition

40 Weeks, 1 Credit

Students must sign up for this class in the spring of their 11th grade year.

Advanced Placement English is a rigorous course using materials frequently included in college freshman English literature and composition courses. Students will examine works of various genres with emphasis on novels, plays, poetry, and essays. Students are expected to read texts closely and examine them critically in preparation for class discussion, an integral part of the course. Writing assignments are frequent, both in class (on demand) and outside of class (process). Students may earn college credit, depending on test performance and the college they attend. A major summer assignment must be completed prior to the beginning of the course. All components of the ELA Common Core Standards are addressed in this course.

All students enrolled in this course must take the AP Literature Exam. Students are expected to pay for the AP exam fee, which will be determined by the College Board. The final exam is a local exam.

Digital Media Literacy

20 Weeks, ½ Credit

Grades 9-12

How do we make sense of the world through social media and the internet? How do we know that what we see and share is accurate? Students in this course will develop their critical thinking skills and learn how to better find, evaluate, and use information online. This is an asynchronous online course with weekly assignments.

Social Studies

Graduation Requirements

4 credits of Social Studies + Regents Exams in Global History and US History

Global History 1

40 Weeks, 1 Credit

Grade 9 begins with the Paleolithic Era and the development of the first civilizations, continues with an examination of classical societies, and traces the expansion of trade networks and their global impact. The course emphasizes the key themes of interactions over time, shifts in political power, and the role of belief systems. While the course emphasizes the importance of historical and spatial thinking, all of the social studies practices and standards are included in the study of global history and geography. [Skills are developed in Global 1 that will serve as a basis for the remainder of high school social studies classes.](#) The course is required of all ninth graders. The final exam is a local exam.

Global History 2

40 Weeks, 1 Credit

Global II is a continuation of Global I. This course picks up with a review of the world in 1750 and then quickly delves into the rise of Revolutions ranging from the cries for Liberty in the French Revolution to the swirling smoke of the Industrial Revolution. We then quickly jump into the Age of Imperialism and Nationalism leading directly to World War I & II and the resulting Cold War. We end the course with a detailed analysis of the Modern World since 1945 with a heavy emphasis on current events. Students will be expected to be able to identify enduring historical issues in preparation for the Global Regents Exam. The final exam is the Global History and Geography Regents Exam that heavily emphasizes Global History II.

U.S. History and Government

40 Weeks, 1 Credit

Prerequisite: successful completion of the Global History courses.

This course is a study of U.S. History and Government with an emphasis on the Constitution, American political system, and modern American History from Colonial beginnings to the present. There is an emphasis on economic, social, foreign policy themes, and the Constitution. The final exam is the U.S. History and Government Regents.

Participation in Government

20 Weeks, ½ Credit

This one-semester course is designed to aid students in developing a better understanding of self-government and to give them the knowledge and the skills to be committed, capable, and active citizens. Emphasis will be on the rights and responsibilities of citizens in a democracy. This course is required for graduation for all students. It is understood that this course is to be taken upon successful completion of Global Studies I and II, as well as U.S. History and Government. The final exam is a local exam.

Economics and Economic Decision-Making

20 Weeks, ½ Credit

This is a one-semester course designed to provide students with the economic knowledge and skills that will enable them to function as informed and economically literate citizens in our society and in the world. Emphasis will be on the practical understanding and use of economic decision making. This course is required for graduation for all students. It is understood that this course is to be taken upon successful completion of Global Studies I and II, as well as U.S. History and Government. The final exam is a local exam.



Social Studies Electives:

The following courses are to be taken in addition to, not in lieu of, the senior and/or junior Social Studies courses.

Race, Class, and Gender in American Society

40 Weeks (every other day) or 20 Weeks, semester, ½ credit
Grades 11-12

Is the American Dream still a possibility? Are girls smarter than boys? Does race affect your likelihood of going to college? Through discussions, videos and field assignments, this course examines the concepts of race, class and gender and how they shape the structure of the United States. There is heavy emphasis on discussion, sharing your opinions and hearing the unique ideas of others. There is also a reading and writing component to the course. The final exam is a portfolio final project.

The 1960s

20 Weeks, semester, ½ credit
Grades 11-12

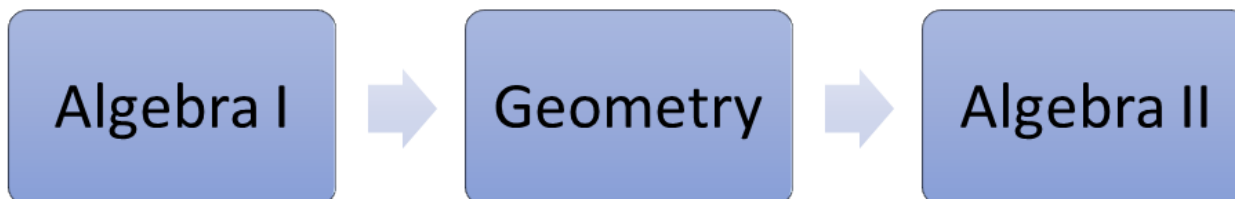
This course will explore the pivotal events and people related to the turbulent decade of the 1960s in the United States. Topics will include but not be limited to the Kennedy years, the Civil Rights movement, the Space Race, and the Vietnam War. Extensive film and archival footage will be used throughout the course. **Because of the nature of the course, it will be open only to juniors and seniors, preferably seniors.** Expectations of the course include a willingness to discuss, research, and share information throughout the semester. Each student will be required to secure parental permission to view course material because of the nature of the topics that will be explored.

Mathematics

Graduation Requirements

3 credits of Mathematics + 1 Mathematics Regents Exam

Regents Mathematics Course Sequence

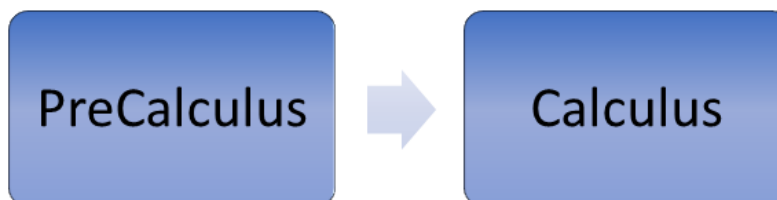


Regents Exams

In order to earn a Regents Diploma with Advanced Designation, a student must pass two additional mathematics assessments (i.e. Geometry and Algebra II) and one additional science assessment.

To earn a Regents Diploma with Advanced Designation with Honors, a student needs to have a computed average score of 90 or higher on all Regents examinations required for the Regents Diploma with Advanced Designation (no rounding up is permitted).

Additional Mathematics Courses



Students planning to attend college should take a mathematics course for all four years of high school as many colleges recommend this. Even if your future college course of study does not focus on mathematics, colleges embrace well-rounded, educated individuals.

Students aiming to apply to a selective four year college or who plan to major in a STEM (science, technology, engineering, mathematics) related field should complete a precalculus course in high school.

If time and schedules allow, students who complete a calculus course in high school can take advantage of potential college credits and advanced placement. Additionally, students who take rigorous math classes that are offered at a high level in high school could help themselves stand out during the college application process.

Algebra I

40 Weeks, 1 Credit

ALGEBRA I is the first course in the Regents math sequence. The focal point is *functions*, including linear, exponential and quadratic. All future mathematics courses build upon the foundation developed in Algebra I.

Students will continue to develop their expertise with the New York State Standards for Mathematical Practice:

- ❖ make sense of problems
- ❖ reason abstractly and quantitatively
- ❖ construct viable arguments
- ❖ critique the reasoning of others
- ❖ model with mathematics
- ❖ use appropriate tools strategically
- ❖ attend to precision
- ❖ look for and make use of structure
- ❖ look for and express regularity in repeated reasoning

Students successfully completing this course will have completed one (1) credit towards the three (3) mathematics credits required for graduation. Students will sit for the Algebra I Regents Exam at the end of the course.

Geometry

40 Weeks, 1 Credit

Prerequisite: Algebra I

GEOMETRY is intended to be the second course in the Regents mathematics sequence. Logical arguments are utilized to prove relationships of congruence and similarity in 2D shapes and 3D objects. Ratios of angles in triangles are studied to construct an understanding of Trigonometry.

Students will continue to develop their expertise with the New York State Standards for Mathematical Practice:

- ❖ make sense of problems
- ❖ reason abstractly and quantitatively
- ❖ construct viable arguments and critique the reasoning of others
- ❖ model with mathematics
- ❖ use appropriate tools strategically
- ❖ attend to precision
- ❖ look for and make use of structure
- ❖ look for and express regularity in repeated reasoning

Students successfully completing this course will have completed one (1) credit towards the three (3) mathematics credits required for graduation. Students will sit for the Geometry Regents Exam at the end of the course.

Algebra II

40 Weeks, 1 Credit

Prerequisite: Algebra I

ALGEBRA II is intended to be the third and final course in the Regents mathematics sequence. It is a continuation and extension of the previous two Regents mathematics courses. Students will build on their work with functions in Algebra I and extend their learning to include polynomial, rational, radical, and trigonometric functions. Students synthesize and generalize what they have learned about a variety of function families and identify appropriate types of functions to model a situation.

Students will continue to develop their expertise with the New York State Standards for Mathematical Practice:

- ❖ make sense of problems
- ❖ reason abstractly and quantitatively
- ❖ construct viable arguments and critique the reasoning of others
- ❖ model with mathematics
- ❖ use appropriate tools strategically
- ❖ attend to precision
- ❖ look for and make use of structure
- ❖ look for and express regularity in repeated reasoning

Students successfully completing this course will have completed one (1) credit towards the three (3) mathematics credits required for graduation. Students will sit for the Algebra II Regents Exam at the end of the course.

PreCalculus AB

40 Weeks, 1 Credit

Prerequisite: Algebra II

PreCalculus AB is necessary for all students who plan to take AP Calculus. Topics include: linear functions and inequalities, conic sections, curve sketching with critical points, exponential and logarithmic functions with problems in exponential growth and decay, advanced trigonometry including DeMoivre's theorem, polar coordinates, and sequences and series. If time allows, linear systems, matrices, and determinants will be included. The course concludes with the theory of limits.

This is a concurrent enrollment (dual credit) course with Tompkins Cortland Community College. Students who successfully complete this course will earn a total of eight (8) TC3 college credits, which can be transferred to many colleges and universities.

Advanced Placement[®] Calculus

40 Weeks, 1 Credit

Prerequisite: PreCalculus AB or consent of the instructor

The Advanced Placement[®] (AP[®]) Calculus course follows the AP[®] Calculus Course and Exam Description. Course study will include concepts, methods and applications of differential and integral calculus. The content of the course is roughly equivalent to that of a first semester college-level calculus course.

Students can earn college credit, advanced placement, or both with their AP[®] Exam scores, depending on the policy of the colleges they are interested in.

All students enrolled in this course must take the AP[®] exam in May. Students are expected to pay for the AP exam fee, which is determined by the College Board.



Electives Eligible for Mathematics Credit				
Video Games & Misinformation	Money & Banking	Intro to Programming	AP Statistics	BOCES Math

The Mathematics of Video Games & Misinformation

40 Weeks, 1 credit



Prerequisite: Algebra I

What do video games and misinformation have in common? Math & Computer Science!

Students in this course will spend the first semester using mathematical concepts (such as coordinate planes, order of operations, ratio and proportion, domain and range, and function composition) to design and debug a simple video game.

The second semester will be spent using statistics (such as tables, charts, graphs, probability, sample size, and standard deviation) to explore how data can be presented to persuade, and perhaps mislead, an audience.

The course is also an introduction to computer science and the computer programming language Pyret, which is similar to languages such as Python and JavaScript.

Money & Banking

40 Weeks, 1 credit

Prerequisite: Algebra I

This course covers the New York State Business Mathematics Curriculum. Lecture, small group work, discussions, and cooperative learning are the typical modes of instruction used to help students apply fundamental mathematics concepts to solve everyday life business problems that they will encounter throughout their lives. Topics include: gross/net pay, bank reconciliation, compound interest, single payment/installment loans, automobile/homeowner's insurance premiums, and stock/bond purchases/sales.

This is a concurrent enrollment (dual credit) course with Tompkins Cortland Community College. Students who successfully complete this course will earn a total of three (3) TC3 college credits, which can be transferred to many colleges and universities.

Introduction to Programming

20 Weeks, ½ Credit

Prerequisite: None

This course introduces object-oriented computer programming with the JavaScript or Python programming language by creating animations and simple games. The curriculum utilizes project-based learning. This course is listed in the mathematics course guide because it is taught by a mathematics teacher, however the only mathematics used in this course is arithmetic and some spatial reasoning.

Advanced Placement[®] Statistics

40 weeks, 1 Credit

Prerequisite: Algebra I, Geometry and Algebra II, or consent of the instructor

The Advanced Placement[®] (AP[®]) Statistics course follows the AP[®] Statistics Course and Exam Description. It introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. This course is an excellent option for students with a wide range of interests, and varied mathematical backgrounds. A statistics course is required for many college majors including psychology, sociology, health sciences, and business. AP[®] Statistics may be taken concurrently with PreCalculus AB or AP[®] Calculus.

Students who successfully complete the course and score well on the AP[®] examination may receive credit, advanced placement, or both for an introductory level college statistics course.

All students enrolled in this course must take the AP[®] exam in May. Students are expected to pay for the AP[®] exam fee, which will be determined by the College Board.

Science

Graduation Requirements

3 Regents Science Core Courses Includes: 1 Life Science & 1 Physical Science & 1 additional science course + 1 Science Regents Exam

Standard course sequence:

9th Grade - Biology

10th Grade - Earth and Space Science

11th Grade - Chemistry

12th Grade - Students may elect to take Astronomy, Forensics, Regents Physics, Dual Credit Physics, AP Biology, or New Visions

Students may elect to take Astronomy or Forensics as a second science class in grades 10-12. These courses should not be substituted for Regents or AP level work. Students may take Chemistry in grade 10 if they meet the requirements in the Chemistry course description; this allows students more options in grades 11 and 12.

Biology

40 Weeks, 1 Credit

Grades 9–12

Biology covers the NYS core curriculum stressing the MST's standard 1 and 4. Topics include scientific inquiry, biochemical processes that maintain dynamic equilibrium, cell biology, human anatomy and physiology, biology of unicellular organisms, disease, reproduction and development, genetics, evolution and ecology. Along with the lecture periods, two or three additional laboratory periods are required every week. Mastering lab skills, accessing scientific information, and connecting biological concepts with math, science, technology and other fields of study will be stressed. Application of knowledge to real life problems will be practiced. The final exam is the NYS Biology Regents.

Earth and Space Sciences

40 Weeks, 1 Credit
Grades 9-12

Prerequisite: Biology

Earth and Space Science is designed as an introductory course to the physical sciences after Biology. The course encourages students to explore the processes of change on Earth and space. Units of study include Rocks and Minerals, Earthquakes, Energy in the Environment, Geological History, Weather, Climate, Natural Disasters and Astronomy. Emphasis is placed on examining and applying core concepts from the charts and graphs in the *Earth Science Reference Tables* for students to develop a deep understanding of the content. Throughout the year, timely environmental issues such as climate change, environmental pollution and sustainability will be explored. The final exam is the NYS Earth and Space Sciences Regents.



Physical Science

40 Weeks, 1 Credit
Grades 11-12



Prerequisites: Biology and Earth and Space Sciences

Physical Science is a hands-on course that integrates principles of chemistry and physics. It emphasizes inquiry-based learning, process skills, and higher order thinking skills. Instruction is based on the Next Generation Science Standards in Physical Science. Chemistry units include: composition of matter, atomic structure and periodic table, and chemical bonds and reactions together with basic nuclear chemistry. Physics units include: forces and motions; conservation of energy, electricity and magnetism; and wave phenomena, characteristics, behavior, including electromagnetic and sound waves. Experimentation is the basis of science, laboratory investigations are an integral part of this course. The final exam is a local exam.

Chemistry

40 Weeks, 1 Credit
Grades 10-12

Prerequisites: Algebra, Biology, and Earth Science (Please read course description for more details).

Regents Chemistry covers the study of matter, energy, atomic structure, nuclear, periodic table, bonding, kinetics and equilibrium, acids and bases, electrochemistry, and organic compounds through a laboratory experience. Laboratory work is essential to understanding and required to take the Regents Exam at the end of the year. Students will use mathematical analysis with emphasis on underlying principles to solve problems and equations. Typically scheduled for 11th grade, students must have successfully completed a course in Algebra. Incoming sophomores with an interest in pursuing the sciences and who have not already taken Earth Science, may enroll in chemistry if they maintain a 92% average in Regents Biology and receive a 92% on the Biology Regents exam. Prior to consideration, students must secure teacher recommendation and provide written rationale for why they wish to take Chemistry in Grade 10. The final exam is the NYS Chemistry Regents.

Physics

40 Weeks, 1 Credit
Grades 11-12

Prerequisite: Algebra and Geometry

Regents Physics covers the study of mechanics (motion, force, work, energy), waves (sound, light), electricity and magnetism (static, circuits, magnetic fields, induction), and modern physics through conceptual development, laboratory experience, and mathematical analysis. Laboratory work is essential to understanding and required to take the Regents Exam at the end of the year. **Typically scheduled for 11th or 12th grade, strong algebra skills are essential to success. Basic trigonometric functions/math is also frequently used.** The final exam is the NYS Physics Regents.

Physics (Dual Credit)

40 Weeks, 1 Credit
Grades 11-12

Prerequisite: Algebra and Geometry

Physics (Dual Credit) covers the study of mechanics (motion, force, work, energy), rotational dynamics, fluid mechanics, thermodynamics, optics (lenses and mirrors), waves (sound, light), electricity and magnetism (static, circuits, magnetic fields, induction, capacitors), and modern physics through conceptual development, laboratory experience, and mathematical analysis. **All topics on the AP Physics 1 and 2 exams are covered within this course allowing students to take the AP in May. Students are expected to pay for the AP exam fee, which will be determined by the College Board.** Laboratory work is essential and necessary for the course and understanding; it is required to take the Regents Exam at the end of the year. **All Regents topics are covered, students will be signed up to take the Regents exam at the end of the so they can receive Regents credit as well.** Typically scheduled for 11th or 12th grade, good algebra skills are essential to success. The final exam is a local exam.

- **This is a Concurrent Enrollment course with Tompkins Cortland Community College. Students who successfully complete this course may earn a total of 8 college credits, which are transferable to many colleges and universities.**

Advanced Placement Biology

40 weeks, 1 Credit
Grade 11-12

Prerequisite: This course may be taken after completion of both Regents Biology and Chemistry with an earned average in each prerequisite course of 90% or above. Interested students not meeting this prerequisite must obtain a recommendation from the chemistry teacher and permission from the AP Biology teacher.

The AP Biology course is designed to enable students to develop advanced inquiry and reasoning skills, such as designing a plan for collecting data, analyzing data, applying mathematical routines, and connecting concepts within and across domains. This AP Biology course is equivalent to a two-semester college introductory biology course in which students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular energetics and communication, genetics, information transfer, ecology, and interactions.

All students in this course must take the Advanced Placement exam. Students are expected to pay for the AP exam fee which will be determined by the College Board.

Forensic Science

40 weeks, 1 Credit
Grade 11-12

Forensic Science is a discussion and practical laboratory course that integrates three major disciplines of science (Physical Science, Biology and Chemistry) in the study of objects that relate to a crime. This course focuses on the collaboration, identification and analysis of crime scene evidence that can be used in a court of law. Emphasis will be placed on the methods that link suspect, victim and crime scene. Inquiry-based exercises will include fingerprinting, handwriting analysis, blood typing, hair and fiber examination, ballistics, toxicology and DNA analysis. Current events and case studies will be explored. The final exam is a local exam.

Astronomy

40 weeks, 1 Credit
Grade 11-12

Introductory Astronomy is a general study of the fundamental principles of astronomy. The course concerns motion of the universe (earth, planets, the solar system, stars), the evolution of the universe and the solar system, and exotic stellar phenomenon (black holes, white dwarves, wormholes, supernova). We will also answer the popular questions: Why do we see constellations when we look up and what are the stories behind them? How did the Earth and other planets form? How far does space go? Could there be life on other planets? These concepts will be explored in this full year astronomy course.

This course is designed to help students learn science concepts while addressing some of the most common questions about space. Students who choose this course should have successfully completed biology, have mastered basic algebra skills, and be curious about what is beyond Earth. The final exam is a local exam.

- **This is a Concurrent Enrollment course with Tompkins Cortland Community College. Students who successfully complete this course may earn a total of 3 college credits, which are transferable to many colleges and universities.**

World Languages

Graduation Requirements

1 credit of advanced study in a single world language

Sequence Notes

- **All students must earn one high school credit in world language.** This credit may be earned by passing 7th and 8th grade Spanish or French; or by taking and passing a high school foreign language class.
- All students entering high school in 2001 and thereafter who want to obtain a **regents diploma with advanced designation** must take at a minimum 3 years of Spanish or French and earn a passing grade of 65% on the **level 3 local exam**.
- Strong retention of material from year to year is key to success in subsequent levels. A grade of 75% on the Level 2 Final Exam is required for advancement to Level 3.
- Students may substitute the 3 credit world language requirement with a 5 credit sequence in music, art, business, or career and technology education.
- Students who continue through Level 5/AP and meet the requirements established by the NYS Office of Bilingual Education and World Languages will be eligible to receive the **NYS Seal of Biliteracy** on their diplomas.

French 2

40 weeks, 1 credit

Prerequisite: French 1

This course builds upon the foundation of French 1 and is an intermediate step in preparation for the local exam at the end of French 3. The course goal continues to be oral communication, with emphasis on listening, comprehension and speaking. Students continue to expand their French vocabulary and understanding of French grammar. Social and cultural studies of the French-speaking world provide the context for the students' study of French. The final exam is a local exam. Strong retention of material from year to year is essential for success in subsequent levels. **A grade of 75% on the Level 2 Final Exam is required for advancement to Level 3.**

French 3

40 Weeks, 1 Credit

Prerequisite: French 2

This course includes extensive practice in listening and reading. Writing is approached as a written means of communication, with emphasis on short letters and compositions in which students apply skills acquired in French 1 and 2 and which are further developed in level 3. Speaking skills also continue to be developed as students use French to discuss the topics outlined in the New York State Checkpoint B curriculum. Development of strong listening and reading skills is essential for success in 4 Honors. Students will be exposed to more authentic listening via the use of podcasts, videos and TV. The final exam is a local exam.

French 4 Honors

40 weeks, 1 credit

Prerequisite: French 3 and successful outcome on the French level 3 exam.

Strong reading and listening skills in the language are very important to success in this course. A desire to deal with more challenging material and topics and to participate in a classroom conducted almost exclusively in the target language are also critical to success in the Checkpoint C classroom.

This course covers Checkpoint C material from the New York State Syllabus for World Language. According to the New York State Checkpoint C Resource Guide: "In the Checkpoint C classroom students receive instruction in the target language and participate in long-term units of study. Checkpoint C represents a more advanced and serious study of the language and culture and is seen as a bridge to further language studies that might occur in the community college, university, language school or workplace." The final exam is a local exam.

French 5

40 Weeks, 1 Credit

Prerequisite: French 4H

Students who would like to continue their study of French but who do not want to take the AP exam should enroll in this course. This advanced level course is taught in conjunction with the AP French Language course. Students will do the same units as AP but will not do AP preparation or grammar that is specific to the AP exams. The grading of written and oral work will be based on a more communicative rubric. The final exam is a local exam.

Advanced Placement French Language

40 Weeks, 1 Credit

Prerequisite: French 4H

This Advanced Placement French Language course encompasses aural/oral skills, reading comprehension, advanced grammar, and composition. Such a course, emphasizing the use of French for active communication has the following objectives:

- The ability to comprehend formal and informal spoken French
- The acquisition of vocabulary and a grasp of structure to allow the easy, accurate reading of newspaper and magazine articles as well as of modern literature in French
- The ability to compose expository passages
- The ability to express ideas orally with accuracy and fluency

All students enrolled in this course must take the AP exam. Students are expected to pay for the AP exam fee, which will be determined by the College Board. The final exam is a local exam.

Spanish 1

40 Weeks, 1 Credit

This course in beginning Spanish is for students with no prior experience studying a world language or who need one world language credit for graduation. Students are introduced to the culture of the Spanish-speaking world; they practice vocabulary and elementary grammar structure with the intention of communicating in Spanish from the beginning of the course. This course serves as a prerequisite for Spanish 2. **This course is not offered every year.** The final exam is a local exam.

Spanish 2

40 Weeks, 1 Credit

Prerequisite: Spanish 1

This course builds upon the foundation of Spanish 1 and is an intermediate step in preparation for the local exam at the end of Spanish 3. The course goal continues to be oral communication, with emphasis on listening comprehension and speaking. Students continue to expand their Spanish vocabulary and understanding of Spanish grammar. Social and cultural studies of the Spanish-speaking world are presented through reading. The final exam is a local exam. Strong retention of material from year to year is key to success in subsequent levels. **A grade of 75% on the Level 2 Final Exam is required for advancement to Level 3.**

Spanish 3

40 Weeks, 1 Credit

Prerequisite: Spanish 2

This course includes extensive practice in listening and reading. Writing is approached as a written means of communication, with emphasis on short letters and compositions in which students apply skills acquired in Spanish 1 and 2 and which are further developed in level 3. Speaking skills also continue to be developed as students use Spanish to discuss the topics outlined in the New York State Checkpoint B curriculum. Development of strong listening and reading skills is essential for success in 4 Honors. Students will be exposed to more authentic listening via the use of podcasts, videos and TV. The final exam is a local exam.



Spanish 4 Honors

40 Weeks, 1 Credit

Prerequisite: Spanish 3 and successful outcome on the local level 3 exam.

Strong reading and listening skills in the language are very important to success in this course. A desire to deal with more challenging material and topics and to participate in a classroom conducted almost exclusively in the target language, are also critical to success in the Checkpoint C classroom.

This course covers Checkpoint C material from the New York State Syllabus for World Language. According to the New York State Checkpoint C Resource Guide: “In the Checkpoint C classroom students receive instruction in the target language and participate in long-term units of study. Checkpoint C represents a more advanced and serious study of the language and culture and is seen as a bridge to further language studies that might occur in the community college, university, language school or workplace.” The final exam is a local exam.

Spanish 5

40 Weeks, 1 Credit

Prerequisite: Spanish 4H

Students who would like to continue their study of Spanish but who do not want to take the AP Spanish exam should enroll in this course. This advanced level course is taught in conjunction with the AP Spanish Language Course. Students will do the same units as AP but will not do AP preparation or grammar that is specific to the AP exam. The grading of written and oral work will be based on a more communicative rubric. The final exam is a local exam.

Advanced Placement Spanish Language

40 Weeks, 1 Credit

Prerequisite: Spanish 4H

This Advanced Placement Spanish Language course encompasses aural/oral skills, reading comprehension, advanced grammar, and composition. Such a course, emphasizing the use of Spanish for active communication has the following objectives:

- The ability to comprehend formal and informal spoken Spanish;
- The acquisition of vocabulary and a grasp of structure to allow the easy, accurate reading of newspaper and magazine articles as well as of modern literature in Spanish;
- The ability to compose expository passages;
- The ability to express ideas orally with accuracy and fluency.

All students enrolled in this course must take the AP exam. Students are expected to pay for the AP exam fee, which will be determined by the College Board.

Visual Arts

Graduation Requirements

1 credit of Art and/or Music

Sequence Notes

All students must earn at least 1 credit in Art and/or Music from classes approved for this requirement. These classes include: Studio-Digital Art, Design and Drawing for Production, Introduction to Engineering Design, General Music, Music Theory, Band, Chorus, or Orchestra. Such classes have been noted in descriptions.

Students may use a 5-unit sequence in Art in lieu of their World Language sequence requirement for completion of the Regents Diploma with Advanced Designation. However, all students must still earn one high school credit in world language.

Studio & Digital Art

40 Weeks, 1 credit

Grades 9-12

Studio Art is the foundational course for all other Visual Arts courses. Students will learn the fundamentals of how to think and perform as a visual artist. Students will utilize the Studio Thinking Habits of Mind to create imaginative and expressive works of art in diverse mediums (traditional studio mediums such as drawing and painting as well as digital mediums such as Photoshop and Glowforge technologies). Units of study are open-ended and allow for the student-artist to create works of their individual choosing. Students will also learn to formally document their art-making process to show how their ideas developed into fully elaborated works. Students will exhibit their works in student-led exhibitions.

- Students successfully completing this class will have fulfilled the fine arts requirement for graduation.
- Students successfully completing this class will have completed the prerequisite for Drawing.
- Students in any grade (9-12) may take this introductory level art class.



Drawing

20 Weeks, ½ Credit

Prerequisite: Studio-Digital Art

This course is a requirement for students to be enrolled in Painting, Ceramics, Design Studio, Advanced Drawing & Painting, or AP Art.

This course builds skills in drawing realistically through observation with a range of drawing media. Through demonstrations and individual exploration, students will learn techniques with pencil, charcoal, ink, chalk pastels, oil pastels, and digital media. Students will further develop their ability to plan works of art that communicate a concept, mood, or message, and to critique their own work and the work of others. Students will document their artistic process both in and outside of class as they practice techniques, explore ideas, and gather visual research and inspiration for their projects. Students will display their work in art exhibitions.

- **This is a dual-credit course with Tompkins-Cortland Community College. Students who successfully complete this course may earn 3 college credits, which are transferable to many colleges and universities.**

Painting

20 Weeks, ½ Credit

Prerequisite: Studio-Digital Art; and Drawing (OR Pass/Fail option if prerequisites have not been met, 10th-12th grade students only)

By the end of this course students will complete a portfolio which demonstrates skills in painting realistically using color, value, and texture. Students will work in a variety of painting media, including watercolor, tempera, acrylic, mixed media, and nontraditional art media. Students will study works of art by historical and contemporary artists, and create their own art influenced by these studies. Students will further develop their ability to critique their own work and the work of others. Students will document their artistic process both in and outside of class as they practice techniques, explore ideas, and gather visual research and inspiration for their projects. Students will curate and design art exhibitions throughout the course.

- **This is a dual-credit course with Tompkins-Cortland Community College. Students who successfully complete this course may earn 3 college credits, which are transferable to many colleges and universities.**

Design Studio

40 Weeks, 1 Credit

Prerequisite: Studio-Digital Art; and Drawing (OR Pass/Fail option if prerequisites have not been met, 10th-12th grade students only)

Do you want to learn new art techniques or make a difference with your art? Create layered artworks based on personal interests and current topics such as environmental issues. Students will learn to combine a variety of art-making approaches, such as printmaking, drawing, painting, and digital design. Students will document and share their process digitally and curate their own exhibition opportunities.

Ceramics

20 Weeks, ½ Credit

Prerequisite: Digital or Studio Art; and Drawing (OR Pass/Fail option if prerequisites have not been met, 10th-12th grade students only)

Create usable works of Art! Students will plan and build a series of functional clay objects such as coasters, boxes, cups and vessels. Starting with the basics of creating structurally sound pieces, students will learn to construct, decorate and glaze using hands-on techniques. Students are encouraged to incorporate personal interests and concerns into their work, while gaining inspiration from how other artists use clay. Students will keep an artist's journal to document their creations and share what they discover during the process. Students will display their work in art exhibitions.

- **This is a dual-credit course with Tompkins-Cortland Community College. Students who successfully complete this course may earn 3 college credits, which are transferable to many colleges and universities.**

Photography & Digital Illustration

40 Weeks, 1 credit

Prerequisite: Fine Arts graduation requirement completed, 11th and 12th grade students only.

In the first half of this course, students will learn the basics of manual-mode photography on DSLR cameras. Student work will start with craftsmanship or technique and build to advanced compositions to support meaningful concepts in the work. Skills covered will include lighting techniques, long-exposure, depth of field, bokeh effect, composing eye-catching shots and editing in Adobe Lightroom. Students will curate their works for a personal portfolio as well as student-led exhibitions.

In the second half of this course, students will begin to develop Digital Illustration projects based on manipulation of photographic images and laser-cutting technology. Students will use Adobe Photoshop and Adobe Illustrator to create images and designs based on multiple-exposure techniques, typographic portraiture, projection, and choice work using the Glowforge laser cutter. Students will continue to build their portfolios to include their digital illustration works.

Advanced Drawing and Painting

40 weeks, 1 credit

Prerequisite: Studio-Digital Art, Drawing, and pursuing a sequence in Visual Arts. Portfolio review required as well as permission of instructor.

This course is highly recommended for junior visual art majors who are definitely planning to take Advanced Placement Studio in Art in their senior year in order to start considering themes for their Sustained Investigation portfolio. Senior visual art majors who are seriously interested in developing a portfolio that prepares them for a possible art career are also encouraged to take Advanced Drawing and Painting.

Advanced Drawing and Painting students will create a comprehensive, well-organized, and unique portfolio of artwork focusing on art materials and interests that are personally challenging. Creating art work which demonstrates strong observational skills in drawing and painting is a primary goal, but students are allowed to select materials outside of traditional drawing and painting options. Students will prepare and present their works to an outside adjudicator for the final exam in this course, and then display their portfolio in the end of year art exhibit. Students will also maintain an online art portfolio throughout the duration of this course. This course will have summer assignments that are for credit on the first five weeks progress report card.

AP Studio in Art in 2D Design or Drawing

40 weeks, 1 credit

Prerequisite: A sequence of courses in Studio and/or Digital Art and Permission of Instructor.

Students are expected to create a comprehensive, well-organized, and unique portfolio of artwork focusing on art materials and interests that are personally challenging. The portfolio must contain 15 works of art and/or process pieces centered on one topic (Sustained Investigation) and 5 pieces will be mailed in for examination (Selected Works). Students will also maintain an online art portfolio throughout the duration of this course and display their Sustained Investigation portfolio at the end of year art exhibit. This course will have summer assignments that are for credit on the first five weeks progress report card.

- **All students enrolled in this class must complete the AP Portfolio in 2D Studio Art+Design. Students are expected to pay for the AP exam fee, which will be determined by the College Board.**

Yearbook Design

40 Weeks, 1 credit

No prerequisite. Grades 9-12. May be taken Pass/Fail

This course introduces students to digital editing and publishing software, the basics of layout, typography, color theory, photography, journalistic ethics, interviewing, and writing copy. Students will practice

professionalism, collaboration, and organization as they work as part of the yearbook staff to plan, create, and market the Lansing High School Cayugan. Students will use Jostens' Yearbook Avenue software, as well as programs such as the Adobe Suite. Students are expected to delegate time every week to attend school events, interviewing, and taking photographs, and should prioritize their time accordingly. Students will have the opportunity to take on a leadership role and run for one of several editor positions. In addition to the yearbook, students will create several assignments related to preparing items for publication, which may include: portrait and action photography, a business card or logo, creating a unique font, a mock advertisement, interviewing a friend, family member, or local business member, and putting together their own individualized yearbook.

Design and Drawing For Production (DDP)

40 Weeks, 1 Credit

Grades 9-12

This course focuses on communicating solutions to problems, through a careful design process. The skills developed in DDP will include creating technical drawings and sketches by hand, as well as drawings and models using computer software. Some projects will include 3D printing, as well other tools and materials, for taking ideas from plans to product.

- **Students successfully completing this class will have fulfilled the fine arts requirement for graduation**
- **This course will not earn students any college credits**

Introduction to Engineering Design (IED)

40 Weeks, 1 Credit

Grades 9-12

Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects like designing a new toy or improving an existing product. These activities not only build knowledge and skills in engineering, but also empower students to develop essential skills such as problem solving, critical and creative thinking, communication, collaboration, and perseverance. Projects in this course develop a variety of skills, including 3D modeling and printing. This course is the first course in the **Project Lead The Way** sequence, and is recommended for students interested in continuing on to future engineering courses (POE, DE, and EDD).

- **Students successfully completing this class will have fulfilled the fine arts requirement for graduation.**
- **This is a dual-credit course through the PLTW program and Rochester Institute of Technology. Students who successfully complete the RIT course requirements may earn 3 college credits, which are transferable to many colleges and universities.**

Music

Graduation Requirements

1 credit of Art and/or Music

Sequence Notes

Students pursuing either a local or Regents diploma must earn one credit in Music and/or Art from classes approved for this requirement. These classes include: Art 1, Design and Drawing for Production, Introduction to Engineering Design, General Music, Music Theory, Band, Chorus, or Orchestra. Such classes have been noted in descriptions.

Students may use a 5-unit sequence in Music in lieu of their Foreign Language requirement for completion of the Regents Diploma with Advanced Designation. **However, all students must still earn one high school credit in foreign language.**

Mixed Chorus

40 Weeks, 1 Credit (Meets everyday) or ½ Credit (taken with Band or Orchestra; meets every other day)
Grades 9-12

The High School Mixed Chorus is open to any student who wishes to participate. No audition is required. It is designed to instruct students in the basic concepts of good vocal production and choral singing through the performance of a variety of music in the choral genre. Eligible members take a group lesson once a week and these lessons are on a rotating schedule. The lessons include the study of solo literature and vocal technique. The Mixed Chorus performs several evening concerts during the school year.

- **This course will yield 1 credit towards the fine arts graduation requirement. Students may take this course more than one year and earn additional credit.**

Varsity Chorale

40 Weeks, 1 Credit (Meets everyday) or ½ Credit (taken with Band or Orchestra; meets every other day)
Grades 10-12

Students who desire to be in Varsity Chorale must audition for the teacher. Auditions are held in May for the following academic year. If an accepted student does not uphold the high quality, work ethic, and performance expectations of the group throughout the year, they may be removed from the ensemble and placed in Mixed Chorus. Varsity Chorale performs a wide variety of literature spanning several hundred years of choral composition. The music performed by this group is more challenging, including a cappella songs, music in other languages and in a variety of styles. Eligible members take a group lesson once a week and these lessons are on a rotating schedule. The lessons include the study of solo literature and vocal technique. The Varsity Chorale performs several evening concerts throughout the school year.

- **This course will yield 1 credit towards the fine arts graduation requirement. Students may take this course more than one year and earn additional credit.**

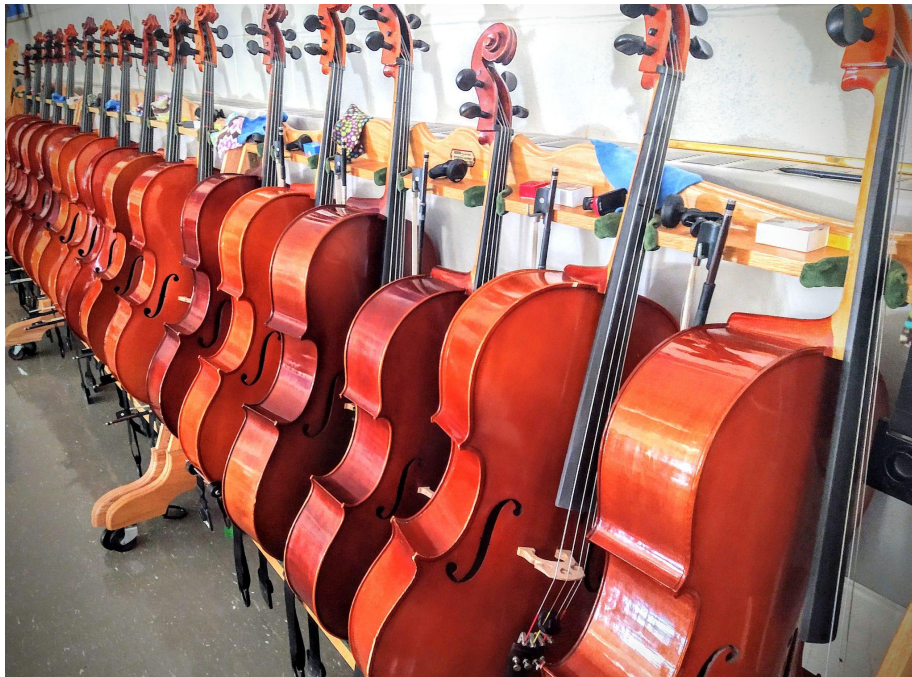
Orchestra (Strings)

40 Weeks, 1 Credit

Grades 9-12

The High School Orchestras meet daily to study and perform a wide variety of String and Symphony orchestra literature. All members take a group lesson once a week. These lessons are on a rotating schedule. The lessons include the study of scales and technical exercises, solo literature, chamber music, and orchestral techniques. The orchestras perform several evening concerts during the school year.

- **This course will yield 1 credit towards the fine arts graduation requirement. Students may take this course more than one year and earn additional credit.**



Symphony Orchestra (Woodwind, Brass, and Percussion)

40 Weeks, ½ Credit

Grades 9-12

Band students audition to participate in this ensemble. Students meet every other day with the string students. Symphony Orchestra studies and performs a variety of symphonic orchestra literature. Sectional/lessons will be rotated as part of the band lesson sequence. This ensemble performs several evening concerts during the school year.

- **This course will yield .5 credits towards the fine arts graduation requirement. Students may take this course more than one year and earn additional credit.**

Band

40 Weeks, 1 Credit

Grades 9-12

The Lansing High School Band rehearses daily and performs a variety of wind band literature as well as modern music such as movie soundtracks, jazz, rock, and pop. In addition to the daily rehearsal, band students attend one group lesson per week on a multi-period rotation focusing on developing technique, tone, and musicianship. Solo literature and chamber ensemble experiences are also available through lessons. The LHS Band performs several concerts throughout the year, and students also have the opportunity to participate in extracurricular honors bands.

- **This course will yield 1 credit towards the fine arts graduation requirement. Students may take this course more than one year and earn additional credit.**

Music: Its Role And Importance In Our Lives (General Music)

40 weeks, 1 Credit

Grades 9-12

This course explores the importance of music in all aspects of culture. Topics studied include but are not limited to: African drumming, the history of Rock and Roll, music in film, American Musical Theatre, Opera, ukulele, and music in advertising. The class uses project based learning and focuses on diverse learning styles.

- **This course will yield 1 credit towards the fine arts graduation requirement**
- **This is a dual-credit course with Tompkins Cortland Community College. Students who successfully complete this course may earn 3 college credits, which are transferable to many colleges and universities. Course requirements reflect appropriate expectations for local and dual credit.**

Music Theory I

40 Weeks, 1 Credit

Grades 10-12

Music Theory is an elective course dealing with elements of musical structure. The objectives of this course are: gain an understanding of the basic rules and principles involved in using the language of music, increase the ability to analyze music aurally and visually, and fulfill a primary prerequisite toward the development of skills in composing, arranging, harmonizing, and improvising music. Students should have a basic ability to read music to take this course, such as the level needed to participate in a music ensemble.

- **This course will yield 1 credit towards the fine arts graduation requirement.**
- **This is a dual-credit course with Tompkins Cortland Community College. Students who successfully complete this course may earn 3 college credits, which are transferable to many colleges and universities.**

AP Music Theory (Music Theory II)

40 Weeks, 1 credit

Grades 11-12

Prerequisite: Music Theory I

AP Music Theory is a continuation of concepts begun in Music Theory I, such as musical form, analysis, part writing, secondary function, chord progressions, sight singing, and aural dictation, culminating in the AP Music Theory exam in the Spring. The class demands a high level of independence from students, as much of the work is done on their own, meeting with the teacher to develop skills and gain feedback.

- **This is a dual-credit course with Tompkins Cortland Community College. Students who successfully complete this course may earn 3 college credits, which are transferable to many colleges and universities.**
- **All students enrolled in this course must take the AP exam. Students are expected to pay for the AP exam fee, which will be determined by the College Board.**

Business

Graduation Requirements

None Required

Sequence Notes

- Students may use a 5-unit sequence in Business in lieu of their Foreign Language requirement for completion of the Regents Diploma with Advanced Designation. However, **all students must earn one high school credit in foreign language.**
- Course offerings in the Business Department include a total of **17 college credits available for students to take.**

College Keyboarding & Document Processing

20 Weeks, ½ Credit

Grades 9-12

This course is designed for everyone to learn or improve their keyboarding skills. In this class, you will learn how to format everyday documents in your personal and professional life – memorandums, letters, outlines, and reports. Speed and accuracy development on the keyboard will also be addressed. Students will demonstrate mastery through daily typing exercises and timed production tests using Microsoft Word.

- **This is a concurrent enrollment course with Tompkins Cortland Community College. Students who successfully complete this course will earn 1 college credit, which is transferable to many colleges and universities.**

Sports Marketing

20 Weeks, ½ Credit

Grades 9-12

This is an introductory course which will help students develop a thorough understanding of marketing concepts and theories. The course is centered on the Marketing Mix and its implications on business practices in our society today. Specific topics include: target marketing and segmentation, sponsorship, event marketing, promotions, sponsorship proposals, and marketing plans. Case studies and real-life applications are utilized in discussing various marketing concepts. A special emphasis will be placed on the sports and entertainment industries and the impact marketing has on them.

- **This is a concurrent enrollment course with Tompkins Cortland Community College. Students who successfully complete this course will earn 3 college credits, which are transferable to many colleges and universities.**

Career & Financial Management

20 Weeks, ½ Credit

Grades 9-12

This course is designed to provide the necessary day-to-day skills that students will need when they graduate, are living on their own and are working full time. Students will be able to apply what they learn in this course to real-life applications such as: maintaining a budget, understanding the importance of credit and borrowing money, utilizing different forms of investment options, insurance related coverages and other business related topics. Practical simulations and guest speakers will also be incorporated into the class.

- **This is a concurrent enrollment course with Tompkins Cortland Community College. Students who successfully complete this course will earn 3 college credits, which are transferable to many colleges and universities.**

Microsoft Office

20 Weeks, ½ Credit

Grades 10-12

Prerequisite: College Keyboarding & Document Processing (suggested)

This course provides students with an opportunity to acquire skills and concepts essential for working in an electronic office. Specifically, the semester will focus on Microsoft Excel/Google Sheets and Microsoft PowerPoint/Google Slides. Students will have "hands-on" experience in performing many text processing and data processing applications on the computer. Topics of instruction include - data entry/storage, calculations, charts/graphs, comparative analysis, presentation organization, illustration, and enhancements.

- **This is a concurrent enrollment course with Tompkins Cortland Community College. Students who successfully complete this course will earn 2 college credits, which are transferable to many colleges and universities.**

Accounting 101

40 Weeks, 1 Credit

Grades 10-12

This course introduces basic accounting concepts with an emphasis placed on the accounting cycle. Students will learn to keep financial records for a service and retail business. Principles covered include the bookkeeping cycle, debit/credit theory, financial statements, use of various journals and ledgers, worksheets, accounts receivable/payable, buying/selling merchandise, and payroll systems.

- **This is a concurrent enrollment course with Tompkins Cortland Community College. Students who successfully complete this course will earn 4 college credits, which are transferable to many colleges and universities.**

Money & Banking

40 Weeks, 1 Credit

Grades 10-12

This course covers the New York State Business Mathematics Curriculum. Lecture, small group work, discussions, and cooperative learning are the typical modes of instruction used to help students apply fundamental math concepts to solve everyday life business problems that they will encounter throughout their lives. Topics include: gross/net pay, bank reconciliation, compound interest, single payment/installment loans, automobile/homeowner's insurance premiums, and stock/bond purchases/sales.

- **This is a concurrent enrollment course with Tompkins Cortland Community College. Students who successfully complete this course will earn 3 college credits, which are transferable to many colleges and universities.**

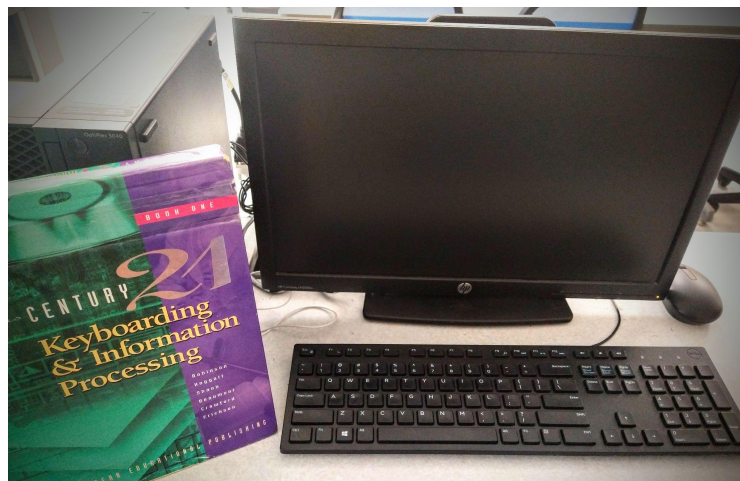
Web Design

20 Weeks, ½ Credit

Grades 9-12

Web Design is intended for people who want to develop dynamic and professional looking business or personal websites. This course helps students develop the foundation for creating your own website through the use of HTML, web graphics, and web editors. In addition, the tools needed to incorporate - text, tables, slide shows, graphics, animation, image maps, and navigation systems will also be addressed. The course covers web site development from A –Z, from design to the final published site. Students will apply what they have learned to the creation of a website as their final project.

- **This is a concurrent enrollment course with Tompkins Cortland Community College. Students who successfully complete this course will earn 1 college credit, which is transferable to many colleges and universities.**



Technology Education

Graduation Requirements

None Required

Sequence Notes

- All students must earn at least 1 credit in Art and/or Music from classes approved for this requirement. These classes include: Art 1, Design and Drawing for Production, Introduction to Engineering Design, General Music, Music Theory, Band, Chorus, or Orchestra. Such classes have been noted in descriptions.
- Students may use a 5-unit sequence in Technology in lieu of their Foreign Language requirement for completion of the Regents Diploma with Advanced Designation. However, **all students must earn one high school credit in foreign language.**
- Although any student may enroll in any Project Lead The Way (PLTW) course, the sequence is designed to begin with Introduction to Engineering Design and end with the senior course: Engineering Design and Development (EDD). Students not following this sequence path may have difficulty keeping up with the course load and subject matter.

The Project Lead The Way (PLTW) curriculum is a nationally renowned curriculum which allows students to apply their math and science skills to real world problems. Students will have the opportunity to explore broad fields of engineering to help them make career choices. Each of the classes uses state-of-the-art technology equipment and software and is taught in a laboratory setting that involves projects rather than lectures to learn the material. Classes focus on problem-solving and encouraging students to work in teams. In some cases students may earn college credit through special agreements with area colleges.

Design and Drawing For Production (DDP)

40 Weeks, 1 Credit

Grades 9-12

This course focuses on communicating solutions to problems, through a careful design process. The skills developed in DDP will include creating technical drawings and sketches by hand, as well as drawings and models using computer software. Some projects will include 3D printing, as well other tools and materials, for taking ideas from plans to product.

- **Students successfully completing this class will have fulfilled the fine arts requirement for graduation.**
- **This course will not earn students any college credits.**

Introduction to Engineering Design (IED)

40 Weeks, 1 Credit

Grades 9-12

Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects like designing a new toy or improving an existing product. These activities not only build knowledge and skills in engineering, but also empower students to develop essential skills such as problem solving, critical and creative thinking, communication, collaboration, and perseverance. Projects in this course develop a variety of skills, including 3D modeling and printing. This course is the first course in the **Project Lead The Way** sequence, and is recommended for students interested in continuing on to future engineering courses (POE, DE, and EDD).

- **Students successfully completing this class will have fulfilled the fine arts requirement for graduation.**
- **This is a dual-credit course through the PLTW program and Rochester Institute of Technology. Students who successfully complete the RIT course requirements may earn 3 college credits, which are transferable to many colleges and universities.**

Principles of Engineering (POE)

40 Weeks, 1 Credit

Grades 10-12

POE is the second course in the Project Lead The Way (PLTW) High School Technology sequence. This course provides an overview of engineering and engineering technology. Students develop problem-solving skills by working alone and in groups to tackle real-world engineering problems. Through theory and practical hands-on experiences, students address the emerging social and political consequences of technological change. The course of study includes the Design Process, Engineering Systems, Materials and Material Testing, Thermodynamics, Statics, and Engineering Quality and Reliability.

- **This is a dual-credit course through the PLTW program and Rochester Institute of Technology. Students who successfully complete the RIT course requirements may earn 3 college credits, which are transferable to many colleges and universities.**

Digital Electronics (DE)

40 Weeks, 1 Credit
Grades 10-12

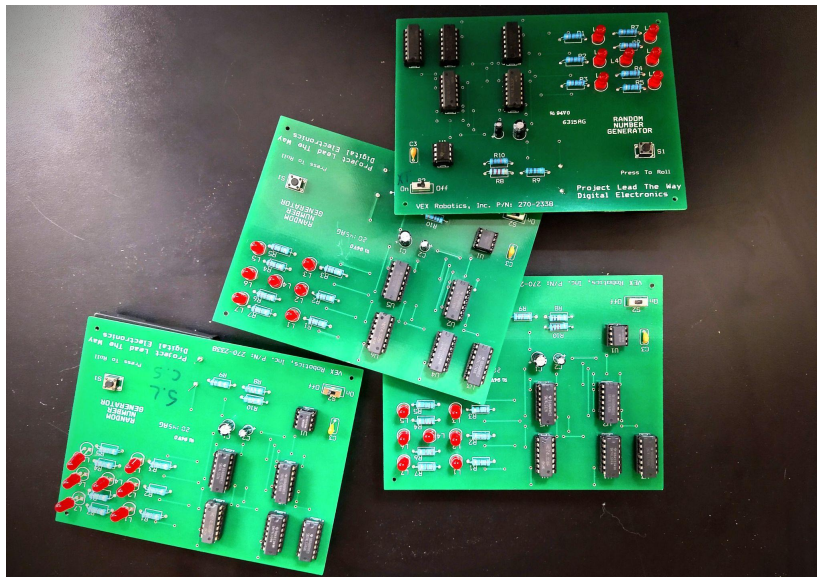
Digital Electronics is the third specialization course in the Project Lead The Way (PLTW) High School Technology sequence. Digital electronics is the foundation of all modern electronic devices such as mobile phones, MP3 players, laptop computers, digital cameras and high-definition televisions. Students are introduced to the process of combinational and sequential logic design, engineering standards and technical documentation. This course is designed for 10th or 11th grade students.

- **This is a dual-credit course through the PLTW program and Rochester Institute of Technology. Students who successfully complete the RIT course requirements may earn 3 college credits, which are transferable to many colleges and universities.**

Engineering Design and Development (EDD)

40 Weeks, 1 Credit
Grades 12

In this capstone course, students work in teams to design and develop an original solution to a valid open-ended technical problem by applying the engineering design process. Students perform research to choose, validate, and justify a technical problem. After carefully defining the problem, teams design, build, and test their solutions while working closely with industry professionals who provide mentoring opportunities. Finally, student teams present and defend their original solution to an outside panel. This course is appropriate for 12th grade students.



Physical Education and Health

Graduation Requirements

2 Credits of Physical Education – ½ credit of P.E. per year

1/2 credit of Health Education

Physical Education

40 Weeks, ½ Credit

The curriculum offers a variety of activities, such as badminton, pickleball, basketball, disc golf, floor hockey, fitnessgram assessments, lacrosse, racquetball, soccer, softball, swimming, table tennis, team handball, tennis, ultimate frisbee, volleyball, weight training, archery and yard games. The course emphasizes fitness and team sports as well as focusing on lifetime sports and the benefits of an active lifestyle. This course includes skill and written assessments relating to each unit.

Health

20 Weeks, ½ Credit

Grades 10-12

This course addresses the physical, mental/emotional, and social aspects of health. The curriculum is designed to expose students to a variety of health related topics in the hopes that it will influence students to make positive decisions about their own well-being. Some units in the curriculum are: Mental Health and Illness, Healthy Relationships, Human Sexuality, Communicable and Non-Communicable disease, Drugs, Alcohol and Tobacco, Nutrition, and Stress Management. Additionally, the newly added State graduation requirement of Hands-Only CPR & AED Training will be provided in this class. Students are evaluated with quizzes/tests, projects, individual research assignments, and a cumulative final exam.

- If a student cannot fit Health into their schedule by their Junior year and intends to continue on with all other coursework through senior year, they may take an online Health class. Students must be capable of working independently and have strong time management and communication skills to be successful in this online platform.

Exercise & Nutrition

20 Weeks, ½ Credit

Grades 10-12

This class focuses on personal awareness of individual health through the areas of stress, nutrition and exercise. Planning and participating in a successful exercise and nutritional program will be a part of this course. This class combines lectures and hands-on activities that give students the opportunity to put theory into practice. Warning: You may sweat and have to eat food.

Other

Driver Education

20 weeks (fall semester), ½ credit
Grades 11-12



Prerequisite: Driving Permit/License required

This course is based on an integrated curriculum of classroom theory, simulations, and actual behind the wheel experience. The primary emphasis of these activities will focus on safety and defensive driving. ***Specific topics to be discussed will include - Motor Vehicle Law; Driving Procedures; Adverse Weather/Night Driving; Handling Emergencies; Alcohol & Other Drugs; Buying/Insuring/Registration of a Vehicle; and Preventive Maintenance.*** Students successfully completing this program will receive their MV-285 (Senior License Certificate). Per NYS DMV Guidelines, any student who does not meet the required course hours will jeopardize their eligibility for this certificate.

Career and Technical Education

In addition to regular classes at Lansing High School, students may elect to attend TST BOCES to complete a sequence in career and technical education beginning their junior year.

- Students may use a 5 unit sequence in Career and Technical Education in lieu of their World Language requirement for completion of the Regents Diploma with Advanced Designation. However, **all students must take one credit of world language.**
- Students who are interested in a BOCES program can visit the Career and Tech campus in the spring of their sophomore year. Students can register for CTE classes through their school counselor. Availability in the program is limited so registration cannot be guaranteed.

Career and Tech Education (CTE) programs educate students in a variety of technical areas, preparing them for entering the workforce with a marketable skill and for continuing on to higher education. These programs are taught for a minimum of 2 hours during the AM or PM session each day, and all courses provide a job shadow and/or internship experience over the course of their completed curriculum. Bus transportation is provided daily to and from the Career and Tech Center. Students continue their major academic subjects in the remaining three or four periods at the home school district. Students receive 2 – 4 credits for each year of their Career and Tech Program.

All Career and Tech classes are currently New York State approved. To be approved, courses must meet rigorous guidelines related to assessment, an academically strong curriculum that is aligned with the New York State Learning Standards, and relevance to industry practices. All CTE courses meet the NYS graduation requirement to allow students to earn the CTE Pathway by attaining mandatory CDOS hours, and second year students are eligible to earn a Technical Endorsement upon completion of the two year curriculum. Most Career and Tech courses offer integrated math and science credit, and some classes offer Concurrent Enrollment college credit. All Career and Tech Programs have articulation agreements with colleges that have a related program.

Successful Career and Tech students are eligible to participate in National Leadership Organizations, such as NTHS (National Technical Honor Society) <https://nthsofamerica.org/>, FFA (Future Farmers of America) <https://www.ffa.org/>, and SkillsUSA <https://www.skillsusa.org/>. Students involved in these organizations compete at the regional, state and national level in Career and Tech related competitions, and attend workshops and conferences to enhance their leadership skills.

For more information on these and other Career and Tech Programs, visit the website at:

<http://tstcte.org/>

Career and Tech Center (607) 257-1551

Director: Ms. Cindy Walter

Animal Science

1st Year – PM Session & 2nd Year – AM Session

<https://www.tstcte.org/animal-science.html>

Course Description: This program prepares students for a wide range of careers related to animal care and veterinary science. The driving objective of the course is client education in order to allow students to effectively recall and communicate with others on the practice care and management of different species of animals. Topics of study include: animal health and disease, nutrition, reproduction, parasitology, anatomy and physiology, and animal behavior. Students work with a variety of companion and production animals to enhance their skills in animal handling, care and management. Students will perform clinical procedures that are commonly performed at veterinary clinics and learn the technical skills to operate and manage a dog grooming clinic. Leadership opportunities are available in this class through the local chapter of the National Student Leadership Organization, FFA (Future Farmers of America), where students participate in leadership training, workshops and national conferences.

Animals in the Animal Science classroom are used as educational tools in the program. Animal care and grooming clinics are implemented to help students to learn standard operating procedures by following written protocols, documentation, team work, problem solving, and verbal communication/instruction in a professional work environment.

Integrated Academic Credits Available: 1 credit of Math and 1 credit of Science over the course of the two year curriculum.

Industry Certification/Concurrent Enrollment Credit Options: *This course offers 3 Concurrent Enrollment credits in the area of Veterinary Technology through Genesee Community College.* Students can earn industry certification in RECOVER Basic Life Support for Companion Animals upon completion of this program.

Required Materials: Students will need to purchase scrubs and safety glasses for this course – estimated cost is \$30.00.

College Majors/Career Opportunities in this Field: Veterinary Technician, Agriculture, Veterinary Assistant, Equine Studies, Zoology, Conservation Officer, Animal Trainer, Animal Care Specialist, Pet Groomer, Animal Laboratory Assistant, Animal Shelter Worker, Pet Salesperson, Farm Owner/Herdsman.

Auto Body

1st Year – PM Session & 2nd Year – AM Session

<https://www.tstcte.org/auto-body.html>

This program trains students in collision repair, automotive detailing, painting and restoration work. Topics of study include: collision and auto body repair, auto refinishing, welding techniques, and replacement of parts and sections of panels. Students learn to use hand, power, and specialized auto body tools and equipment to repair dents and frame work on metal and plastic sections of automobiles. Students have the opportunity to create customized paint graphics, airbrushing, and restoration work on high performance and show quality vehicles.

Integrated Academic Credits Available: 1 credit of Math and 1 credit of Science over the course of the two year curriculum.

Industry Certification/Concurrent Enrollment Credit Options: Students can earn industry certification in OSHA 10 and SP/2 safety training, plus students are prepared for I-Car industry certification upon completion of this program.

Required Materials: Students will need to purchase work boots, work clothes, and safety glasses for this course – estimated cost is \$50.00.

College Majors/Career Opportunities in this Field: Automotive Detailer, Auto Body Technician, Shop Owner/Manager, Automotive Insurance Claim Adjuster, Parts Manager, Auto Glass Installer, Auto Collision Repair Technician.

Auto Technology

1st Year – PM Session & 2nd Year – AM Session

<https://www.tstcte.org/auto-tech.html>

This is a nationally certified automotive program through ASE (Automotive Service Excellence.) Topics of study include: engine performance, tire repair/replacement, alignment, fuel systems, wiring and electrical systems, power trains and transmissions, brake repair and replacement, steering and suspension. Students will diagnose, troubleshoot and perform preventative maintenance on foreign/domestic cars and light trucks by using the latest techniques and computerized diagnostic equipment.

Integrated Academic Credits Available: 1 credit of Math and 1 credit of Science over the course of the two year curriculum.

Industry Certification/Concurrent Enrollment Credit Options: ASE (Automotive Service Excellence) Entry-Level Industry Certification in Maintenance and Light Repair and NYS certification in Motor Vehicle Inspections, plus S/P 2 safety training, are available upon completion of this program.

Required Materials: Students will need to purchase work boots, work clothes, and safety glasses for this course – estimated cost is \$50.00.

College Majors/Career Opportunities in this Field: Automotive Service Technician, Tire Mechanic, Parts Specialist, Shop Owner, Automotive Sales Representative, Engine Performance Technician, Emissions Analyst, Mechanical Design/Engineering.

Computer Technology

1st Year – PM Session & 2nd Year – AM Session

<https://www.tstcte.org/computer-technology.html>

Students will learn the skills necessary to work in the fields of information technology and computer network design and management. Topics of study include: identifying, assembling, and repairing PC hardware and peripherals; installing and configuring operating systems (Windows, MacOS, and Linux); Linux and Windows server configuration and administration; network design, installation, and maintenance, and security of computers and networks.

Integrated Academic Credits Available: 1 credit of Math and 1 credit of Science over the course of the two year curriculum.

Industry Certification/Concurrent Enrollment Credit Options: *This course offers 6 Concurrent Enrollment credits through Tompkins Cortland Community College.* Students may be eligible to take several industry certifications - CompTIA Information Technology Fundamentals (ITF+), A+, and Network+ certifications, and the Google IT Support Professional Certification.

Required Materials: Students do not need to purchase extra supplies for this course.

College Majors/Career Opportunities in this Field: IT Technical Support, Network Support Technician, Database Management, Computer Programmer, Information Technology, Computer Repair, Security Administrator, Software Developer, Computer Forensics.

Construction Trades

1st Year - AM and PM Session

<https://www.tstcte.org/construction-trades.html>

This NEW course encompasses all of the skills that are necessary in residential and commercial construction. Students will learn the fundamental practical skills needed in the construction field, such as: proper use of hand and power tools, safety procedures, blueprint reading, and obtaining accurate measurements. Practical knowledge will be applied by working with drywall installation, rough and finish carpentry, framing, painting, roofing, floor installation, door and window installation, siding, electrical wiring, restoration work, plumbing, stonework and masonry.

Integrated Academic Credits Available: Not applicable for this course. Students can enroll in Personal Money Management or Science if these credits are needed towards graduation.

Industry Certification/Concurrent Enrollment Credit Options: Students can earn industry certification in OSHA 10 and SP/2 safety training upon completion of this program.

Required Materials: Students will need to purchase a tape measure, work boots, work clothes, and safety glasses for this course – estimated cost is \$100.00.

College Majors/Career Opportunities in this Field: Construction Laborer, Flooring/Window/Drywall/Carpet Installer, Building Inspector, Carpenter, Electrician, Plumber, Boilermaker, Painter, Roofer, Laborer, Contractor, Construction Manager.

Cosmetology

1st Year – PM Session & 2nd Year – AM Session

<https://www.tstcte.org/cosmetology.html>

Students will learn technical and communication skills required to be successful in a professional salon work environment. Topics of study include: hair coloring, styling, conditioning and shaping, esthetics, nail care, and massage. Product knowledge, proper application and technical procedures are taught to enhance the personal care of hair, nails, and skin. Students develop and practice their skills during clinic events. Students must accumulate 1,000 hours of instruction in order to be eligible to take the NYS certification exam.

Integrated Academic Credits Available: 1 credit of Math and 1 credit of Science over the course of the two year curriculum.

Industry Certification/Concurrent Enrollment Credit Options: Students can be eligible to earn a NYS Cosmetology License upon completion of the program.

Required Materials: First year students will need to purchase a kit that includes: mannequin, smock, and hair supplies – total cost of the kit is \$200.00. Second year students must buy a senior kit – total cost is \$100.00. Close toe shoes are required footwear for this course. Fundraising opportunities are available for students to offset required materials for this course.

College Majors/Career Opportunities in this Field: Hair Stylist, Cosmetologist, Salon Owner, Color Consultant, Nail Technician, Esthetician, Product Sales Representative, Barber, Electrolysis, Make-Up Artist, Salon Manager.

Culinary Arts

1st Year – PM Session & 2nd Year – AM Session

<https://www.tstcte.org/culinary-arts.html>

Students will learn the fundamentals of safety and sanitation, equipment operation, and how to prepare short order and large quantity cooking meals. Topics of study include: baking breads and pastries, creating main entrees, side dishes, and soups, practicing professional skills through customer service, menu planning, and recipe conversions. Students will work effectively with their team members, learn restaurant management skills through catering services, cake and pastry orders, and the complete operation of *Bistro 555*, the on-campus restaurant.

Integrated Academic Credits Available: 1 credit of Math and 1 credit of Science over the course of the two year curriculum.

Industry Certification/Concurrent Enrollment Credit Options: *This course offers 3 Concurrent Enrollment credits through Tompkins Cortland Community College.* Students can earn industry certification as a ServSafe Food Handler upon completion of the program.

Required Materials: Students will need to purchase a Culinary Arts uniform for this course – estimated cost is \$50.00.

College Majors/Career Opportunities in this Field: Pastry Chef, Sous Chef, Restaurant Owner, Food Sales Representative, Nutritionist, Baker, Short Order Cook, Executive Chef, Food Service Manager, Hospitality, Resort Manager.

Digital Media Technology

1st Year – PM Session & 2nd Year – AM Session

<https://www.tstcte.org/digital-media-technology.html>

Students will experience an overview of graphic design, video production, game design, and animation. Topics of study include: graphic design, digital photography, digital video production, 2D and 3D animation techniques, and video game design. Both raster and vector-based design software will be utilized to provide creative, practical solutions to graphic design challenges. Students will create both complex animations and working video games using a variety of tools, including Adobe Animate, Autodesk 3dsMax, GameMaker Studio, Unreal Engine, Blender and Dragonframe. Throughout this course, there is a strong emphasis on problem-solving, effective time management, and working both in teams and independently.

Integrated Academic Credits Available: 1 credit of Art over the course of the two year curriculum. Students can also enroll in Personal Money Management or Science if these credits are needed towards graduation.

Industry Certification/Concurrent Enrollment Credit Options: *This course offers 6 Concurrent Enrollment credits through Tompkins Cortland Community College.* Students can earn several Adobe Certified Professional certifications completion of this program.

Required Materials: Students do not need to purchase extra supplies for this course.

College Majors/Career Opportunities in this Field: Graphic Design, Communications, Game Design, New Media, Animation, Advertising Design, Web Design, Multimedia Artist, Game Artist, UI/UX Designer, Production Assistant, Videographer, App Developer, and Photographer.

Early Childhood

1st Year – PM Session & 2nd Year – AM Session

<https://www.tstcte.org/early-childhood.html>

Students will examine the physical, social/emotional and intellectual development of young children through classroom discussions, group and individual projects, and practical experiences with professionals in the early childhood field. Topics of study include: early childhood programs and careers, benefits of educational toys/equipment to promote cognitive development, child health/safety/nutrition, special education, parent engagement, child observation and needs assessment. Students will design and implement lesson plans through group and independent work, enhance professional written and oral communication skills, plan and prepare nutritious meals for young children, and structure curriculum experiences for young children focused on art/music/science/reading. Students will learn through a variety of modalities, including: field trips, presentation, guest speakers, and field work. First year students will observe and care for infants/toddlers/preschool children in a professional classroom environment, plus participate in a job shadow experience. Second year students will participate in internship experiences that will be held in regional childcare centers, elementary schools, and at the Ithaca Community Childcare Center (IC3) on Warren Road in Ithaca.

Integrated Academic Credits Available: Not applicable for this course. Students can enroll in Personal Money Management or Science if these credits are needed towards graduation.

Industry Certification/Concurrent Enrollment Credit Options: *This course offers 6 Concurrent Enrollment credits through Tompkins Cortland Community College.* Students can earn the Foundations in Health and Safety e-Learning industry certification and up to 15 hours of required industry training in childcare upon completion of this program.

Required Materials: Students must have a positive attitude and an interest in working with and caring for young children.

College Majors/Career Opportunities in this Field: Child Care Provider, Preschool Teacher, Early Intervention Specialist, Speech Therapist, Social Worker, School Counselor, Head Start Director, Teacher Assistant, Special Education Teacher, Preschool Director, Reading Specialist, Nanny.

Exercise & Health Sciences

1st Year – PM Session & 2nd Year – AM Session

<https://www.tstcte.org/exercise-and-health-science.html>

Students explore the effects of exercise including cardio-conditioning, strength and flexibility training on human health, wellness and sports performance. Topics of study include: resistance work, HIIT/EMOM/Circuit

classes, flexibility and yoga practice, nutrition and weight management, anatomy & physiology, and fitness safety. Students will design, implement and update personal training programs based on client specific goals. Throughout the two years, students will investigate and focus on various career paths in the health industry.

Integrated Academic Credits Available: 1 credit of Math, 1 credit of Science, and 1 credit of Physical Education over the course of the two year curriculum.

Industry Certification/Concurrent Enrollment Credit Options: *This course offers 5 Concurrent Enrollment credits through Tompkins Cortland Community College.* Students can earn American Red Cross First Aid, CPR and AED certifications, and **may** be eligible to take the Certified Personal Trainer Exam through the National Academy of Sports Management (NASM) upon completion of the program.

Required Materials: Students must have athletic attire and sneakers, class trainer shirt, and First Aid/CPR/AED materials for this course – estimated cost is \$60.00.

College Majors/Career Opportunities in this Field: Recreational Therapy, Athletic Training, Sports Management, Physical Therapy, Physical Education or Health Teacher, Coaching, Fitness Instructor, Certified Personal Trainer, Gym Manager, Chiropractor, Strength and Conditioning Coach, Orthopedic Technician, Recreation and Sports Director.

Heavy Equipment

1st Year – PM Session & 2nd Year – AM Session

<https://www.tstcte.org/heavy-equipment.html>

Students will be trained in the operation, maintenance, diagnosis and repair of heavy equipment, farm machinery and heavy duty trucks. Topics of study include: principles of the diesel engine, alternative fuel sources, drive train, brakes, suspension and steering, electrical systems, hydraulics, landscaping, agriculture, conservation, welding, and preventive maintenance. This program is designed to meet the growing demand for technicians and operators in the transportation, construction and agricultural fields.

Integrated Academic Credits Available: 1 credit of Math and 1 credit of Science over the course of the two year curriculum.

Industry Certification/Concurrent Enrollment Credit Options: Students can earn industry certification in OSHA 10 and SP/2 safety training, plus forklift operation certification upon completion of this program.

Required Materials: Students will need to purchase work boots, work clothes, and safety glasses for this course – estimated cost is \$50.00.

College Majors/Career Opportunities in this Field: Heavy Equipment Technician, Backhoe Operator, Diesel Mechanic, Skid Steer Operator, Hydraulics Technician, Equipment Manager, Heavy Equipment Operator, Diesel Truck Driver, Highway Superintendent, Construction Laborer, ForkLift Operator.

Nurse Assisting and Health Occupations

1st Year – PM Session & 2nd Year – AM Session

<https://www.tstcte.org/nurse-assisting-and-health-occupations.html>

Students will learn the skills to be a supportive caregiver through clinical experiences in nursing homes, hospitals, and private homes. Topics of study include: personal care procedures, anatomy and physiology, body mechanics, body structures and functions, medical terminology, nutrition, human biology, disease treatment and prevention, and medical legality issues. During clinical rotations, students perform personal care procedures, learn to take vital signs, and assist patients with mobility using crutches, canes, walkers and wheelchairs.

Integrated Academic Credits Available: 1 credit of Math, 1 credit of Science and ½ credit of Health over the course of the two year curriculum.

Industry Certification/Concurrent Enrollment Credit Options: *This course offers 9 Concurrent Enrollment credits through Tompkins Cortland Community College.* Students can earn industry certifications in Phlebotomy, Certified Nurse Assistant, Home Health Aide, Personal Care Aide, and American Heart First Aid and CPR certification upon completion of this program.

Required Materials: Students will need to purchase scrubs, and shoes – estimated cost is \$75.00. Students are required to have completed a yearly physical exam and be up to date on all immunizations, including a flu and Covid-19 vaccines, and two PPD inoculations, in order to participate in the mandatory clinical rotations.

College Majors/Career Opportunities in this Field: Home Health Aide, Certified Nursing Assistant, Physical Therapy Aide, Phlebotomist, Registered Nurse, Respiratory Therapist, Emergency Medical Technician, Licensed Practical Nurse, Surgical Technician, Nutritionist, Physician Assistant.

Public Safety & Emergency Services

1st Year – PM Session & 2nd Year – AM Session

<https://www.tstcte.org/public-safety--emergency-services.html>

Students will learn criminal and civil law, vehicle and traffic law, arrest and court procedures, report writing and professional communication skills. Topics of study include: interviewing skills, self-defense, security, fingerprinting, civil rights, forensics, accident and crime scene illustration, digital photography, and forensics. Students will participate in community service projects, participate in guest speaker presentations, attend local field trips to agencies/organizations, conduct physical conditioning exercises, learn patrolling skills, collect evidence and crime scene investigation tactics. Students who are interested in the field of corrections, probation, judicial system, law enforcement, along with first responders (EMT, Fire Department, etc.) may be interested in this course.

Integrated Academic Credits Available: 1 credit of Math and 1 credit of Science over the course of the two year curriculum.

Industry Certification/Concurrent Enrollment Credit Options: Students can attain American Heart First Aid and CPR certification upon completion of this program

Required Materials: Students will need to purchase PT gear (black t-shirt and black shorts) for this course – estimated cost is \$30.00.

College Majors/Career Opportunities in this Field: Corrections Officer, Police Officer, Security Guard, Conservation Officer, Military Police, Homeland Security Advisor, Crime Scene Investigator, State Police Officer, Customs/Border Control Agent, Court Reporter, Criminologist, Probation Officer, First Responder, Private Investigator.

Welding

1st Year – PM Session & 2nd Year – AM Session

<https://www.tstcte.org/welding.html>

Students will learn to manipulate metal using a variety of welding techniques including MIG, TIG, arc welding, and plasma cutting. Topics of study include: metallurgy, flame cutting, blueprint reading, set up and operation of drill press machine, and cutting and shearing techniques. Students will practice these methods on aluminum, stainless steel, and other materials. Students can create unique designs by using the CNC (Computer Numerical Control) Plasma Machine or developing metal sculpture projects.

Integrated Academic Credits Available: 1 credit of Math and 1 credit of Science over the course of the two year curriculum.

Industry Certification/Concurrent Enrollment Credit Options: Students can earn industry certification in OSHA 10 and SP/2 safety training upon completion of this program.

Required Materials: Students will need to purchase a welding tool kit, work boots, work clothes, and safety glasses for this course – estimated cost is \$180.00.

College Majors/Career Opportunities in this Field: CNC Operator, Tool and Die Maker, CAD Programmer, Welding Technician, Fabricator, Pipefitter/Steamfitter, Iron Worker, HVAC Technician, Metal Sculptor, Underwater Welder, Boilermaker, Sheet Metal Worker, Plumber.

Personal Money Management

Offered during 1st year or 2nd year of CTE Program

This course is designed to develop a thorough understanding and mastery of the arithmetic processes involved in financial literacy in order to help students plan and manage personal finances by making educated decisions about money. Topics of study include: percents, budgeting, earning income and paying taxes, simple and compound interest, credit cards and installment buying, home ownership, banking transactions, and finance. Students will examine current world economic conditions focusing on how these can impact their personal economic situations and learn how to apply mathematical principles to financial matters.

Note: This course satisfies one (1) credit of Math towards graduation. *This course offers 3 Concurrent Enrollment credits through Tompkins Cortland Community College.*

Physical Education

Offered during 1st year and/or 2nd year of CTE Program

Course Description: This course will focus on team and individual sports, with a focus on life-long fitness. Topics of study include: recreational sports, strength and flexibility, cardio-conditioning, and weight training. Students are required to wear sneakers for class.

Note: This course satisfies one-half (1/2) credit of Physical Education towards graduation each year.

Science

Offered during 1st year or 2nd year of CTE Program

This course provides students with authentic science that correlates with their Career and Tech Program. Topics of study include: concepts associated with physical science, scientific process and investigation, and introductory chemistry. Students will conduct lab work that is related to science concepts taught through the different technical fields offered through Career and Technical Education.

Note: This course satisfies one (1) credit of Physical Science towards graduation.

World of Work Programs

<http://tstboces.org/cte>

The World of Work program assists high school students with a variety of instructional needs. Classes promote self-esteem and positive socialization, as well as cognitive and motor skills development through a progressive curriculum. The classes integrate students into the most appropriate and least restrictive Career and Tech setting, offering instruction in both generic and job specific skills, which are important for competitive employment and independent living. Students will work on employability training skills, including: attendance,

punctuality, hygiene, organization and efficiency, building confidence, taking responsibility and showing respect. The goal is to create a personal skill set for each student to help them maintain employment upon graduation. World of Work classes are offered in the AM and PM for a minimum of two hours each day.

Career Exploration Program

Grades 11-12, AM or PM Session

The Career Exploration Program (CEP) provides students with the opportunity to explore realistic career options available in our community. Generally, students who enroll in this program are nearing completion of their high school career, and this is typically the capstone course leading to entry-level work. Most CEP students have taken Food Services and/or Outdoor Recreation Services prior to enrollment in this course. Students will have the opportunity to participate in non-paid internship experiences during the school year. These work experiences are based on the student's interests and abilities, and individual progress is closely monitored and evaluated. Transportation is provided to and from the work site. Students work directly with a job-site mentor (an employee), learning general and technical job skills in the field, and students receive a written work evaluation at the end of each internship.

Food Service

Grades 9-12 , AM or PM Session

The Food Services Program develops a foundation of skills necessary to become an entry-level food service employee. A balance of theory and kitchen skills gives students real world experience. Students work in groups to learn to properly use culinary tools and equipment, and they are encouraged to develop and use their creativity in the selection and presentation of their recipe execution. Students participate in on-site training by working and managing an on-campus coffee shop, pizza delivery system, and catering service which reinforce student's interpersonal and job skills as they gain practical experience in related food service occupations. This class involves all participants to use their literacy, math and science skills as it relates to the culinary field.

Outdoor Recreation Service

Grades 9-12, AM or PM Session

The Outdoor Recreation Services Program exposes students to a wide range of job skills and employability experiences. The curriculum has a heavy emphasis on the repair and maintenance of small engine power equipment, including: ATV's, lawn mowers and chainsaws. Students will also be working with aspects of traditional agriculture mechanics, such as: MIG Welding, basic framing, plumbing, wiring, and tractor operation and maintenance. Woodworking and basic construction skills are developed throughout the curriculum.

TST BOCES New Visions

New Visions is an honors level program that offers seniors a progressive, college and career exploratory, and academically challenging senior year. These programs are demanding yet extremely rewarding for highly motivated, mature, responsible, and academically capable students. New Visions students must be extremely trustworthy, exhibit a high degree of integrity, and be excited to work collaboratively with others who express varying points of view. Students are required to manage their time well, keep track of deadlines, and participate in group work with minimal intervention by the teacher. This provides students the freedom to acquire knowledge through independent and cooperative learning, both in the classroom, lab and in the professional work setting. The New Visions programs are highly regarded by collegiate administrators as evidence of a student's motivation, intelligence, and desire for success.

New Visions students will divide their week between classroom theory and instructional days where students will discuss literature, global concerns, and science-related topics in an integrated academic learning environment. Students will work on projects independently and in groups, while earning concurrent enrollment college credits and mandatory credits for graduation. In addition, students will participate in rotational experiences where they will work with professionals, graduate students, and college professors that work within their field of study.

The New Visions programs are held daily from 10:00am – 2:00pm daily at Cornell University or Cayuga Medical Center. Students receive high school credit for English 12 Honors, Participation in Government and Economics Honors, two elective science credits, as well as Concurrent Enrollment credits from Tompkins Cortland Community College. Students are expected to be professional, courteous and to strictly adhere to the guidelines set forth by their teachers and mentors.

Interested students must apply to their specified New Visions program during the early portion of the second semester of their junior year. Following the submission of the completed New Visions application, qualified students will be invited to participate in a formal interview. Acceptance into a New Visions Program is very competitive. The selection process is based on grades, recommendations, an interview and an essay, among other criteria. Students who enroll in the New Visions Programs intend to pursue a competitive college or university upon graduation.

For more information on the New Visions Programs, visit <https://www.tstnv.org/>

Engineering

<https://www.tstnv.org/engineering.htm>

This innovative and exciting course is located in Thurston Hall, allowing students a commanding view of the Cornell University Engineering Quad and the campus beyond. The curriculum is designed for high-achieving high school seniors who are interested in pursuing higher education, and eventually, a career in engineering. The program focuses on the study and application of physics and engineering concepts, along with on- and

off-campus engineering experiences that show students how practicing engineers apply these tools. The engineering experiences will include touring engineering labs throughout Cornell University, visiting local and regional engineering companies, participating in topical lectures from engineering faculty and experts, and working in the PARADIM material science labs. The integrated core academics take a critical look at Government, Economics, English and Physics, all through the lens of engineering. Students are actively engaged in engineering design challenges throughout the year that touch on every major branch of engineering - mechanical, electrical, environmental, genetic, civil and chemical. In order to be successful in this course, students must be organized, respectful, motivated and willing to step outside their comfort zones to learn in new ways. Students must also be ready to learn from failure and to understand that there is never just one way to solve a particular problem. Finally, this course relies heavily on working as a team, so students should be prepared to work in a group in a productive, efficient and enjoyable way.

Students will receive integrated high school academic credits for the following courses: English 12 Honors, Economics/Participation in Government Honors, Fundamentals of Engineering, and PHSC 211 - Physics I: Mechanics and Heat upon completion of this program.

Concurrent Enrollment Credits: PHSC 211 - Physics I: Mechanics and Heat (4 credits) from Tompkins Cortland CC and Engineer Your World (3 credits) from University of Texas at Austin are earned upon completion of the program.

Health and Medical Sciences

<https://www.tstnv.org/health-and-medical-sciences.html>

This exciting and challenging program is located at the Cayuga Medical Center in Ithaca. The curriculum immerses students into the healthcare field by engaging them in a combination of classroom learning and clinical rotations throughout the hospital, along with independent medical practices and health agencies in the community. Through daily involvement with medical professionals, students become more educated about the range of healthcare professions. Students observe and assist with patient care, learn laboratory and diagnostic procedures, and interact with a variety of healthcare professionals. Students recognize the importances that every role plays in helping ensure quality patient care. New Visions students integrate their experiences on clinical rotations into their assignments, research projects, and discussions in the classroom.

Students will receive integrated high school academic credits for the following courses: English 12 Honors, Economics/Participation in Government Honors, Health and Medical Sciences, and BIOL 131/132 - Human Anatomy and Physiology upon completion of this program.

Concurrent Enrollment Credits: BIOL 131 - Human Anatomy and Physiology I (4 credits) and BIOL 132 - Human Anatomy and Physiology II (4 credits) are earned upon completion of the program.

Life Sciences/Applied Scientific Research

<https://www.tstnv.org/health-and-medical-sciences.html>

This unique, fun and innovative program is located at the Guterman Lab in the College of Agriculture and Life Sciences Department at Cornell University. Students will explore numerous career opportunities in the science of agriculture, food, and natural resources or veterinary medicine. Students choose a rotational experience in veterinary medicine (case study research) or an applied research experience allowing for exploration within unique interest areas in state of the art laboratories across the university campus. Research experiences are planned in close collaboration with and supervised by the New Visions Teacher, which can include the study in plant and animal science, veterinary medicine, forestry, land and water conservation, agriculture business, sustainability, fishery-wildlife management, biological engineering, and much more. The course is designed to attract mature students of high professional and ethical standards who are interested in life science and inquiry. Selected students are not afraid to work hard both independently and with others. Each year, students become a cohort that is expected to set and achieve student driven goals by leaving the program, and their community, a better place.

Extension leadership opportunities are available in this class through the local chapter of the National Student Leadership Organization, the FFA (Future Farmers of America), where students participate in leadership training, workshops and national conferences.

Students will receive integrated high school academic credits for the following courses: English 12 Honors, Economics/Participation in Government Honors, Applied Scientific Research, and ENVS 110/111 - Food Systems upon completion of this program.

Concurrent Enrollment Credits: ENVS 110 - Food Systems Seminar I: Introduction to the US Food System (3 credits) and ENVS 111 - Food Systems II: Food Movements (3 credits) are earned upon completion of the program.

Services

English as a New Language

40 weeks, 1 credit

All students will be assessed upon registration to Lansing High School through a Home Language Questionnaire and the NYSITELL (New York State Identification Test for English Language Learners) if necessary. Those who are determined to require support will attend ENL classes and/or receive ENL support, based on their level of English proficiency. Students attend ENL classes (or receive support) until they test proficient on the New York State English as a Second Language Achievement Test (NYSESLAT).

The ENL program provides English language instruction in reading, writing, listening, speaking and American cultural education. The goal is to increase students' skills to a level equivalent to that of their native speaking peers and those needed to succeed in life in the United States. These skills will be developed through the use of authentic reading materials, content area concepts as well as materials similar to those used in the ELA classes.

Study Center

40 weeks, 0 credit

The study center provides services to students who are identified through the Committee on Special Education. Educational services are arranged through the CSE and are based on documentation. Students who attend the study center receive assistance in writing, reading, mathematics, content area material, and study skills.

Center For Academic Progress (CAP)

40 weeks, 0 credit

CAP provides services to students who are identified through the Committee on 504 Education or identified through the LHS Student Support Team. Students who attend a CAP period receive assistance in study skills such as time management, organization and test taking. Students may also receive support in writing, reading, mathematics, and other content area material.

Library Media Services

The library is open to all students and faculty as a resource to support learning, and serves as a flexible space that accommodates classes, student group work, and individual quiet study. The collection includes over 12,000 books, e-books, and periodicals (with greater access to all TST BOCES system libraries via interlibrary loan) and online access to databases and other subscription web resources. Laptops and Chromebooks are available for student use, and a variety of educational technology including iPads, iPods, and video cameras are also available.

Health Services

A Registered Professional Nurse staffs the health office for the school day while students are present in school. Students may seek medical attention for illness or injuries from the nurse. School physicals for sports participation, working papers, or other reasons are provided, as well as, screening for vision and hearing problems. The nurse is also available for health counseling and education.

Counseling

School counselors and a school psychologist are available to meet with students concerning a wide range of issues including academic, social, and personal problems; crisis counseling is always accessible. The school psychologist also administers diagnostic testing for academic related problems under the auspice of the CSE.



Sports, Recreation, and Activities

Students who are involved in their school and community perform better in school, meet new people and become accepted to college more often than compared to students who are not involved. Not all clubs are offered every year and are subject to change.

Extra-Curricular Clubs & Programs

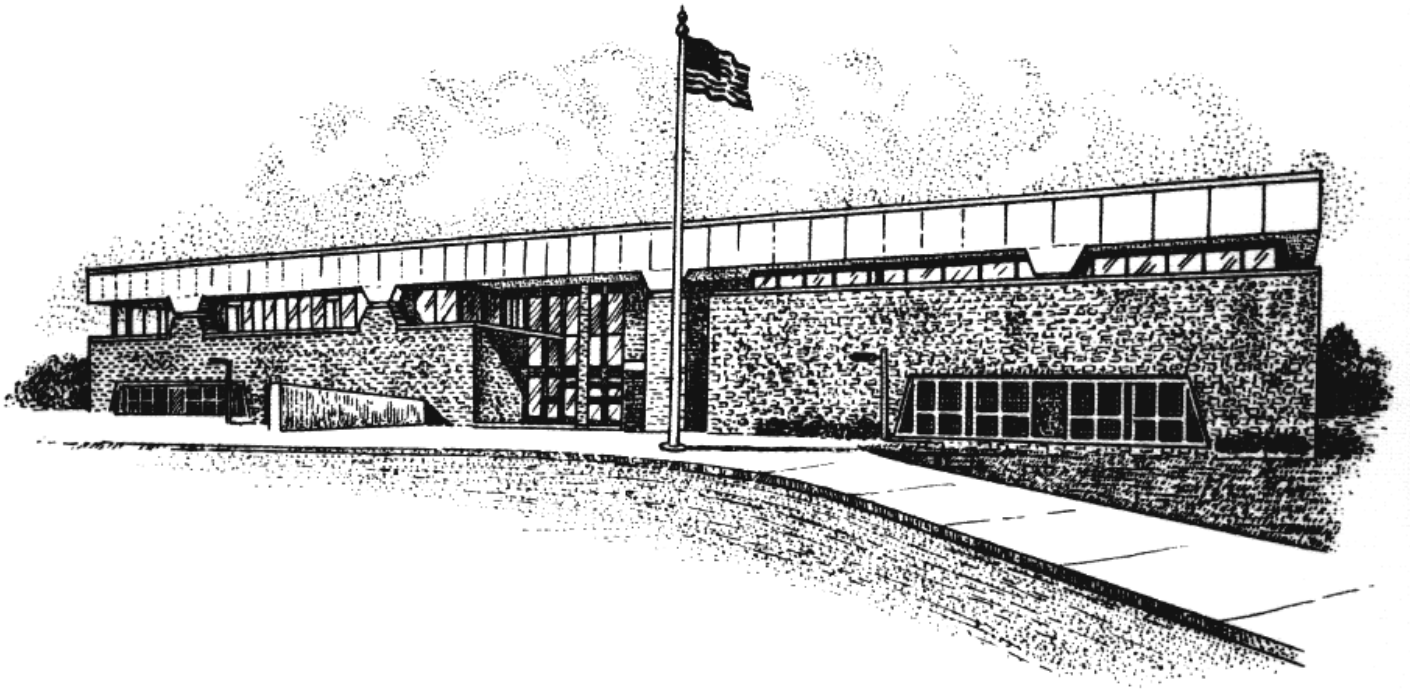
ACE (Access to College Education)	Model UN	Fall Drama
Art Club	Yorkers	Spring Musical
Bobcat Newspaper	HOBY Leadership Conference	Tech Crew
Link Crew	Student Council	Shakespeare Competition
The Bobcat Team	Gender Sexuality Alliance	Jazz Band
Cayugan Yearbook	Multicultural Club	Show Choir
National Honor Society	Chess Club	
The Bobcat Team	Super Smash Bros Club	

Outside of School Activities

Leo Club	High School Helpers	The Learning Web
----------	---------------------	------------------

Sports

Fall	Winter	Spring
Cross Country	Basketball (Boys and Girls)	Baseball
Cheerleading	Cheerleading	Golf
Football	Swimming (Boys)	Softball
Soccer (Boys and Girls)	Wrestling	Track & Field
Swimming (Girls)	Indoor Track	Tennis
Volleyball (Girls)	Bowling	



Lansing High School



**300 Ridge Road
Lansing, NY 14882
Telephone: 607-533-3020
lansingschools.org**