

CALEDONIA-MUMFORD HIGH SCHOOL

**Program
of
Studies**

CAL-MUM



RAIDERS

Course Selections

The Cal-Mum Way ~ Learn : Lead : Inspire

2026-2027

Introduction

Dear Students, Parents, and Guardians:

Throughout this program, you will find that Caledonia-Mumford High School offers a wide variety of courses that will prepare students for the demands of college and build career-related skills. We encourage all students to challenge themselves by enrolling in rigorous courses that will prepare them for life beyond high school and create opportunities in post-secondary education and the work force.

In addition to offering courses aligned to the NYS Regents curricula, Cal-Mum partners with local colleges to provide dual credit courses that offer students the opportunity to earn college credits while meeting NYS graduation requirements. Advanced Placement (AP) courses are also offered through the College Board where students experience the rigor of college level work with the opportunity to sit for a national exam at course completion. These courses weigh heavily on colleges and universities' acceptance decisions.

Together, our families and school personnel form a partnership that shares the responsibility for the success of our students. This document acts as a guide for the course selection process, but open communication with your child's counselor and teachers is crucial in maximizing the educational experience.

Please feel free to contact our counseling department with any questions you may have, or to set up an appointment to discuss course selections. We are excited about the learning opportunities we offer and look forward to assisting you.

Sincerely,

High School Administration & Counseling Team

The Caledonia-Mumford Central School District, in collaboration with our community, takes pride in providing safe, comprehensive and rigorous educational experiences, in order for all students to graduate as ethical, responsible, lifelong learners, who are college and career ready.

Cal-Mum Middle/High School • 99 North St. • Caledonia, NY 14423 • 585-538-6811

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Nondiscrimination Policy

The Cal-Mum Central School District hereby advises students, parents, employees and the general public that it offers employment and educational opportunities, including vocational education opportunities, without regard to sex, race, color, national origin or handicap. Inquiries regarding this nondiscrimination policy may be directed to either representative below:

Title IX Officer

Superintendent for Administration and
Personnel
Cal-Mum Central School District
99 North Street
Caledonia, NY 14423

Section 504 Coordinator

Director of Pupil Services
Cal-Mum Central School District
99 North Street
Caledonia, NY 14423

Graduation Requirements

Required Classes

Subject	Units
English	4
Social Studies	4
Mathematics	3
Science Must include 1 unit from a Physical Setting course and 1 unit from Living Environment	3
Health	0.5
Art, IED/DDP or Music	1
World Language An Advanced Designation Diploma requires 3 units of World Language or a 5-unit sequence in Business, Technology, Art, Music or BOCES CTE	1
Physical Education Students earn 0.5 credits each year across four years of high school.	2
Electives Advanced Designation Diplomas require 1.5 units.	3.5
Total Units	22

Required Regent Exams

Advanced Designation w/ Honors Diploma (<i>Average of 90 or above on 8 Regents Exams</i>)	
<ul style="list-style-type: none"> • ELA • Global History & Geography • US History & Government 	<ul style="list-style-type: none"> • Living Environment <i>and</i> a Physical Setting • Algebra 1 and Geometry and Algebra 2
Advanced Designation Diploma (<i>Passing score of 65 or above on Regents Exams</i>)	
<ul style="list-style-type: none"> • ELA • Global History & Geography • US History & Government 	<ul style="list-style-type: none"> • Living Environment <i>and</i> a Physical Setting • Algebra 1 and Geometry and Algebra 2
Regents Diploma (<i>Passing score of 65 or above on Regents Exams</i>)	
<ul style="list-style-type: none"> • ELA • Algebra 1 • Global History & Geography 	<ul style="list-style-type: none"> • US History & Government • Living Environment or a Physical Setting
Local Diploma (<i>Available for students with disabilities + Safety Net</i>) - must score 55 or above on Regents Exams	
<ul style="list-style-type: none"> • ELA • Algebra 1 • Global History & Geography 	<ul style="list-style-type: none"> • US History & Government • Living Environment or a Physical Setting

***Alternative assessments approved by the Commission of Education may be used in place of required state assessments

General Information

Counseling Department

College and Career Readiness

The department of counseling and student services provides a comprehensive curriculum intended to support all students in acquiring the skills, knowledge and attitudes needed to become effective students, responsible citizens, productive employees and lifelong learners. As an integral part of the school's total program, the Counseling Department's Curriculum adheres to the American School Counselor's Association National Model. This model is competency based and reflects three domains of service: academic, personal/ social, and career development.

Counseling Services

- Assistance with course selections
- Career Exploration
- Classroom counseling instruction
- Educational presentations for parents
- Individual, personal, social and academic counseling services as needed
- Individual 4-Year Plan meetings with all students
- Post-graduate planning

Naviance

Naviance is a web-based software program for college/career exploration. Naviance provides students with a variety of features including college research and compatibility tools, course planning, career assessments and personality inventories to help students connect what they are doing in school, their interests and abilities to potential careers.

Additionally, Naviance's integration with "The Common Application" facilitates the submission of college applications, transcripts, school forms and recommendations through Naviance eDocs.

Assistance Offered

Freshman Year

- Individual Conferences, that may include parents, to develop a flexible four-year educational plan
- Further exploration of Naviance

Sophomore Year

- Assistance in gaining information about careers, colleges and course choices
- Career planning information including an occupational interest inventory

Junior Year

- PSAT exam followed by instruction in interpreting and improving scores and how to incorporate results into a student's college search
- Informational meetings for parents and students regarding post-secondary planning and financial aid
- Information on SAT and ACT testing
- Opportunities to meet with college representatives
- Planning post high school opportunities through group and individual conferences

Senior Year

- Information regarding topics such as: financial aid, college entrance tests, careers and colleges
- Informational meetings for parents & students regarding post-secondary planning and financial aid
- Opportunities to meet with college representatives
- Scholarship information
- Individual meeting(s) with students to actively prepare and work on post-secondary plans reaching toward the goal of college, military, or employment

Academic Services

Academic Intervention Services

The Academic Intervention Services (AIS) Compliance Plan has been developed in response to State Education Department Requirements for students. Students determined to be at risk in one or more of the following areas: Language Arts, Mathematics, Science, or Social Studies may receive AIS support. The Plan outlines a screening process to be followed, which includes a set of entrance and exit criteria respectively.

The intensity of service is based upon the level of performance in class and/or exams. Additionally, services may be entered, changed in intensity, or exited based upon multiple measures. These measures include teacher recommendation, classroom performance, and State Regents Scores. The AIS class is a scheduled non-credit bearing class that occurs during Home Base time.

English as a New Language (ENL)

This section is for informational purposes only. Eligibility for the following program and classes is determined by District and New York State guidelines.

The English as a New Language (ENL) Program serves the English language acquisition needs of students whose native language is not English. The Program focuses specifically on building academic language needed for success in high school so that students who are English Language Learners (ELL's) can be college and career ready. Students are placed in ENL classes based on their proficiency level in English. This level is determined either by the assessment they take when they first enter a New York State school, the NYSITELL (New York State Identification Test for English Language Learners), or by an annual measure of English language proficiency, the NYSESLAT (New York State English as a Second Language Achievement Test). New York State has identified 5 levels of English language proficiency: Entering (beginner); Emerging (low intermediate); Transitioning (intermediate); Expanding (advanced); and Commanding (proficient).

ENL Services for English Language Learners at the Entering through Transitioning levels involve two main components:

- ENL classes are taught by a certified ESOL (English to Speakers of other Languages) teacher where English Language Learners receive instruction in all aspects of language learning (reading, writing, listening and speaking) to develop the academic language and background knowledge needed to be successful in content area classes.
- Integrated ENL and content area classes where ESOL teachers co-teach with content area teachers in content area classes required for graduation (English, Mathematics, Science, or Social Studies).

ENL Services for English Language Learners in the Expanding and Commanding levels are provided through Integrated ENL and content area classes only so that these students can receive any extra support needed to further their English language development.

The ESOL teacher and the students' general education teachers work closely together to help ensure student success. Students in the ENL Program are required to achieve the same Common Core Standards and complete the same graduation requirements as all other students.

Special Education

Cal-Mum High School offers Special Education Services for students with disabilities. Every student with a disability has an Individual Educational Plan (I.E.P.) to address his or her needs in the classroom. Students involved in the continuum of services are working on goals and objectives to become college and/or career ready and to reach the standards of the Cal-Mum School District along with the curriculum requirements of New York State. The continuum of services offered through the Special Education department provides the least restrictive educational environment possible for student success.

Program Information

Advanced Placement Program

The Advanced Placement (AP) Program is a cooperative educational endeavor sponsored by the College Board. Based on the fact that many young people can complete college-level studies in their secondary schools, it represents a desire of schools and colleges to foster such experiences. Like other programs of the College Board, this program is national; its policies are determined by representatives of member institutions and its operational services are provided by the Educational Testing Service.

Advanced Placement serves three groups: students who wish to pursue college-level studies while still in secondary school, schools that desire to offer these opportunities, and colleges that wish to encourage and recognize such achievement. Participating colleges may grant credit and appropriate placement to students who have done well on the examination.

Although the program provides a curricular guide and examination in each field, all colleges do not follow the same or even similar procedures upon receipt of AP Examination grades. Students should contact colleges directly to see what AP exams and scores are accepted. The District currently offers the following AP courses:

- AP Art and Design
- AP US History
- AP Computer Science Principles
- AP English Literature
- AP Language and Composition
- AP Psychology
- AP World History: Modern
- AP Macroeconomics
- AP Microeconomics
- AP Calculus AB
- AP Biology
- AP Chemistry

Work Experience Program

The Work Co-Op Program is a paid or non-paid internship experience that provides individualized career placements for our students in different pathways of their choice. Students may earn either ½ unit or 1 full unit of credit during their junior or senior year.

The program provides students with the opportunity to gain insight and experience in occupations and careers based on their individual interests.

Students must apply and meet the criterion to be accepted into the program for the following year. This criterion includes excellent attendance, good academic standing, positive teacher evaluations, and current working papers. Schedules must allow time either through late arrival, early release, or through a block of school time to complete the on-the-job portion of the internship.

Students must supply their own transportation to their internship placement if they are working off campus. Each week interns meet with our School-to-Work coordinators for approximately one period and also attend a seminar class with the coordinator. Interns are responsible for handing in signed timesheets each week, completing journal entries that reflect on their experiences, and successful completion of a work portfolio including items such as a resume and cover letter.

Hour Requirements

NYS Dept. of Education Credit	Internship Hours	Seminar Hours with Coordinator
½ unit	60	27 hours (1 period per week plus independent work)
1 unit	120	54 hours (1 period per week plus independent work)

Career Shadowing Program

The Career Shadowing Program is designed to provide the students of Cal-Mum High School with the opportunity to investigate, observe, and evaluate specific occupations which may be related to their potential career interests.

The purpose of the Career Shadowing Program is to provide an organizational framework that outlines an educationally sound process students can follow in order to explore occupations that are of interest to them. Students will spend a work day, or part of a work day, with a Career Shadowing Mentor who is currently employed in the occupation the student wishes to research. This is an individualized experience. Students will work directly with the School-to-Work Coordinator to set this up.

School –To-Work Coordinator:

Caroline Richardson

Crichardson@cal-mum.org

Course Add/Drop Process

Course requests are shared with the students and their families early in the scheduling process. Students who have engaged in the course selection process should have a well-planned schedule that does not require changes. A course can be added during the first two weeks of class and can be dropped within the first full week of the class. At no point will a student be allowed to drop a class for a study hall. Choose your courses carefully. Changes are only made for educational reasons and must follow the approved add/drop process. Students should be fully scheduled. Students are not allowed to have multiple study halls on a letter day. Mid-semester course drops are only considered under extenuating circumstances with principal input and approval.

Course Load Requirements

Students are required to maintain a minimum course load of 7.0 credits each year unless otherwise approved by the Principal.

Course Selection

The academic requirements for Mathematics, Science, English and Social Studies are essentially the same for all students. The materials used, the depth of content studied, and the methodology varies depending upon the level of the selected course. Teacher recommendation for course selection will consider student academic achievement, test-taking skills, performance on standardized achievement tests, student effort, and interest in the subject matter.

Advanced Placement (AP) - courses that culminate in an Advanced Placement exam. High school students can earn college credit for qualifying AP exam scores. The AP Exams do require a fee.

Dual Enrollment (+) - courses that offer students the opportunity to concurrently earn college and high school credit. In order to receive the college credit students are required to pay a reduced course fee.

Honors (H) – courses for students who are eligible for enrichment and/or acceleration.

Regents (R) – courses culminating in a Regents examination.

Courses in other subject areas, and/or electives, are designed for students to achieve success at all academic levels.

Course Weighting

The following point values are added to a student's quarterly grades to encourage students to take rigorous and challenging courses.

Advanced Placement courses: 8%

Both weighted and non-weighted cumulative averages are reported on the Cal-Mum High School transcript. We report both averages since the majority of our local and competitive universities use the non-weighted average for college admission decisions. The weighted average is used to determine, Honor Roll, National Honor Society eligibility and Senior class rank.

Dual Enrollment

The Dual Enrollment Program is a cooperative educational endeavor presently between Cal-Mum High School, Genesee Community College, and RIT. There are numerous dual enrollment courses offered at Cal- Mum High School: These courses are identified by a "+" at the end of the course title.

Courses identified as Dual Enrollment (+) may change annually.

Honor Roll Standards

High Honor Roll

In order to qualify for the High Honor Roll, a student must earn an overall combined weighted average of 90 for the marking period. No incompletes.

Honor Roll

To be eligible for the Honor Roll, a student must earn an overall combined weighted average of 85 for the marking period.

See Parent/Student Handbook for all guidelines surrounding course grades.

NCAA Eligibility

The NCAA Eligibility Center certifies the academic and amateur credentials of student-athletes intending to participate in intercollegiate athletics at the Division I or II level. **It is the responsibility of each individual student-athlete to make sure that their courses are approved by the NCAA yearly.**

Cal-Mum School District has a list of NCAA approved courses, code 331150, on the Eligibility Center website (www.eligibilitycenter.org). All Division I or II athletes use code 9999 when reporting ACT or SAT scores to the NCAA eligibility center.

- Click on the “NCAA College Bound Student-Athlete” link to enter the site.
- Navigate to the “Resources” tab and select “U.S. Students” where you will find the link for the list of NCAA course.

After checking the list and completing the registration process, visit the HS Counseling Center to request an initial copy of your transcript be sent to the Eligibility Center. Students who have attended more than one HS, will need to request transcripts from each HS. A final transcript will be sent to the NCAA upon graduation.

Course Selections

Art

Art Department Sequences

Students may use a 5-unit sequence in Art to replace the 3 required units of language for the Regents with Advanced Designation Diploma.

Art Department Information

Successful completion of Studio Art is the prerequisite for Portfolio Preparation, Drawing and Painting, AP Art & Design.

1. Studio Art
2. Drawing and Painting
3. AP Art and Design
4. Ceramics



Studio Art is a prerequisite for these courses

Studio Art

Semester Course 1 Unit

Grades 9-12

Career Clusters: [Arts, Audio/Video Technology & Communication](#); [Architecture & Construction](#); [Business Management & Administration](#); [Education & Training](#); [Health Science](#); [Manufacturing](#); [Marketing](#)

Portrait Of A Graduate Attributes:

Primary: Creative Innovator

Secondary: Critical Thinker

Prerequisite: (In discussion)

Studio Art is the prerequisite for several art courses and is the foundation course of the Art Department.

This course is designed to give students access to a variety of mediums. It is an introductory course that focuses on the Elements and Principles of Design, with a focus on mediums where we offer upper level classes.

These mediums include (but are not limited to) drawing, painting, sculpture, printmaking, colored pencil, pastels, and Photoshop.

Drawing and Painting

Semester Course 1 Unit

Grades 9-12

Career Clusters: [Arts, Audio/Video Technology & Communication](#); [Architecture & Construction](#); [Business Management & Administration](#); [Education & Training](#); [Health Science](#); [Manufacturing](#); [Marketing](#)

Portrait Of A Graduate Attributes:

Primary: Creative Innovator

Secondary: Critical Thinker

Prerequisite: Studio Art

This course presents the beginning techniques of drawing, painting, and drawing and painting mediums. Emphasis is placed on drawing and composition both realistic and abstract. Surfaces, brushes and different kinds of paints are studied and applied. Contour drawing, shading, still-life and colored pencils will be studied and applied. The students will refine their drawing and painting skills as well as enhance their individual ability in drawing, painting and presentation. In addition, various artists are studied, and their techniques are applied to individual works.

Portfolios are required.

Ceramics 1

Semester Course 1 Unit

Grades 10-12

Career Clusters: [Arts, Audio/Video Technology & Communication](#); [Architecture & Construction](#); [Business Management & Administration](#); [Education & Training](#); [Health Science](#); [Manufacturing](#); [Marketing](#)

Portrait Of A Graduate Attributes:

Primary: Creative Innovator

Secondary: Critical Thinker

Prerequisite: Studio Art

This course will provide students with a beginning level experience of the use of clay as a fine art medium. Forming techniques, surface development, glazing and kiln firing practices will be introduced. The students will experience hand-building techniques including pinch, coil, and slab. Wheel throwing is introduced with expectations for basic levels of achievement.

AP Art and Design

Semester Course 1 Unit (This course is offered every other year, odd years).

Grades 11-12

Career Clusters: Arts, Audio/Video Technology & Communication; Architecture & Construction; Business Management & Administration; Education & Training; Health Science; Manufacturing; Marketing

Portrait Of A Graduate Attributes:

Primary: Creative Innovator

Secondary: Critical Thinker

Prerequisites: Studio Art, Drawing and Painting

The AP Art and Design Portfolio will be broken into TWO parts: Selected Works (Quality) 40% and Sustained Investigation (Practice, Experimentation and Revision) 60%. The students will investigate materials, process and ideas based on a personal inquiry. The students will communicate and reflect on their art and design.

High School students can earn college credit for qualifying AP Exam scores. The college credit option DOES require a fee.

Business

Business/Marketing Education Sequences

Business/Marketing – 5 Unit Sequence

Students may use a 5-unit sequence in business to replace the 3 required units of language for the Regents with Advanced Designation Diploma.

A combination of any of the following courses:

Accounting	(1)
Career Quest+	(1)
Computing for College and Careers	(1)
Leadership and Ethics	(1)
Personal Finance/Basic Investing+	(1)
Marketing/Sports and Entertainment Marketing	(1)
Virtual Enterprise+	(1)
Business and Personal Law+	(1)
Work Experience Program (Co-Op)	(.5)

Career Quest +

Semester Course 1 Unit

Grades 9-12

Career Clusters: [Universal](#)

Portrait Of A Graduate Attributes:

Primary: Reflective and Future Focused

Secondary: Effective Communicator

Prerequisite: None

This course is designed to introduce students to the world of work. Students begin the course by completing a self-assessment and identifying occupation goals. Students create a career portfolio that includes employment skills such as completing a job application, resume writing, and interviewing as well as a strength and weakness analysis, personal statement, basic budget for their career choice, and a personal mission statement. Topics discussed include career planning and "soft skills" needed for career success.

This is a writing intensive course that can be used for a CTE sequence.

+ Dual Enrollment - Students may have the opportunity to obtain college credit for this course. The college credit option DOES require a fee.

Computing for College and Careers

Semester Course 1 Unit

Grades 9-12

Career Clusters: [Business Management & Administration](#); [Finance](#); [Information Technology](#); [Marketing](#)

Portrait Of A Graduate Attributes:

Primary: Effective Communicator

Secondary: Academically Prepared

Prerequisite: None

This course is designed to have students learn to use technology appropriately in academic, business, and social settings. The main focus of this class is to familiarize students with the software applications used throughout school in all academic areas. Students will be asked to gather, research, and analyze data for relevance, validity, and accuracy and then use that data appropriately to answer questions, create projects and communicate with faculty and students. A special focus will be on Microsoft Word and Microsoft Excel.

Accounting

Semester Course 1 Unit (offered every other year opposite Business and Personal Law, odd years).

Grades 11 -12

Career Clusters: [Business Management & Administration](#); [Finance](#); [Government & Public Administration](#); [Marketing](#)

Portrait Of A Graduate Attributes:

Primary: Critical Thinker

Secondary: Academically Prepared

Prerequisite: None

Upon completion of this course the student should be able to keep a simple set of books. Academic students planning to major in Accounting or Business Administration in college, and students planning to own their own business, will find this course extremely beneficial. This course gives an overview of accounting systems and processes with particular emphasis on the principles and procedures of the complete accounting cycle. Sub-systems for handling cash receipts, cash payments, purchases and sales of merchandising business are also presented.

Note: Students may take this course as a business elective or a third year of mathematics.

Business and Personal Law +

Semester Course 1 Unit

Grades 11-12

Career Clusters: [Government & Public Administration](#); [Law, Public Safety, Corrections & Security](#); [Finance](#); [Information Technology](#)

Portrait Of A Graduate Attributes:

Primary: Critical Thinker

Secondary: Academically Prepared

Prerequisite: None

(Offered every other year opposite Accounting – even years starting with 2020)

This course is a study in everyday business transactions. It gives students a practical knowledge of their rights and obligations. Business and Personal Law serves as an excellent background for those planning on attending the Justice Academy, contemplating business courses in college, and is recommended to both business and accounting students.

+ Dual Enrollment - Students may have the opportunity to obtain college credit for this course. The college credit option DOES require a fee.

Marketing/Sports and Entertainment Marketing

Semester Course 1 Unit

Grades 10-12

Career Clusters: [Marketing](#); [Hospitality & Tourism](#); [Business Management & Administration](#)

Portrait Of A Graduate Attributes:

Primary: Creative Innovator

Secondary: Effective Communicator

Prerequisite: None

(Offered every other year opposite Virtual Enterprise – even years)

The first 10 weeks of this course allows students to develop and promote products and work with design teams to price and package those products to sell on store shelves. Students will be challenged to "think outside the box" and develop good working relationships with their peers. In addition, students will be expected to fine-tune strengths and overcome weaknesses through weekly presentations, group activities, and in-depth case studies. Students will also learn how to market themselves to be successful in the future

The second 10 weeks takes an in-depth look at the market driven entertainment and sports industries. This section examines the dynamics of marketing various forms of entertainment, including product tie-ins, branding of teams and persons, and cross promotion. Students will also learn about some legal issues and other challenges in marketing sports and entertainment products.

Personal Finance/Basic Investing +

Semester Course 1 Unit

Grades: 11-12

Career Clusters: [Finance](#); [Business Management & Administration](#); [Marketing](#); [Hospitality & Tourism](#)

Portrait Of A Graduate Attributes:

Primary: Critical Thinker

Secondary: Reflective and Future Focused

Prerequisite: None

How money-smart are you? Step into this course specifically designed for high school students to

understand the importance of the financial world, including planning and managing money wisely. Areas of study taught through application in personal finance include sources of income, budgeting, banking, consumer credit, credit laws and rights, personal bankruptcy, insurance, spending, taxes, investment strategies, saving accounts, mutual funds and the stock market, buying a vehicle, and living independently. Based on the hands-on skills and knowledge applied in this course, students will develop financial goals, and create realistic and measurable objectives to be MONEY SMART! Through project-based learning activities and tasks, students will apply mathematical concepts in realistic scenarios and will actively engage by applying the mathematics necessary to make informed decisions related to personal finance.

Note: Students may take this course as a business elective or a third year of mathematics.

+ Dual Enrollment - Students may have the opportunity to obtain college credit for this course. The college credit option DOES require a fee.

Leadership and Ethics

Semester Course 1 Unit

Grades 11-12

Career Clusters: [Business Management & Administration](#); [Government & Public Administration](#); [Hospitality & Tourism](#); [Information Technology](#); [Marketing](#)

Portrait Of A Graduate Attributes:

Primary: Critical Thinker

Secondary: Reflective and Future Focused

Prerequisite: None

In this course, students will gain an understanding of the leadership process and leadership models relative to helping people and organizations adjust to and accept strategic leadership approaches. Students will study leadership theories and examine the role of ethics in successful leadership. Current ethical issues will be examined and discussed. Movies will be used to show example of leadership styles and to discuss the effectiveness of each style. The class will be project based as well as reading and writing intensive.

Virtual Enterprise +

Semester Course 1 unit (offered every other year, opposite Marketing – odd years)

Grades 11-12

Career Clusters: [Business Management & Administration](#); [Marketing](#); [Hospitality & Tourism](#)

Portrait Of A Graduate Attributes:

Primary: Critical Thinker

Secondary: Global Citizen

Prerequisite: Marketing/Sports & Entertainment Marketing

Have you ever wondered what the billionaire Warren Buffett, visionary Steve Jobs, and entrepreneur Jeff Bezos have in common? After you finish studying business practices in this course, you may discover you have many of these same qualities. This course will expose you to business terminology, concepts, and current business practices. We will help you establish a viable business vocabulary, foster critical and analytical thinking, and refine your business decision-making skills. Since your education should help you contribute and compete in the global business environment, we will also focus on multicultural aspects of markets and business.

+ Dual Enrollment - Students may have the opportunity to obtain college credit for this course. The college credit option DOES require a fee.

Work Experience Program (Co-op)

Semester Course ½ or 1 unit

Grades: 11-12

Career Clusters: [Universal](#)/Job Title Dependent

Prerequisite: Application Only or Principal Permission

Portrait Of A Graduate Attributes:

Primary: Reflective and Future Focused

Secondary: Academically Prepared

Co-op or Diversified Cooperative Work Experience is a New York State approved Work Experience Program geared toward juniors and seniors and affords participants the chance to experience “first hand,” a career specific employment opportunity. With this, students are able to utilize many of the concepts, procedures, and skills that they have developed throughout their educational and personal experiences. The Co-op opportunity offers students credit in two ways:

- Working at a location on campus during a block within the school day (application only)
- Using a current job. Early release or late arrival may be granted. (Principal permission only)

Students are graded using a rubric and contact is made with work supervisors as to student work and progress.

English

All students are required to complete 4 years (credits) of English to meet NYS graduation requirements. Across these four years, students will continue to develop their skills in analysis, writing, and communication.

The foundational skills taught and practiced in English are essential for future success across [all career clusters/pathways](#).

English 9 R

Semester Course 1 Unit

Grade 9

Career Clusters: [Universal](#)

Portrait Of A Graduate Attributes:

Primary: Critical Thinker

Secondary: Creative Innovator

Prerequisite: None

This course emphasizes reading, writing, and critical-thinking skill development to prepare students for the English Regents exam and future professional success. Grounded in the Next Generation Learning Standards, the curriculum challenges students to thoughtfully analyze information and evaluate evidence across a variety of texts, including short stories, poems, plays, and novels. By identifying patterns and connections between content areas, students will utilize their imagination and curiosity to develop creative solutions to complex issues. Through units focused on argumentative writing and evidence-based claims, learners will ultimately cultivate the flexible thinking necessary to adapt to evolving challenges and navigate the world with insight.

English 9 H

Semester Course 1 Unit

Grade 9

Career Clusters: [Universal](#)

Portrait Of A Graduate Attributes:

Primary: Critical Thinker

Secondary: Creative Innovator

Prerequisite: Teacher Recommendation

This Honors course is designed to enhance reading, writing, and critical thinking skills at an accelerated level, fostering the deep literary understanding and effective communication necessary for college and career readiness. While engaging with a variety of complex texts, including short stories, poems, plays, and novels, students will be challenged to thoughtfully evaluate evidence and

identify patterns across multiple content areas. The curriculum utilizes imagination and flexible thinking to solve problems creatively, pushing students to develop original ideas while adapting to the rigorous expectations of an honors-level workload. By focusing on sophisticated argumentative and analytical writing, the course empowers students to address complex issues with insight and prepare for the evolving challenges of a global landscape.

English 10 R

Semester Course 1 Unit

Grade 10

Career Clusters: [Universal](#)

Portrait Of A Graduate Attributes:

Primary: Academically Prepared

Secondary: Critical Thinker

Prerequisite: Successful completion of English 9/9 H

This course prepares students for success in college, careers, and civic life by building a rigorous foundation in the NYS Next Generation Learning Standards. Students engage with a rich variety of texts—including fiction, drama, poetry, and journalistic nonfiction—to analyze how complex characters develop and how authors utilize rhetoric and precise word choice to shape central ideas. Moving beyond foundational literacy, students are challenged to evaluate evidence critically, identifying patterns and connections across multiple content areas to address complex global issues. Through an iterative, inquiry-based research process, students explore diverse perspectives and synthesize multiple sources to establish and defend their own evidence-based positions. By the conclusion of this course, students will have developed the analytical insight and communication skills necessary to navigate the world with clarity and purpose.

English 10 H

Semester Course 1 Unit

Grade 10

Career Clusters: [Universal](#)

Portrait Of A Graduate Attributes:

Primary: Academically Prepared

Secondary: Critical Thinker

Prerequisite: Successful completion of English 9/9 H or teacher recommendation.

Building upon the foundations of 9th grade, English 10 Honors provides an accelerated path toward college and career readiness through a rigorous application of the Next Generation Learning Standards. This course is designed for the academically prepared student, offering

a sophisticated curriculum that emphasizes classic literature and complex, challenging informational texts. Students will analyze the development of complex characters and the evolution of central ideas while mastering vocabulary, root words, and advanced rhetorical strategies. A hallmark of the honors experience is the demand for critical inquiry; students are expected to evaluate evidence thoughtfully, identify intricate patterns across multiple content areas, and synthesize diverse perspectives to address complex global issues. Requirements include independent reading, a mandatory summer assignment, and a focus on oral presentation and communication skills. By engaging in an iterative research process and navigating competing viewpoints, students will establish nuanced, evidence-based positions, preparing them for the New York State Assessment in 11th grade and a life of insightful civic engagement.

English 11 R

Semester Course 1 Unit

Grade 11

Career Clusters: [Universal](#)

Portrait Of A Graduate Attributes:

Primary: Academically Prepared

Secondary: Critical Thinker

Prerequisite: Successful completion of English 10/10 H.

This course is designed to ensure students are academically prepared for the New York State Regents Examination in English and the demands of college, career, and civic life. By delving deeply into works by acclaimed authors and historical figures, students build a sophisticated knowledge base and master the ability to delineate complex arguments. A central focus of the curriculum is the capacity to analyze information thoughtfully and evaluate evidence critically; students interrogate how authors utilize word choice, rhetoric, and structure to advance specific points of view and create aesthetic impact. Through an iterative, inquiry-based research process, students explore topics with multiple perspectives, gathering and analyzing vetted sources to establish and defend their own nuanced positions. By identifying patterns and connections across diverse text types and media, students develop the communication skills and intellectual insight necessary to navigate complex issues and engage meaningfully with the world.

English 12

Semester Course 1 Unit

Grade 12

Career Clusters: [Universal](#)

Portrait Of A Graduate Attributes:

Primary: Academically Prepared

Secondary: Reflective and Future Focused

Prerequisite: Successful completion of English 11.

Senior English is a comprehensive course designed to refine reading, writing, and communication skills through the in-depth study of a diverse range of literary genres. Students will engage in independent analysis and synthesis of challenging texts such as Shakespeare's Hamlet, Orwell's 1984, or Dumas' The Count of Monte Cristo, while also mastering various writing styles. This rigorous course emphasizes critical thinking, independent learning, and effective communication, preparing students for the demands of college and future careers.

By the end of this class, students will be equipped with the knowledge and skills necessary to achieve success in college, careers, civic engagement, service, and life.

AP English Language and Composition: Prepare for College and Master Key Writing Skills

Semester Course 1 Unit

Grade 11

Career Clusters: [Universal](#)

Portrait Of A Graduate Attributes:

Primary: Academically Prepared

Secondary: Critical Thinker

Prerequisites: Successful Completion of English 10 H or teacher recommendation.

This course goes beyond the basics to help you become a skilled reader, writer, and critical thinker. You'll dive deep into challenging texts, exploring how authors use language to inform, persuade, and inspire. You'll also develop your own writing skills, crafting well-researched, persuasive arguments.

Benefits of AP:

College Credit: A high score on the AP exam can earn you college credit, saving time and money.

College Admission: AP courses demonstrate your academic rigor and college readiness.

Skill Development: The skills you learn—critical thinking, analysis, and communication—are valuable for college and career success.

If you're looking for a challenging and rewarding English course that will prepare you for college and beyond, this is the right choice.

This course culminates in the Advanced Placement exam of the same title in May and the New York State Assessment in June.

High School students can earn college credit for qualifying AP Exam scores. The college credit option DOES require a fee.

By the end of this class, students will be able to analyze information thoughtfully, evaluate evidence critically, and identify patterns and connections between different pieces of information.

AP English Literature and Composition: A Deep Dive into Literary Worlds

Semester Course 1 Unit

Grade 12

Career Clusters: [Universal](#)

Portrait Of A Graduate Attributes:

Primary: Academically Prepared

Secondary: Critical Thinker

Prerequisite: Successful completion of English 11, AP Language or teacher recommendation.

Designed for students with exceptional English language skills and a passion for literature, this course offers a collegiate-level exploration of literary masterpieces from across the ages. Through in-depth analysis and discussion, you'll hone your critical reading, writing, and research abilities. Key features include seminar-style learning with dynamic discussions and collaborative analysis of classic and contemporary texts. You'll also engage in extensive writing to develop your skills through numerous essays and a research project.

This course is specifically designed to prepare you for the AP English Literature and Composition Exam, which has the potential to earn you college credit and advanced placement. A high score on the AP exam can give you a head start in college and demonstrate your commitment to academic rigor. By taking this course, you'll cultivate essential skills such as critical thinking, analytical writing, and effective communication, which will benefit you throughout your academic and professional journey. If you're a dedicated student seeking an intellectually stimulating and rewarding English experience, this course will challenge and inspire you.

High School students can earn college credit for qualifying AP Exam scores. The college credit option DOES require a fee.

Creative Writing: Unleash Your Inner Author

Semester Course ½ Unit

Grades 11-12

Career Clusters: [Universal](#)

Portrait Of A Graduate Attributes:

Primary: Creative Innovator

Secondary: Academically Prepared

Prerequisite: None

Calling all aspiring wordsmiths! This course is your passport to the vibrant world of contemporary literature. Through dynamic workshops and supportive feedback, you'll hone your craft and unlock your unique voice. Dive into captivating stories and poems, exploring the power of language to transport and inspire. From plot twists to poetic imagery, you'll master the tools to craft compelling narratives and evocative verses.

Forget the stress of exams—this course is all about celebrating your creative journey. You'll build a portfolio showcasing your growth as a writer, from initial drafts to polished masterpieces. Share your work with fellow writers in a supportive community, and receive constructive feedback to help you refine your skills. By the end of the semester, you'll have a collection of your best pieces, a testament to your newfound confidence and creativity. Join us and embark on an exciting adventure of self-expression!

By the end of this course, students will be able to utilize their imagination, curiosity, and creative thinking to solve problems, and develop new ideas and products.

Public Speaking: Communicating Effectively

Semester Course ½ Unit

Grades 11-12

Career Clusters: [Universal](#)

Prerequisite: None

Portrait Of A Graduate Attributes:

Primary: Effective Communicator

Secondary: Critical Thinker

This course is an elective designed for juniors and seniors interested in developing their public speaking skills. This course is highly participatory in nature. Students will learn and develop skills to make them better communicators by writing effective speeches and delivering them to an audience. Students will learn the components, styles and techniques involved in delivering different types of speeches such as persuasive, informational, demonstration, book talks, etc. There will be personal, peer, and teacher evaluations in order for students to learn and gain confidence speaking publicly.

By the end of this course students will articulate ideas clearly and confidently through speaking, writing, and the use of different types of media for various purposes, while engaging with diverse audiences and actively listening to different perspectives.

AP Psychology

Semester Course 1 Unit

Grades 11-12

Career Clusters: [Universal](#)

Portrait Of A Graduate Attributes:

Primary: Critical Thinker

Secondary: Reflective and Future Focused

Prerequisite: Prior experience in an Honors or AP course

The AP Psychology course introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories associated with the biological bases of behavior, cognition, development, and mental health. This course is designed to develop the Critical Thinker; as students employ psychological research methods and the scientific method, they learn to analyze information thoughtfully, evaluate claims and evidence critically, and identify patterns across multiple content areas to address complex human issues. Beyond the scientific rigor, students become Reflective and Future Focused by applying psychological insights to their own lives. Through the study of social psychology, personality, and emotion, students engage in self-reflection to identify strengths, set meaningful goals, and use social awareness to maintain supportive relationships. By prioritizing responsible decision-making and mental well-being, students cultivate the insight necessary to navigate the world and their future careers with empathy and intellectual independence. This course is the equivalent of a first-year college introductory psychology course and prepares students for the AP Examination.

High School students can earn college credit for qualifying AP Exam scores. The college credit option DOES require a fee.

World Languages

Seal of Biliteracy:

Caledonia-Mumford High School is pleased to announce participation in the New York State Seal of Biliteracy Program. In recognition of the importance of bilingualism, many states have begun to award a Seal of Biliteracy to students who have studied and attained a high level of proficiency in English and another language by high school graduation.

The Seal of Biliteracy is a prestigious award that lets colleges and employers know that you are proficient in more than one language. It is a distinction that will be attached to diplomas and transcripts of graduates who have demonstrated language mastery in both English and any other language.

Any student working towards proficiency in reading, writing, listening and speaking in English and another language can apply. High school counselors and language teachers will assist students who are eligible to apply for this seal of distinction. Planning will typically begin during the 10th grade year. School counselors will ensure that all necessary courses are in the student's course load to achieve the seal. Students are eligible to apply for the New York State Seal of Biliteracy at the beginning of their junior or senior year.

In addition to completing all requirements for graduating with a NYS Regents diploma, students wishing to receive the NYS Seal of Biliteracy must also demonstrate proficiency in both English and another language.

Students will need to earn 3 points in a Language Other Than English and 3 points in English. Additional information about the criteria, as well as an application packet, is available in the counseling office or on the Cal-Mum High School website.

Spanish I

Semester Course 1 Unit

Grades 9-12

Portrait Of A Graduate Attributes:

Primary: Global Citizen

Secondary: Effective Communicator

Career Cluster: [Government & Public Administration](#); [Hospitality & Tourism](#); [Human Services](#)

This course is for students who have not yet earned one high school credit in World Languages to fulfill the New York State graduation requirement. It is aligned with the NYS World Language standards. This course builds and

expands on communication skills. It allows students to engage in simple conversations and develop their listening, reading, and writing abilities. This course will also incorporate cultural insight and awareness of Spanish speaking countries.

Spanish II

Semester Course 1 Unit

Grade 9

Portrait Of A Graduate Attributes:

Primary: Global Citizen

Secondary: Effective Communicator

Career Cluster: [Government & Public Administration](#); [Hospitality & Tourism](#); [Human Services](#)

Prerequisite: Spanish I and passing of the Proficiency Equivalency Exam.

Spanish 2 is a course designed to provide students with a solid foundation for future Spanish courses. The course is aligned with the NYS World Language standards which emphasize communication, cultures, connections, comparisons, and communities. In this course, students further their learning from the Checkpoint B Regional Assessment. They will explore topics such as travel, food, outdoor activities, clothing, celebrations and customs, and health. The course provides opportunities for students to continue developing their listening, speaking, reading, and writing skills. Students will participate in simple conversational situations, combining learned elements of the language orally and in writing. They will be able to satisfy basic survival needs and interact on issues of everyday life in the present and introduction of the past tenses. Students will compose sentences that narrate, describe, compare, and summarize familiar topics related to the target culture. Focus is placed on understanding the main ideas of reading and listening. Students will develop a better understanding of the similarities and differences between cultures and languages and examine the influence of beliefs and values on the target culture.

Spanish III

Semester Course 1 Unit

Grade 10

Portrait Of A Graduate Attributes:

Primary: Global Citizen

Secondary: Effective Communicator

Career Cluster: [Government & Public Administration](#); [Hospitality & Tourism](#); [Human Services](#)

Prerequisite: Spanish II

This is an intermediate-level course designed to build upon the foundation established in Spanish II. The course is aligned with the NYS World Language standards which

emphasize communication, cultures, connections, comparisons, and communities. In this course, students will continue learning about Spanish language and Hispanic cultures through engaging activities, interactive lessons, and authentic resources. They will explore topics such as art, food, famous Hispanic people, climate and environmental issues, education, and problems affecting the world. Students will continue to develop their listening, speaking, reading, and writing skills through a variety of interactive activities and assignments. They will participate in conversational situations, satisfy basic survival needs, and interact on issues of everyday life in the present, past and future tenses. Emphasis is placed on understanding main ideas and developing a better understanding of the similarities and differences between cultures and languages. Students will also explore the influence of beliefs and values on Hispanic cultures. At the end of this year, students will take a Regional Comprehensive Exam in World Language. The exam consists of speaking, listening, reading & writing sections. This course strengthens the skills necessary to prepare the student for this exam.

Spanish IV +

Semester Course 1 Unit

Grades 11-12

Portrait Of A Graduate Attributes:

Primary: Global Citizen

Secondary: Effective Communicator

Career Cluster: [Government & Public Administration](#); [Hospitality & Tourism](#); [Human Services](#)

Prerequisite: Spanish III

This elective is a 201 level college credit course. The course is designed to help articulate ideas clearly and confidently through speaking, writing, and the use of different types of media for various purposes, while engaging with diverse audiences and actively listening to different perspectives. The class helps to build strong, respectful relationships with diverse perspectives to create a rigorous, inclusive learning community. The course also enhances students' listening and reading skills in Spanish. The course prepares students to interact with native speakers in everyday settings by conducting instruction primarily in Spanish, with some explanations provided in English. Through extensive practice and application, students will further develop their ability to communicate effectively in Spanish across a range of contexts.

+ Dual Enrollment - Students may have the opportunity to obtain college credit for this course. The college credit option DOES require a fee.

Spanish V +

Semester Course 1 Unit

Grade 11-12

Portrait Of A Graduate Attributes:

Primary: Global Citizen

Secondary: Effective Communicator

Career Cluster: [Government & Public Administration](#); [Hospitality & Tourism](#); [Human Services](#)

Prerequisite: Spanish IV

This elective is a 202 level college credit course. The course is designed to strengthen Spanish listening, speaking, reading & writing skills acquired in Intermediate Spanish IV. This course further enhances checkpoint C themes to help them develop confidently through speaking, writing, and the use of different types of media for various purposes, while engaging with diverse audiences and actively listening to different perspectives. The class helps to build strong, respectful relationships with diverse perspectives to create a rigorous, inclusive learning community. Emphasizes increased accuracy and depth of the students; abilities and knowledge of contemporary Hispanic culture through group and individual work, oral exercises, presentation, reading & writing assignments. Instruction occurs in Spanish. Students express themselves orally and in writing at the high-intermediate level and understand key concepts when spoken clearly at native speed. This course has 2 GCC mandate projects about conflicts in the Hispanic world.

+ Dual Enrollment - Students may have the opportunity to obtain college credit for this course. The college credit option DOES require a fee.

Math

In order to be college and career ready, the Cal-Mum Math department STRONGLY ENCOURAGES all students to enroll in four years of Math.

Pre-Algebra

Semester Course 1 Unit

Grade 9

Career Clusters: [Universal](#)

Portrait Of A Graduate Attributes:

Primary: Critical Thinker

Secondary: Academically Prepared

Placement is by teacher recommendation.

This Pre-Algebra course provides a foundational understanding of algebraic concepts and skills, emphasizing the use of graphing calculators and mathematical vocabulary. Students will explore operations with real numbers, solve equations, simplify radicals, and apply these skills to real-world scenarios through word problems. The course also covers the basics of polynomials, linear equations, and functions, with an introduction to factoring. Calculator proficiency and precise mathematical language are integrated throughout the curriculum to prepare students for success in higher-level math courses. This course will end in a local final exam.

Algebra 1 R

Semester Course 1 Unit

Grade 9

Career Clusters: [Universal](#)

Portrait Of A Graduate Attributes:

Primary: Critical Thinker

Secondary: Academically Prepared

This is the first course in a sequence of three courses designed to meet the graduation requirements for math. Algebra 1 is a mathematics course required for all freshmen students. The course will conclude with the Algebra 1 Common Core Regent's Exam in either January (if taken in the fall) or June (if taken in the spring). Successful completion of the Algebra 1 Regents Exam is required for graduation. In this course, students will learn about three major functions: Linear, Exponential, and Quadratic. Module 1 will cover linear topics including solving, graphing, and systems. Module 2 will cover the basics of descriptive statistics and linear regressions. Module 3 will cover exponential topics including

arithmetic and geometric sequences, exponential growth and decay, function notation, absolute value, and transformations of functions. Finally, Module 4 will cover quadratic topics including factoring, solving, area and flying object modeling, and completing the square. A graphing calculator (TI 83 or TI 84) is required for the

Algebra 1 Regents Exam and is recommended for the course.

Algebra 1 R Extended

Year Course 2 Unit

Career Clusters: [Universal](#)

Portrait Of A Graduate Attributes:

Primary: Critical Thinker

Secondary: Academically Prepared

Prerequisite: Teacher Recommendation.

This is the first course in a sequence of three courses designed to meet the graduation requirements for math. Algebra 1 is a mathematics course required for all freshmen students. The course will conclude with the Algebra 1 Common Core Regent's Exam in June. Successful completion of the Algebra 1 Regent's Exam is required for graduation. This course will cover the same content as Algebra 1, but will be extended over two semesters. Modules 1 and 2 will be taught in the fall. The fall semester will be concluded with the Algebra 1 Mid-Year Assessment. Module 3 and 4 will be taught in the spring. The spring semester will be concluded with the Algebra 1 Common Core Regent's Exam. A graphing calculator (TI83 or TI84) is required.

Geometry R

Semester Course 1 Unit

Prerequisite: Algebra 1

Career Clusters: [Universal](#)

Portrait Of A Graduate Attributes:

Primary: Critical Thinker

Secondary: Academically Prepared

Geometry will be required for students who took Algebra 1 and are pursuing a Regents Diploma with Advanced Designation. The course will require students to do both formal and informal proofs justifying geometric relationships. These relationships include coordinate geometry, triangles, quadrilaterals, circles, transformational geometry, constructions, solids, and right-angle trigonometry. The course will end in the State Geometry Regents examination. A graphing calculator (TI-83 or 84) is required for the Regents exam and recommended for the course.

Algebra 2 R

Semester Course 1 Unit

Grades 10-11

Career Clusters: [Business Management & Administration](#); [Finance](#); [Health Science](#); [Information Technology](#); [Manufacturing](#); [Transportation, Distribution & Logistics](#)

Portrait Of A Graduate Attributes:

Primary: Critical Thinker

Secondary: Academically Prepared

Prerequisite: Successful completion of Algebra 1 and Geometry.

This is the third in the sequence of Regents level courses designed to meet the NYS Common Core learning standards in Mathematics. Students will prepare for the Algebra 2 Regents examination, which is required for a New York State Advanced Regents Diploma. The exam will be taken in January (first semester students) or June (second semester students). The course is broken up into 4 modules. They will include these topics: algebra of polynomials and radicals, rational functions, the complex number system, trigonometric functions, logarithmic functions, probability and inferential statistics. A graphing calculator (TI-83 or TI-84) is required for the Algebra 2 regents' exam and will be used throughout the course to illustrate concepts.

Applied Math

Semester Course 1 Unit

Grades 10-11

Career Clusters: [Architecture & Construction](#); [Transportation, Distribution & Logistics](#); [Marketing](#); [Human Services](#)

Portrait Of A Graduate Attributes:

Primary: Critical Thinker

Secondary: Academically Prepared

Prerequisite: Algebra/Algebra Extended

The principle focus of this course is to improve mathematics computational and communication skills by the modeling of problems from a variety of settings. Students will develop knowledge in the application of math in several areas (Logic, Number Systems, Probability, Statistics, Basic Personal Finance, and the history behind these ideas). Students will use different reasoning, problem-solving, and modeling techniques to explore the world of math.

AP Computer Science Principles

Semester Course 1 Unit (course runs every other year, even years)

Grades 9-12

Career Clusters: [Architecture & Construction](#); [Marketing](#); [Transportation, Distribution & Logistics](#); [Information Technology](#); [Manufacturing](#); [Agriculture, Food & Natural Resources](#)

Portrait Of A Graduate Attributes:

Primary: Creative Innovator

Secondary: Critical Thinker

Prerequisite: Algebra 1

AP Computer Science Principles is an introductory college-level computing course that introduces students to the breadth of the field of computer science. Students learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They incorporate abstraction into programs and use data to discover new knowledge. Students also explain how computing innovations and computing systems – including the internet—work, explore their potential impacts and contribute to a computing culture that is collaborative and ethical. This course engages students in creative aspects of the field by allowing them to develop a computational programmed artifact based on their interests. The course will conclude the semester with three tasks. Students will create a programmed artifact, to be turned into the student's digital portfolio. Students will also take a final exam given in two parts; a multiple-choice exam and a programmed artifact. Finally, students will have the option to take the AP Computer Science written exam in May.

Math 102

Semester Course 1 Unit

Grades 10-12

Career Clusters: [Finance](#); [Health Science](#); [Information Technology](#)

Portrait Of A Graduate Attributes:

Primary: Critical Thinker

Secondary: Academically Prepared

Prerequisite: Algebra 1

This course has the same description as Algebra 2 with greater emphasis on rational expressions. This course also fulfills the 3rd year requirement for graduation. This course does not prepare students to advance directly to Pre-Calculus and, therefore, is recommended for students who need extra time to prepare for the Algebra 2 Regents exam. This class is recommended for students to improve their Algebra skills prior to taking the Regents level Algebra 2 course. Students will not take the NYS Algebra 2 Regents exam at the end of this course. A graphing calculator (TI-83 or TI-84) will be used throughout the course to illustrate concepts.

Pre-Calculus +

Semester Course 1 Unit

Grades 11-12

Career Clusters: [Business Management & Administration](#); [Finance](#); [Health Science](#); [Information Technology](#)

Portrait Of A Graduate Attributes:

Primary: Critical Thinker

Secondary: Academically Prepared

Prerequisite: Successful completion of Algebra 2 and a passing regents final exam score.

This is a college level course in which students can earn four college credits through GCC. The course is designed to prepare advanced Math students for Calculus. Topics covered include Functions, Rational Expressions, Quadratics, Logarithmic and Exponential Functions, Trigonometry, Analytic Trigonometry, Trigonometric Identities and Equations, Graphing Trigonometric Functions, Systems of Equations, Synthetic and Long Division of Polynomials, Polar Equations and Conic Sections. A graphing calculator (TI-83 or TI-84) will be used throughout the course to illustrate concepts.

+ Dual Enrollment - Students may have the opportunity to obtain college credit for this course. The college credit option DOES require a fee.

Statistics +

Semester Course 1 Unit

Grades 11-12

Career Clusters: [Universal](#)

Portrait Of A Graduate Attributes:

Primary: Critical Thinker

Secondary: Academically Prepared

Prerequisite: Algebra 1

This is a college level course designed to look at both descriptive and inferential statistics. Over 10 chapters, students will learn to describe data with numerical calculations and graphical representations, calculate and interpret probability, understand normal distributions, calculate and interpret confidence intervals, perform hypothesis testing and basic linear regression calculations. By the end of the course, students should be able to appropriately analyze any set of data given to them. This course places an emphasis on practical application and utilizes the TI 84 plus graphing calculator capabilities as well as Excel.

There will be a data analysis project after chapter 5. The course is concluded with a final exam given in two parts, a data analysis and written exam at the end of the semester.

+ Dual Enrollment - Students may have the opportunity to obtain college credit for this course. The college credit option DOES require a fee.

Calculus +

Semester Course 1 Unit

Grade 12

Career Clusters: [Business Management & Administration](#); [Finance](#); [Health Science](#); [Information Technology](#)

Portrait Of A Graduate Attributes:

Primary: Critical Thinker

Secondary: Academically Prepared

Prerequisite: Successful completion of Pre-Calculus, above average math ability, and strong motivation and work ethic

This is a college level course in which students can earn four college credits through GCC. The course deals with the study of functions of a single variable. Specifically, we will study the concepts of limits, continuity, differentiation, anti-differentiation, and also look at how we can apply these concepts to solve problems of various types. A graphing calculator (TI-83 or TI-84) will be used throughout the course to illustrate concepts.

+ Dual Enrollment - Students may have the opportunity to obtain college credit for this course. The college credit option DOES require a fee.

AP Calculus AB +

Full Year 2 Units

Grade 12

Career Clusters: [Business Management & Administration](#);
[Finance](#); [Health Science](#); [Information Technology](#)

Portrait Of A Graduate Attributes:

Primary: Critical Thinker

Secondary: Academically Prepared

Prerequisite: Successful completion of Pre-Calculus, above average math ability, and strong motivation and work ethic

AP Calculus AB is a rigorous college-level course. Students will study the AP Calculus AB curriculum in preparation for the AP Calculus AB exam in May. Students will examine functions and make connections about the cohesive concepts of continuity, limits, derivatives, transcendental functions and integrals through graphical, numerical, algebraic, and verbal analysis. Students will then apply these unifying concepts to model and solve application questions. A graphing calculator (TI-83 or TI-84) will be used throughout the course to illustrate concepts. Students enrolled in this course will have the option to receive dual credit for this course from Genesee Community College. It is equivalent to MAT 141 and earns 4 college credits. Students will be required to take the AP Calculus AB exam in May as well as a final exam to meet GCC requirements.

+ Dual Enrollment - Students may have the opportunity to obtain college credit for this course. The college credit option DOES require a fee.

Music

Music has ties to every human endeavor and contributes to our daily well-being throughout our lives. It marks the special events and enhances the quality of our lives that cannot be obtained from any other source.

The goal of the high school music program is to provide students with a broad foundation of musical knowledge, coupled with a high level of academic performance skills. The music course offerings are designed to fulfill the needs of all students with an interest in music. The music program in the high school builds sequentially on the music program in the middle school and provides the foundation for lifelong participation in and enjoyment of music. Instructional activities are directed toward achieving the National Standards for the Arts.

Every music course, including performance courses, provides experiences in creating, performing, listening to, and analyzing music, in addition to focusing on its specific subject matter. Also included are learning experiences designed to develop the ability to read music, use the notation and terminology of music, describe music, make informed evaluations concerning music, and understand music and music practices in relation to history and culture and to other disciplines in the high school curriculum.

Semester Course Offerings

- Band 9-12
- Concert Choir 9-12
- Music Theater
- Piano/Ukulele

Students may use a 5-unit sequence in music to replace the 3 required units of foreign language for the Regents with Advanced Designation Diploma.

Concert Band

Semester Course ½ Unit

Grades 9-12

Career Clusters: [Arts, Audio/Video Technology & Communications](#); [Education & Training](#); [Manufacturing](#)

Portrait Of A Graduate Attributes:

Primary: Global Citizen

Secondary: Creative Innovator

Prerequisite: None

Students rehearse in an ensemble every other day. Students participate in evening concerts, school assembly programs and perform for our Elementary students. All Band members will participate as a Pep band at home football games and pep rallies. Students may participate in solo festivals, which are a prerequisite for selection to

All-County, Area All-State, and Conference All-State bands. Students are invited to participate in school extra-curricular activities such as jazz band, and may be invited to play in the annual musical.

Concert Choir

Semester Course ½ Unit

Grades 9-12

Career Clusters: [Arts, Audio/Video Technology & Communications](#); [Education & Training](#); [Manufacturing](#)

Portrait Of A Graduate Attributes:

Primary: Global Citizen

Secondary: Creative Innovator

Prerequisite: None

The music to be studied and performed will require singing and music reading skills and will be selected from appropriate mixed voice choral literature. Students will have opportunities for small group and individual instruction that will supplement regular Concert Choir class. All opportunities listed for Concert Chorus are available to students registered for Concert Choir. Students in the choral music program are encouraged to participate in solo evaluation festivals, in All-County, and in All-State music groups.

Music Theater

Semester Course ½ Unit (every other year, even years)

Grades 9-12

Career Clusters: [Arts, Audio/Video Technology & Communications](#); [Education & Training](#); [Manufacturing](#)

Portrait Of A Graduate Attributes:

Primary: Global Citizen

Secondary: Critical Thinking

Prerequisite: One year of Band or Chorus or Teacher Recommendation

The study of all types of musical theater will be included. The course will focus on Opera, Operetta, Broadway, and Ballet. The study of individual shows as well as history of the theater, acting, and analysis will also be included. Students enrolled in the musical theater class will learn about musicals as well as analyze the historical events that laid the foundation for musical theater culture to exist as an artform. More specifically, some units from this course would likely include the following: Opera buffa and seria, German Lied/Gesamtkunstwerk, Musical Theater in the beginning, Musicals in the early to mid-20th century, Musicals in the mid to late 20th century, and Modern Musicals.

Piano/Ukulele

Semester Course ½ Unit (every other year, odd years)

Grades 9-12

Career Clusters: Arts, Audio/Video Technology & Communications; Education & Training; Manufacturing

Portrait Of A Graduate Attributes:

Primary: Creative Innovator

Secondary: Critical Thinking

Prerequisite: One year of Band or Chorus or Teacher Recommendation

The basics of music are covered, including the principles of notation, staff, clefs, notes, rests, whole, and half notes, and music terminology. Rhythm and meter are studied which includes tempo markings, time signatures, dictation, triplets, syncopation, and asymmetric meters. Students enrolled in the piano/ukulele class will learn the fundamentals of these instruments in a hands-on manner. More specifically, by the end of the course students will have had lessons in the following: Piano playing, Ukulele playing, Rhythmic Ostinatos, Music reading, Music writing, Harmonic Functionality, and Melodic tendencies.

Physical Education & Health

- Encourage safety concepts within physical activities
- Build a knowledge of and appreciation for the rules and history of activities

Exercise Physiology

Semester Course 1 Unit

Grades 11-12

Career Clusters: [Health Science](#); [Human Services](#); [Science, Technology, Engineering & Mathematics](#)

Portrait of a Graduate Attributes:

Primary: Critical Thinker

Secondary: Academically Prepare

This course is designed for students interested in the medical field (athletic training, physical therapy, nursing, pre-med) an introduction to correlating skills and content that will give them a head start as they enter college. The students will be exposed to extensive anatomy and physiology, injury recognition and evaluation, injury treatment and rehabilitation, preventative athletic taping and manual muscle testing.

After completing this course, the students will be well prepared to begin a college career that is focused on the medical field.

This course may serve as a third-year science.

Health Education

Semester Course 1 Unit

Grades 9-12 (Recommended for 10th Grade)

Career Clusters: [Health Science](#); [Hospitality & Tourism](#); [Law, Public Safety, Corrections & Security](#)

Prerequisite: None

Portrait Of A Graduate Attributes:

Primary: Reflective & Future Focused

Secondary: Academically Prepared

This course is a graduation requirement, and deals with the topics of Mental Health (personality development, self-esteem, communication skills and self-evaluation, grief, stress, conflict resolution and anger control, values - goals - and decision-making skills, and health advocacy); CPR/First Aid, where all students will learn how to handle emergency situations. Drug Education (tobacco, alcohol, marijuana, cocaine, hallucinogens, dependence and its effect on the family). Other units include healthy relationships, nutrition, disease and disease prevention.

After taking this course students will have the knowledge and skills to maintain their own personal health, the ability to create and maintain a safe and healthy environment, as well as be able to manage their personal and community resources.

Physical Education is a mandated course for all students in public school in the State of New York and is a requirement for graduation from Caledonia-Mumford Central School. Students receive ½ credit per year for the successful completion of Physical Education, for two credits upon graduation

Physical Education

Semester Course ½ Unit

Grades 9-12

Career Clusters: [Health Science](#); [Education & Training](#); [Hospitality & Tourism](#); [Law, Public Safety, Corrections & Security](#)

Portrait of a Graduate Attributes:

Primary: Academically Prepared

Secondary: Creative Innovator

Physical Education is an integral part of the entire educational process which utilizes human movement as a primary means for influencing the psychological, intellectual, social, and the physical development of the individual to effectively meet and adjust to the demands of a changing society. Throughout their high school years, students will be exposed to many different types of activities in Physical Education class. These activities include team sports, physical fitness, as well as lifetime activities.

The Physical Education program of the Caledonia-Mumford Central School District is designed to:

- Create positive attitudes towards movement and physical activity
- Develop lifelong movers
- Develop an understanding of, and respect for, physical fitness
- Develop an awareness of body mechanics
- Develop leadership and responsibility
- Foster good sportsmanship
- Build self-esteem
- Enhance communication and comprehension skills
- Develop an appreciation for the environment through outdoor activities

Science

Cal-Mum High School science classes are designed to prepare students to be college and career ready by exposing them to the necessary knowledge and essential skills as they grow into 21st century learners. Our instruction is based on the Common Core and New York State Curriculum Standards. Our intention is to challenge all students with high quality instruction in science education. Science classes engage students through hands-on laboratory experiments, problem-solving, critical thinking, oral and written communication skills, collaboration, creativity, and using innovative technology.

In order to be college and career ready, the Cal-Mum science department STRONGLY ENCOURAGES all students to enroll in four years of science

Life Science: Biology R

Semester Course 1 Unit

Grades 9-12

Career Clusters: [Agriculture, Food & Natural Resources](#); [Health Science](#); [Science, Technology, Engineering & Mathematics](#)

Portrait Of A Graduate Attributes:

Primary: Academically Prepared

Secondary: Critical Thinker

This course is designed to provide a broad and general understanding of the fundamental principles of biology and the living environment. Topics include scientific inquiry and skills, similarities/differences among living organisms, homeostasis, reproduction and development, evolution, ecology and genetic continuity.

Includes 1200 required lab minutes. If lab and content requirements are met, this course culminates with a Regents final exam.

Earth & Space Science R

Semester Course 1 Unit

Grades 9-12

Career Clusters: [Agriculture, Food & Natural Resources](#); [Science, Technology, Engineering & Mathematics](#); [Architecture & Construction](#); [Education and Training](#); [Government & Public Administration](#); [Health Science](#); [Hospitality & Tourism](#)

Portrait Of A Graduate Attributes:

Primary: Academically Prepared

Secondary: Critical Thinking

Earth Science involves the study of planet Earth, its

interconnected and dynamic systems and its setting in space. Areas of study include geology (rocks and minerals, crustal movements, surface processes), meteorology (weather and climate), and astronomy (local and deep space).

This course aims to build your understanding of the world around you and scientific phenomena you encounter on a daily basis.

This course may be used toward the physical setting credits needed for graduation. The final exam is the NYS Regents exam for Earth Science. To take this exam, the student must satisfactorily complete the state lab time of 1200 minutes of scientific inquiry and hands on laboratory work.

Chemistry R +

Semester Course 1 Unit

Grades 10-12

Career Clusters: [Agriculture, Food & Natural Resources](#); [Health Science](#); [Science, Technology, Engineering & Mathematics](#)

Prerequisite: Successful completion of Algebra 1

Portrait of a Graduate Attributes:

Primary: Critical Thinker

Secondary: Academically Prepared

Regents Chemistry is a rigorous introduction to the fundamental building blocks of matter – atoms. Topics covered include matter and energy, atomic structure, chemical bonding and reactions, the periodic table, stoichiometry, kinetics and equilibrium, acids and bases, nuclear chemistry, electrochemistry, organic chemistry and solutions.

The objective of this course is to give students a broad-based introduction to chemistry which can be applied to further study in science and can help students understand chemistry which can be applied to further study in science and can help students understand chemistry in the world around them. All students must successfully complete 1200 minutes of hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to apply science and engineering practices and develop critical thinking and reasoning skills. At the completion of this course, students will be prepared to take the NYS Regents Chemistry exam.

+ Dual Enrollment – Students may have the opportunity to obtain college credit for this course (GCC course: CHE 100, 3 credits). This option DOES require a fee.

Environmental Science

Semester Course 1 Unit

Grades 10-12

Career Clusters: [Agriculture, Food & Natural Resources](#);

[Science, Technology, Engineering & Mathematics;](#)
[Architecture & Construction;](#) [Education and Training;](#)
[Government & Public Administration;](#) [Health Science;](#)
[Hospitality & Tourism](#)

Portrait Of A Graduate Attributes:

Primary: Global Citizen

Secondary: Reflective and Future Focused

Prerequisites: Students should have completed Regents Living Environment, passed the course and the final exam. Students should have taken the Regents Earth Science course.

Environmental Science is a course where students examine the impact of humans on the planet Earth. This class dives into the four spheres of planet Earth: Atmosphere, Biosphere, Hydrosphere and Lithosphere and how they are changing with human activity. Topics include ecosystems, biomes, pollution, biodiversity, energy, natural resources, endangered species, water and land management.

Local and global concerns are explored as students will consider the interconnectedness of humans and our environment and investigate practical mitigation and adaptation strategies to climate change.

Physics R

Semester Course 1 Unit

Grades 11-12

Career Clusters: [Architecture & Construction;](#)
[Information Technology;](#) [Science, Technology,](#)
[Engineering & Mathematics](#)

Prerequisite: Algebra 1, Geometry

Corequisite: Algebra 2 (This course includes use of basic trigonometric functions.)

Regents Physics is a challenging, algebra-based course that explores topics from mechanics (1-and 2-dimensional motion, Newton's Laws, circular motion, work and energy), thermodynamics, special relativity, electricity and magnetism, waves (light and sound), and modern particle physics. The objective of this course is to give students a broad introduction to physics, which will change the way you view the world around you. All students must complete 1200 minutes of hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to apply science and engineering practices and develop critical thinking and reasoning skills. At the completion of this course, students will be prepared to take the NYS Regents Physics Exam.

AP Biology

Semester Course 1 Unit

Grades 11-12

Career Clusters: [Agriculture, Food & Natural Resources;](#)
[Science, Technology, Engineering & Mathematics;](#) [Health Science](#)

Portrait Of A Graduate Attributes:

Primary: Academically Prepared

Secondary: Critical Thinker

Prerequisite: Life Science: Biology R, Chemistry R (85 or higher)

AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes, energy and communication, genetics, information transfer, ecology, and interactions. The AP Biology course is equivalent to a two-semester college introductory biology course for biology majors. This course requires that 25 percent of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to apply the science practices.

At the completion of this course, students will be prepared to take the AP biology exam in May. High School students can earn college credit for qualifying AP Exam scores of three or higher. This option DOES require a fee.

AP Chemistry +

Semester Course 1 Unit

Grades 11-12

Career Clusters: [Science, Technology, Engineering & Mathematics](#)

Prerequisite: Chemistry R, Algebra 1

Portrait of a Graduate Attributes:

Primary: Critical Thinker

Secondary: Academically Prepared

AP Chemistry is an intense course that takes a deeper dive into chemistry topics introduced in Regents Chemistry. Special emphasis is placed on quantitative treatments of stoichiometry, equilibrium, and thermodynamics. This course requires that 25 percent of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to apply the six Science Practices. At the completion of this course, students will be prepared to take the AP Chemistry exam in May. High School students can earn college credit for qualifying AP Exam scores of three or higher. This option DOES require a fee.

+Dual Enrollment – Students may have the opportunity to obtain college credit for this course. (GCC course: CHE 101, 3 credits). This option DOES require a fee.

Social Studies

These courses of study should give students the knowledge, intellectual skills, civic understandings, and dispositions toward democratic values that are necessary to function effectively in American society. Ultimately, social studies instruction should help students assume their role as responsible citizens in America’s constitutional democracy and as active contributors to a society that is increasingly diverse and interdependent with other nations of the world.

The foundational skills taught and discussed throughout the Social Studies curriculum are essential for future success across [all career clusters/pathways](#).

Global History and Geography 9

Semester Course 1 Unit

Grade 9

Career Cluster: [Universal](#)

Portrait Of A Graduate Attributes:

Primary: Academically Prepared

Secondary: Global Citizen, Critical Thinker

Prerequisite: None

Global History and Geography covers a wide variety of topics including the Paleolithic Era and the development of the first civilizations, examination of classical societies, and traces the expansion of trade networks and their global impact. The course emphasizes the key themes of interactions over time, shifts in political power, and the role of belief systems. Throughout the semester, you will develop skills in critical thinking, sourcing of documents, comparison, contextualization, and causation.

In preparation for the Global History Regents examination in grade 10, students at all levels will do extensive writing.

Pre-AP World History

Semester Course 1 Unit

Grade 9

Career Cluster: [Universal](#)

Portrait Of A Graduate Attributes:

Primary: Academically Prepared

Secondary: Global Citizen, Critical Thinker

Prerequisite: Teacher Recommendation

This course is for highly motivated students and will focus on the skills necessary to successfully complete the Advanced Placement World History: Modern Exam. This college-level course requires students to complete outside readings and assignments. The course will give students the tools and knowledge to succeed in future Advanced Placement courses and Regents exams. Students will understand the importance of geography, economics, and political science in the development of civilizations, and will examine how these civilizations grew, interacted with one another, and declined. Students will explore the major religions to understand their connections, their differences, and their impacts on individuals, nations, and the world. Finally, students will follow the exploration and colonization of “new worlds,” and will uncover the scientific and philosophical roots of revolution that pushed the world into modernity. Students who continue this course in 10th grade will take the AP Examination in May.

Global History & Geography 10 R

Semester Course 1 Unit

Grade 10

Career Cluster: [Universal](#)

Portrait Of A Graduate Attributes:

Primary: Academically Prepared

Secondary: Global Citizen, Critical Thinker

Prerequisite: Global History & Geography 9

This course will examine Global History from the Era of Absolutism to issues of global interdependence. By studying a variety of societies and cultures from across the globe, students will identify problems and/or issues that have existed across history and how different cultures and societies attempted to solve them. Throughout the semester, you will develop skills in critical thinking, sourcing of documents, comparison, contextualization, and causation. Students enrolled in this course are required to take the Global History & Geography Regents Exam at the end of the semester.

AP World History: Modern

Semester Course 1 Unit

Grade 10

Career Clusters: [Universal](#)

Portrait Of A Graduate Attributes:

Primary: Academically Prepared

Secondary: Global Citizen, Critical Thinker

Prerequisite: Global History & Geography 9 or teacher recommendation

This course will examine 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 in order to identify causation, comparison, and continuity/change over time. The AP World History course highlights the following six themes: Humans and the Environment, Cultural Developments and Interactions, Governance, Economic Systems, Social Interactions and Organization, and Technology and Innovation. This full semester course culminates in the Advanced Placement Exam of the same title. Sophomores involved in this course will also have the New York State Regents Assessment to take at the end of the semester.

High School students can earn college credit for qualifying AP Exam scores. The college credit option DOES require a fee.

US History & Government 11 R

Semester Course 1 Unit

Grade 11

Career Cluster: [Government & Public Administration](#); [Human Services](#); [Law, Public Safety, Corrections & Security](#); [Education & Training](#)

Portrait Of A Graduate Attributes:

Primary: Academically Prepared

Secondary: Critical Thinker

Prerequisite: Global History & Geography 10

US History is a chronologically organized course with the emphasis being on the United States as a developing industrial and post-industrial nation. Constitution and legal issues will be explored in depth, as will be the problems of a dynamic industrial society in an increasingly complex and technology-oriented world. Throughout the course, students will develop skills in critical thinking, document sourcing, argumentation, contextualization, and corroboration. Enrolled juniors will be required to take the New York State Regents exam at the end of the semester.

AP U.S. History

Semester Course 1 Unit

Grade 11

Career Clusters: [Government & Public Administration](#); [Human Services](#); [Law, Public Safety, Corrections & Security](#); [Education & Training](#)

Portrait Of A Graduate Attributes:

Primary: Academically Prepared

Secondary: Critical Thinker, Effective Communicator

Prerequisite: AP World History or a recommendation from a teacher

The History Department offers a course and exam in AP United States History to students who wish to study a college equivalent course in introductory American History. This is designed as a full year American History course including topics ranging from Pre-Columbian N. America to contemporary times. The course is set up to provide students with analytical skills and factual knowledge necessary to deal critically with the problems and materials in U.S. History. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. Students will learn to assess historical materials--their relevance to a given interpretive problem, reliability, and importance--and to weigh the evidence and interpretations represented in historical scholarship. The AP U.S. History course develops the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in essay format. Juniors involved in this course will also have the New York State Regents Assessment to take at the end of the semester.

High School students can earn college credit for qualifying AP Exam scores. The college credit option DOES require a fee.

Participation in Government

10 Week Course ½ Unit

Grade 12

Career Clusters: [Government & Public Administration](#); [Law, Public Safety, Corrections & Security](#)

Portrait Of A Graduate Attributes:

Primary: Global Citizen

Secondary: Effective Communicator

Prerequisites: Global History and Geography, US History and Government

The primary purpose of this course is to facilitate and encourage the development of civic-minded individuals capable of effectively fulfilling the "office of citizen." After an introductory look at the responsibilities and rights of the citizen, the course will focus on ways that the student can get involved and actively participate in their democracy. The course is also designed to engage students in the analysis of public policy issues on the local, state, and national level. Activities that students will be involved in include attending local government meetings, participation in community-based service projects, and speaking with local government officials.

Economics

10 Week Course ½ Unit

Grade 12

Career Clusters: [Business Management & Administration](#); [Law, Public Safety, Corrections & Security](#)

Portrait Of A Graduate Attributes:

Primary: Academically Prepared

Secondary: Critical Thinker

Prerequisites: Global History and Geography, US History and Government

The primary purpose of this course is to provide students with economic knowledge, skills, and abilities that will enable them to function as economically literate citizens in a global economy. Although not designed to be a course in consumer economics, the course does provide a unique opportunity for students to combine knowledge of theoretical economic concepts and principles with practical, real-life economic decision-making.

AP Macroeconomics and AP Microeconomics (AP Economics)

Full Year Course 2 Units

Grade 12

Career Clusters: [Business Management & Administration](#); [Finance](#); [Government & Public Administration](#); [Marketing](#)

Portrait Of A Graduate Attributes:

Primary: Critical Thinker

Secondary: Academically Prepared

Prerequisites: Global History and Geography, US History and Government

AP Economics is a college level course, which involves advanced study in Economics. The 30-week course prepares students to take both the AP Microeconomics and AP Macroeconomics exams given by the College Board in May. In addition to exploring basic economic concepts and theories, students will participate in a class competition sponsored by the Federal Reserve Board known as the FED Challenge. The course should give students a good preview of the rigorous nature of a demanding college course. A stronger background in math is also beneficial. Students can potentially receive college credit and/or advanced college placement as a result of the course.

To meet graduation requirements, the last 10 weeks of this course will center on the curriculum for Participation in Government.

War and Conflict

Semester Course ½ Unit

Grades 9-12

Career Clusters: [Universal](#)

Portrait Of A Graduate Attributes:

Primary: Global Citizen

Secondary: Effective Communicator

This course will examine the causation, continuation, and changing dynamics of War throughout history. During the semester, the class will analyze the historical circumstances that led to the conflict, the events of it, the methods used, and the social, political, and economic impacts of war. Students will identify and discuss the various perspectives involved in the war and determine if the events were avoidable or could have been mediated. The class will cover both domestic as well as global conflicts throughout history.

Civic Leadership 1

Semester Course ½ Unit

Grades 9-12

Career Clusters: [Universal](#)

Portrait Of A Graduate Attributes:

Primary: Global Citizen

Secondary: Effective Communicator

This course is designed to help students learn more about the communities in which they live along with building stronger leadership and interpersonal skills. The learning experiences of the course will assist students in identifying a community issue that they would like to explore and problem solve as part of a capstone project in Civic Leadership 2. Civic education empowers all students to make informed decisions for the public good as members of a culturally diverse, democratic society in an interdependent world. Through civic education, students learn how to identify and address problems in their community or school community. Students also learn how to demonstrate respect for the rights of others, respectfully disagree with other viewpoints, and provide evidence for a counterargument. This course and resulting projects are also designed to strengthen the relationships of the school and students with parents, families, civic leaders, and outside organizations and community partners.

Civic Leadership 2

Semester Course ½ Unit

Grades 9-12

Career Clusters: [Universal](#)

Portrait Of A Graduate Attributes:

Primary: Global Citizen

Secondary: Effective Communicator

Prerequisites: Civic Leadership 1

Upon completion of Civic Leadership 1, this course is designed to allow students to pursue their own area of civic interest and participation in the community through developing and completing a unique and independent capstone project. Interaction with community members and organizations that result in real changes and impact will make the experience most meaningful. Completion of this course, along with other graduation requirements, may result in a NYS Seal of Civic Readiness.

Technology Education

***Note: All students may take this course as an alternative for the Fine Art requirement.*

Technology Education is an exploratory program of instruction in the resources, systems, and impacts of technology. Students enrolled in Technology Education courses study the major technological systems of the world and our society. Technology Education courses have been designed to meet the needs of all academic levels and are taught through laboratory-based, “hands-on” project-based learning opportunities. Students enrolled in Technology classes will create projects in a collaborative environment with an emphasis on safety and the design process – all while building life-long problem-solving skills.

Design and Drawing for Production (DDP)

Semester Course 1 Unit

Grade 9-12

Career Clusters: [Universal](#)

Portrait Of A Graduate Attributes:

Primary: Creative Innovator

Secondary: Critical Thinker

Prerequisite: None

Project Lead the Way (PLTW) Design and Drawing for Production (DDP) is a hands-on, project-based high school course that develops students as **creative innovators and critical thinkers** through engineering design and manufacturing experiences. Students apply the engineering design process to imagine, design, test, and refine solutions to real-world problems.

Using industry-standard computer-aided design (CAD) software and a variety of materials and tools, students create detailed digital models and physical prototypes while analyzing constraints, evaluating performance, and making data-driven design decisions. Emphasis is placed on iterative problem-solving, precision, and adaptability as students revise their work based on testing and feedback.

Throughout the course, students collaborate in teams to communicate ideas, justify design choices, and reflect on both successes and challenges. By the end of the course, students will have developed a strong foundation in engineering design and manufacturing principles, along with the creative and analytical skills needed for further study and careers in engineering, manufacturing, and related technical fields.

Introduction to Computer Programming - JavaScript 1 & 2

Semester Course 1 Unit

Grades 9-12

Career Clusters: [Universal](#)

Portrait Of A Graduate Attributes:

Primary: Critical Thinker

Secondary: Creative Innovator

Prerequisite: None

Introduction to Computer Programming – JavaScript 1 & 2 develops students as **critical thinkers and creative innovators** through hands-on coding experiences. Students learn JavaScript commands, functions, and control structures by analyzing problems, solving puzzles, and writing programs using a web-based platform (CodeHS).

Students write and run code directly in the browser while experimenting with both text-based and block-based programming. Emphasis is placed on logical reasoning, pattern recognition, debugging, and evaluating program behavior to refine solutions. Through interactive and visual programming challenges, students explore multiple ways to solve problems and adapt their code based on results.

In addition to independent coding, students participate in in-person collaborative activities to discuss strategies, test ideas, and support one another’s learning. By the end of the course, students will have built a strong foundation in computer programming concepts, problem-solving skills, and creative thinking that prepares them for further study in computer science and related fields.

Digital Photography - Graphic Design/Arts - Photo

Semester Course 1 Unit

Grades 9-12

Career Clusters: [Arts, A/V Technology & Communications](#); [Hospitality & Tourism](#); [Marketing](#)

Portrait Of A Graduate Attributes:

Primary: Creative Innovator

Secondary: Global Citizen

Prerequisite: None

Digital Photography – Graphic Design/Arts – Photo develops students as **creative innovators and globally aware visual communicators** through hands-on exploration of digital photography. Students learn the elements of art and principles of design as they apply to photographic composition, lighting, and visual storytelling.

The course examines the history of photography, including its scientific and technological development, influential innovators, and its role within diverse cultural and social contexts. Students explore ethical considerations in photography and the responsibility of image-makers in local, global, and digital communities.

Through guided practice and creative projects, students use digital cameras and editing software to capture, edit, and refine images. Instruction includes photo editing techniques such as cropping, exposure and color adjustments, filtering, and effective photo storage and management. By the end of the course, students will have developed both technical skills and artistic vision, enabling them to create impactful and meaningful photographic work.

Digital Videography – Graphic Design/Arts - Video

Semester Course 1 Unit

Grades 9-12

Career Clusters: [Arts, A/V Technology & Communications](#); [Hospitality & Tourism](#); [Marketing](#)

Portrait Of A Graduate Attributes:

Primary: Effective Communicator

Secondary: Creative Innovator

Prerequisite: Digital Photography

Digital Videography – Graphic Design/Arts – Video develops students as **effective communicators and creative innovators** through hands-on video production and editing experiences. Students learn to communicate

ideas clearly and creatively using Adobe Premiere, the industry-standard video editing software.

Through project-based learning, students practice importing and organizing footage, editing and refining clips, incorporating transitions and effects, and exporting completed video projects. Emphasis is placed on visual storytelling, sequencing, pacing, and audience awareness as students shape raw footage into meaningful narratives.

Students collaborate with peers to plan, edit, and revise projects while applying problem-solving strategies to overcome technical and creative challenges. By the end of the course, students will have a strong foundation in video editing and digital storytelling, preparing them for advanced study or careers in film, television, advertising, and other media-related fields.

Project Lead the Way

Project Lead the Way is a nonprofit organization that relays the need for engineers and has set up a Pre-Engineering curriculum in conjunction with colleges and universities from across the U.S. It comprises of a sequence of five courses which, when combined with traditional mathematics and science courses, introduces students to the scope, rigor and discipline of engineering prior to entering college. Students are encouraged and welcome to enroll in individual classes without committing to the entire sequence – provided they can meet the prerequisite requirements.

Students are eligible to receive college credit for these courses. They will need to maintain an overall average of an 85 and pass the end of the course assessment / college exam. Credit will be given through Rochester Institute of Technology. Students will receive an official college transcript upon request. Credits are transferable. For more information go to www.pltw.org

PLTW Introduction to Engineering Design (IED) +

Semester Course 1 Unit

Grade 9

Career Clusters: [Universal](#)

Portrait Of A Graduate Attributes:

Primary: Creative Innovator

Secondary: Critical Thinker

Prerequisite: Must be concurrently enrolled in Algebra I as a minimum mathematics requirement.

PLTW Introduction to Engineering Design (IED) introduces students to how engineers and industrial designers turn ideas into real-world products. Students explore the engineering design process while creating, testing, and refining solutions to open-ended design challenges.

Using professional 3D CAD software and hands-on tools such as 3D printers and laser cutters, students design and model products, analyze measurements and data, and build functional prototypes. Through individual and team-based projects, students learn technical sketching, documentation, and how to communicate design decisions.

The course emphasizes creativity, problem-solving, and iteration, helping students understand how engineering impacts people, society, and the world around them. IED provides a strong foundation for further study in engineering, manufacturing, and technical design pathways.

***Note: All students may take this course as an alternative for the Fine Art requirement.*

PLTW Principles of Engineering (POE) +

Semester Course 1 Unit

Grades 10-12

Career Clusters: [Architecture & Construction](#); [Manufacturing](#); [Science, Technology, Engineering & Mathematics](#)

Prerequisite: Introduction to Engineering Design or DDP, Geometry

Portrait Of A Graduate Attributes:

Primary: Creative Innovator

Secondary: Effective Communicator

Principles of Engineering is a hands-on course that helps the student understand the field of engineering and engineering technology. Students design, construct, test and evaluate various projects that apply knowledge and skills. Student explore various technology systems and manufacturing processes to learn how engineers and technicians apply math, science and technology in an engineering problem-solving process.

PLTW Computer Integrated Manufacturing (CIM) +

Semester Course 1 Unit

Grades 10-12

Career Clusters: [Manufacturing](#); [Science, Technology, Engineering & Mathematics](#)

Prerequisite: Introduction to Engineering Design or DDP, Geometry

Computer Integrated Manufacturing (CIM) is a course that applies principles of robotics and automation. The course builds on computer solid modeling skills developed in introduction to Engineering Design and uses computer-controlled equipment to produce actual models of three-dimensional designs. Fundamental concepts of robotics used in automated manufacturing and design analysis are included.

PLTW Digital Electronics (DE) +

Semester Course 1 Unit

Grades 10-12

Career Clusters: [Manufacturing](#); [Science, Technology, Engineering & Mathematics](#); [Information Technology](#)

Portrait Of A Graduate Attributes:

Primary: Creative Innovator

Secondary: Critical Thinker

Suggested Prerequisites: Introduction to Engineering Design or DDP, Algebra II

This course provides a foundation for learning about electronics, circuit design, and electrical engineering. The course includes topics such as combinational and sequential logic, and students are exposed to circuit design tools used in industry, including logic gates, integrated circuits, and programmable logic devices. Students will work with both digital circuits using Multisim 14.1 software in the CAD Lab, as well as physical circuit boards.

Students will learn how technology powers our everyday lives, as well as explore career paths that aim to improve these systems. All physical equipment will be provided for you by the school.

Note: Students may take this course as either a technology elective, a third year of mathematics OR a third year of science.

ownership of their learning, developing leadership, collaboration, communication, and organizational skills. By the end of the course, students produce a comprehensive engineering solution and presentation that reflects their interests, strengths, and future goals, preparing them for college, careers, and real-world engineering challenges.

+ Dual Enrollment - Students may have the opportunity to obtain college credit for this course. The college credit option DOES require a fee.

PLTW CAPSTONE +

Semester Course 1 Unit

Grades 10-12

Career Clusters: [Science, Technology, Engineering & Mathematics](#)

Portrait Of A Graduate Attributes:

Primary: Reflective and Future Focus

Secondary: Creative Innovator

Prerequisite: Introduction to Engineering Design and must have taken at least two of the following three: CIM, POE or DE

PLTW Engineering Design and Development (EDD) is the culminating capstone experience in the PLTW engineering pathway. In this course, students identify and solve a real-world engineering problem of their choosing through a self-directed, team-based design process.

Unlike traditional courses, students help shape the curriculum as they research problems, define constraints, develop and test solutions, and refine designs based on feedback. Working collaboratively, students engage with experts, manage timelines, and apply technical knowledge gained from previous PLTW courses.

The instructor serves as a facilitator while students take

Driver Education

Driver Education

Semester Course ½ Unit

Age 16

Driver Education includes those learning experiences provided by the school to help the learner use the motor vehicle safely and efficiently. Its objective is to develop social responsibility, develop pride in high stands of performance, promote safe, efficient, and enjoyable use of the car, develop a habit of cooperation and prepare for useful vocations. A special emphasis will be placed on defensive driving and collision avoidance.

Emphasis in the classroom will include chapter assignments and tests, lecture, notebook organization, insurance project, research paper and final exam.

In-Car lessons include under the hood maintenance, driving in residential areas, rural back roads, rural highways, expressways, traffic light awareness, backing, parallel parking, hill parking and 3-point turns. Students will use verbal commentary while driving to demonstrate hazard awareness, and proper visual and decision-making skills

*The student must be 16 years of age and in “Good Standing” with the school district. Seniors will be registered first, and then the oldest juniors. Date –of-birth will be the deciding factor for student in lower grades. Student must have a Learner’s Permit or a Driver’s License. The availability of this course to every student is uncertain due to scheduling considerations.

GV BOCES CTE

An Education for the Real World

Prerequisite: Completion of algebra, good academic standing and good attendance record. Continued participation in BOCES programs is dependent upon daily attendance and positive credit accrual of both course credit and required exams. Students who are not maintaining at least 85% daily attendance, and/or do not pass the classes/exams required for high school graduation will be removed from attending BOCES.

Career and technical education offers you a first-hand opportunity to explore any of a number of career fields. Relying heavily on hands-on learning, it’s an intensive, exciting way to learn if a particular career is the right one for you.

You can learn the skills you need for immediate employment, or prepare for a career that requires further education.

Either way, business and industry are waiting for you. Their need for skilled workers has never been greater, and BOCES can help you open the door to those opportunities.

Two-Year Courses

- Animal Science
- Auto Body
- Auto Technology
- Building Trades
- Conservation
- Cosmetology
- Criminal Justice
- Culinary Arts
- Diesel Mechanics
- Electro-Mechanical Trades
- Graphic Arts
- Health Dimensions
- Metal Trades
- Computer Information Systems

Detailed course descriptions are available at www.gvboces.org.

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