- Mohonasen High School Course Catalog

Mohonasen High School offers a wide array of core courses that help students meet graduation requirements, as well as a broad selection of elective and college-level classes designed to help students find their passion and prepare for life after high school graduation. Use the links below to learn more about what is available to students.

CORE ACADEMIC DEPARTMENTS

- English
- Social Studies
- Math
- Science
- World Language
- Health and Physical Education

CAREER AND TECHNICAL EDUCATION (CTE), AND THE ARTS

- Art
- Business
- Criminal Justice
- Emerging Technologies/Pre-Engineering
- Family & Consumer Sciences: Early Childhood Education
- Media Arts
- Medicine & Health
- Music
- Capital Region BOCES CTE Opportunities

COURSE LEVELS

Mohonasen High School offers different levels of academic study in the core curriculum. The level at which a student studies is determined by previous academic achievement, student interest, application, and/or teacher recommendations. Many four-year colleges and competitive majors require or consider the rigor of coursework during high school in admissions decisions. To be as competitive as possible for these colleges and/or majors and to be more prepared for college level coursework on campus, it is recommended that students take the most rigorous level of coursework that they can get Bs in, even if it means honing their study skills, staying after for extra help and forming study groups.

- **Advanced Placement (AP):** AP courses are offered in English, social studies, math, and science. The AP music theory exam is also given. Acceptance into these courses is based on student interest.

- **Honors:** courses are offered in English (9-11) and World History 9. Acceptance into these courses will be based on student interest, academic achievement, regents exam scores, and/or teacher recommendation.
- **Regents Prep:** This course of study provides students with an average paced program and moderate support. Most students complete their math and science requirements in three years, but are encouraged to take more. Students planning on continuing their education at college should take this level of courses at a minimum. Students in Regents Prep may earn an Advanced Regents or Regents Diploma.
- **Academic Intervention Services (AIS):** AIS provides academic support in English, and Algebra 1 to provide additional academic support.

THE NEW YORK STATE SEAL OF BILITERACY

The NYSSB is an award given by a high school, school district, or county office of education that formally recognizes students who have attained a high level of proficiency in two or more world languages (one of which must be English) by high school graduation.

The intent of the NYSSB is to:
• affirm the value of diversity in a multilingual society;
• encourage the study of languages;
• identify high school graduates with multilingualism and multiliteracy skills for employers;
• provide universities with additional information about applicants seeking admission;
• prepare students with twenty-first century skills; and
• recognize the value of world and home language instruction.

This award is denoted by a seal affixed to the student's diploma and a notation on the student's high school transcript.

To earn the NYSSB, students must demonstrate Intermediate High proficiency in English and the required level of proficiency in one or more world languages set forth by the NYS Learning Standards for World Languages, adopted by the NYS Board of Regents in March 2021. Students can earn points toward the NYSSB in a number of ways, including:

• Completing coursework in English and/or a world language with an average of 85% or better;
• Completing a Home Language Arts Program with an average of 85% or better;
• Earning a set score on an approved assessment in English and/or a world language;
• Demonstrating successful completion of coursework from a nation outside the U.S.; and
• Completing and presenting a Culminating Project in English and/or a world language that demonstrates the required level of proficiency in all three modes of communication (Interpretive, Interpersonal, and Presentational).

*For more information contact the high school main office or your school counselor

COLLEGE CREDIT

College Credit

There are multiple ways to earn college credit during high school.
These include:

College in the High School (CHS)

CHS credits are earned by meeting minimum grade (usually a 75+) requirements in the course. Students have an official transcript from the college, but do not need to attend the college to get the credit. However, students should always check with their prospective colleges to be sure that credits transfer and under which category are the awarded credits i.e. electives vs. English vs. Spanish. Our CHS courses are offered through SUNY Schenectady County Community College (SCCC), RIT (PLTW courses), Siena College or Syracuse University (SUPA courses). Additional fees may be required to receive college credit.

- **Project Lead the Way**
  (PLTW) Pre-Engineering courses may be taken for Rochester Institute of Technology (RIT) course credit. Scores on the PLTW final exam and the final course average determine eligibility for college credit. Students seeking college course credit through RIT would pay an additional fee of approximately $225.

- **Syracuse University Project Advance (SUPA)**
  Syracuse University Project Advance (SUPA) is a cooperative program between Syracuse University and participating school districts that allows high school seniors to take regular college courses in their own schools at low cost. The cost is $115 per credit hour ($345 for the 3 credit courses offered) and financial assistance is available through Syracuse University.

Advanced Placement

Advanced Placement Exams are taken in May. They are graded on a scale of 1–5. Each post-secondary institution offers college credit based on its own specific criteria which can vary. The exams, which cost approximately $100, require registration in early November.

High School Graduation Requirements

Graduation requirements are divided into two categories: credits and exams.Students are required to earn 22 credits, including a mandatory core curriculum of 18.5 credits in order to graduate. Students also are required to pass a minimum of five New York State Regents

Exams. There are additional courses and exam requirements for an Advanced Regents Diploma.

- 4 credits in English
- 4 credits in Social Studies
- 3 credits in Math
- 3 credits in Science
- 1/2 credit in Health
- 1 credit in World Language
- 1 credit in Art or Music
- 2 credits in Physical Education
- 3.5 additional credits

Minimum 22 credits

Regents Diploma:

- Minimum score of 65 required on all exams listed below:
- 1 Math Regents
- 1 Science Regents
- 1 Social Studies
- English Regents

AND at least one of the following:

- Humanities Pathway: a second social studies Regents or state-approved alternative
- STEM Pathway: a second science Regents, second math Regents or a state-approved alternative
- CTE Pathway: completion of a state-approved CTE program and assessment - some CTE programs offer the National or State exam needed for this pathway and Mohonasen offers a pathway in the Pre-Engineering and Manufacturing areas.
- Arts Pathway: completion of an arts sequence and state-approved arts assessment - Mohonasen offers the AP Music Theory exam and a score of 3+ is needed for this pathway.
- CDOS Pathway: completion of 2 credits of CTE (credits in CTE, business, FACS or emerging technologies areas), 54 WBL Hours, Employability Profile, & Career Plan

Advanced Regents Diploma

- All of the above exams plus additional tests listed below, with minimum score of 65 required
- 2 additional math Regents exams
- 1 additional science Regents exam

- 4 credits in world language with a passing score on the Checkpoint B World Language (Spanish or French) exam OR a five unit sequence in fine arts (art/music), CTE (includes credits in business, technology, family and consumer sciences, and/or career and technical education). Financial Literacy is required for the 5 credit CTE sequence.

Students who have a 90 or better average on all of the Regents exams needed for their diploma will be awarded a “with honors” distinction with their Regents or Advanced Regents Diplomas.

Local Diploma

A local diploma is only available to students with disabilities. See our Special Education page for details.

In addition to the total number of credits needed to graduate, there is a requirement that all students carry at least 6.5 credits per year (seniors may carry 5.5 credits). This ensures that students continue to challenge themselves throughout high school and are able to experience a variety of different courses. Students requiring Academic Intervention Services are sometimes allowed to take fewer credits due to scheduling limitations.

High School Course Registration

Annual Student Conferences

Parents and students are encouraged to be proactive about calling or making appointments with their school counselor whenever they have questions about which courses they can choose from and which would best serve their future goals. Counselors meet with every student each year by grade and parents are encouraged to attend.

GRADE 8

Students and parents are invited to attend an evening high school information program about their elective choices. This is usually held in January. Following the evening program, high school counselors meet with students in large group presentations at Draper to provide an orientation to high school scheduling and explain elective choices. Students make elective course requests. A complete list of recommended and requested courses are mailed home in May for parents to sign and return to the 8th grade counselor.

In August, students and parents are invited to a freshman orientation session, usually scheduled the week or two before school starts.

GRADE 9 & 11

It is important that counselors get to know students in order to best advocate and assist them toward their goals. 9th grade is a key year for developing a game plan for the rest of high school. The discussion focuses on the counselor getting to know the student and their goals, strengths and interests. There is also a review of current academic performance, long and short-term goals and methods of career exploration available to students. The freshman conference is a good opportunity for parents to personally meet with their child's counselor, give input into course selection and set the stage for a productive working relationship that will last straight through to graduation. Parents will be invited in for their child's conference.

Junior year, post high school plans are discussed in more detail and individual steps planned. Progress toward graduation, course requests and the student's career plan are reviewed.

A list of course requests is available through SchoolTool and is mailed home for a parent signature in the spring.

GRADE 10

At sophomore check-ins, counselors meet individually with students to cover topics including academic advising, career planning and individual options for the following year. Parents are alerted meetings are beginning and can attend if they would like.

GRADE 12

The emphasis switches to graduation and making a successful transition to college and/or the workplace. Parents are invited by Google Calendar invite and are welcome to attend.

HIGH SCHOOL REGISTRATION

At the high school there are several days dedicated to students selecting their courses for the following year. This is called Course Registration. The process occurs during the winter for 9th, 10th and 11th grade students. During the first two days, as students move through their day, teachers will set aside a portion of the block to discuss course options and make recommendations. This will occur in both core academic and elective areas.

In addition, all 9th and 10 th grade students will be exposed to elective options via videos and/or live presentations. All teachers are available for additional questions period 10 during the week. Students are encouraged to bring their course selection sheets home both nights for parental input. During Day 3, students will meet with counselors in large group settings to go over selections, check credits, answer questions and collect sheets.

WHAT IF I CHANGE MY MIND ABOUT THE COURSES I SELECTED?

Students sometimes express concern that they may be locked into taking the courses planned out earlier in the year. Students actually have until the end of May to change their minds with regard to course selections and should see their counselor.

WHAT IF I DON'T GET THE COURSE(S) THAT I WANTED?

The actual scheduling of students into classes is a very complex procedure that cannot be finalized until the close of the summer school session each August. Students receive their schedules on the first day of school. Every effort is made to place students in the classes they request, but some scheduling conflicts are inevitable.

Sometimes a course gets cut due to low enrollment. Or, if a student selects multiple courses that are only offered one block each day, they are not always able to fit every elective into their schedule. That's why counselors ask students to rank their choice of electives from most important to least and choose back-up courses. When in doubt, contact your counselor as soon as possible if there are problems or concerns with your final schedule.

Course Policies & Procedures

CREDITS REQUIRED FOR ADVANCEMENT

Students need to meet specific academic requirements to advance to each grade level. They are as follows:

- **Sophomore**
  A student must earn a minimum of 4 credits. One of these credits must be in English or global studies.
- **Junior**
  Students must have a minimum of 8.5 credits. These must include at least two credits in English or social studies, and at least one in the other; and at least one credit in each math and science.
- **Senior**
  Students must be able to be scheduled to graduate. Students also must have two units of credit in math as they are not allowed to take two math courses simultaneously.

DROPPING A COURSE

It is important that students choose courses carefully since dropping courses after school begins is very difficult. It requires permission from both the parent and the school and often causes

scheduling problems. Students are allowed to drop a course up to 5 weeks into a full-year course and up to 3 weeks into a semester course. However, this is only if they can still maintain 6.5 credits (or 5.5 credits for seniors). It is the student's responsibility to get a course drop form from the teacher and procure signatures from the teacher, counselor, academic administrator, parent, and principal in the order that they appear on the form. There will be no indication on their transcript if all guidelines are followed. Dropping a course required for graduation is not permitted.

ADDING A COURSE

Students are only able to add a course during the first 8 days of the semester/school year. This timeframe encompasses two rotations of A-D days. It has been shown that students adding a course after this time are unable to make up the work that has been missed.

REQUESTS AND NON–REQUESTS FOR TEACHERS

A student or parent may relay a preference for a particular teacher, but this in no way guarantees that the match will work when student schedules are created. There are simply too many variables when it comes to scheduling students, courses, and teachers to be able to promise a particular teacher. Students and parents may put in a non–request for a particular teacher if the student and/or sibling has had the teacher before. However, there is no guarantee that a non–request can always be honored, for the same reasons outlined above.

EARLY GRADUATION

Students wishing to complete their graduation requirements either one year or one semester early need to see their counselor the year before. They also will need to complete and submit the Early Graduation Request Form signed by themselves and their parent to their counselor for presentation to the principal.

HONOR SOCIETIES

Mohonasen High School sponsors several honor societies. They are National Honor Society, French Honor Society, Science Honor Society, Spanish Honor Society, Math Honor Society, Tri-M Music Honor Society, and National Business Honor Society. Eligibility is based on grade level and very specific academic and extra-curricular criteria.

HONOR ROLLS

Honor rolls are calculated at the end of each marking period. All grades, except PE, are counted toward the grade point average. Students with failing or incomplete grades are not eligible for honor roll regardless of their average.

English

The English program at Mohonasen Central School District is designed to help students reach a level of competency in the New York State Learning Standards for English/Language Arts. This includes students being able to read, write, listen, and speak for: information and understanding; literary response and expression; critical analysis and evaluation; and social interaction. Development of the use of the writing process and a variety of both classic and contemporary literature will be the primary vehicles for meeting and exceeding these standards.

Course Offerings

ENGLISH 9

The emphasis in this course is on language skills. Students will write for a variety of audiences and purposes, focusing on literary response. They will review techniques for the research process and produce a multiple–source paper, as well as practice formal and informal speech. Literature is taught by genre: novel, short story, poetry, and drama.

Credit: 1

Grade: 9

Prerequisite: None

Final: Exam

ENGLISH 9 HONORS

The purpose of this course is to offer students an opportunity for enriched studies. Students will complete a number of individual projects and prepare presentations in addition to the work of the core curriculum. The course is designed to build knowledge, enhance comprehension skills, develop abstract thought processes, and hone critical-thinking skills.-Students will be required to do extensive independent reading and writing.

Credit: 1 Grade: 9

Prerequisite: None

Final: Exam

ENGLISH 10

English 10 builds upon and extends the work of the previous year. Students will be required to do extensive independent reading and writing. Literature units introduce comparison and

contrast of genres and subjects, with emphasis on analysis, interpretation, and concept development. Students will write for a variety of audiences and purposes, focusing on argumentative writing, with uses of claim, evidence and counterclaim.

Credit: 1

Grades: 10

Prerequisite: English 9 or English 9 Honors

Final: Exam

ENGLISH 10 HONORS

In addition to the English 10 Regents course work, students will be required to do extensive independent reading and writing.

Credit: 1

Grades: 10

Prerequisite: English 9 or English 9 Honors

Final: Exam

ENGLISH 11

Students have the opportunity to experience classic and current literature, as well as the cultural and historical influences upon major novelists, poets, dramatists, and non–fiction writers. There is a focus on vocabulary in context and author's choice of language. Writing is focused on literary response and argumentative writing, as well as personal narratives and responses in preparation of the NYS Regents Exam.

Credits: 1

Grades: 11

Prerequisite: English 10 or English 10 Honors

Final: Exam/Writing Project

**Students will take the Regents Exam in June*

ENGLISH 11 HONORS

Besides the core curriculum of English 11, class activities include various critical approaches to the exploration of literature, including technique and structure. Increased mastery of English

syntax, style, and vocabulary will be emphasized. Students also will participate in reader–response writing and discussion and be required to do extensive independent reading and writing.

Credit: 1

Grades: 11

Prerequisite: English 10 or English 10 Honors

Final: Multi–Genre Writing Portfolio Project

**Students will take the Regents Exam in June*

ENGLISH 12 A/B

English 12 A/B prepares students for life after high school, whether they are headed to college or into the workforce. Each half year course, offered sequentially, allows students to further develop strong and sophisticated reading, writing, speaking and listening skills. Students will develop college entrance essays, business letters and creative pieces. Class projects will allow students to select and explore written pieces and writing styles based on their interests.

Credit: .5 credits each

Grades: 12

Prerequisite: English 11 or English 11 Honors

AP ENGLISH LITERATURE AND COMPOSITION

This rigorous and demanding course is designed for serious students of literature who are planning to enter college. AP English engages students in the careful reading and critical analysis of imaginative literature. A high level of verbal competence and skill in writing is required, as well as the ability for sustained independent inquiry.

Credit: 1

Grades: 12

Prerequisite: English 11 or English 11 Honors

Final: Research Paper

**AP Exam is taken in May*

ENGLISH 123: COLLEGE COMPOSITION

College composition is an intensive study in the method, forms and style of composition, and in detailed analysis of the writing process. Students will acquire a foundation in the writing process by developing effective communication skills with an emphasis on expository writing, particularly the essay.

Credit: 0.5

Grades: 12

Prerequisites: English 11 or English 11 Honors and at least a 75 on the English Regents Exam

Final: Research Paper/Oral Presentation

College Credit: 3 CHS credits through SCCC

ENGLISH 124: LITERATURE AND WRITING

This course introduces students to the interpretation of literature and the examination of literary genres, devices, and critical theory. Students read and discuss short fiction, drama, and poetry. Organizational pattern and composition techniques studied in English 123 are strengthened and refined by applying them to writing essays about assigned readings.

Credit: 0.5

Grades: 12

Prerequisites: English 123: College Composition

Final: Research Paper/Exam/Oral Presentation

College Credit: 3 CHS credits through SCCC

FILM AS LITERATURE

This course will examine classic and contemporary cinema as a modern literary form. Students will be expected to complete occasional reading assignments in conjunction with the study of various films. Assessments will include a variety of writing assignments. Class requirements include participation and active, alert viewing. Film lists will vary from semester to semester. Parental permission is required as some of the films will be rated R. *Consistent attendance is critical for success in the course as most films will be viewed in class.*

Credit: 0.5

Grades: 12

Prerequisite: English 11 or English 11 Honors

Final: Exam

MEDIA & SOCIETY

This course will look at how media and society are influenced by each other by looking at major media events of the last century through multiple communication models. Students will watch, read, and listen to rebroadcasts of events and analyze how coverage impacts the viewer/listener and how the viewer/listener impacts coverage, including the impact of technological advances.

Credit: .5

Grades: 12

Prerequisite: English 11 or English 11 Honors

Final: Project/Exam

MEDIA FOCUS

This course guides students to become active viewers and producers of media. They learn to understand the language of film, to analyze commercials and political ads, and to interpret the visual messages and techniques used in TV news programs. After being given lessons and demonstrations with all necessary equipment, the students will produce their own assignment using individual ingenuity and creativity.

Credit: .5

Grades: 12

Prerequisite: English 11 or English 11 Honors

Final: 25 Page Script

SPORTS JOURNALISM

This course is writing intensive, focusing on modeling the style used specifically for sports articles and broadcasts, including use of blogs and tweets. Students will examine the various aspects of sports media, getting a behind the scenes look at such topics as interviewing athletes and coaches, how to choose and cover sporting events, and how to cover these by both speaking publicly and through digital media. Success in Sports Journalism is dependent on the completion of many articles, response journals, written and visual media projects, and research-based assignments.

Credit: 0.5

Grades: 12

Prerequisite: English 11 or English 11 Honors

THEATER I

Primarily directed toward performance, this course includes training in special skills related to theater performance and production. Students study the means of creating and producing drama as they engage in individual and group theatrical and theater–related tasks. The course covers stage language, voice and diction, stage movement, character, analysis, and the fundamentals of play production.

Credit: 0.5

Grades: 12

Prerequisite: English 11 or English 11 Honors

Final: Paper/Performance

THEATER II

This course continues skill development for theater, but delves more deeply into aspects of play production, such as setting, lighting, costuming, and makeup. Students are encouraged to take Theater I, but it is not a prerequisite.

Credit: 0.5

Grades: 12

Prerequisite: English 11 or English 11 Honors

Final: Paper/Performance

PUBLIC SPEAKING

This course provides students an opportunity to develop an informed, proactive voice as citizens through the medium of speech. The class examines how speakers use language to affect audiences. Oral presentations include speeches which entertain, inform, and persuade. Impromptu speeches and critical listening are required. Students who are intimidated by public speaking are encouraged to take this course to improve their confidence.

Credit: 0.5

Grades: 12

Prerequisite: English 11 or English 11 Honors

Final: Project/Speech

INTRODUCTION TO PHILOSOPHY

This course employs a chronological look at the lives, ideas and cultural-historical backgrounds of the major philosophers that have impacted western history and thought. Students explore the central questions that have preoccupied philosophers and laymen alike. Students are required to think critically and form their own conclusions and "personal philosophies," which they will articulate and defend. The grading is heavily based on completion of specific reading and HW assignments.

Credit: 0.5

Grades: 12

Prerequisite: English 11 or English 11 Honors

Final: Paper/Exam

ADDITIONAL INFORMATION

Graduation Requirements

All students are required to pass four years of English to graduate. This can be accomplished through the following sequence:

- Grade 9: English 9 or English 9 Honors
- Grade 10: English 10 or English 10 Honors
- Grade 11: English 11 or English 11 Honors
- Grade 12: AP English or 2 English Electives

All students will take the English Regents Exam in June of their 11th grade year

Honors and Advanced Placement Courses

The honors and AP curriculum is designed for students who love to read and write. Courses are organized like Regents English classes but are aimed at greater proficiency of skills, a wider range of reading, and a greater depth of understanding. Strong reading and writing skills are necessary for success. Based on teacher discretion, extra summer reading and independent work may be required.

Entry into the program is through recommendation and application. Students need to reapply to the program each year, regardless of whether they were enrolled in Regents or honors courses the previous year.

Academic Intervention Services (AIS)

AIS interventions are designed to help students reach the learning standards in English Language Arts. AIS labs focus on the development of reading, writing, and communication skills that students will need to be successful on the Regents exam. Students who fail to meet the minimum of 65 on the ELA Regents will be scheduled for a Regents prep lab for support, as one is available in the schedule.

Social Studies

The social studies program at Mohonasen is intended to prepare students to be productive citizens in the American democratic society of the 21st century. Students will be able to understand the interconnected world in which they live and be able to apply knowledge and skills learned to new and divergent problems and possibilities.

Course Offerings

GLOBAL HISTORY AND GEOGRAPHY 9

In this course, students will study world history from Prehistoric times—through ancient and medieval civilizations—up to 1750. The course will stress themes like the impact of geography, innovation and religion on the development of civilizations. This course fulfills 1 of the 2 global history and geography credits required for graduation in New York State.

Credit: 1

Grades: 9

Prerequisite: None

Final: Exam

GLOBAL HISTORY 9 Honors

The purpose of this course is to offer an enriched study into Global History and Geography in preparation for AP World. Students enrolled in World History Honors are expected to enroll in AP World HIstory in grade 10. This course covers the history of humanity from its earliest origins through the French Revolution. Major areas of study include the interaction of human groups across time through trade, war, and climate shifts. Particular attention will be paid to the development of major world religions and gender roles that developed in various societies. This course fulfills 1 of the 2 global history and geography credits required for graduation in New York State.

Credit: 1

Grades: 9

AP WORLD HISTORY

Students will study the cultural, economic, political, and social developments that have shaped the world from c. 1200 CE to the present. Students will analyze texts, visual sources, and other historical evidence and write essays expressing historical arguments. This course fulfills the second of two global history and geography credits required for graduation in New York State.

Credit: 1

Grades: 10

Prerequisite: Global History and Geography 9 or GLOBAL History 9 Honors

Final: Global History Regents Exam

**AP Exam is taken in May*

GLOBAL HISTORY 10

Global 10 continues the study of Global History and Geography, beginning with an examination of the Enlightenment and proceeding through the present day. Students will investigate enduring issues in world history that have shaped modern society. Students will examine issues, themes, and historical events from multiple perspectives and make global connections that lead to in-depth understanding. This course fulfills the second of two global history and geography credits required for graduation in New York State.

Credit: 1

Grades: 10

Prerequisite: Global History and Geography 9

Final: Global History Regents Exam

UNITED STATES HISTORY & GOVERNMENT

This course examines the history of the United States from pre-colonial times to the present. The U.S. Constitution is a key unit of study and provides the framework for subsequent time periods. Students will develop and exercise their critical thinking skills through the analysis of primary and secondary sources, and both thematic and document-based writing.

Credit: 1

Grades: 11

Prerequisite: Global History 10 or AP World History

Final: Regents Exam

AP US HISTORY

Students will study the cultural, economic, political, and social developments that have shaped the United States from c. 1491 to the present. Students will analyze texts, visual sources, and other historical evidence and write essays expressing historical arguments.

Credit: 1

Grades: 11

Prerequisite: Global History 10 or AP World History

Final: US History & Government Regents Exam

**AP Exam is taken in May*

SUPA *PST101*

SUPA/PST 101 fulfills a NYS Participation in Government requirement, as well as a social sciences and a critical reflections requirement for the Arts and Sciences core. This course is accredited through Syracuse University and students will earn 3 Syracuse University credits upon successful completion. It is also required for all Policy Studies majors. It helps you learn how to do good as a citizen and to do well in your personal life. It develops the research skills that you will use throughout your college career and the rest of your life.

PST 101 is divided into five parts. For each part, you will submit a module paper. Each module must be typed following the correct format. Absences, tardiness or poor participation in class will result in deductions from your module grades. Class time will be used for lectures, outside speakers, and group exercises.

Credits: 3 Credits

Prerequisites / Co-requisite: There are no prerequisites for this course.

PST 101 Introduction to the Analysis of Public Policy
This course is a partnership between Mohonasen High School and Syracuse University Project Advance. The course is designed to provide students with basic research, communication, and decision-making skills used in public policy analysis. In addition, students are required to read and analyze articles in *The New York Times* on local, state, and international public policy

issues. The instructor determines which public policy issues are chosen for study throughout the semester.

The content coverage of the course, while important, is secondary to the development of a range of applied social science skills that will help the student make more informed choices as a citizen, worker, and consumer. These include the ability to define and identify the components of public policy issues; communicate ideas and findings with respect to public policy issues; collect information on public policy issues; use graphs, tables, and statistics to analyze public policy; examine the use of surveys and informal interviewing procedures; identify a social problem and come up with a proposed public policy to deal with it; list the benefits and costs of a proposed public policy; forecast the impact of the policy on societal conditions; analyze the political factors and develop strategies to implement a proposed public policy; identify essential features of major current public policy issues; apply skills to Syracuse University and outside the university; and work in teams effectively. This course can replace or be taken in addition to the high school Participation in Government course and earn three college credits from Syracuse University. The cost is $345 and financial aid is available to eligible students through Syracuse University.

High School Credit: 0.5
Grade: 12
Prerequisite: US History and Government or AP US History

SUPA ECONOMICS

ECN 203: Economic Ideas and Issues
This course is an introduction to mainstream economic thought designed for students with a liberal arts interest. The goals of this course are to introduce students to the ideas that form the foundation of modern Western (neoclassical) economic thought, to examine the basic framework (the model) that economists have built on this foundation, and to show how this model is applied to current issues facing individuals and society.

The course begins with a presentation of the scientific method, which is then used to analyze the question: How do individuals and societies make choices when they are faced with scarcity? Beginning with the individual in the simplest of situations, a one-person society, the course moves step by step to develop a model of a complex society based on division of labor and exchange through markets. The process takes students from the microeconomic to the macroeconomic level, emphasizing the connection between these two perspectives. Students examine the benefits, as well as the problems, inherent in a market-oriented economy. The course prepares students to analyze and understand the ongoing economic policy debate between interventionists and non-interventionists. This course can replace or be taken in addition to the high school Economics course and earn three college credits from Syracuse University.The cost is $345 and financial aid is available to eligible students through Syracuse University.

Credit: 0.5
Grade: 12
Prerequisite: US History and Government or AP US History

ADDITIONAL INFORMATION

Graduation Requirements

All students are required to take four years of social studies to graduate. This is accomplished through the following sequence:

- Grade 9: Global History 9 or Global History 9 Honors
- Grade 10: Global History 10 or AP World History
- Grade 11:US History and Government or AP US History
- Grade 12: Participation in Government (PIG) and Economics

Academic Intervention Services (AIS)

AIS services are provided through a Cross Content Connections course for students who do not initially pass the Regents exams in Global, English and/or US History.

Advanced Placement Courses (AP)

AP courses in social studies are geared for serious history students with an interest in reading and writing. These courses entail significant research and written work. Students can request these courses during Course Registration in January and are expected to take the May AP exam for all AP courses in which they are enrolled, which cost approx $100 each.

Math

The mathematics program at Mohonasen offers preparation in the concepts and skills necessary for competence in mathematics, as well as preparation for further study. Students will learn problem-solving techniques, gain a deeper knowledge of our number system, acquire experience with quantitative reasoning, and develop critical-thinking skills.

Course Offerings

NEXT-GEN REGENTS ALGEBRA I

This course is an introduction to algebraic concepts that emphasize the New York State Common Core learning standards. The topics covered provide a foundational understanding in algebra that prepares students for further study in mathematics. Topics covered throughout the course include foundational algebraic skills, linear inequalities, linear, quadratic and exponential

functions, systems of equations, sequences and series, and statistics. This course prepares students to take the NG Algebra I Regents exam in June.

Credit: 1

Grades: 9

Prerequisite: Successful completion of Math 8

Final: NG Algebra I Regents Exam

NEXT-GEN REGENTS ALGEBRA I W/ LAB

This course is an introduction to algebraic concepts that emphasize the New York State Common Core learning standards. The topics covered provide a foundational understanding in algebra that prepares students for further study in mathematics. Topics covered throughout the course include foundational algebraic skills, linear inequalities, linear, quadratic and exponential functions, systems of equations, sequences and series, and statistics. This course meets three of the four days in the day rotation schedule. This course prepares students to take the NG Algebra I Regents exam in June.

Credit: 1

Grades: 9

Prerequisite: Successful completion of Math 8

Final: NG Algebra I Regents Exam

NEXT-GEN REGENTS ALGEBRA I EXTENDED

This course is an introduction to algebraic concepts that emphasize the New York State Common Core learning standards. The topics covered provide a foundational understanding in algebra that prepares students for further study in mathematics. Topics covered throughout the course include foundational algebraic skills, linear inequalities, linear, quadratic and exponential functions, systems of equations, sequences and series, and statistics. This course meets all four days in the day rotation schedule. This course prepares students to take the NG Algebra I Regents exam in June.

Credit: 1

Grades: 9

Prerequisite: Successful completion of MCS 8, or students who struggled with Math 8 and need additional support and remediation in Algebra I.

Final: NG Algebra I Regents Exam

COMMON CORE REGENTS GEOMETRY

This course will reinforce topics covered in CC Algebra I and introduce logic, right–triangle geometry, area and volume of geometric shapes, transformations, properties of quadrilaterals and triangles, and geometric proof. This course prepares students to take the CC Geometry Regents exam in June.

Credit: 1

Grades: 9, 10, 11

Prerequisite: Successful completion of CC Regents Algebra I and a score of 75 or better on the CC Algebra I Regents Exam.

Final: CC Geometry Regents Exam

COMMON CORE REGENTS GEOMETRY W/ LAB

This course will reinforce topics covered in CC Algebra I and introduce logic, right–triangle geometry, area and volume of geometric shapes, transformations, properties of quadrilaterals and triangles, and geometric proof. This course meets three of the four days in the day rotation schedule. This course prepares students to take the CC Geometry Regents exam in June.

Credit: 1

Grades: 9, 10, 11

Prerequisite: Successful completion of CC Regents Algebra I and a score of 65 or better on the CC Algebra I Regents Exam.

Final: CC Geometry Regents Exam

COMMON CORE GEOMETRY

This course covers primarily Euclidean geometry, congruence, similarity, and transformation including rigid motions. It also includes the study of triangles with emphasis on real-world and

theoretical situations including triangle congruence. Points, lines, planes, circles and other figures in 2-dimensional space are studied along with the primary 3-dimensional figures. This course prepares students to take a local final exam in June.

Credit: 1

Grades: 10, 11, 12

Prerequisite: Successful completion of CC Regents Algebra I.

Final: Local Final Exam

COMMON CORE ALGEBRA II (PART 1)

This course is intended for students who have successfully completed both Algebra I and a geometry course. Topics covered will include functions, rational expressions, radicals, exponents, logarithms, and trigonometry. While this course does not cover *all* the concepts required for the Algebra II Regents exam, it provides students a foundation in many of the mathematical concepts preparing them for the Common Core Algebra II course (which culminates in the Algebra II Regents exam) the following year. This course prepares students to take a local final exam in June.

Credit: 1

Grades: 10, 11, 12

Prerequisite: Successful completion of Common Core Geometry or CC Regents Geometry.

Final: Local Final Exam

COMMON CORE REGENTS ALGEBRA II

This course is designed for the strong CC Regents Geometry student who will gain a greater depth of understanding in mathematical concepts and how they relate to the world using real-life applications. The scope and content include polynomial and rational expressions, real and complex numbers, relations and functions, transformational geometry, exponential and logarithmic functions, circles, trigonometric graphs, equations and identities, and probability and statistics. This course prepares students to take the CC Algebra II Regents exam in June.

Credit: 1

Grades: 10, 11, 12

Prerequisite: Successful completion of Algebra II Part I, or successful completion of CC Regents Geometry and a score of 65 or better on the CC Geometry Regents Exam.

College Credit: This course offers the option for students to earn 3 CHS credits through SCCC.

Final: CC Algebra II Regents Exam

COMMON CORE REGENTS ALGEBRA II W/ LAB

This course is designed for the CC Regents Geometry student who will gain a greater depth of understanding in mathematical concepts and how they relate to the world using real-life applications. The scope and content include polynomial and rational expressions, real and complex numbers, relations and functions, transformational geometry, exponential and logarithmic functions, circles, trigonometric graphs, equations and identities, and probability and statistics. This course meets three of the four days in the day rotation schedule. This course prepares students to take the Algebra II Regents exam in June.

Credit: 1

Grades: 10, 11, 12

Prerequisite: Successful completion of Algebra II Part I, or successful completion of CC Regents Geometry and a score of 65 or better on the CC Geometry Regents Exam.

College Credit: This course offers the option for students to earn 3 CHS credits through SCCC.

Final: CC Algebra II Regents Exam

INTERMEDIATE ALGEBRA

This course is designed to fulfill the third year graduation requirement for math. The scope and content include polynomial and rational expressions, equations, and inequalities, real and complex numbers and algebraic and mathematical concepts. This course prepares students to take a local final exam in June.

Credit: 1

Grades: 11, 12

Prerequisite: Successful completion of a Geometry course.

Final: Local Final Exam

FINANCIAL MATH

This course is designed to introduce students to concepts of financial literacy through the lens of mathematics. Students will learn concepts of sound financial practices while also learning the mathematical concepts underpinning them. The scope and content of this course includes, but is not limited to, the topics of budgeting, banking services, credit, employment, taxes, investments, and planning for retirement.

Credit: 1

Grades: 11, 12

Prerequisite: Successful completion of a Geometry course. This course is not intended to replace a Regents level course as a student progresses through the Regents pathway.

STATISTICS

This college-level course is intended for students looking for a fourth credit in mathematics. Statistics is one of the most widely used applications of mathematics and this course is intended to teach students how to use statistics to interpret the world around them. Students will learn about collecting data and sampling techniques, organizing data for presenting information, and analyzing data to make good decisions. This course prepares students to take a local final exam in June. This course is offered with the option for College in the High School credit.

Credit: 1

Grades: 11,12

Prerequisite: Completion of Algebra II Part 1 or Algebra II or Pre-Calculus

College Credit: This course offers the option for students to earn 3 CHS credits through SCCC.

Final: Local Final exam

PRE-CALCULUS

This course is designed to prepare students for college-level mathematics. It includes a very thorough study of all algebraic and trigonometric functions, polynomial equations, functional notations, sequence and series, conic matrices, vectors and rational functions. This course is highly recommended for those planning to attend college.

Credit: 1

Grades: 11, 12

Prerequisite: Successful completion of Algebra II and a score of 70 or higher on the Algebra II Regents Exam.

Final: Local Final Exam

College Credit: This course offers the option for students to earn 4 CHS credits through SCCC.

ADVANCED PLACEMENT CALCULUS (AB)

This is a college level course equivalent to Calculus 1 and 2 with successful completion of the AB Calculus AB exam. Topics include limits, derivatives and their applications, integrals and their applications. Additional topics include but are not limited applications with parametric equations, vectors, series.

In May, students are required to sit for the AP Calculus AB exam.

Credit: 1

Grades: 12

Prerequisite: Successful completion of Pre-Calculus with a minimum grade of 75.

Final: Local Final Exam

College Credit: This course offers the option for students to earn 8 CHS credits through SCCC.

***Students enrolled in AP Calculus AB are expected to take the AP exam which is offered in May*

DISCOVERING COMPUTER SCIENCE

This course is designed as an introduction to computer science for high school students who want to express themselves creatively and solve problems that are interesting to them using computational devices. This course is designed for students that have little or no experience studying computer science. Through a series of engaging, hands-on labs and projects, students learn the fundamentals of computer programming using the block-based language Snap! Students will also study the world wide web, designing and creating their own website using HTML, CSS, and JavaScript. Finally, students will explore drawing, animation, and problem solving using Python. Throughout the course, computing history and current events in computer science will be incorporated. Special topics in computer science such as encryption, human-computer interaction, rapid prototyping, and others may be explored.

Credit: 1

Grades: 9, 10, 11, 12

Prerequisite: A desire to learn to code! 80+ in Math 8 or successful completion of Alg 1

Final: None

COMPUTER SCIENCE

This course is designed as an introduction to a range of topics in computer science. Through a series of engaging, hands-on projects, students will begin their study of web design and

computer programming. The application and limits of computing will be explored through current topics in computing that are also relevant to high school students. An emphasis will be placed on developing problem-solving and computational thinking skills. (Note: This class is also listed under Emerging Technologies.)

Credit: 1

Grades: 10, 11, 12

Prerequisite: 85+ in Regents Algebra course OR successful completion of Discovering Computer Sci OR geometry

Final: Exam

College Credit: This course offers the option for students to earn 3 college credits through Siena College.

INTRODUCTION TO SOFTWARE DEVELOPMENT

This course is designed to continue a student's introduction to the academic discipline of Computer Science. Course objectives include developing a student's ability to create programming solutions, to translate algorithmic solutions to a Java implementation, to acquire knowledge about computing systems in general, and to enhance a student's problem-solving abilities.

Credit: 1

Grade: 11, 12

Prerequisite: Successful completion of Computer Science, or successful completion of Algebra II with teacher recommendation or Pre-Calculus.

College Credit: This course offers the option for students to earn 4 college credits through Siena College.

INFORMATION

Graduation Requirements

All students are required to earn at least three units of high school math to graduate. However, students are highly encouraged to earn four credits of math while in high school. Students also must pass at least one math Regents exam in order to graduate. In order to earn an Advanced Regents Diploma, students are required to pass the Algebra I, Geometry, and Algebra II Regents exams.

The sequence of courses is determined by a student's previous academic record in math alongside teacher recommendation. If students would like to challenge their placement, a meeting with their school counselor, the math administrator, and a parent may be required.

A student can earn a math and/or science distinction on their diploma if they score at least an 85 on three Regents exams in that area (math or science, or both).

Academic Intervention Services (AIS)

AIS is delivered to students through an attached math lab. Students receiving AIS services in math will receive an additional 80 minutes of class time meeting during three of the four days in the day rotation schedule. Students enrolled in Regents Algebra I Extended will have an additional 160 minutes of class time meeting during all four days in the day rotation schedule. Students will complete the necessary coursework within one year and will take the associated NG Mathematics Regents exam. Other supports can include Regents Prep labs, if available, for students who are not successful on the NG Algebra I Regents exam.

Calculators

The Texas Instruments 84 Plus (TI-84+) graphing calculator is an important part of the math curriculum. These calculators are used at all levels of the curriculum. A limited number of calculators are available within the class, however, students are strongly encouraged to purchase their own. These calculators are recommended for all math classes and required for the NG Algebra I, NG Geometry, and NG Algebra II Regents exams.

Science

The department puts science in historical perspective and relates it to problems in society and technology. Science is concerned with the facts, concepts, and processes at work in the physical and biological worlds. Emphasis is placed on problem–solving skills and scientific attitudes.

Course Offerings

Regents Life Science: Biology

Regents Life Science: Biology is taught in accordance with the New York State core curriculum. Emphasis is placed on scientific inquiry, testing and analyzing proposed explanations using conventional and invented methods, examining similarities and differences among living things, reproduction and development, the basic unit of life, physiology, classification, ecology, genetics, biochemistry, and evolution. This course prepares students to take the Regents Life Science: Biology exam in June.

Credit 1

Grades 9

Prerequisite: Successful completion of Science 8.

Final: Regents Life Science: Biology Exam. To be eligible to sit for the exam, students must have 1200 minutes of hands-on laboratory experience with evidence of satisfactory completion.

Regents Earth and Space Science

This course will explore the science of geology, astronomy, and meteorology. It introduces students to a wide range of fundamental principles, ideas, and investigation techniques. This course prepares students to take the Regents Earth and Space Science exam in June.

Credit: 1

Grades: 9,10,11

Prerequisite: Successful completion of Living Environment or Regents Life Science: Biology.

Final: Regents Earth and Space Science Exam. To be eligible to sit for the exam, students must have 1200 minutes of hands-on laboratory experience with evidence of satisfactory completion.

Regents Physical Science: Chemistry

In this course students will explore the nature of matter, energy, the mole, formulas and equations, states of matter, composition of atoms, chemical bonding, rates of reaction, acid and bases and several other chemistry concepts. This course prepares students to take the Regents Physical Science: Chemistry exam in June.

Credit: 1

Grades: 10, 11, 12

Prerequisite: Successful completion of Earth Science or Earth and Space Science and enrollment in, or completion of, NG Algebra 2 Part 1 or NG Regents Algebra 2.

Final: Regents Physical Science: Chemistry Exam. To be eligible to sit for the exam, students must have 1200 minutes of hands-on laboratory experience with evidence of satisfactory completion.

Regents Physical Science: Physics

This course is the study of the physical world from the subatomic to the cosmic level. It is designed for students with a strong science and math background, especially for those students planning to study science or engineering in the future. Students will study the nature of matter and energy and how they are related. Topics include mechanics, waves and light, electricity and

magnetism, and atomic and modern physics. This course prepares students to take the Physics Regents exam in June.

Credit: 1

Grades: 11, 12

Prerequisite: Successful completion of Regents Chemistry or Regents Physical Science: Chemistry and enrollment in, or completion of, NG Regents Algebra 2.

Final: Regents Physical Science: Physics Exam. To be eligible to sit for the exam, students must have 1200 minutes of hands-on laboratory experience with evidence of satisfactory completion.

Core Earth Science

In this course, students will explore the major components of Earth science: Meteorology, Geology, and Astronomy. Topics include: rocks and minerals, plate tectonics, Earth's waters, atmosphere, climate, and our solar system. We will ask and answer questions about our Earth as we discover what happened in the past, what caused the earth to look the way it does, and what it might look like in the future.

Credit:1

Grades: 9,10,11,12

Prerequisite: One year of science (preferably Living Environment) and a teacher recommendation

Environmental Studies

Relevant environmental issues and their resulting impacts, as well as sustainable energy and agriculture, will be investigated through interdisciplinary research, literature and field based inquiry. This course includes fall/spring garden labor and production, and on campus multipurpose landscape design, installation and maintenance. Additionally this course incorporates lectures, guest speakers, off campus learning labs and student projects. This course can be used to meet the third year science course requirement.

Credit: 1

Grades: 11,12

Prerequisite: Successful completion of 2 years of science (1 life science, 1 physical science).

Final: Local Final Exam

College Credit: This course offers the option for students to earn 3 CHS credits through SCCC.

Introduction to Medical Science: Life Science

This course of study will help prepare students interested in entering a two or four year college program in a health or medical related profession. Whether interested in being a pharmacist, nurse, doctor, paramedic or technician, this course will expose students to the many branches of medicine. Students will be instructed in standard diagnostic techniques, treatment procedures, medical terminology, medical reporting, and biomedical ethics. Topics include, but are not limited to: basic anatomy and physiology, microbiology and epidemiology, oncology, dermatology, orthopedics, hematology, cardiology, respiratory therapy, radiology, neurology, and psychology. In addition, students will gain hands-on practical experiences to help develop skills in basic first aid CPR. This course can be used to meet the third year science course requirement.

Credit: 1

Grades: 11,12

Prerequisite: Successful completion of 2 years of science (1 life science, 1 physical science).

Final: Local Final Exam

Criminal Science

This course is a survey of a crime laboratory. It looks at the role of the lab in criminal investigations including firearms identification, examination of documents, crime scene analysis, and fingerprinting. This course is part of a sequence of courses in the Criminal Justice pathway and must be taken in conjunction with the Criminal Justice courses. Students not enrolled in the Criminal Justice pathway are not permitted to enroll. Enrollment preference will be given to Juniors. This course can meet science requirements for graduation.

Credit: 1

Grades: 11,12

Prerequisite: Application and passed at least one science Regents exam.

Other: Must be taken with Introduction to Criminal Justice

**Registration priority given to juniors*

AP Biology

This course is the equivalent of a first year, two semester college biology course. It is based on the College Board AP Biology framework. Topics include evolution and diversity of life, biological systems and maintenance of homeostasis, life processes, and the interactions of biological systems. The course will culminate in the AP Biology exam in May.

Credit: 1

Grades: 12

Prerequisite: Successful completion of three Regents science courses. An 85% or better in chemistry is recommended.

Final: Local Final Exam

***Students enrolled in AP Biology are expected to take the AP exam which is offered in May.*

AP Physics 1

AP Physics 1 is a full-year honors level physics course that is the equivalent of a first-semester introductory college course in algebra-based physics. Students will deepen their understanding of physics through inquiry-based investigations as they explore the topics of kinematics; dynamics; circular motion; gravitation; energy; momentum; simple harmonic motion; torque and rotational motion. Students will take the AP Physics 1 exam in May and then prepare to take the Siena Physics 110 final exam in June with the additional topics of fluids and thermodynamics.

Credit: 1

Grade: 11, 12

Prerequisite: Successful completion of at least three Regents science courses and enrollment in, or completion of, CC Regents Algebra 2 (with or without lab).

Final: AP exam in May and Siena Physics 110 final exam in June. Both finals provide the opportunity for students to receive college credit.

***Students enrolled in AP Physics 1 are expected to take the AP exam which is offered in May.*

AP Chemistry

The AP Chemistry course provides students with a college-level foundation to support future advanced coursework in chemistry. Students cultivate their understanding of chemistry through inquiry-based investigations, as they explore content such as: atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium.

College Course Equivalent:

The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first college year.

Lab Requirement:
This course requires that 25 percent of instructional time engages students in lab investigations. This includes a minimum of 16 hands-on labs (at least six of which are inquiry-based). It is recommended that students keep a lab notebook throughout.

Credit: 1

Grade: 11, 12

Prerequisite: Successful completion of at least three Regents Science credits (including successful completion of Principles of Chemistry) and enrollment in, or completion of, CC Regents Algebra 2.

Final: Local Final Exam

***Students enrolled in AP Chemistry are expected to take the AP exam which is offered in May.*

INFORMATION

Graduation Requirements

All students are required to earn three credits in science to graduate. However, students are highly encouraged to earn four credits in science while in high school. One of these courses must be in a life science (Living Environment) and at least one course must be in a physical setting (Earth Science, Chemistry, or Physics).

All students are required to pass at least one Regents Exam in science. Students must pass at least two Regents Exams (1 life science and 1 physical science) to earn an Advanced Regents Diploma.

A student can earn a math and/or science distinction on their diploma if s/he scores at least an 85 on three Regents exams in that area (math or science, or both).

Laboratory Requirements

Completion of required laboratory experiments and activities, including submission of acceptable written reports of all experiments and activities, is mandated for admission to New York State Regents Exams in science. As per NYS Education Department regulations, students must complete at least 1200 lab minutes in any course that leads to a science Regents exam. They also are required for district local final examinations, as per department policy. Labs meet for an additional 80 minutes in a four day rotation and are included in the time allotted for the class on student schedules.

Prerequisites

Prerequisites as listed for science courses are to be interpreted as the minimum background for success in a given course. Any deviation must be within the recommendation of the student's counselor, the academic administrator for science, and the principal. Math courses are part of the prerequisite because of the necessary problem–solving skills they teach.

Advanced Placement Courses (AP)

Students enrolling in AP courses should be highly motivated and prepared to experience college-level rigor by enrolling in the course. All students looking for a challenge, or the possibility of earning college credit, may enroll in an AP course if they have met the prerequisites. It is highly recommended that students enrolling in an AP course obtain recommendations from their current teacher and the AP teacher.

Students are expected to take the AP Exam for each AP course they enroll in.

Academic Intervention Services (AIS)

Support includes Regents Prep labs for students who are not successful on the Living Environment Regents exam, as one is available in the schedule.

World Languages

Our department's mission is to inspire and prepare students to become active, compassionate global citizens. We provide a rigorous academic curriculum, diverse language opportunities, as well as a learning environment that celebrates multiculturalism and multilingualism.

Course Offerings

FRENCH 1 (as request numbers allow)

This course is an introduction to French language and culture, and allows students to establish a basic foundation in the communicative skills of listening, speaking, reading, and writing. Students will be able to communicate in these areas within a fixed vocabulary range.

Credit: 1

Grades: 9,10,11,12

Prerequisite: None

Final: Exam

FRENCH 2

In this course communicative skills are strengthened by increasing depth of vocabulary and structure, and by reinforcement and expansion of previously learned language concepts.

Culture remains an integral part of the program. Students will grow in their ability to communicate from a basic to an intermediate level.

Credit: 1

Grades: 9,10,11,12

Prerequisite: French 1

Final: Exam

FRENCH 3

Students continue to expand their communicative abilities and their understanding of the French speaking world. Students increase their vocabulary and their knowledge of structure and develop strategies for mastering a larger and more sophisticated variety of materials and language tasks.

Credit: 1

Grades: 10,11,12

Prerequisite: French 2

Final: Local Exam

FRENCH 4

In this course students move toward self–expression in French and showcase their creativity in a variety of projects. These include a reflection on Francophone poetry, short stories, and a short novel. Students accumulate experience with more advanced structure concepts and nuances of the language.

Credit: 1

Grades: 11,12

Prerequisite: French 3

Final: Checkpoint B Exam

College Credit: 3 CHS credits through HVCC

FRENCH 5

Students continue their growth toward an advanced-level of expertise in French by expansion of their communicative skills, understanding of culture, and more exposure to literature and history. Projects continue to reflect students' creativity and increasing sophistication in the language. As in previous levels, there is emphasis on the usefulness of French in business and other employment areas.

Credit: 1

Grades: 12

Prerequisite: French 4

Final: Exam

College Credit: 3 CHS credits through HVCC

SPANISH 1

This course introduces students to the Spanish language and culture of the Hispanic people. Communicative skills of listening and speaking are developed. At the end of the course, students will possess sufficient basic vocabulary and structure to comprehend and express themselves with others.

Credit: 1

Grades: 9,10,11,12

Prerequisite: None

Final: Exam

SPANISH 2

The fundamental language skills possessed by the student at the end of Spanish 1 will be reinforced. While oral communication remains the primary objective, reading and writing skills will be expanded through increased vocabulary and greater emphasis on grammatical structures.

Credit: 1

Grades: 9,10,11,12

Prerequisite: Spanish 1

Final: Exam

SPANISH 3

This course, a synthesis of Spanish 1 and 2, offers a formal analysis of grammar for use in reading and writing. Writing is emphasized through guided and original compositions. Vocabulary is expanded through supplemental readings. And conversational and listening skills are further developed through dialogue.

Credit: 1

Grades: 10,11,12

Prerequisite: Spanish 2

Final: Local exam

SPANISH 4

Grammar from Spanish 1,2 and 3 is reinforced and expanded upon through readings in the native language.

Credit: 1

Grades: 11,12

Prerequisite: Spanish 3

Final: Checkpoint B Exam

College Credit: 3 CHS credits through SCCC

SPANISH 5

The objective of the course is to provide students with an in–depth study of the Spanish language. The goal is for students to demonstrate what they can produce in Spanish using a variety of formats. Some of the work completed during the year will reflect the student's particular areas of interest and independent research. The course will involve thematic units allowing students to improve communicative proficiency, literary criticism and interpretation, translation, and cross-cultural understanding.

Credit: 1

Grades: 12

Prerequisite: Spanish 4 and a 65 on the Spanish Checkpoint B Exam

Final: Exam

College Credit: 3 CHS credits through SCCC are available.

INFORMATION

Sequences and Requirements

One credit of foreign language is required to graduate in New York State. This requirement can be met in several ways:

- Earn at least a 65 in French 8 or Spanish 8 and a 65 on the French/Spanish exam in eighth grade
- Earn a 65 in French 1/Spanish 1 in high school

To earn a sequence in foreign language, students must pass French 4/Spanish 4 and pass the corresponding Checkpoint B Exam. Doing this will meet the sequence requirement for an Advanced Regents Diploma.

Health & Physical Education

The goal of health and physical education courses is to encourage students to be physically active and expand their understanding of personal habits and their importance in promoting short- and long-term physical health. In addition to class instruction, an extensive intramural program is offered to students.

Physical Education Grading

All students will be graded using a rubric in physical education class. Each day is worth 5 points. Students are graded on participation/dress, effort, punctuality, and attitude. If all of these expectations are met for that day, 5 points will be awarded. It is possible to receive anywhere from 0-5 points per day. Students must dress appropriately for PE and participate actively and to the best of their ability for the entire class in order to receive full credit.

Students who are absent from school will lose 5 points for that day. Students who are absent from PE class for both excused (attending a school field trip, scheduled music lessons, scheduled guidance or other counselor meeting, state and local exams) and unexcused (class cut) reasons will also lose credit (5 points) for that day. If a student does not change or participate in class, they will also lose 5 points for that day. Students will be allowed to make-up

and receive full credit for all excused absences and “0’s.” Class cuts cannot be made up for class credit. PE make-ups may be done one of two ways:

- Intramurals: Students may participate in intramurals when offered during activity period after school. The schedule is posted every Monday and will change weekly.
- PE Class with your teacher: Students must get an appointment pass from their PE teacher to attend class during study hall for make-up credit.

Course Offerings

Physical Education 9-12

Credit: 0.25/semester

Grades: 9,10,11,12

Final: None

Currently students in PE class will have the option to choose from PE 9-12 or Strength and Conditioning. PE 9-12 students will have the option to choose team/individual sports.

Team Sports

Team Sports consists of highly competitive team sports, like football, soccer and basketball. They utilize the sport education model, where every student has their own role/responsibility (coach, captain, fitness instructor, scorekeeper, official, etc.). At the beginning of each unit, they draft new teams, come up with team names and designate who will perform each role. Next, they spend a few classes developing skills and strategies for gameplay as a team. The remainder of the unit consists of tournament play that leads to a championship game to designate the winning team of that particular sport unit.

Individual Sports and Fitness

The Individual Sports and Fitness group is less competitive for the most part. It includes individual sports such as badminton, tennis and modified volleyball. It also focuses on improving fitness levels while participating in various fitness-related activities such as yoga, pilates, dance, etc.

Strength and Conditioning

The Strength and Conditioning group will take place in the weight room and focus on improving muscular strength and endurance, agility, speed and power. These students will learn various

weight lifting and strength training techniques. They will also focus on sport-specific exercises necessary to improve performance on the athletic field/court.

Health

Health education is the process of providing learning experiences for the purpose of influencing knowledge, attitudes, and conduct relating to individual, community, and world health. The course also helps instruct students how to maintain or improve their health and be able to secure abundant vigor and vitality that are the foundations for the greatest possible happiness and service in personal, family, and community life.

Credit: 0.5

Grades: 10,11,12

Prerequisite: None

Final: Test/Project

INFORMATION

Graduation Requirements

All students are required to earn two units in physical education over the course of four years. This entails students taking PE every other day throughout high school. Students who fail PE will be rescheduled for two PE courses the following semester.

Students unable to take PE will be given written assignments to earn credits. In such cases, a written statement from a doctor must be given to the school nurse in a timely fashion.

All students are also required to complete and pass a health course. Mohonasen has added the state-mandated parenting course to the health curriculum.

MOVED FROM BEFORE MUSIC

Medicine & Health

The medicine and health program is oriented toward students who are interested in careers in health, nutrition, physical education, and sports science.

Course Offerings

Foundations of Sports Medicine (not offered in 2025-26)

Foundations of Sports Medicine is a one-semester course. The course will cover the introduction to college level exercise science, kinesiology, and anatomy & physiology. This class is intended for juniors & seniors who are interested in athletic training, physical therapy, and the treatment of injuries. Functional movement, nutrition, and rehabilitation will be explored within the context of sports performance. The class is meant to cultivate interest in the field of health sciences.

Credit: .5

Grades: 11,12

Prerequisite: Health with at least 85 average and Living Environment with at least 80 average

Final: Exam/Project

Program Facilitator

The District Director of Physical Education, Athletics & Health Education serves as the Program Facilitator for the Medicine & Health program.

Art

The curriculum of the art department is available for all students. These courses are designed to enable students to learn more about themselves and their abilities so they can succeed in school and in life. These classes will help prepare the serious art student as well as enhance the artistic skills of all students.

Course Offerings

STUDIO IN ART

Studio in Art is required as a student's first experience. The student will work in two or three dimensions in a great variety of media, which may include drawing, watercolor, tempera, printmaking, sculpture, pottery, charcoals, pastels, pen and ink, or lettering. Processes, techniques, and fundamentals of design are learned largely through students' involvement in substantial and exciting projects. Art appreciation, art criticism, aesthetics, and art history are integrated into the program and correlated within the art projects.

Credit: 1

Grades: 9,10,11,12

Final: Exam/Project

Prerequisite: None

**Course is a prerequisite for all other art courses.*

**Meets art/music requirement for graduation.*

DRAWING AND PAINTING

This course enables students to study figure, still life, and landscape drawing and painting. This course prepares students for teaching, illustrating, designing, and other art-related careers.

Credit: 1

Grades: 10,11,12

Final: Project/Self-Assessment

Prerequisite: Studio in Art

CERAMICS 1

This will be an introduction to ceramics. Students will begin to explore the processes, techniques, equipment and tools used when working with clay. They will be taught the basic skills of hand building such as pinching, coiling and slab construction, as well as an introduction to throwing on the wheel. Students will also learn the basic techniques for glazing and other surface treatments used in the ceramic arts.

Credit: .5

Grades: 10,11,12

Final: Exam

Prerequisite: Studio in Art

SCULPTURE 1

This course will be an introduction to sculpture. Projects will be created on a small scale using a variety of media. We will look at different styles of sculpture throughout art history. Students will explore the three-dimensional relationship of volume, mass, form and light.

Credit: .5 Grades: 10,11,12

Final: Exam

Prerequisite: Studio in Art

GRAPHIC ART

In this course, students will be introduced to the elements and principles of basic graphic design. Students will create a variety of projects including logos, posters, digital art, digital painting, and character development. Through the study of typography, design problem-solving, and design concepts, students will discover how to creatively and competently design using technology used in the field today. Students will work with Adobe In-Design, Illustrator, and Photoshop to create basic design projects as well as many professional work samples.

Credit: .5

Grades: 10,11,12

Prerequisite: Studio Art

ADVANCED STUDIO 3D: CERAMICS II

This course will expand on the knowledge and experience gained in Ceramics I. Students will learn more advanced techniques in hand building, throwing on the potter's wheel, and glazing. They will learn to use a combination of different techniques of building to create their pieces. Students in this class will also take a more active role in the daily job of keeping a ceramics studio running. Many projects will allow the self-motivated and independent art student to develop their own artistic voice when creating solutions to creative problem solving assignments.

Credit: 0.5

Grades: 11,12

Final: Project

Prerequisite: Studio in Art, Ceramics 1

ADVANCED STUDIO 3D : SCULPTURE II

This course will expand on the knowledge and experience gained in Sculpture I. A variety of media and technique choices will be available to the students as they explore the application of more complex design problems in both relief and sculpture in the round. Many projects will allow the self-motivated and independent art student to develop their own artistic voice when creating solutions to creative problem solving assignments.

Credit: 0.5

Grades: 11,12

Final: Project

Prerequisite: Studio in Art, Sculpture 1

ADVANCED STUDIO: DRAWING AND PAINTING

This course is designed for the student who needs an art portfolio for college. The course covers composition, elements and principles of design, and color theory. Personal expression and drawing from observation will be stressed.

Credit: 1

Grades: 11,12

Final: Exhibit/Portfolio

Prerequisite: Studio in Art, Drawing and Painting

**College Credit: 3 CHS credits through SCCC*

EXPLORATORY ART

Exploratory Art is a class for all entry level students in which they will develop skills related to life and all forms of art. The purpose of this class will be to explore all types of artistic endeavors pertaining to life skills and functions. This is a full year class for 1 full credit and is open to all students who wish to explore various types of art and techniques within and outside the traditional art classroom. Another purpose of this class is to develop social skills and utilize skills related to the interactions within a community and society.

Credit: 1

Grades: 9-12

Final: NA

Prerequisite: Studio Art/ Studio Art Equivalent for BOCES & WBL Students

DIGITAL PHOTOGRAPHY

In this course, students will learn the basic principles of photography including exposure, framing, perspective, and proportion. Students will complete units based on landscape, portraiture, still life, and abstract photography. Adobe Photoshop and InDesign will be the prominent programs used in this course.

Credit: .5

Grades: 10,11,12

Final: Project

Prerequisite: Studio Art

INDEPENDENT STUDY ART

This course is designed for the student who is interested in pursuing their artwork in a deeper, more advanced or sophisticated level of study. Focus will be made by the individual and their specific direction. Students must be independent and self–motivated to be successful in this course.

Credit: .5 or 1

Grades: 12

Final: Project

Prerequisite: Studio in Art, Drawing and Painting and Advanced Studio 3D: Sculpture or Ceramics or Advanced Studio: Drawing and Painting

** Need to complete application and receive permission from instructor.*

INFORMATION

Sequences and Requirements

In order to receive a five-unit sequence in the fine arts toward an Advanced Regents Diploma, students must first complete and pass Studio Art. Students may receive the other four credits through other art or music courses.

BUSINESS Career Technical Education

The business department's goals are to provide students with the knowledge and skills necessary for college; to prepare students to directly enter the world of work; to give students information that is helpful in carrying on personal business affairs and entrepreneurship; and to prepare students to make informed economic decisions in life.

Intro to Business - Career and Financial Management (CFM)1

This course is designed for students to gain an introductory understanding of the different facets of business and the many different careers that each of those facets entails. Students will learn the basics of the economic system, business organization, and entrepreneurship. Some of the

topics include but are not limited to business economics, business management and leadership, marketing, and more.

Credit: 0.5

Grades: any

Final: None

Prerequisites: None

** Required for all business, CTE, family and consumer science, and technology sequences.*

Financial Literacy

This course is designed to help students analyze different concepts that they will encounter as they start to make decisions. Students will discuss and understand concepts including credit scores, gross pay, net pay, loans, interest, health care, budgeting, purchasing a vehicle, and more.

Credit: 0.5

Grades: any

Final: Exam

Prerequisites: None

** Three Business Math Credits can be earned through SUNY Schenectady.,*

ACCOUNTING I

Accounting is designed to give the student a complete understanding of the accounting cycle, from opening entries through Post-Closing Trial Balance for a service business organized as a sole proprietorship. Accounting basics, journalizing and posting, cash controls, worksheet, financial statements, adjusting and closing entries will be taught. Additionally, the course will focus on the auditing procedures, interpreting financial information, as well as the importance of strong business ethics. The goal of the course is to give students' strong foundation skills that will assist them whether they pursue a career in an accounting or related business field and is vital for any student thinking of becoming an entrepreneur.

Credit: 0.5

Grades: 10, 11, 12

Prerequisite: None

Final: Exam

**Four credit hours can be earned for successful completion of this course through SUNY Schenectady.*

ACCOUNTING II

Accounting II builds on the Accounting I concepts with more in-depth study of the accounting cycle using more complex businesses that are merchandising businesses that are organized as a corporation. Special journals, payroll processes and taxes, uncollectible accounts, capital stock, declaration of dividends and depreciation of plant assets are just a few of the topics that will be covered. Additionally, the course focuses on the importance of auditing procedures, vertical and horizontal analysis of financial statements, as well as the importance of strong business ethics. The goal of the course is to give students' accounting skills that will assist them as they pursue a career in a business field or continue study for a career as an Accountant.
Credit: 0.5
Grades: 10, 11, 12
Prerequisite: Accounting I

Final: Exam

**Four credit hours can be earned for successful completion of this course through SUNY Schenectady.*

BUSINESS LAW

Students will develop an understanding of the origins of our legal system and contemporary legal processes that are essential for business and personal success. Legal cases will be discussed and solved through the use of critical-thinking skills and application of laws. Students gain valuable insight regarding their personal rights as well as their liability toward others. Contract negotiations are an integral part of commerce and everyday life. Students will understand the framework of contract law in order to conduct themselves as responsible adults.
Credit: 0.5
Grades: 11,12
Prerequisite: None
Final: Exam

PRINCIPLES OF MARKETING

Marketing I is designed to provide students with an introduction to marketing. This course focuses on key marketing concepts, the role of marketing within organizations, and the role of marketing in society. Marketing I allows students to build foundational marketing skills, which further can be explored in Marketing II. Topics covered in this course include: designing marketing strategies, consumer behavior, social media and e-marketing, market research, types of markets, and relationship and customer relationship marketing.
Credit: 0.5
Grades: 10, 11,12
Prerequisite: None
Final: Exam
**College Credit: 3 CHS credits through SCCC are available for the completion of this course.*

CAREER PORTFOLIO: CAREER AND FINANCIAL MANAGEMENT II (CFM2)

This course is designed to develop competencies essential for successful employment. Students will be required to compile a portfolio containing a resume, cover letter, interview skills, and career research project. Additionally, students will prepare for the college experience by preparing activity sheets and college essays, as well as researching college course of studies in the career fields they are interested in pursuing. Successfully reaching college and career goals are major objectives in this class.
Credit: 0.5
Grades: 11,12
Programs: Internet
Final: Exam/Portfolio
Prerequisite: None

** Required for all business sequences.*

ENTREPRENEURSHIP

Students will undertake the process of establishing a real business. Students will hone ideas and objectives, write and present a business plan, develop and manage media campaigns, and design a business logo. Students will end the course by pitching their business to community members.
Credit: 0.5
Grades: 11,12

Prerequisites: Marketing, Financial Literacy, Accounting 1 (Recommended)

Final: Project Based

**College Credit: 3 CHS credits through SCCC are available for the completion of this course.*

Criminal Justice

The Criminal Justice Program has been designed for Mohonasen students interested in pursuing careers related to criminal justice and law enforcement. It prepares students to enter post-secondary education in these fields or go straight to the workforce. Possible careers related to this program include: law enforcement at local, state or federal levels, court or security officer, corrections or environmental officer, military police officer, bail enforcement agent, private investigator, forensic technician among others. Students who successfully complete both Criminal Justice I and II may be eligible to receive up to six college credits at Schenectady County Community College.

Course Offerings

INTRODUCTION TO CRIMINAL JUSTICE – YEAR 1

Provides the philosophical and historical background of law enforcement and analyzes the components of the criminal justice system, including the police, courts and corrections.

Credit: 1.0

Grades: 11,12

Prerequisite: Application

Other: Must be taken with Criminal Science

**Registration priority given to juniors*

CRIMINAL SCIENCE – YEAR 1

This course is a survey of a crime laboratory. It looks at the role of the lab in criminal investigations including firearms identification, examination of documents, criminal analysis, and fingerprinting.

Credit: 1.0

Grades: 11,12

Prerequisite: Application

Other: Must be taken with Introduction to Criminal Justice

**Registration priority given to juniors*

INTRODUCTION TO CRIMINAL JUSTICE II – YEAR 2

This course builds on the foundation of year one of the program. Students will also have the opportunity to further research and explore the law enforcement career area of their choice.

Credit: 0.5

Grades: 12

Prerequisite: Successful completion of Criminal Justice I and instructor approval.

Emerging Technologies/Pre-Engineering

Emerging technologies are those technical innovations which represent progressive developments within a field for competitive advantage; converging technologies represent previously distinct fields which are in some way moving towards stronger inter-connection and similar goals. They are technologies which arise from new knowledge, or the innovative application of existing knowledge; they lead to the rapid development of new capabilities; they are projected to have significant systemic and long-lasting economic, social and political impacts.

By completing Mohonasen's Technology – Engineering CTE Pathway, students can receive a CTE designation on their diploma AND learn valuable college and career skills. In some cases, a CTE pathway can also be used to meet a graduation requirement.

Technology

ITT or IED are prerequisite classes for all other Technology courses.

Introduction to Technology and Trades: (ITT – DDP)

This introductory course is designed to give students an overview of the various areas of technology and trade skills. In addition, students will explore some of the various career options related to the course, along with the preparations needed to make in order to pursue them beyond high school. Students will cover fundamental skills in the design process, sketching, measuring and marking, career readiness, and planning and production. Some of the course

trade skills include: construction, electricity and electronics, manufacturing, metal fabrication, woodworking, and others.

Credit: 1

Grades: 9, 10, 11, 12

Prerequisite: None

Final: Project

Meets Art/Music requirement for graduation

Introduction to Engineering Design (IED-DDP) (PLTW)

This introductory course is designed to give students an overview of the various areas of technology and engineering skills. The theme of the course is the use of systemic design process to develop creative solutions to many types of problems. Students will develop skills in creative problem solving, 3D sketching, industrial design, teamwork, and presentation skills. State of the art computer aided design (CAD) software is used. Students will spend a large percent of their time creating computer models. Throughout the course, math and science concepts are used to arrive at the best solution to design problems. Students will develop skills in creating prototypes or models of their designs. Students will learn to safely and accurately use a variety of hand tools and machines to produce prototypes of their designs. Projects include past inventions, creating 3D models, and designing products that can be manufactured.

Credit: 1

Grades: 9, 10, 11, 12

Prerequisite: none

Final: Exam

College Credit: 3 SCCC credits or 3 credits through RIT by passing the PLTW Exam

Meets the Art/Music requirement for graduation

Power Mechanics

This is an introductory course in the area of gasoline engine operation and fluid power mechanics. The course of study will concentrate on small two and four-cycle engine operations. In Power Mechanics, students will also disassemble, inspect, and reassemble small gasoline

engines and learn about the different types of systems. Students will be introduced to the operations of automotive engines, automotive maintenance, and car design.

1 credit
Grades: 10-12
Prerequisite: ITT or IED

Computer Integrated Manufacturing (PLTW)

This course introduces students to the world of advanced manufacturing. Computer Integrated Manufacturing (CIM) is the study of manufacturing planning, integration and implementation of automation. Students will study the history of manufacturing, process and control systems, rapid prototyping, programming techniques, computer controlled machining and industrial robot design. Various machines will be used to create actual parts from their 3-D designs

Credit: 1

Grades: 10, 11, 12

Prerequisite: ITT or IED

Final: Exam

College Credit: 3 credits through RIT by passing PLTW Exam.

Principles of Engineering (PLTW)

This is a broad-based survey course designed to help students gain better understanding about careers in engineering and engineering technology. The main goal of the course is to experience, through theory and hands on problem solving activities what engineering is all about and to answer the question. “Is a career in engineering or engineering technology for me?” This course reinforces problem solving communication and teamwork skills. Projects include building and testing a “Rube Goldberg” machine, a bridge structure, a computer controlled machine and working with GE engineers to solve an energy problem. Students are required to write two technical research papers related to branches of engineering and technical failures in engineering.

Credit: 1

Grades: 11, 12

Prerequisite: ITT or IED; taking Alg 2 concurrently is highly recommended

Final : Exam

College Credit: 3 credits through RIT by passing PLTW Exam

Aerospace Engineering (PLTW)

This course is designed to offer students a better understanding about careers in aerospace engineering and aerospace technology. Students gain this experience through developing creative problem solving skills, communication skills and teamwork skills. Mathematical and scientific skills are integrated into all activities. Projects include research and class presentation on the history of flying vehicles, computer simulation programs developed by NASA to design wings and model rockets, design, build and test a wing section using a wing tunnel; learn to navigate using a flight simulator, design build and test glider plans, a g-force simulator and a microgravity drop tower and much more.

Credit: 1

Grades: 10, 11, 12

Prerequisite: ITT or IED

Final : Exam

College Credit: 3 credits through RIT by passing PLTW Exam

Engineering Design and Development: (PLTW)

Credit: 1

Grade 12

Prerequisite: ITT or IED, must be a fourth technology credit

Final: Project

The knowledge and skills students acquire throughout the PLTW Engineering program come together in the Capstone/Engineering Design and Development course. Students will identify problems, conduct research, test solutions and present findings while applying design process principles. Students enrolled in this course will focus on drone technology and flight control systems and will have an opportunity to be a part of our competition US Drone Soccer Team. While progressing through the design process, students will work closely with their peers and experts and will continually hone their organizational skills, communication skills and problem-solving abilities. The capstone course is appropriate for 12th grade students, especially

those pursuing a technical career path. This course should be taken as a senior as it will require the application of the knowledge and skills introduced in the foundation courses.

Manufacturing Systems I

This is an introductory course designed to offer a broad-based view of how people change or process materials. Students will complete a variety of projects using various tools and machines to teach them the fundamentals of manufacturing processing. Activities including Casting and Molding – Permanent Mold Techniques, Forming – Plastics, Hot and cold forming metals and ceramic materials. Students will be using 3-D solid modeling software, injection molders, vacuum formers, 3-D printers, metal working tools, drill press, bandsaw, lathe, milling machine, and welding equipment. This course provides valuable experiences to students interested in a manufacturing career.

Credit: 0.5

Grades: 10,11,12

Prerequisite: ITT or IED

Final: Project

Manufacturing II

This course will extend the concepts and techniques learned in Manufacturing Systems II. Students will focus on the tools and processing used in the manufacture of products. Students will have the opportunity to learn about and apply techniques from the following content areas: Separating, Basic Layout Tools and Procedures, Precision Measurement, Sawing, Broaching, and Filing , Turning and Related Operations, Milling and Related Operations, Shaping and Planning Metals, Drilling, Boring, Reaming, and Tapping , Abrasive, Shearing. Students will develop advanced machining skills and relate them to mathematical and scientific concepts.

Credit: .5

Grades: 10, 11, 12

Prerequisite: ITT or IED and Manufacturing I

Final: Project

Production and Construction I

This course focuses on production activities. Two major production categories are covered – manufacturing and construction. Manufacturing is the production of any object or material in a factory. Construction is the production or assembly of material on site. Approximately 75 percent of class time is dedicated to hand-on activities using a variety of tools. Students will design, investigate, research and construct objects in both woodworking and metal fabrication. Sample projects in Adirondack chairs, Shaker furniture, chess boards, and metal shelf brackets.

Credit: .5

Grades: 10, 11, 12

Prerequisite: ITT or IED

Final: Project

Production and Construction II

The course is designed to give students some knowledge on how buildings are constructed. Included in the course will be planning of a house, including cost estimation, foundation (includes footings) siding (wood and vinyl) roofing and electrical and plumbing codes. A storage shed will be constructed and erected. Other examples of projects include stair design, pipe fittings, electrical layout, framing and roofing.

Credit: .5

Grades: 10, 11, 12

Prerequisite: ITT or IED, and Production and Construction I

Final: Project

Advanced Production and Construction

This advanced level production and construction course is designed to give students an in-depth look into aspects of finish carpentry and furniture making and the career connections tied to the industry. Students will build upon their basic skills developed in their previous trades courses and apply them to larger, more involved projects. Students will study advanced aspects in wood joinery, fastening, finishing and machine and tool use. The majority of the class will be spent working on hands-on projects.

Credit: .5

Grade Level – 11 and 12

Prerequisite – ITT or IED, Production and Construction I and II

Introduction to Residential Systems

This course is designed to introduce topics in the home such as: residential wiring, plumbing and heating, ventilation & air conditioning (HVAC) systems. Through experiment, construction and problem solving based instruction students will be able to solve basic elements common to all residential systems.

Credit .5

Grades 10, 11, 12

Final: project

Introduction to Nanotechnology

This course is designed to introduce students to the rapidly advancing field of nanotechnology and its applications. Basic chemistry and physics topics will be covered as they relate to nanotechnology. Students will be exposed to an introduction of the study of materials: metals, ceramics, polymers, and electronic materials. Students will investigate the relationship between bonding, structure, and properties of these materials. At the end of the year, students will appreciate the underlying principles of size-dependent properties and the processing and fabrication of these materials at the molecular level. This course incorporates lectures, guest lecturers, use of computers, lab work and student projects.

Credit: 1.0

Grades: 10, 11, 12

Prerequisite: One year high school Regents science, preferably co-enrolled in or successfully completed Regents Chemistry

Final: Semester-end Exams (2)

College Credit: 6 CHS credits through SCCC (2 college courses)

DISCOVERING COMPUTER SCIENCE

This course is designed as an introduction to computer science for high school students who want to express themselves creatively and solve problems that are interesting to them using computational devices. This course is designed for students that have little or no experience studying computer science. Through a series of engaging, hands-on labs and projects, students learn the fundamentals of computer programming using the block-based language Snap! Students will also study the world wide web, designing and creating their own website using HTML, CSS, and JavaScript. Finally, students will explore drawing, animation, and problem

solving using Python. Throughout the course, computing history and current events in computer science will be incorporated. Special topics in computer science such as encryption, human-computer interaction, rapid prototyping, and others may be explored.

Credit: 1

Grades: 9, 10, 11, 12

Prerequisite: Students want to be in the class and learn how to code!! For 8th graders: an average of 80+ in Math 8 and for others: successful completion of Regents Algebra I

Final: None

Can count as a math credit.

COMPUTER SCIENCE

This course is designed as an introduction to a range of topics in computer science. Through a series of engaging, hands-on projects, students will begin their study of web design and computer programming. The application and limits of computing will be explored through current topics in computing that are also relevant to high school students. An emphasis will be placed on developing problem-solving and computational thinking skills. (Note: This class is also listed under Emerging Technologies.)

Credit: 1

Grades: 10, 11, 12

Prerequisite: Successful completion of Alg 1 with average above an 85%, completion of Discovering CS or completion of Regents Geo

Final: Exam

College Credit: 3 credits (Through Siena College)

Can count as a math credit.

INTRODUCTION TO SOFTWARE DEVELOPMENT

This course is designed to continue a student's introduction to the academic discipline of Computer Science. Course objectives include developing a student's ability to create

programming solutions, to translate algorithmic solutions to a Java implementation, to acquire knowledge about computing systems in general, and to enhance a student's problem-solving abilities.

Credit: 1

Grade: 11, 12

Prerequisite: Successful completion of Computer Science; or successful completion of Common Core Algebra II with teacher recommendation or Precalculus.

College Credit: 4 credits (Through Siena College)

Can count as a math credit.

Family & Consumer Sciences (CTE)

The FACS (Family and Consumer Science) program helps students become competent and self-reliant in managing their personal, family, and work lives. It is designed to meet the needs of students interested in careers in education, childcare, health and consumer services, counseling, social work, dietetics and nutrition education.

LIFESPAN STUDIES CORE (Not offered for 2025-26)

Lifespan Studies focuses on skills needed for understanding relationships across the lifecycle. Strategies for understanding self, as well as for dealing with change, helps students cope with the challenges of living in today's world. Students armed with these coping strategies are more likely to be involved in positive relationships in their family, school, community and workplace.This course relates to careers in human services. Activities include movies, interviews, and a lifespan project.

Credit: 0.5

Grades: 9, 10, 11, 12

Prerequisite: None

CHILD PSYCHOLOGY I

Child Psych I focuses on the physical, social, emotional, and cognitive development during the prenatal, infant, and toddler stages of life. This course relates to careers in human services and education. Activities include movies, child care assessments, toy evaluations, toddler play projects, field trips as well as child observations. No prerequisite required.

Credit: 0.5

Grades: 9, 10, 11, 12

Prerequisite: None

CHILD PSYCHOLOGY II

Child Psych II links to Child Psych I and focuses on the physical, social, emotional and cognitive development during the preschool and school-age stages of life. Related to careers in human services and education. Activities include movies, creating a preschool play project, and 10 hours of child observations. Prerequisite: Child Psychology I

Credit: .5
Grades: 10, 11, 12

Prerequisite: Child Psychology I (may be waived with teacher approval)

PARENTING

Focuses on learning an active approach to parenting. It will help students clarify their own goals for the future and teach effective methods for leading children throughout the stages of life. Projects include: Flour Baby, Parent Interviews and The Child's Storybook.

Credit: 0.5

Grades: 9, 10, 11, 12

Prerequisite: None

ADULTING 101

Students will explore the transition between childhood and adulthood and the challenges of adolescence. They will come to understand the importance of identity formation and autonomy

during adolescence. How will I manage life on my own? Students will fill their virtual toolbelt with adulting skills to prepare for life after high school, broaden understanding of their roles and responsibilities as members of family and peer groups, school, work, local, and global communities. Be prepared for projects and participation!

Credit: 0.5

Grades: 11, 12

Prerequisite: None

FOOD & NUTRITION

Designed to help students understand nutrition, as well as learn basic culinary skills. Students will research the USDA food guide, comparison shop, and plan and prepare nutritious meals. Kitchen groups are formed to complete labs and projects. This course relates to careers in culinary arts, dietetics and nutritional education.

Credit: 0.5

Grades: 11, 12

Prerequisite: None

EDUCATION CAREER EXPLORATION INTERNSHIP PROGRAM (CEIP)

This is a one-year, non-paid, 108-hour internship. It is a link between school and careers involving the education of children. Students are placed with a classroom teacher in Bradt Primary School, Pinewood Elementary School, or Draper Middle School. Students will experience all aspects of the teaching profession. They will be able to improve their teamwork, leadership, and human relation skills. Students will fill out timesheets, journals, and work on related activities, such as ADD, a resume, mock interview and portfolio project. The internship is scheduled during the school day and students must be able to drive themselves to go to Bradt or Pinewood for their internship. As a requirement, students must also be scheduled for the CEIP Lab where they must complete 54 hours of classroom instruction related to the internship.

Credit: 1

Grades: 11,12

Prerequisite: Child Psychology I

Final: Portfolio (The course is Pass/Fail.)

Media Arts

This program is designed for students interested in pursuing careers related to video production, music production, video editing, communications, journalism, broadcasting, theater arts, film, scriptwriting, acting, graphic design and a variety of other careers. It gives students practical, hands-on opportunities to learn about the equipment and processes related to the careers above as well as involvement in a variety of projects that benefit the Mohonasen School Community.

Course Offerings

MEDIA ARTS AND LIVE PRODUCTION

Students will engage in a creative workshop where they will be guided through the creative process from inception to completion in varied aspects of media arts. Each student will be asked to explore the creative process and utilize their creativity to create short movies, documentaries, news clips, music videos and varied other genres. They will review and critique different forms of modern media, including, but not limited to, newspapers, magazines, websites, blogs, social media, television, advertising and marketing, radio and public relations. Students will also be exposed to the technical elements relating to media writing, digital photography, digital video, digital music and the editing and production process. Students will learn the art of storytelling from the story idea, through interviewing, researching and the creation of digital media projects. They will practice basic interviewing skills and explore ethical concerns of journalists in our society. Students will also explore issues relating to privacy, consumerism, artistic/creative expression and media ownership through their own creative works.

Credit: 1.0

Grades: 10,11,12

Students may take the course a second time for credit with instructor approval.

Music

The goal of the music department is to give students the opportunity to find a richer life by guiding them to a better understanding of music. There are valuable courses offered in several areas of music. All students, regardless of skill level, are encouraged to participate.

Course Offerings

BAND

The Concert Band meets every day and entails the study and experience of standard and new repertoire, including preparation and performance at concerts and ensemble festivals. All concert members will receive instrumental lessons one period per week throughout the school year. Outstanding students will be selected for placement in the following groups on a non–credit, extracurricular basis: Jazz Band, Chamber Ensembles, All-County Festivals, Suburban Scholastic Council music functions, NYSSMA solo festivals, Area All–State, and All-State Bands. Marching Band, which is elective, entails experience in marching techniques, including presentation and performance at pep rallies, homecoming, and competitive field shows in the months of September and October.

Credit: 1

Grades: 9,10,11,12

Prerequisite: None

Final: None

ORCHESTRA

Membership in Orchestra includes the study of standard repertoire, techniques of concert performance, and orchestra routines. All members are required to attend instrumental lessons one period per week. Orchestra students participate in winter and spring concerts. Outstanding students will be able to apply to NYSSMA, Suburban Council, All County and Area All-State. NYSSMA eligible students may also apply for All State. Upperclassmen, that are advanced in their school studies, have the opportunity to perform in a string quartet. The string quartet meets weekly, in place of regular group lessons.

Credit: 1

Grades: 9, 10, 11, 12

Prerequisite: None

Final: None

SELECT ORCHESTRA

This is a non–credit, extra-curricular organization. Select Orchestra is an ensemble for advanced orchestra members. Members are selected through either an invitation or an audition held in the spring semester for the following fall term. Students in Select Orchestra are asked to prepare a solo piece of a NYSSMA level 3 or higher. Select Orchestra performs for several functions during the school year and also attends a spring trip. This is a wonderful experience for students that are looking to get more exposure to chamber orchestra literature and to perform throughout the community. Select Orchestra meets primarily after school.

Credit: None

Grades: 9,10,11,12

Prerequisite: Audition and a current member of HS Orchestra

Final: None

CHOIR

Choir is a credit-bearing ensemble with membership based on instructor recommendation and/or audition. Members perform a wide variety of vocal repertoire and learn appropriate vocal technique and reading skills. All ensemble members are required to attend one 40 minute vocal lesson per week. Outstanding ensemble members will be encouraged to audition for Select Choir, Suburban Council and All County music festivals and to participate in NYSSMA. The choir performs at school concerts, assemblies and select competitions.

Credit: 1

Grades: 9,10,11,12

Prerequisite: Teacher approval or audition

Final: None

SELECT CHOIR

This is a non-credit, extra-curricular organization. It is a select group of choir members who are advanced both musically and vocally. Members are selected through auditions. The group performs at various school and community events and concerts. Students also participate in festivals such as All County, Suburban Council, NYSSMA solo competitions, Area All–State, and All–State choirs.

Credit: None

Grades: 9,10,11,12

Prerequisite: Students must be a current member of the HS Choir and Audition.

Final: None

A CAPPELLA ENSEMBLE

This is a non-credit, extra-curricular pop a cappella group. It is a highly select group of choir members who are advanced singers and performers. Members are selected through auditions. The group performs at various school and community events, as well as the International Championship of High School A cappella. This is a highly competitive group and meets 1-2 times a week throughout the year.

Credit: None

Grades: 9,10,11,12

Prerequisite: Students must be a current member of the HS Choir and Audition.

Final: None

MUSIC THEORY

Music Theory is the study of written music and how it is structured. The objective of the course is to foster a more sophisticated level of musicianship and to prepare the serious music student for higher education in studies at the college level. The course incorporates theory, analysis, sight-reading and solfege, ear training, composition, and music history..

Credit: 1
Grades: 10, 11, 12
Prerequisite: Students must demonstrate intermediate-level ability to read music and belong to a school music ensemble. Students not involved in an ensemble must get permission from the instructor.
Final: Exam
**Required for a music sequence.*
**College Credit: 3 CHS credits through SCCC*

MUSIC THEORY II/AP Music Theory

AP Music Theory will explore in depth the study of written music and how it is structured. The objective of the course is to foster a more advanced level of musicianship and to prepare the serious music student for higher education in studies at the college level. The course incorporates advanced levels of theory, analysis, sight-reading and solfege, ear training,

composition, and music history. Students participating in this course will take the AP Music Theory Exam in May.

Credit: 1

Grades: 10, 11, 12
Prerequisite: Students must complete one year of regular level Music Theory, or students must demonstrate advanced-level ability to read and analyze music and belong to a school music ensemble.
Final: AP Exam.

MUSIC AND MEDIA ARTS APPRECIATION

Music and Media Arts Appreciation is an introduction to media arts applications and the study of music from a listener's point of view. Students will learn how to "make beats," create and edit movies and photography, and have the opportunity to learn basic guitar, ukulele, bass, drumset, and piano. They will also learn how to navigate MacOS in our CAT building Mac lab and how to use various Apple software programs including iMovie and Logic Pro.

Credit: 1

Grades: 9-12

Prerequisite : None

Final: Exam

MUSIC PRODUCTION I & II

Music Production I is focused on the creation and production of music for both live events and studio recording productions. This includes music for albums, streaming audio, podcasts, TV shows/commercials, radio shows/commercials, concerts, plays, and other school events. Students will have the opportunity to help run and perform at our bimonthly open mic nights. Students will continue to learn intermediate and advanced music theory, guitar, ukulele, bass, drum set and piano skills. They will also learn about how to compose lyrics, melodies and songs.

Students in Music Production II will have the opportunity to take part in more advanced and independent music projects and production work. Students may take Music Production II for multiple years to continue producing audio production projects of their choice.

Credit: 1.0

Grades: 10,11,12

Prerequisite: 1 year of Music and Media Arts Appreciation **OR** 1 year of participation in band, choir, or orchestra.

Capital Region BOCES CTE Opportunities

Career & Technical Education courses take place at the Capital Region Career and Technical School in Albany. The courses are geared toward juniors and seniors who have a strong interest in a specific career area. Students have an opportunity to earn certification, licensure, and/or college credits in some programs. Students must be on track for graduation to be eligible to attend. The available programs are listed below by cluster. You can get more detailed information about individual programs from your guidance counselor or at the link below

Requirements for CTE consideration and participation

Students must visit the CTE program that they are interested in and return a signed contract in order to get on the CTE list. Having a 3 quarter passing average in all classes and returning the contract asap will increase chances of being able to attend a CTE as their programs do fill quickly with many area schools sending students. One field trip and an evening CTE open house provide opportunities to visit the program of interest. All classes must be passed during the school year and attendance and discipline records are also considered for students to remain on the list of those wanting to attend CTE. If summer school is needed, the student will go on a waitlist for their program and be added if space at CTE allows. By signing the contract, students and parents are agreeing that they commit to the student attending the program for the entire year. CTE gives juniors preference over seniors for two-year programs.

Course Offerings

See this list for current CTE programs and locations. Mohonasen sends students to the Albany CTE campus, not Schoharie.
https://www.capitalregionboces.org/career-technical-education/courses-programs/

Architecture and Construction

- Building Trades *(Albany and Schoharie Campuses)*
- *Carpentry Services *(Albany Campus)*
- Heavy Equipment Repair and Operation *(Albany Campus starting 2025-26)*
- Electrical Trades *(Albany and Schoharie Campuses)*
- Heating, Ventilation, Air Conditioning and Refrigeration (HVAC/R) *(Albany Campus)*
- Entertainment Technology I and II *(Off Campus)*
- Plumbing *(Albany Campus starting 2025-26)*

Education

- Early Childhood Education *(Albany Campus)*

Government and Public Administration

- Criminal Justice *(Albany and Schoharie Campuses)*

Health Science

- New Visions: Health Careers – Ellis & St. Peter's Hospitals *(Off Campus)*
- Sterile Processing Technician *(Albany Campus)*
- Two-Year Sequence of Health Careers *(Albany and Schoharie Campuses)*

Hospitality

- Culinary Arts and Hospitality Technology *(Albany and Schoharie Campuses)*
- *Culinary – Food Services *(Albany Campus)*

Information Technology

- Game Design and Implementation *(Albany Campus)*
- Digital Media Design *(Albany Campus)*
- Network Technology *(Albany Campus)*

Manufacturing

- Manufacturing and Machining Technology *(Albany Campus)*
- Welding and Metal Fabrication *(Albany Campus)*

Retail and Office Services

- Cosmetology *(Albany and Schoharie Campuses)*
- Global Fashion Studies I and II *(Albany Campus)*
- *Pet Tech *(Albany Campus)*
- *Retail and Office Services *(Albany Campus)*

- *Vocational Training and Transition *(Albany Campus)*

Transportation, Distribution and Logistics

- Automotive Collision Technology *(Albany Campus)*
- *Automotive Services *(Albany Campus)*
- Automotive Trades Technology *(Albany & Schoharie Campus)*
- Automotive Youth Educational System (AYES) *(Albany Campus)*
- Diesel Technology *(Albany Campus)*

*Services Programs and Pet Tech (Grooming) are only open to students with IEPs and do not have an integrated math or science class

Campus tours, individual and group visits, open houses and various events open to the public are held throughout the year for students and their parents to get an inside look at the campuses and learn more.

NEW VISIONS HEALTH CAREERS EXPLORATION

This program differs from the other programs listed. This is an honors-level program available only to seniors. It is housed at either Ellis or St. Peter's Hospital. Students must apply and interview in order to be accepted. Students should see their counselor early in their junior year if this is an option they would like to pursue as Open Houses are held in January and applications are due in February/March. Students should have at least an overall GPA of an 85 to apply.