

**Lyndonville Central School District**

**L. A.. Webber Middle-High School**

**Course Catalogue 2021-2022**





## Counselors

Jeff Kingsbury

Counselor

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## 2020-2021 Course Catalogue

### Introduction:

This course catalogue has been developed to assist you and your parents with long range program planning and in selecting courses of study that will prepare you for college and/or employment. This book describes the many courses of study available to you. With help from your school counselor, teachers, and parents, you will be able to select a program that fits your individual needs and interests consistent with your college and/or career goals. Give careful consideration to your post secondary plan. It should be broad enough to provide a well-rounded education, yet rigorous enough to prepare you to compete effectively for college and/or job placement.

We hope that you and your parents will work together to plan your program. Your counselor will offer the opportunity for annual career and course selection planning with you and your parents. Your counselor will help you analyze individual courses, prerequisites, your goals and interests, clubs and extracurricular activities, and community service opportunities to help you accomplish your personal, educational, and career goals.

In the sections that follow, we will review the steps you need to take during your high school career to earn a diploma based on the requirements set forth by the New York State Education Department and the Board of Regents. Within those requirements, you have many choices and options available to you. Following the planning section, you will find listings, by subject area, of the full selection of courses offered at L.A. Webber Middle-High School.

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### Program Adjustments:

School counselors and others continually emphasize the importance of making careful decisions regarding selection all through the school year, but especially during December, January, and February, when counselors meet with students to review the programming plan and make selections for the coming school year. **There should be little need for change if choices are made wisely.**

Student course requests are tallied and potential enrollment figures are used to determine course offerings for the coming school year during the budget process in March and April. Courses with insufficient enrollment will be cancelled and these students will be counseled to make alternative selections.

There are three opportunities to change schedules prior to the opening of school:

1. When course listings are sent home.
2. After final grades are reported in June.
3. After summer school results are reported in August.

After August, all changes requests will be handled using our Course Selection and Schedule Adjustment process guidelines. We firmly believe that with careful planning, the need for changes in the fall should be almost nonexistent.

## Graduation Requirements:

To graduate from Lyndonville Central School District, a student must meet all of the requirements specified in the regulations of New York State, including successful completion of all required Regents exams.

### ***Course and credit requirements:***

	Regents Diploma	Regents Diploma with Advanced Designation
English	4 credits	4 credits
Social Studies	4 credits	4 credits
Mathematics	3 credits	3 credits
Science	3 credits	3 credits
Art/Music	1 credit	1 credit
Health	½ credit	½ credit
Physical Education	2 credits	2 credits
Language Other Than English (LOTE)	1 credit	3 Credits*
Electives	3.5 credits	1.5 credits
Total Credits	22 credits	22 credits

### ***Regents exam requirements***

	Regents Diploma	Regents Diploma with Advanced Designation
English Language Arts	65% or higher	65% or higher
Global History	65% or higher	65% or higher
US History	65% or higher	65% or higher
Integrated Algebra <b>or</b> Geometry <b>or</b> Algebra 2	65% or higher	65% or higher
Science	65% or higher	65% or higher
Integrated Algebra <b>and</b> Geometry, <b>and</b> Algebra 2	N/A	65% or higher
LOTE	N/A	65% or higher
Life Science	N/A	65% or higher

\*students may substitute a 5-unit concentration in Art, Business, Occupational Education, Technology, and Music for the LOTE requirement.

# L.A. Webber High School Suggested Academic Program

	9th Grade	10th Grade	11 <sup>th</sup> Grade	12th Grade
<b>English</b>	English 9 English 9 (Pre-AP)	English 10 English 10 (Pre-AP)	English 11 AP English Language	English 12 ACE English 12 AP English Literature
<b>World Language</b>	Spanish I Spanish II	Spanish II Spanish III	Spanish III Spanish IV	Spanish IV
<b>Mathematics</b>	Algebra * Geometry*	Geometry * Algebra II *	Geometry * Algebra II * Pre Calculus *	Integrated Algebra II * Pre Calculus * AP Calculus * AP Statistics
<b>Physically Active for Life</b>	PAFL Health	PAFL Health	PAFL	PAFL
<b>Science</b>	Earth Science Living Environment	Earth Science Living Environment Chemistry	Chemistry Physics AP Physics	Chemistry Physics AP Physics Astronomy
<b>Social Studies</b>	Global I Global (Pre-AP)	Global II AP World History	US History & Government AP US History & Government	Economics & Participation in Government AP Gov't, Politics and Economics AP US History & Government
<b>Fine Arts</b>	Studio in Art Band or Chorus	Band or Chorus		

***All course offerings are subject to change based on enrollment and staffing.***

## **Counseling Information:**

At L.A. Webber Middle-High School each student receives career plan counseling and college placement services. Each year the school counselor meets with all students to help make their high school experience rewarding and successful. Counselors meet with students individually and in groups to provide extensive guidance and academic support. A variety of programs are also provided to assist students with the development of a post secondary plan. Students and parents are strongly encouraged to meet with the counselor annually for program planning.

## **Post Secondary Planning:**

It is our goal to provide you with an academic plan that will fit your individual needs, interests, and career goals. Each year the school counselor meets with **all** students to provide career planning and counseling services. During these annual conferences, the school counselor works with students and parents to select a tentative four-year program of study. This course work should be broad enough to provide a well-rounded education, yet specific enough to prepare for higher level studies and/or to compete effectively in the job market. The school counselor will meet with each student to discuss any questions or concerns that arise. In addition, through the use of the web-based Choices Planner and Explorer, students will collect information about their interests and abilities that will ultimately lead to the development of each individual's post-secondary plan.

All students in grade 9 develop a post secondary plan for four years of high school and one year of post secondary education and/or employment. Each plan is based on each individual student's career goals and is designed to meet the New York State requirements. This plan is reviewed annually with **all** students and parents. It is very important that each parent and student update their post secondary plan and select courses designed to prepare students for post secondary opportunities. L.A. Webber Middle-High School strongly recommends **all** parents participate in this process.

## Program Information

*The purpose of the Lyndonville Central School District's counseling program is to assist students with course selection, career exploration, college admission, and/or pursuit of work skills development. Please work closely with your counselor and meet annually to help plan your school program.*

*Counselors and teachers will help students select courses based on student college/career goals, interest, motivation and recommendation.*

### **Advanced Placement (AP) Courses (Weighted 1.10):**

Advanced placement courses are the most academically rigorous that L.A. Webber High School has to offer. These courses are designed to challenge and prepare students for a college environment. A number of studies show that students who take AP courses are much more likely to earn a bachelor's degree. AP Courses are a valuable introduction to college level work. They provide students with the exposure to both the level and quality of work expected at a collegiate level. The successful completion of an AP exam may afford the opportunity of earning college credit. Enrollment in an AP course may require the students to complete summer assignments as part of the course expectations.

Upon completion of the course, students are required to participate in the AP exam.

Students and families are encouraged to consult with their school counselor and college representatives as to whether or not Advanced Placement courses are awarded college credits by specific colleges/universities and at what level of performance on the Advanced Placement Exam.

1. Students who want to enroll in AP courses should demonstrate an aptitude and interest in that particular subject area. Students should have an average of 85 in the subject area during the current year or principal's approval.
2. Those who enroll in AP courses are required to take the AP exam offered during the third week of May.
3. L.A. Webber Middle-High School will pay the complete AP exam fee, established by the Educational Testing Service, prior to the exam.
4. Final course assessments may include Regents or local examinations, portfolios and/or service learning projects.

### **Advanced Placement Course Offerings:**

- AP English Language and Composition
- AP English Literature and Composition (with GCC Option)
- AP Statistics (with GCC Option)
- AP Calculus AB (with GCC Option)
- AP Physics
- AP Biology
- AP Computer Science (with GCC Option)
- AP US Government & Politics
- AP US History
- AP World History

**College Partnership Credit Opportunities (Weighted 1.05):**

Lyndonville Central School District currently has an articulation agreement with Genesee Community College through its Accelerated College Enrollment (ACE) program. Dual credit courses are taught in the high school by high school teachers following a syllabus that is aligned to the college curriculum. Students who satisfactorily meet the established criteria will earn college credit and receive a transcript from GCC.

**GCC ACE Course Offerings:**

- CEP101 - Career and Educational Planning
- PED251 – Introduction to Sports Management
- PED258 – Sport Marketing
- English 12
- AP Physics
- Astronomy
- Computer Science
- Keyboarding
- Financial Concepts
- Spanish IV
- Pre-Calculus
- History 215 – The American Civil War
- History 217 – History of Sport in America

**Requirements for Student Course Load:** In order to be considered a full-time student enrolled at L.A. Webber Middle High School, students in grades 9-12 must enroll in a minimum of 5.5 courses and physical education during each semester.

Seniors must carry a minimum of 5.5 credits. Exceptions are only made in extenuating circumstances by the principal.

In order to participate in athletics, students must be enrolled in a minimum of 5.5 credits plus Physical Education.

**Promotion Policy:**

The minimum credits required to move to the next grade level are:

- From 9<sup>th</sup> to 10<sup>th</sup> grade .....5.5 credits
- From 10<sup>th</sup> to 11<sup>th</sup> grade .....11 credits
- From 11<sup>th</sup> to 12<sup>th</sup> grade .....16.5 credits

## Art

All art courses beyond Studio in Art are designed for students who have completed their art requirement in Studio in Art and desire an in-depth study of the arts.

### **Studio in Art (1 credit)**

Studio in Art is a full-year introduction to the nature, function, and techniques of the visual arts in the present and in the past. Students are introduced to a variety of materials through exploration of media, techniques, and creativity. Some of the areas covered are: Drawing and Painting, Ceramics, Graphics, Calligraphy, Design, Sculpture, Crafts. A comprehensive study of Art History from the cave man to the present will be covered. **This course fulfills the graduation requirement of one credit in fine arts.**

**View video course description:**

<https://quik.gopro.com/v/QLKJjVs6u/>

### **Photography (1 credit)**

This course is designed in three parts:

1. Use of the camera and technical creation of a photograph through dark room experience.
2. Learning to use photography in journalistic format. This will be done through the creation of the yearbook with specific assignments designed with practical application.
3. Lastly the students will explore photography as an art form. This will be emphasized through their choice of subjects and how they are presented photographically.

*Prerequisite: Studio in Art*

*See video course description here:*

<https://quik.gopro.com/v/ipnxc7BhH/>

## Business

### Digital Literacy (1 credit)

Digital Literacy is focused on helping students become efficient, effective, and ethical users of technology as a tool for communication, learning, and productivity. This course will offer students the opportunity to develop a common set of skills and understandings aligned with the NETS standards. Learning experiences will involve a variety of applications and projects that allow students to demonstrate digital literacy. Students will develop a culminating digital portfolio to showcase their skills and understandings.

### Career and Financial Management (1/2 credit)

This required course is for all Business, Family and Consumer Science, and Technology majors. This course is divided into 2 sections: *The Working Citizen module* is designed to introduce students to the realities of the working world. This unit will attempt to help the student develop a series of skills and behaviors that will help him/her integrate their role with the work place and the home. *The Personal Resource Management module* is designed to develop and use concepts for the effective management of time and personal, human and financial resources. The students will develop the skills necessary for managing resources as a productive worker, a contributing family member and a self-sufficient individual.

*Recommended Grade Level: 9-12*

*Evaluation: Local Assessment*

*View Video Course Description*

<https://quik.gopro.com/v/5EoXivGRXw/>

### Entrepreneurship (1 credit)

Entrepreneurship is a groundbreaking and exciting year-long class that transforms middle and high school students into real, confident entrepreneurs. Throughout the class, students develop business ideas, write business plans, conduct market research, pitch their plans to a panel of investors, and actually launch and run their own real, legal, fully formed companies

and social movements. Complete with dynamic guest speakers from the local business community and exciting behind-the-scenes trips to local companies, the fun, projects-based approach empowers students to take charge of their futures in a profound way.

*Recommended Grade Level: 12*

*Evaluation: Local Assessment or College Assessment*

*Prerequisite: At least 2 credits in Career Education*

### PED 258 GCC ACE Sports Marketing/ PED 251 Introduction to Sports Management

Sports Management and Marketing gives you the opportunity to apply business principles to the sport industry. This program offers foundations of accounting, marketing, and management principles with a focus on sports information, sports facility management, and sport organization. These two 20 week, 1/2 credit courses offer students an opportunity to earn GCC college credit.

*View video course description:*

<https://quik.gopro.com/v/2cRuUjK8yC/>

### GCC ACE Keyboarding- OFT 101 (1 Credit)

ACE Credits: 3

This course develops personal computer and keyboarding skills through an individual program of instruction using computer software, including frequent drills to increase speed and accuracy. Introduces simple letters, tabulations, vertical and horizontal centering, and one-page reports.

*View video course description here:*

[https://drive.google.com/file/d/0B6jW7aBp\\_0b3eXdRLVZoR0VGTUtkMIhOOFVsVmNGbFloaFVj/view?usp=sharing](https://drive.google.com/file/d/0B6jW7aBp_0b3eXdRLVZoR0VGTUtkMIhOOFVsVmNGbFloaFVj/view?usp=sharing)

### Community Work Study (1 Credit)

The Shops at 29 N Main feature a boutique hotel and business center/stationary store offering basic office supplies, customized

souvenirs, and business services including copying. Students at LCS may apply to participate in a course of study titled, "Community Work Study." Students in the program will help to staff the shop while receiving training and supervision from a school appointed job coach.

Students will work with a cohort of volunteer mentors, comprised of members of the local business community, to assist in this process. For course credit, students will be required to independently complete a series of online learning modules on various topics related to business management, to include but not limited to: business law, accounting and finance, marketing, managing technology & innovation, resources management & sustainable development, human resource management, social entrepreneurship, and corporate responsibility, and ethics & accountability.

Students in 11<sup>th</sup> or 12<sup>th</sup> grade and who are in good standing with academics, behavior, and attendance may be eligible for the program. Strong preference will be given to students with an 80% or higher GPA. Interested students should attend the kickoff meeting and complete the application packet. Review of the applications will be completed by the principal, business owner, and job coach based upon a rubric as well as other measures. Selected students will be required to participate in a panel interview. Selected finalists will also be required to provide written permission from a parent or guardian and will then be notified and invited to the kickoff event.

Work study hours that fall within the regular day will be uncompensated. However, students may become eligible for paid employment after the school day and on weekends, holidays, or during the summer months. During their enrollment, students will receive period evaluations and will be required to complete self-evaluation reflections.

## English

*Evaluation: NYS ELA 8*

Four years of English Language Arts credits are required for graduation. The course work for each year, as well as for each level, is derived from district curriculum guides which outlines minimal skill attainment. To earn a high school diploma, students must pass the New York State Comprehensive Regents Examination.

English courses marked with an asterisk\* are available for up to three college credits through our dual credit program with Genesee Community College. This program allows students to earn college credit, at a reduced cost, during their high school years. Students earn both high school and college credit for these courses.

Advanced placement courses are the most academically rigorous that L.A. Webber High School has to offer. These courses are designed to challenge and prepare students for a college environment. The successful completion of an AP exam may afford the opportunity of earning college credit. It is our policy that students enrolled in an AP course may need to complete a summer assignment prior to beginning an AP course. Upon completion of the course, students are required to participate in the AP exam.

### English 7

This course focuses on the development of strategies that students use when reading fiction and nonfiction. Students will work on study and organizational skills, test-taking strategies, vocabulary development, and ways to increase comprehension. Students will discuss and analyze literary works as they relate to the real world.

*Evaluation: NYS ELA 7*

### English 8

Students in this course continue to focus on the development of strategies that students use when reading fiction and nonfiction. Students continue to work on developing study and organizational skills, test-taking strategies, vocabulary development, and ways to increase comprehension. Students will discuss and analyze literary works as they relate to the real world.

### English 9 (1 credit)

This is a comprehensive study of English literature, composition, and grammar. In literature, the students learn to sharpen reading skills on fiction, biography, drama and poetry. They learn the various elements of which such literature is composed: plot, theme, characterization, figurative language. In composition, the students learn how to make their thoughts clear while using various types of writing such as: narration, description, research paper, character sketch, poetry, exposition, reporting, letter writing and essay. In grammar, the students are taught not only parts of speech, but how the parts of speech can be used to develop clearer and more complicated sentences. They also learn the proper usages of standard English as it applies to their speaking and writing.

*Evaluation: Local Examination*

### Pre-AP English 9 (1 credit)

This course is designed for the students whose previous achievement level in English is clearly at or above grade level standard. Core materials for this level parallel English 9 with two significant differences – depth and degree of challenge. Writing and composition skills stress a high degree of proficiency in the use of the English Language. Excellence in writing is stressed in all assignments. Students will be expected to write fact based, as well as, thought based essays and to do independent projects. Completion of summer work is required for enrollment in this course.

*Evaluation: Local Examination and written project*

*Prerequisite: Students should demonstrate a strong work ethic and an interest in English.*

*Teacher recommendation, an 85% average in previous English course, or principal's approval required for enrollment.*

### English 10 (1 credit)

In this course, students will study various forms of literature including the short story, poetry, one-act plays, full length plays, and full length novels. Some of the novels include "The Pigman", "After the First Death", "To Kill a

Mockingbird”, “And Then There Were None”, and “Ordinary People”. Students will be able to write themes and apply them to literature which they have read. Students will also examine the English language, its structure and usage. Students will study the various parts of speech, sentences, and will work on developing a useful working vocabulary. They will also be asked to produce their own written compositions, including journal writing and persuasive essay.

*Evaluation: Local Examination*

### **Pre AP English 10 (1 credit)**

This course is designed to meet the challenge of the advanced placement student who has demonstrated a consistently high proficiency in both written expression and reading skills. Regents level core material is enriched through activities which require both independent study skills and more sophisticated thought processes. A variety of world literature is studied. Completion of summer work is required for enrollment in the course.

*Evaluation: Local Examination and written project*

*Prerequisite: Students should demonstrate a strong work ethic and an interest in*

*English. Teacher recommendation and an 85% average in previous English course, or principal's approval required for enrollment.*

### **English 11 (1 credit)**

Emphasis for this class is on American Literature and writing skills, as preparation for the Comprehensive English Regents exam, given in January to all juniors. Students must achieve a score of at least 65% to meet this graduation requirement. Students will read various short stories, essays, poems, and plays. Some of the titles include The Crucible, a play by Arthur Miller, as well as classic works by Edgar Allan Poe, Henry David Thoreau, Nathaniel Hawthorne, Walt Whitman, and Emily Dickinson. Students will write various essays based on the text selections. Students will also practice specific writing skills through listening sections and document-based questions.

*Evaluation: English Regents Examination*

### **AP English 11**

#### **Language and Composition (1 credit)**

AP English 11 is a course in Language and Composition at the college level for highly motivated juniors whose reading, writing, and thinking skills are above average. In this course, students will refine their reading, writing, and critical thinking skills through an in-depth analysis of American Prose styles in fiction. In addition, there will be sustained emphasis on nonfiction and the rhetorical devices that nonfiction writers use to create meaning, persuade their audience and express complex ideas. Completion of summer work is expected when enrolling in this course. Students are required to take the national Advanced Placement Exam and could qualify for college credit based on individual proficiency and upon specific college requirements.

*Evaluation: Advanced Placement Exam English Regents Examination,*

*Prerequisite: Students should demonstrate a strong work ethic and an interest in English. Teacher recommendation, an 85% average in previous English courses, or principal's approval.*

### **\*English 12 (English 101/English 105) (1 credit)**

The course is designed to be a combination of reading and writing. The readings will cover assorted kinds of literature including a variety of novels from various genres. Some of the novels will include “The Great Gatsby”, “A Separate Peace”, “The Catcher in the Rye”, “The Bean Trees”, “A Tale of Two Cities”, and “The Chocolate War”. The writing part of the course will require the student to be competent in various kinds of composition. From the creative side, the student will develop descriptive and narrative writing, both in prose and in poetry. From the more academic side, the student will develop expository writing like essay, critical analysis, persuasion, and reporting. The student will also be able to produce a fully documented research paper.

**\*AP English 12 for College Credit Literature and Composition (English 101/English 105) (1 credit)**

Membership in this class will be determined by pupil interest and ability confirmed by prior record (grades and teacher judgment). Subject matter will include Shakespeare, European Literature in translation, English and/or American novel, classical literature and poetry. Students should expect to read, write and discuss at college level; in depth, if not breadth. Facility and experience with poetry and great books will enhance class performance and achievement. Completion of summer work is expected when enrolling in this course. Students are required to take the national Advanced Placement Exam and could qualify for college credit based on individual proficiency and upon specific college requirements.

\*Students have the option to take this course at a reduced cost for college credit through Genesee Community College.

*Evaluation: Advanced Placement Exam*

*Prerequisite: Students should demonstrate a strong work ethic and an interest in English.*

*Teacher recommendation, an 85% average in previous English course, or principal's approval.*

**Spanish**

**Index:**

Spanish I	1
Spanish II	1
Spanish III	1
*Spanish IV	1

Students must successfully complete three units of Language Other Than English and pass the New York State Regents Exam to earn a Regents with Advanced Designation Diploma. Students must complete at least one year of LOTE to graduate.

LOTE courses marked with an asterisk\* are available for up to three college credits through our dual credit program with Genesee Community College.

This program allows students to earn college credit, at a reduced cost, during their high school years. Students earn both high school and college credit for these courses.

**Spanish I (1 credit)**

This course introduces students to the language and the people of Spanish speaking countries, and to the geography, history, and heritage. Emphasis is on good pronunciation and on the four skills of understanding, speaking, reading and writing. The student will complete the minimum requirements as set forth in the New York State Syllabus for Modern Languages.

**Spanish II (1 credit)**

The emphasis of this course is on the grammatical aspects of the Spanish language. Reading and writing are the basic target skills.

**Spanish III (1 credit)**

The third year of the three-year Regents Sequence continues to stress the four skills of listening, reading, speaking and additional emphasis on writing. This level refines the speaking, listening, reading and writing skills developed in Spanish I & II. Students will master Spanish grammar, read short stories, write compositions, and further explore the culture of Spanish-speaking countries.

*Evaluation: Regents Examination*

**\*Spanish IV (1 credit)/ GCC ACE Option**

The main objectives of this course are to improve communication skills in the second language and to gain an understanding of cultural features through language study. Prerequisite: Teacher recommendation, 85 or higher average in Spanish III and/or administrative approval.

## Mathematics

### **Common Core Integrated Algebra (1 credit)**

This course is the first course of a three year sequence leading to the Integrated Algebra Regents, the Geometry Regents, and the Algebra 2 and Trigonometry Regents exams. Intended for those not successful in the eighth grade, this course will be intended to shore up algebra skills necessary for the assessment. Algebra is the core of the course with some diversions into basic geometry, trigonometry, probability, statistics, and applications of real world problems. Reading, writing and communicating mathematics are an essential part of student success.

*Evaluation: Integrated Algebra Regents Examination*

### **Common Core Geometry (1 credit)**

This course is the second course of a three year sequence leading to the Integrated Algebra Regents, the Geometry Regents, and the Algebra 2 and Trigonometry Regents exams. Geometry is the core of the course with some diversions into basic trigonometry, probability, statistics, and applications of real world problems. Algebra skill obtained in the Integrated Algebra prerequisite is essential in meeting course objectives. Reading, writing and communicating mathematics are an essential part of student success.

*Evaluation: Geometry Regents Examination*

### **Common Core Algebra II/Trigonometry (1 credit)**

This course is the third course of a three year sequence leading to the Integrated Algebra Regents, the Geometry Regents, and the Algebra 2 and Trigonometry Regents exams. Advanced algebra and trigonometry is the core of the course with some diversions into geometry, probability, statistics, and applications of real world problems. Reading, writing and communicating mathematics are an essential part of student success.

*Evaluation: Integrated Algebra 2 and Trigonometry Regents Examination*

### **\*Precalculus (1 credit)**

Advanced algebra, trigonometry, functions, logarithms, analytic geometry, matrices, sequences and series, polar coordinates, graphing calculator and computing technology, and applications of real world problems in these areas are the core of the course. A graphing calculator is required. Reading, writing, and communicating mathematics

at a very high level is an essential part of student success.

*Prerequisite: Successful completion of the Math B or Integrated Algebra 2 and Trigonometry regents.*

### **AP Calculus for College Credit (1 credit)**

Functions, limits, sequences and series, differential calculus, an introduction to integral calculus, and applications of real world problems are the core of the course. Special emphasis is placed on optimization, related rates, motion, and exponential and logarithmic functions. A graphing calculator is required. Reading, writing, and communicating mathematics at a very high level is an essential part of student success.

### **Financial Concepts (1 Credit)/ GCC ACE BUS 110- Personal Money Management**

This course will focus on practical mathematical applications related to business and personal finance. The course will equip students with hands-on, lifelong skills including creating a financial plan for personal goals, avoiding credit trouble, saving money on everyday and major purchases (auto, homes, etc.), investing in stocks, bonds and mutual funds.

### **AP Computer Science (1 Credit)/ GCC ACE CIS 127 – Computing in Math, Science, and Engineering (3 ACE Credits)**

This course, co-seated as Advanced Placement and Accelerated College Enrollment (ACE) is focused on creative problem solving and real-world application to better prepare students for college and career. Students will be introduced to the central ideas of computer science, instilling the ideas and practices of computational thinking, and inviting students to understand how computing changes the worlds. Students will develop innovative computational artifacts using the same creative processes artists, writers, computer scientists, and engineers use to bring ideas to life. It is recommended that students considering this course successfully complete a high school algebra course like Algebra I with a strong foundation in basic algebraic concepts dealing with function notation and problem-solving strategies

### **AP Statistics (1 Credit)**

AP Statistics is an introductory college-level statistics course that introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students cultivate their understanding of statistics using technology, investigations, problem solving, and writing as they explore concepts like variation and distribution; patterns and uncertainty; and data-based predictions, decisions, and conclusions.

## **Music and Performing Arts**

### **Senior High Band (Including Instrument Lessons) (1/2 credit)**

Senior High band furthers the student's knowledge of advanced musical skills and emphasizes high performance quality. Instrumental lessons are required once a week. Students chosen to participate in this band should exhibit the desire to perform in a group of advanced students studying difficult music. Assessment is based upon attendance, preparation, and participation in music activities outside the regular schedule.

Opportunities exist to perform in the All-State and All-County bands, Solo Festival, Marching Band, Jazz Band, and other smaller ensembles.

### **Senior High Chorus (1/2 credit)**

The students will develop and master vocal techniques and musical skills. Attendance in class and at concerts is mandatory. Grading will be based on participation, attendance and attendance at concerts. A variety of styles of music will be performed. Students will also have the opportunity to perform in Area All-State, All-County, Solo Festival and other smaller ensembles.

### **AP Music Theory (1 credit)**

This college credit course begins with fundamentals of music theory and covers the theory of music composition, analysis of music structure, music dictation, sight-reading and sight-singing, and composition. This class is very beneficial for any students who plan a career in the field of music, plan to major or minor in music in college, wants to write music, or just wants to have a better understanding of Western music. This is a first year college level course and expectations will be on that level. Outside time is expected for homework, listening, analysis, and composition.

## **Physical Education/Health**

### **Physically Active for Life (1/2 credit)**

The content of physical education involves the art and science of human movement. In this course, students will participate in a variety of health-related fitness activities during each physical education class period.

All students will actively participate in physical education and earn two credits to fulfill graduation requirements. Students participate in physical education on an alternating day basis. Adapted and modified activities are available within the regular physical education classes for those students who may experience temporary special needs.

### **Health (1/2 credit)**

Health is an exploration through the self, family, society and environment. Topics include self-development, alcohol and drugs, tobacco, family life, STD's, abortion and personal lifestyles and their impact on quality of life.

## Science

*Evaluation: NYS Intermediate Science Assessment & Earth Science Regents*

At L.A. Webber High School, Regents science classes are scheduled to meet 7.5 times per week throughout the school year to maximize student performance. Additional instructional time allows teachers to provide students with Academic Intervention Services, Remediation and Support, and Enrichment in an integrated approach to science achievement. Students must pass at least one Regents examination to receive a Regents Diploma and two Regents examinations to receive a Regents Diploma with Advanced Designation.

### Science 7

Science 7 is an integrated program with an emphasis on the living environment, and a connection between physical, chemical and life sciences. Students in this course study life processes, cells, and the five kingdoms. Also, students in this course are introduced to anatomy and physiology. Students will explore these concepts in real life laboratory experiences using scientific equipment including microscopes.

### Science 8

Science 8 is an integrated program with an emphasis on the connection between physical, chemical, and life sciences. As a result, students extend their studies to Earth Science, Chemistry, and Physics. Students will explore these concepts in real life laboratory experiences using scientific equipment. At the conclusion of this course, students will participate in the NYS Intermediate Science Assessment.

### Pre-AP Science 8 Accelerated Earth Science (1 Credit)

Pre-AP Science 8 provides a challenging curriculum for highly motivated students who demonstrate strong reading, writing, and mathematics achievement. This program integrates the 8<sup>th</sup> grade science curriculum with the Earth Science Curriculum. The student learns to measure and observe their environment. Students will develop models of the earth and heavens, including the motions that are constantly occurring. The student will study in depth such topics as: solar radiation, weather, water budgets, erosion, minerals, the moving crust, and landscape features. All of these topics are covered with an emphasis on how they contribute to the changing of the Planet Earth.

### Earth Science (1 credit)

This course contains a variety of topics concerning the earth. The student learns to measure and observe their environment. Students will develop models of the earth and heavens, including the motions that are constantly occurring. The student will study such topics as: solar radiation, weather, water budgets, erosion, minerals, the moving crust, and landscape features. All of these topics are covered with an emphasis on how they contribute to the changing of the Planet Earth.

*Evaluation: Earth Science Regents*

### Living Environment (1 credit)

The intent of this course is to provide students with an awareness of the natural world, basic scientific concepts, stimulation of inductive reasoning, and a basic understanding of biological processes and generalizations. This is accomplished through lectures, class discussions, and hands-on lab situations. Topics of discussion in this course include: ecology, life functions, reproduction, genetics, and evolution.

*Evaluation: Living Environment Regents*

### Chemistry (1 credit)

This course is a study of the structure of matter, changes in the composition of matter and the principles which govern such changes. Some topics included are chemical bonding, acids and bases, electrochemistry, organic chemistry, and chemical kinetics and equilibrium. In addition to regular classes, two laboratory periods per week are required.

*Evaluation: Chemistry Regents Examination*

### Physics (1 credit)

In this course, you will study motion and energy, forces, electricity, magnetism, light and nuclear physics. There is a considerable amount of mathematical content. Problem solving and laboratory work will be emphasized.

*Evaluation: Physics Regents Examination*

### Advanced Placement Physics (GCC ACE Option) (1 credit)

Students in this course will develop a deep understanding of the foundational principles of physics in classical mechanics and modern physics by applying these principles to complex physical

situations that combine multiple aspects of physics rather than present concepts in isolation. Students will discuss, confer, and debate with classmates to explain a physical phenomenon investigated in the class, and will design and conduct inquiry-based laboratory investigations to solve problems through first-hand observations, data-collection, analysis, and interpretation.

*Prerequisite: Regents Physics*

### **Advanced Placement Biology (1 Credit)**

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. 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. Laboratory periods will be scheduled every other day in addition to the core instructional period.

*Prerequisite: Regents Biology*

### **GCC ACE Astronomy (1 Credit)**

This course provides students with an introduction to the universe and the techniques used to study it. Topics include laws of planetary motion, the solar system, types of stars, stages in a star's life, galaxies, cosmology, telescopes, and other instruments. Note: Basic mathematical skills, such as multiplication and division done on a calculator, are required in this course.

See video course description:

<https://drive.google.com/open?id=1JKzevFqpPdfwBpWMJU-CQ6sVdYsD9jT>

## Social Studies

### Global History I (1 credit)

Global History I is the first half of a 2-year course. It is a chronology of Global History from the earliest river valley of civilization to the 1700's A.D. The course is designed to focus on the concepts and themes that recur across time and place. These themes are: change, conflict, geography, political systems, economic systems, urbanization, culture, justice and human rights, belief systems, interdependence, diversity, movement, nationalism, technology, and imperialism. Four historical eras are covered after an introductory unit. The units are: Introduction to Global History, Ancient World, Expanding Zones of Exchange, Global Interactions, and First Global Age.

*Evaluation: Local Examination*

### Pre-AP World History (1 credit)

This course serves as the first half of the AP World History course. It is a chronology of Global History from the earliest river valley of civilization to the 1700's A.D. The course is designed to focus on the concepts and themes that recur across time and place. These themes are: change, conflict, geography, political systems, economic systems, urbanization, culture, justice and human rights, belief systems, interdependence, diversity, movement, nationalism, technology, and imperialism. Four historical eras are covered after an introductory unit. The units are: Introduction to Global History, Ancient World, Expanding Zones of Exchange, Global Interactions, and First Global Age.

*Evaluation: Local Examination*

### Global History II (1 credit)

Global History II is a continuation of Global History I. It revolves around the same themes and concepts, but covers later historical eras. The time spans from the 18<sup>th</sup> Century through the 20<sup>th</sup> Century. The units covered in the second year include: Age of Revolution, Crises and Achievement (1900-1945), 20<sup>th</sup> Century Since 1945, and Global Connection and Interaction. The student must develop the ability to think for him/herself, analyze history and its impact, and express those ideas in writing. A Regents exam will be given at the end of the school year. It is a graduation requirement.

*Evaluation: Global Regents Examination*

### AP World History for college credit (1 credit)

AP World History will examine the history of the human experience from the Neolithic Revolution to the present day. This world history course is taught from a global perspective with more emphasis on global processes and patterns than the standard World History II course. Students study events and people through the analysis of primary source documents and an examination of changes & continuities over time. The course emphasizes critical thinking and the analytical writing skills necessary for success in both a college level history course as well as the AP World History Exam.

*Evaluation: Global Regents Examination, AP World History Examination*

### United States History and Government (1 credit)

This course is organized into 6 chronological units. They include: Constitutional Foundations for the US Democratic Republic, Industrialization of the US, The Progressive Movement - Responses to the challenges brought about by Industrialization and Urbanization, At Home and Abroad - Prosperity and Depression 1917-1940, The US In An Age of Global Crisis – Responsibility, and A World In Uncertain Times - 1950 to the Present. *Evaluation: US History Regents Examination*

### AP United States History and Government for college credit (1 credit)

AP United States History is a college level course. Students should be prepared for a significant amount of independent reading, writing, critical thinking activities, primary source document analysis, and study in order to achieve success. This course covers American history from Pre-Columbian Societies to the United States in the Post-Cold War World. In addition, the course focuses on themes (also see section on course organization), including: American Diversity, American Identity, Culture, Demographic Changes, Economic Transformations, Environment, Globalization, Politics and Citizenship, Reform, Religion, Slavery and Its Legacies in North America and War and Diplomacy. Students enrolled in AP United States History are required to take the AP exam in May and the New York State Regents Exam in U.S. History and Government\* in June. *Evaluation: US History Regents Examination & AP US History Examination*

## **Participation in Government**

### **(1/2 credit)**

This course is an open forum on three current issues that are of concern to our modern society. Examples are Crime, the Drug Crisis, and the Right of Freedom where we analyze, discuss and ultimately agree on a policy to deal with these problems. The emphasis is on student participation in these forums. A community service project is an alternative to taking a final exam in this course. The student must attend a government meeting and contact, through written means, a government official. There are other suggestions as to the third area to complete this project.

## **Economics (1/2 credit)**

This course is the study of the economic system of the US, how it operates and the components of various American economic systems. The course encompasses concepts such as: Supply and demand, productivity, specialization, etc. Economics deals with the role of the individual in the economic system, the interdependence of world economics and the economic impact on social and political decision making.

## **AP US Government and Politics for college credit (1 Credit)**

Advanced Placement courses are college-level courses in the high school program under the direction of the National College Board. This course provides an analytical perspective on government and politics in the United States. This course involves both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. political reality. Students take the College Board Examination in May. Many colleges grant credit. The course fulfills school's requirements for Government.

*Prerequisite: Successful completion of Advanced Placement United States History*

*Open to grade 12 only*

*Evaluation: AP US Government and Politics Examination*

## **GCC ACE History 215 - The American Civil War**

**HS Credits: ½ (one semester)**

**GCC Credits: 3**

**Catalog Description:** Examines the coming of the Civil War-tracing the causes from the rise of slavery in America and the creation of the Constitution to

westward expansion and diverging economic bases – as well as the military, political, and cultural aspects of the war itself. (For students with a grade of 85 or higher on the NY State Regents Exam, this course may be used to fulfill the SUNY General Education requirement for American history. For all others, this course will count as a general education elective.)

## **GCC ACE History 217 - History of Sport in America**

**HS Credits: ½ (one semester)**

**GCC Credits: 3**

**Catalog Description:** Examines the development of sport in America from its folk game roots to the multi-billion dollar business of today. The course investigates the interrelationship between sport and social, economic, cultural and political forces in the United States. Note: Students wishing to use this course to fulfill the SUNY General Education requirement in American History are required to meet one of the following criteria: successful completion of HIS 203 or HIS 204; score 85 or better on the New York State Regents American History and Government examination; or earn a score of 3 or better on the AP United States history examination.

## Technology

### **Project Lead the Way Pathway To Engineering High School Engineering Program**

The PLTW Pathway To Engineering (PTE) program is a sequence of courses, which follows a proven hands-on, real-world problem-solving approach to learning. Throughout PTE, students learn and apply the design process, acquire strong teamwork and communication proficiency and develop organizational, critical-thinking, and problem-solving skills. They discover the answers to questions like how are things made and what processes go into creating products? Students use the same industry-leading 3D design software used by companies like Intel, Lockheed Martin and Pixar. They explore aerodynamics, astronautics and space life sciences. Hello, NASA. Students apply biological and engineering concepts related to biomechanics – think robotics. They design, test and actually construct circuits and devices such as smart phones and tablets and work collaboratively on a culminating capstone project. It's STEM education and it's at the heart of today's high-tech, high-skill global economy.

### **Introduction to Engineering Design (IED)**

Designed for 9th or 10th grade students, the major focus of IED is the design process and its application. Through hands-on projects, students apply engineering standards and document their work. Students use industry standard 3D modeling software to help them design solutions to solve proposed problems, document their work using an engineer's notebook, and communicate solutions to peers and members of the professional community. View video course description here:

<https://quik.gopro.com/v/P5FTzxQcLJ/>

### **Robotic Engineering (RE) (formerly Principles of Engineering (POE))**

This course exposes students to major concepts they'll encounter in a post-secondary engineering course of study, but will directly apply these concepts to the design and construction of working robots utilizing the VEX robotics system.

## Civil Engineering and Architecture

Students learn important aspects of building and site design and development. They apply math, science, and standard engineering practices to design both residential and commercial projects and document their work using 3D architecture design software. Some students have seen these designs come to life through partnerships with local housing organizations.

### **Production Systems (1/2 credit)**

The students will be introduced to the systems of manufacturing and construction: their resources, processes, products, environment and manufacturing. With a strong emphasis on production line projects the students will design and manufacture products which they have chosen. Some projects that students have done in the past include C.D. racks, sports clocks, step stools, and sheet metal toolboxes. Students will use all of the tools and machines in the technology lab including the table saw, router, surface planer and chop saw to produce their projects. View a video course description here:

<https://quik.gopro.com/v/qNHE3Q0qxV/>

### **Material Processing (1/2 credit)**

A view of the way humans change materials, this course differs from the traditional approach of study of a specific material, to studying various materials undergoing similar processing techniques. For example: separating (cutting) is a generic concept. Woods, metals, ceramics, polymers, and other material are all separated, often by similar techniques such as sawing. This course is organized in a systems format; the resources, processes, and effects are the organizing theme. The resulting framework provides a rather complete view of the variety in materials processing. Students will be involved in laboratory activities that will demonstrate specific concepts in the content outline. Strong emphasis is placed on independent problem-solving. Explorations in different welding techniques as well as many other lab projects are designed to make this "hands-on" course challenging as well as a lot of fun. The final project will be a 5-week project that is designed and built by the student. It will be an exploratory project that will allow the student to pursue an area of study more in depth. Some of the projects that were done in the past have included a snowmobile sled (steel welding and fabrication), a doghouse (wood

construction), and entertainment centers/gun cabinets (cabinet making).

### **Introduction to Agriculture**

In this 40-week course, you will learn how to apply scientific knowledge and skills to use plants effectively for agricultural and horticultural production; as well as landscaping and landscape management. You will discover the value of plant production and its impact on the individual, the local, and the global economy. Lessons throughout the course will provide an overview of the field of agricultural science with a foundation in plant science. These lessons include working in teams and exploring hands-on projects. You will work on major projects and problems similar to those that plant science specialists, such as horticulturalists, agronomists, greenhouse and nursery managers, and plant research specialists, face in their respective careers.

### **Study Skills**

### **GCC ACE CEP101 - Career and Educational Planning**

Credits: 3

Catalog Description: Prepares students to develop a greater understanding of career and educational opportunities. Includes self-assessment, goal-setting, and decision-making skills as related to the career development process. Successful completion of the course enables students enrolled in the Individualized Studies degree program to complete their mandatory educational plan. Recommended for student desiring guidance to develop a customized career and educational plan.

**Orleans/Niagara BOCES**  
**(For Juniors and Seniors)**

**Index:**

Auto Body Repair	3
Auto Mechanics	3
Building Trades	3
Computer Aided Drafting Design	3
*Computer Technology	3
Cosmetology	3
*Early Childhood Education	3
Electricity/Electronics	3
Food Service	3
Graphic Communications	3
Health Occupations Technology	3
Heavy Equip. Diesel/Ag. Mech.	3
*Legal Academy	3
Licensed Cosmetology	3
Precision Machine Technology	3
Security & Law Enforcement	3
*Tech Prep Allied Health	3
Tech Prep Automotive	3

Vocational education offers students a first-hand opportunity to explore a number of career fields. Relying heavily on hands-on training, it's an intensive, exciting way to learn if a particular career is the right one for you. Students will learn the skills they need for immediate employment or prepare for a career that requires further education. Business and industry's need for skilled workers has never been greater, and Orleans/Niagara BOCES can help students open the door to those opportunities.

Enrollment in a BOCES program is available to students who have completed the requirements for 10<sup>th</sup> grade or higher. Students must have successfully completed 11 units of credit which should include: English 9, English 10, Global I, Global II, Career and Financial Management, and 2-years of Math and Science. Students that DO NOT meet these requirements will not be able to attend the BOCES center.

**Auto Body (3 credits)**

Auto Body Repair is an occupational program for students who desire to earn a living in a special area of the automotive industry. It is designed to give comprehensive training in the repair, painting and finishing of automobile bodies and fenders,

frame and body alignment, installation of upholstery, body trim, hardware, door locks and remote controls and glass window regulators.

**Auto Body (3 credits)**

Auto Mechanics is a two year course open to all students in their junior or senior year. The program is designed to prepare the student who expects to enter the mechanics field in a repair shop, service department, a service station or a fleet maintenance facility.

**Building Trades (3 credits)**

The Building Trades Program is designed to prepare students to enter directly into the trades or continue their education at a post secondary level. This year we will develop an articulation agreement with the Carpenters Local 23 and Local 280, which will grant pre-apprentice status to graduates who meet the higher skill standard.

**\*Computer Technology (3 credits)**

During the first year, students are introduced to MS-Office, web page editing, graphic & animation basics, operating systems (Windows & Linux) and PC hardware technology. During the second year, students study advanced applications and CISCO networking. After graduation, students are eligible to take the CompTIA A+ certification exams or/and the certification (CISCO) exams that demonstrate their skills as computer operators, Cisco router programmers or PC technicians. Students who graduate from the course are eligible to earn up to 22 **Advanced Studies college credits** from GCC or 6 college credits from NCC.

**Cosmetology (3 credits)**

Cosmetology is a two year program that includes all phases of training necessary to become a licensed cosmetologist. Students enrolled must accumulate 1,000 hours of instruction and pass the state exams. Units of study include: Professionalism, Decontamination/Infection Control, Scalp and Hair Procedures and Theory, Hair Cutting, Permanent Waving, Hair Coloring, Chemical Hair Relaxing, Hair Styling, Artificial Hair, Nails Procedure and Theory, Skin Care- Procedure and Theory, Hair Removal, Safety, Employability Skills and Salon Business.

**\*Early Childhood Education (3 credits)**

This is a one or two year program and is conducted five days a week with a preschool as a critical

component of the program. The preschool is used to observe children and to facilitate students' instructional experience. Students who complete this program will be trained as general early childhood workers. They will be prepared to complete the Child Development Associate credential with 218 to 284 hours of the required 480 hours. If they maintain an average of 85% over two years they can gain 6 credits at Niagara Community College and AP course at Genesee Community College.

### **Electricity/Electronics (3 credits)**

This is a two year program that allows students the opportunity to attain entry level job skills and/or prepare for additional in-depth training in the Electricity/Electronics field. Students will study Consumer/Industrial Electronics and then progress to Electrical Construction techniques.

### **Food Service (3 credits)**

Students in this program will be exposed to a variety of careers available within the food service and food preparation field. By actual participation, students will become familiar with the workings of a modern kitchen while preparing foods of various types. This training will prepare them for future employment in both preparation and serving.

### **Graphic Communications (3 credits)**

This is part two of the Graphic Communications core. This program is a PrintED accredited program, sponsored by the Graphic Arts Education and Research Foundation (GAERF). It's the only printing accreditation program for schools which gives professional direction to meet industry standards. This is a two year program that focuses half a year on Offset Printing and half a year Digital Media each year. Students can go for national accreditation in each area after completion.

### **Health Occupations Technicians (3 credits)**

This is a two year program that allows students experience and exposure to multiple health fields. Experiences will be in multiple clinical settings in local health care facilities such as hospitals, nursing homes, rehabilitation facilities, SASH program, ARC programs, etc. Some of the skills students will learn are: taking blood pressure, pulses, respiration and temperature (vital signs), use of proper body mechanics, safe transferring of patients, use of oxygen, applying dressings and bandages, gloving and isolation techniques, putting

a chart together and filling out requisition forms. Students can take Certified Nursing Assistant exams and become certified in CPR and First Aid and gain certification in Child Abuse Recognition.

### **Heavy Equipment/Diesel (3 credits)**

This two year program is for students interested in working with machines and who wish to pursue a mechanics-oriented career. Students will work on: trucks, tractors, cars, fork lifts, back hoes, bulldozers, hydraulic assembly line conveyers and lawnmowers.

### **Precision Machine Technology (3 credits)**

This two year program is designed to develop skills for the machining industry. Emphasis is placed on machine set-up, operation skills, blueprint reading, shop mathematics, terminology, treatment of metals, cutting speeds and feeds and theory of cutting tools.

Students can go for national certification from the National Institute of Metal Working Skills.

### **Security & Law Enforcement (3 credits)**

This program focuses on public and private security. Its aim is to expose students to potential careers in federal, state and county, local police agencies, transportation, public housing agencies and prisons. It will also show them possible careers in being bodyguards and working as security personnel in shopping malls, hotels/motels, recreation, industrial plants and stores. Students will be introduced to the criminal justice system and shown skills that will be needed in this field. This is a two year course.

### **Welding (3 credits)**

The welding course is designed to develop skills in all areas of welding and metal fabrication, but most specifically those areas where there is the greatest employment potential. Approximately one quarter of the course is devoted to metal fabrication methods and the production of welded items.

### **\*Tech Prep Allied Health (3 credits)**

This program allows students to become aware of current and emerging career opportunities in health care and skills and behavior required throughout the health professions. Tech Prep students combine one or two years of secondary education

with collegiate education to achieve the goals of successful employment as a health care professional. Students learn in a hospital based classroom and apply their knowledge in health care settings and internships.

**Tech Prep Automotive (3 credits)**

This program was developed in response to Erie Community College and area dealership's need to produce graduates who are technically competitive to service today's vehicles. This program is designed for seniors with strong math and science background who anticipate going on for further education. The emphasis of the curriculum will be on engines and electronic systems and on parts and service.