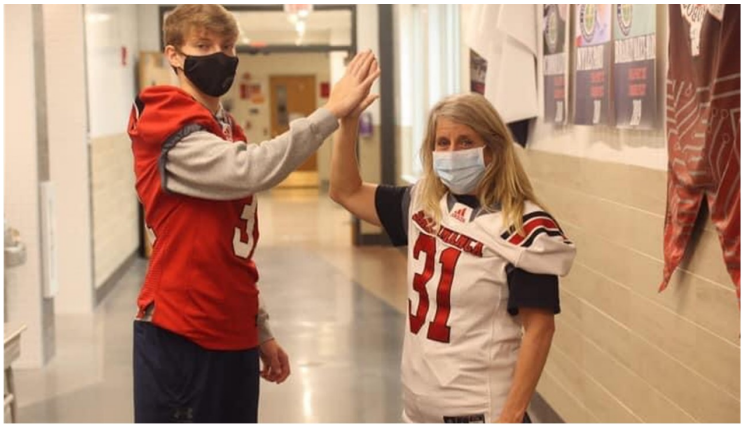
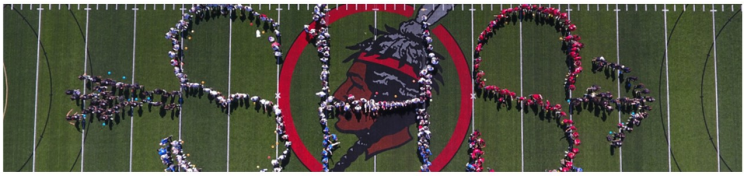




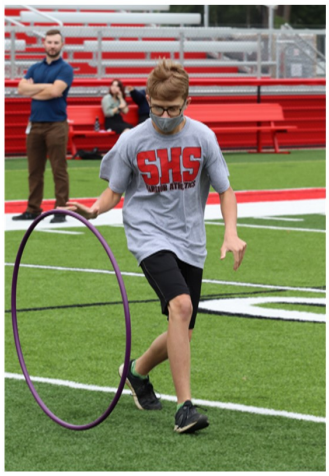
SALAMANCA

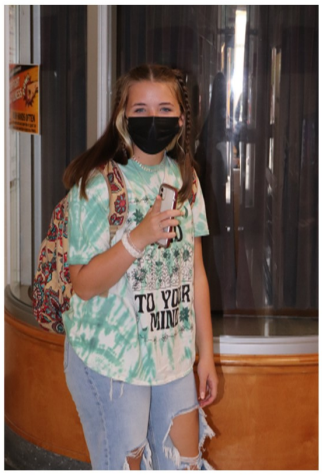
HIGH SCHOOL

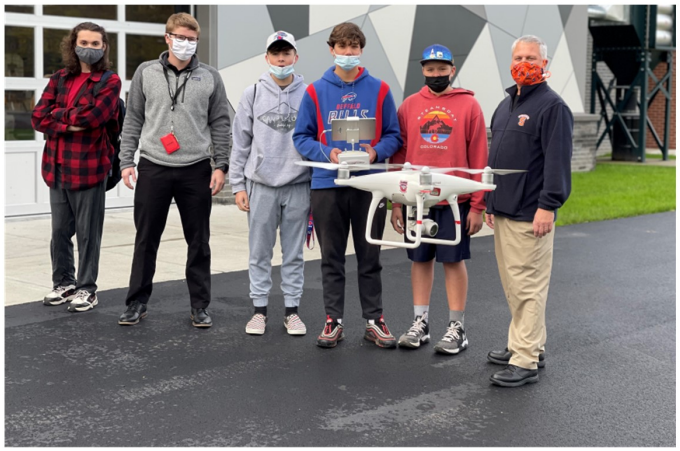
COURSE CATALOG

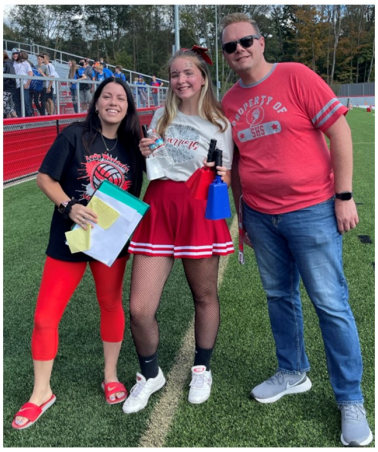
EDUCATIONAL PLANNING GUIDE 2022-23

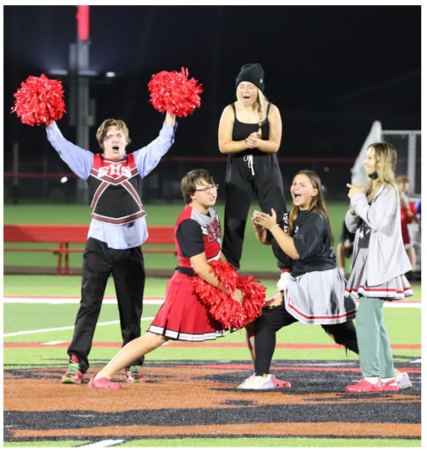
WARRIORS











2022-23 ACADEMIC COURSE GUIDE

The goal of this publication is to stimulate increased student and parent involvement in the process of course selection and scheduling. The key to successful program planning is involvement. The ultimate goal is for each student to have an academic program that will provide a meaningful and successful educational experience. It is necessary for administrators, counselors, and teachers to provide information, counseling, and appropriate recommendations to enable the student and his/her parents to make wise decisions. The ultimate responsibility for the selection of courses lies with the student's parents. Planning a student's academic schedule should be done through informed decision making with consultation and careful consideration.

Included in this book is a four-year high school planning sheet. This plan should be completed by every student upon entering ninth grade and revised each year. When developing a four-year course outline, considerable thought should be given to post-high school plans. Students and parents should refer to the options listed under the section, Course Selection.

The Student Support Center has many resources available to help students with their high school plans. These include books, pamphlets, class pages resources for career and college planning, financial aid, college and career videos, college handbooks, study skills material, as well as access to a bevy of resources on the web. Students and parents are welcome to use any of these materials, either in the office or borrowed from the Center. New this year, is the High School Counseling Corner's Class Pages where students and parents can access all resources electronically.

Dear Future Salamanca High School Graduate,

This course catalog is designed to give students and parents/guardians detailed information about NYS graduation requirements, types of diplomas, and the courses we offer here at Salamanca City CSD. It is our objective to ensure you are college and career ready by the time you graduate.

To become college and career ready it is our belief that it is in the students' best interest to explore many types of courses when planning for their future. Students should consider their future college and career choices when using this catalog and plan wisely to avoid the need for schedule changes or possible misplacement. We want your high school experience to be meaningful, challenging, and memorable!

We offer a broad selection of courses as well as many extra-curricular activities to foster a well-rounded student. We offer collegiate level courses through Erie Community College, Jamestown Community College, SUNY Fredonia, as well as several Advanced Placement courses and vocational courses through our local BOCES.

The high school experience is full of opportunities that prepare each student for adulthood. Exploring, understanding, and choosing wisely from the opportunities that are available here at Salamanca City CSD will provide each student with purpose and focus beyond high school.

Christopher R. Siebert
High School Principal
…And I am a Warrior

HIGH SCHOOL

COURSE DESCRIPTION SECTION

Our Community

The city of Salamanca, nestled in the southwestern portion of New York State on I-86 corridor, has a great deal to offer to current and prospective residents. The Allegheny River winds its way through the middle of the city and surrounding townships, and the city's southern backyard boundary is the beautiful Allegany State Park, which is available year-round for various outdoor activities. The whole area is a naturally beautiful setting for golf, skiing (downhill and cross-country), hunting, and fishing, boating, and camping. Salamanca is the only city in the United States that lies completely on an Indian Reservation. Tourism is fast becoming a major industry in Salamanca and the surrounding area - boasting the Seneca Allegany Casino, Kinzua Dam, Elkdale Country Club, and the Holiday Valley and Holimont Ski Resorts, all within a ten-minute drive.

Our District

The Salamanca City Central School District has an enrollment of approximately 1,293 students in Grades Pre-K-12 at its three buildings and at additional sites. The Prospect Elementary School [Pre-K - Grade 3] has 443 students. The Seneca Intermediate School [Grades 4-7] has 379 students. The High School [Grades 8-12] has 453 students. The District employs a professional staff of over 197 teaching & support personnel, 125 nonteaching employees which includes bus drivers, cleaners/maintenance, food service, office personnel and administrators. The District prides itself on employing support staff specialists who provide speech, remedial reading & literacy, ENL, remedial math, library, psychological, counseling and clinical social work services.

Our School

The NYS Board of Regents accredits Salamanca High School with over 120 courses offered to approximately 453 students with many college level courses offered through JCC, ECC, Fredonia and AP. Salamanca High School is proud to provide students with opportunities to receive the NYS Career and Technical Education endorsement on their Regents Diploma. The school provides competitive Varsity, Junior Varsity, and Modified athletic programs through 36 teams. Students are also engaged in over 20 clubs and activities. Our performing arts program, including musicals and native dancing, rounds off the District’s commitment to a comprehensive education.

The student population of Salamanca High School proudly reflects the community. This diversity provides rich cultural opportunities for students and adults alike. The teaching staff maintains a high degree of professional acuity through ongoing learning opportunities and continuous professional development. Salamanca High School supports students through a progressive 1:1 student to technology device initiative.

Mrs. Tonia Sibilio
A-K, Grades 8-12
945-2404 ext. 6012

Mrs. Michelle Winship
L-Z, Grades 8-12
945-2404 ext. 6013

Mrs. Ashleigh Bova
Native American Counselor 8-12
945-2404 ext. 6014

Salamanca High School

50 Iroquois Drive, Salamanca, NY 14779

(716) 945-2402 Fax: (716) 945-5983

Superintendent	**Principal**	**School Counselors**	
Mr. Robert Breidenstein	Mr. Christopher Siebert	Mrs. Tonia Sibilio	A-K
Deputy Superintendent	**Asst. Principal**	Mrs. Michelle Winship	L-Z
Dr. Mark Beehler	Mrs. Lynnette Magiera	Mrs. Ashleigh Bova	Native American

2021-2022 INFORMATION

- Public School - grades 8- 12
- Accreditation - NY State Board of Regents
- Calendar – Four, ten-week grading periods
- CEEB # - 335-020
- Total District Enrollment – 1517
- Total Sr. HS Enrollment - 477
- Teaching Faculty - 80
- Seniors Ranked - 85

Percent of Graduates Entering College/Military/Regents diploma (Class of 2021)

- 4 yr. College/University – 15%
- 2 yr. College – 14%
- Trade School – 1%
- Military – 1%
- Employment – 5%
- Other-64%

The Community...

Salamanca City School District is located on the Seneca Nation of Indians reservation and encompasses the City and Town of Salamanca, the Town of Coldspring and the Hamlet of Kill Buck.

Graduation Requirements

To earn a NY State Regents Endorsed HS diploma or a NY State Regents Endorsed HS diploma with an Advanced Designation, a student must meet the following units and test requirements:

Unit Requirements

1 unit is equivalent to 40 weeks, .5 unit to 20 weeks. Total units required including core courses & electives equals 22.

	Regents Endorsed with Advanced Designation	**Regents Endorsed**
English	4 units	4 units
Social Studies	4 units	4 units
Science	3 units	3 units
Math	3 units	3 units
World Language	3 units*	1 unit
Art/Music	1 unit	1 unit
Health	1/2 unit	1/2 unit
Physical Education	2 units**	2 units **
*Students can bypass World Language if they have a 5-unit sequence in Career & Tech Ed, Art or Music.		
**4 years of Physical Ed. successfully completed.		

Test Requirements for Regents Endorsed Diploma

- Common Core Examination in English Language Arts
- Common Core Examination in Math
- Regents Examination in Science
- Regents Examination in Social Studies
- Pathway (One additional Regents Exam in Math, Science, Social Studies, or CDOS credential, Civics endorsement or Pathway assessment in the Arts, CTE, or LOTE)

Test Requirements for Regents Endorsed Diploma

- Common Core Examination in English Language Arts
- Regents Examination in Global History & Geography
- Regents Examination in US History & Government
- Common Core Examination in Algebra
- Common Core Examination in Geometry
- Common Core Examination in Algebra 2
- Regents Examination in Physical Science
- Regents Examination in Life Science
- Checkpoint B LOTE Examination or 5-unit sequence in the Arts or CTE

Test Requirements for Regents Diploma w/Advanced Designation and Mastery in Math and/or Science
Students who complete all coursework and testing requirements for the Regents Diploma with Advanced Designation in mathematics and/or science, and who pass, with a score of 85 or better, three commencement level Regents examinations in mathematics and/or three commencement level Regents examinations in science, will earn a Regents Diploma with Advanced Designation, with an annotation of the diploma that denotes Mastery in Mathematics and/or Science, as applicable.

Curriculum
The program of study is comprehensive with academic programs that include Advanced Placement, Jamestown Community College (JCC) Connection courses, Erie Community College (ECC) Advanced studies courses, college preparatory, advanced, honors and New York State Regents courses, career preparation courses offered through BOCES CTE Center at Ellicottville, general, and special education courses. High School courses taken in the 8th grade are considered accelerated courses.

Salamanca High School has 17 students taking Advanced Placement Courses.
Advanced Placement Courses Include:

- Calculus AB
- Calculus BC
- Computer Science A
- Government & Politics
- Computer Science Principles
- Spanish Language and Culture
- Statistics
- United States History

Salamanca High School has 100 students enrolled in College Connection Courses and students are taught College Connections in the High School by a high school teacher. College Connection courses through Jamestown CC in the Salamanca School District include:

- Art: Drawing I, Intro to Computer Art Design
- Business: Accounting Fundamentals, Banking & Finance, Computer Application Software
- Computer Science: CSC 1510 Intro to Computer Science
- English: English Composition I & II, Public Speaking, Writing about Literature
- Math: Calculus & Analytical Geometry I, Calculus & Analytical Geometry II, Elementary Statistics, Pre-Calculus, Problem Solving with Mathematics
- Science: Zoology - Biology of Birds/Insects/Mammals/Reptiles/Amphibians
- Technology: Engineering & Drawing w/ CAD, Intro to Solid Modeling

Erie Community College offers advanced studies credit for College and Career Portfolio (Business Education Employability Portfolio)

CTE Endorsements through the Business department in the Salamanca School District include:
CTE MOUS, CTE Accounting, and CTE Computer Graphics. These programs require completion of 5 credits in rigorous coursework in addition to college courses and an approved Career and Technical education technical assessment.

Grading
All subjects are figured into the GPA. A minimum grade of 65 is passing. A weight of 1.1 is used for Advanced Placement and college courses, 1.05 for honors and higher-level courses and 1.0 for all others. The sum of adjusted scores is divided by the number of credits earned. Weighting is used for ranking purposes only. In ranking transfer students with letter grades, the following equivalents suggested by New York State Education Department are used. During the 2019-2020 school year students were given P for proficient, S for satisfactory, and M for Mastery for MP 3 & 4 grades. The letter grade was not calculated into the student's GPA. Students also received an 'E' for exemption on regents exams if they received Regents course credit in years 19-20 and 20-21. 20-21 students could choose to take their exams and have their actual grade listed on their transcript.

A+ =100 = 4.0 A = 96 = 4.0 A- = 92 = 3.7	B+ = 89 = 3.3 B = 86 = 3.0 B- = 82 = 2.7	C+= 79 = 2.3 C = 76 = 2.0 C- = 72 = 1.7	D+=69 = 1.3 D = 67 = 1.0 D- = 65 = 1.0	F = 60 = 0.0

SAT Mean Scores					ACT Mean Scores		
	Total #	ERW	Math			Total #	Composite Score
Class of 2017	7	510	510		Class of 2017	N/A	N/A
Class of 2018	19	470	460		Class of 2018	N/A	N/A
Class of 2019	41	505	463		Class of 2019	N/A	N/A
Class of 2020	10	467	513		Class of 2020	N/A	N/A
Class of 2021	10	489	470		Class of 2021	N/A	N/A

Athletics Salamanca High School is a Section VI, Class D school offering 28 competitive modified, varsity, and junior varsity sports for boys and girls. Athletes compete in the CCAA Division II League.

PATHWAY OPTIONS

A student must either:

- Pass an additional Regents examination in a different course (mathematics, science, or social studies); or
- Pass an additional Department approved alterative in a different course (English, mathematics, science, or social studies); or
- Pass a Department approved pathway assessment (Arts, CDOS, World Languages); or
- Successfully complete a Department approved CTE program, including the associated 3-part technical assessment; or
- Successfully complete all the requirements for earning the CDOS Commencement Credential

DIPLOMA TYPES

- Regents Diploma – All students
    - with Honors
    - with Career and Technical Education Endorsement
- Regents with Advanced Designation – All students
    - with Honors
    - with Mastery in Math
    - with Mastery in Science
    - with Mastery in Science and Math
    - with Honors and Mastery in Math and Science
    - with Career and Technical Education Endorsement
- Regents Diploma (through appeal) – All students
- Local Diploma - Students with Disabilities with an IEP or if included on the student's 504 Accommodation Plan
    - with Career and Technical Education Endorsement
- Local Diploma (through appeal) – All students
- Local Diploma (through Superintendent's determination) – Students with Disabilities with an IEP

CREDENTIAL TYPES

- Career Development and Occupational Studies Commencement Credential
    - All students other than those assessed using the NYS Alternate Assessment
    - 216 hours of CTE course work, 54 hours of work based learning, career plan, employability profile & meets national work readiness credential
- Skills and Achievement Commencement Credential
    - Students with severe disabilities that are assessed using the NYS Alternate Assessment

EXAM EXEMPTIONS

- Exemptions due to the COVID-19 Public Health Emergency Students granted an exemption from any examination due to COVID-19 are not required to pass such specific examination to meet the assessment requirements for any diploma type. Reference the following FAQs: June/August 2020, January 2021, June/August 2021, and January 2022 (USHG only).

SCHEDULING PROCESS

January
The Course Catalog and Course Request Forms will be available to all students. Counselors will conduct scheduling orientation sessions to discuss the course catalog, review diploma requirements, and assist in making preliminary course selections for the next school year.

January/February/March
All students will meet individually with their school counselor to review their 4-year plan, future career plans, high school transcript and current academic progress. The student will select courses for the upcoming school year. A list of each student's course requests will be sent home. Parents are encouraged to make appointments with their child's school counselor to discuss their child's scheduling and four-year plan.

April/May
The Master Schedule for the following year will be developed, based on course requests made by the students. It is extremely important that all students turn in course request forms that are as accurate as possible at this time. Courses that have too few student requests will be deleted from the following year's master schedule at this time.

May
Students will be asked to make alternate choices where there are unresolvable course conflicts, or situations in which a course will not be offered due to insufficient enrollment.

June
Any requests for a course change should be made during final examination week or the first week of summer vacation. Requests for schedule changes later in the summer will be considered but may not be able to be made for reasons of class size, etc.

July/August
Contact the Student Support Center to request a course change. Counselors will be available on a limited basis during the summer. Please note, schedule changes at this time are subject to approval by the Principal. Students will receive their schedule via mail and/or parent portal in late summer.

COURSE SELECTION

This Course Catalog gives a brief resume of content, prerequisites, and expectations of each course. Students should become familiar with this Course Catalog and other scheduling materials.

Preliminary Steps

- Become familiar with the course catalog
- Review requirements for graduation
- Review elective courses
- Develop a sequence of required and elective courses to meet graduation requirements and to facilitate post-graduation plans
- Discuss ability levels and course selections with teachers and counselors to ensure that you are maximizing your academic potential
- Involve parents/guardians in the course selection process
- Plan optimistically and realistically

Course Selection

- Counselors will meet individually with students to review course selections
- Review the recommendations of teachers and counselors with your parent/guardian
- Complete the course selection sheet
- Have parent/guardian sign the selection sheet
- Return signed selection sheet to the Student Support Center

Scheduling Load

- Students are required to take a minimum of 6 academic courses plus physical education per year
- Student-athletes must be enrolled in 6 ½ credits to maintain athletic eligibility
- To maintain eligibility the student-athlete must be passing at least 5 ½ credits.

Course Levels·

- General (G) - An academic course designed to comfortably challenge the student. These courses are less rigorous and demanding compared to a Regents level course.
- Regents (R) - An academic course based upon the New York State Curriculum. These courses satisfy academic requirements for college and post-secondary employment.
- Regents Accelerated - An academic course that is offered to select students a year ahead of the rest of their cohort. Typically begins with Math and Science in 8th grade.
- Honors (H) - A section of select courses that provide a more in-depth academic focus for students who have been recommended and have met pre-requisites.
- Advanced Placement (AP) – Advanced college level coursework. Students are expected to take the Advanced Placement exam at the end of the year.
- College (College) - An advanced course offered in connection with JCC, ECC or Fredonia. Student's successful completion will also earn them SUNY college credits.

CRITERIA FOR ADMISSION and CONTINUED ENROLLMENT IN HONORS/ACCELERATED COURSES

- Student displays a positive and enthusiastic work ethic.
- Student completes homework and projects independently and meets deadlines.
- Student is a consistent critical thinker who participates regularly in class discussions and offers valuable insight and thoughtful interpretation about what has been read.
- Student consistently presents valuable insight and thoughtful interpretation in his/her writing.
- Student demonstrates consistent attendance – **no more than nine unexcused absences** for the entire year
- Student must have a final average of 85% or higher in previous course as appropriate.

Jamestown College Connection Courses @ Salamanca HS

Course (Credits)	**Eligibility Requirements** Prerequisite= course that must be taken prior to enrolling Corequisite= course that must be taken at the same time
ART 1510: Drawing I (3 credits)	No JCC requisites
ART 1730: Intro to Computer Art & Design (3 credits)	No JCC requisites
BIO 1515/1520/1540/1560: Zoology (1 credit each)	Eligibility: ENG 1510 w/out supports or Corequisite: ENG1510 w/ supports
BUS 1410: Accounting Fundamentals (3 credits)	No JCC requisites
BUS 1610: Personal Finance (3 credits)	SHS Prerequisite: Financial Management Eligibility: ENG 1510 w/out supports or Corequisite: ENG1510 w/ supports
CMM 1610: Public Speaking (3 credits)	Eligibility: ENG 1510 w/out supports or Corequisite: ENG1510 w/ supports
CSC 1510: Introduction to Computer Science	No JCC requisites
CSC 1560: Computer Applications Software I (4 credits)	*SHS Prerequisite: 1 yr. HS Algebra* See JCC Eligibility below: college-level math (MAT 1500 or higher)
CSC1570: Programming Concepts/Applications	Eligibility: MAT 1590 (or higher)
ENG 1510: English Comp (3 credits)	*SHS Teacher Recommendation* Eligibility: ENG 1510 without supports
ENG 1530: English Composition II (3 credits)	Prerequisite: ENG 1510
ENG 1540: Introduction to Literary Studies (3 credits)	Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports

LDR 1300: Leadership Engagement (3 credits)	No JCC requisites
MAT 1500: Problem Solving with Math (3 credits)	Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports AND one of the following: • HS GPA 80+ and either Algebra I Regents 75+ or Algebra 1 course average of 80+ • ACCUPLACER QAS score 246+ • Meets eligibility requirements for any higher-level math course
MAT 1540: Elementary Statistics (3 credits)	Students are eligible if they meet any one of the following criteria: • Successfully completed MAT 1500 • Successfully completed HS Algebra II (or higher) and HS GPA 80+ • ACCUPLACER QAS score 255+ • Meets eligibility requirements for any higher-level math course
MAT 1600: Precalculus (4 credits)	Students are eligible if they meet any of one of the following criteria: • Successfully completed MAT 1590 • Algebra II course average 80+ • Algebra II Regents score 80+ • ACCUPLACER QAS score 280+ • Meets eligibility requirements for any higher-level math
MAT 1710: Calculus & Analytic Geometry I (4 credits)	Successfully completed MAT 1600 or HS pre-calculus
MAT 1720: Calculus & Analytic Geometry II (4 credits)	Successfully completed MAT 1710
MCT 1240: Engineering Drawing with AutoCAD (4 credits)	No JCC requisite
MCT 1380: Intro to Solid Modeling (3 credits)	Prerequisite: MCT 1240

Eligibility for ENG 1510 w/out supports:

- Any student ranked in top 10% of their class
- Any student with an ACCUPLACER Reading score of 250+
- Any student with a PSAT Evidence-Based Reading/Writing score of 560+
- Any student with an ACCUPLACER Reading score of 245-249 & at least one success indicator below:

Seniors who meet one of the following criteria:

- Unweighted cumulative GPA of 80+ through end of jr. year
- Unweighted cumulative GPA of 75-79 at the end of jr. year

Juniors/Sophomores who meet one of the following criteria:

- ELA 10 or 11 Qtr 2 grade of 90+ (or 85+ w/ teacher rec.)
- Global Studies II Qtr 2 grade of 90+ (or 86+ w/ teacher rec)

JCC Success Indicators for English:

- Documentation of NYS Global Regents or American History & Govt. Regents score of 85+
- 85+ final grade in 11th grade English
- 3+ score on any AP Exam
- SAT reading score of 500+ or ACT reading score 21+

JCC Eligibility requirements for Math:

Students qualify for MAT 1600 or any college level math course if they meet any one of the following criteria:

- Algebra II final course average of 80+
- Algebra II Regents score of 80+
- SAT math score of 530+
- ACT math score of 23+
- Passed either HS Precalculus or Calculus

SUNY Erie Advanced Studies @ Salamanca High School

SUNY Erie's Advanced Studies Program is open to all high school juniors or seniors of average or better academic ability interested in beginning their college studies while still in high school.
GS 111 College Success Skills (3 Credits) See page 20 for more information.

SUNY Fredonia Dual Enrollment @ Salamanca High School

SUNY Fredonia grants college credit to all high school students at SHS who successfully complete the GIS 201 Geographic Information Systems course.
GIS 201 Geographic Information Systems (1.5 Credits) See page 43

College Board Advanced Placement @ Salamanca High School

Salamanca High School participates in the College Board Advanced Placement program for high school students. AP gives students the chance to tackle college-level work while they're still in high school. Through taking AP Exams, students can earn college credit and placement.

AP Courses Available with teacher recommendation: United States History, U.S. Government & Politics, Spanish Language and Culture, Computer Science Principles, Computer Science A, Chemistry, Calculus AB. See course catalog for further information.

SALAMANCA HS – FOUR YEAR PLAN

Name _____ Date: _____

GRADUATION REQUIREMENTS

Eng 9	___	**Glob. St. 9**	___	**Math**	___	**Science**	___
Eng 10	___	**Glob. St. 10**	___	**Math**	___	**Science**	___
Eng 11	___	**US Hist.**	___	**Math**	___	**Science**	___
Eng 12	___	**Econ/Govt**	___				
				Future Plans/Courses			
PE 9	___	**Art/Music**	___	_____			
PE 10	___	**Health**	___	_____			
PE 11	___	**World Lang**	___	_____			
PE 12	___			_____			

Credits Earned:	
Credit Needed:	
TOTAL	**22.0**

EXAM REQUIREMENT		**ADVANCED DIPLOMA EXAM**		**Options**	
Algebra CC		Geometry CC		Pathways	
Science Regents		Algebra II CC		Compensatory (SWD)	
Global Studies Regents		Science Regents			
US History Regents		World Language Reg. Equiv.			
English CC		By-Pass:			

DIPLOMA TYPE	Regents	Regents w/ CTE	Regents w/ Adv. Desig.	Regents w/ Adv. Desig. w/ CTE	Local

MASTERY	Math - 3 RE @ 85% or higher		Science **-** 3 RE @ 85% or higher	

HONORS – Regents AVG. of 5 RE must = 90.00% **Yes … No**	**HONOR – Adv. Desig.** AVG. of 8 RE must = 90.00% **Yes … No**	
Math CC	Algebra CC	ELA CC
Science RE	Geometry CC	Global RE
Global RE	Algebra II CC	US History RE
US History RE	Living Science RE	Physical Science RE
ELA CC		

I have reviewed my 4-year plan and understand that I must complete all requirements to graduate. I have reviewed my transcript including course work in progress this current year, Grade Point Average and future career plans. I agree that my transcript is accurate to date.

Student Signature _____ Counselor Signature _____

COURSE DESCRIPTIONS 2022-2023

ART

STUDIO IN ART
This course is the foundation level course, which is required for all high school art majors. Studio Art is a yearlong introduction to the nature, functions and techniques of the visual arts, in the past and present. Students must complete all course work and homework at a no less than proficient level. *This course fulfills the 1 credit for the Fine Arts graduation requirement.

Grade: 9, 10, 11, 12
Length: 40 weeks
Prerequisite: None
Credit: 1.0
Level: G

DRAWING AND PAINTING
This is an advanced level course for grades 10, 11, and 12, which may be elected after the student has completed Studio Art and desires to participate in advanced study in the area of drawing and painting. All assignments and course work must be completed at no less than a proficient level.

Grade: 10, 11, 12
Length: 40 weeks
Prerequisite: Studio in Art final grade of 85+ or teacher recommendation
Credit: 1.0
Level: G

ADVANCED ART
This is a third level course at an advanced level, which can be taken upon teacher recommendation. This class is an introduction to multiple media and techniques and the introduction to creating a portfolio. All assignments and course work must be completed at no less than a proficient level.

Grade: 11, 12
Length: 40 weeks
Prerequisite: Drawing and Painting final grade of 85+ or teacher recommendation
Credit: 1.0
Level: G

SENIOR PORTFOLIO
This is a fourth level course for the competent, serious art major planning on continuing on in the field of art. It can be taken upon teacher recommendation. The focus of the class will be to prepare a professional portfolio to have for school and job interviews. The work in the course will cover a wide range of possibilities so as to have a comprehensive portfolio with depth.

Grade: 12
Length: 40 weeks
Prerequisite: Advanced Art final grade of 85+ or teacher recommendation
Credit: 1.0
Level: G

PHOTOGRAPHY(not offered 22-23)
This course is an advanced course where we will be incorporating the developing world of digital photography and manipulation of photos with Adobe Photoshop. It is helpful but not a requirement for a student to have access to his or her own digital camera. The student will keep a portfolio of their work for evaluation purposes. All assignments and course work must be completed at no less that proficiency level.

Grade: 12
Length: 20 weeks
Prerequisite: Studio Art, teacher recommendation
Credit: 0.5
Level: G

NATIVE AMERICAN CRAFTS
This course is an advanced course where we will be incorporating the developing world of art with the traditional art of Native Americans. We will explore various mediums including but not limited to basketmaking, beading, and weaving. All assignments and course work must be completed at no less than a proficiency level.

Grade: 12
Length: 20 weeks
Prerequisite: Studio Art, teacher recommendation
Credit: 0.5
Level: G

DRAWING I (ART 1510 - JCC 4 credits)
This course is a college course in drawing. It is a half-year course that will give students 4 college credits from JCC if passed with a D or better. Students will gain a working knowledge of foundation skills and abilities in artistic visual expression. Students are introduced to drawing media and concepts. Students learn to draw perceived objects and become able to discuss the drawings meaningfully.

Grade: 11, 12
Length: 20 weeks
Prerequisite: 2 years of Art, teacher recommendation
Credit: 0.5
Level: College

BUSINESS

PERSONAL FINANCE (BUS 1610 - JCC 3 credits)
Banking and Finance will be designed for students to gain a hands-on working environment with respect to the banking industry of today. Students will be responsible for actually running a full-service bank with respect to customer service, opening bank accounts, running teller transactions, scheduling, auditing all while learning about banking regulations as well as problem solving skills. Students will gain practical knowledge of balancing the ATM as well as dual control. Students will gain knowledge in respect to security, fraud, and computer software applications. Students will be prepared to actually work for a bank once this course is completed.

There will be projects in relation to pertinent finance and banking in the world today. In addition, there will be pertinent vocabulary words shared with the students during each unit.

SUNY JCC college credit (**3 SUNY credits**) will also be an option for students who take and pass the JCC Accuplacer with a score of 250+ or meet the eligibility requirements; students not pursuing college credit for this class do not have to take the Accuplacer test.

Grades: 11, 12
Length: 20 Weeks
Prerequisite: Accuplacer score of 250+ or meets eligibility requirements & Financial Management
Credit: 0.5
Level: College

CAREER PLANNING
This course is designed to introduce students to the process of career exploration and research. Students will consider what characteristics (abilities, interests, values, and personality) help make them the unique people that they are and begin thinking about how this self-knowledge relates to their choice of a major and a career. Students will identify the relationship between career planning and lifelong goals. All assignments and projects are designed to develop the technological knowledge, skills, and confidence necessary to succeed in future academic and professional pursuits.
***Required for CTE endorsement for CAS, Accounting and Computer Graphics**

Grade: 9, 10, 11, 12
Length: 20 weeks
Prerequisite: none
Credit: 0.5
Level: G

FINANCIAL MANAGEMENT
This course stresses such items as use of banking facilities, credit usage, insurance usage to manage personal risk, and completing of Federal and State Tax forms. This course will examine and give students ideas and ways that they can begin to work on the building of their personal wealth. Various investment options will be examined and the students will complete an investment portfolio as part of the course requirements. Upon completion of the course the students should understand aspects of financial literacy.
***Required for CTE endorsement for CAS, Accounting and Computer Graphics**

Grade: 8, 9, 10, 11, 12
Length: 20 weeks

Prerequisite: none
Credit: 0.5 (Grade 8-final course average of 80% or higher to earn honors credit)
Level: G

KEYBOARDING
This course is designed for students to develop & enhance skills for entering alphabetic, numeric, & symbol information on a keyboard. The course includes study of basic page layout, design structure and computer graphics to produce professional-looking documents such as spreadsheets & charts, tables, letters, MLA reports, as well as the creative production of flyers, business cards, brochures, advertisements & certificates.
***Required for CTE endorsement for CAS, Accounting and Computer Graphics**

Grade: 8, 9, 10, 11, 12
Length: 20 weeks
Prerequisite: none
Credit: 0.5 (Grade 8-final course average of 80% or higher to earn honors credit)
Level: G

COMPUTER APPLICATION SOFTWARE I (CSC 1560 - JCC 4 credits)
This course will study major Microsoft Applications such as word processing, spreadsheets, web design, and much more. The focus will be on the completion of training and testing for Microsoft Office Certifications 2013 in Word, Access, Excel, and PowerPoint and Outlook. After the completion of each Microsoft Component through Gmetrix training and testing, students will have to choose at least one Microsoft Office Specialist Certification Test to take for industry standard certification. Students are encouraged to take and to pass as many certifications tests as they wish. The second half of the course is a project-based course designed to teach the students how to use and integrate all applications named above. (One certification test completion is required.)
***Required for CTE endorsement for CAS**

SUNY JCC college credit will also be an option for students who take and pass the JCC Accuplacer or meet eligibility requirements and then pass the course. (**4 SUNY credits**) Students not pursuing college credit for Computer Application Software I class **do not have** to take the Accuplacer test.

Grade: 10, 11, 12
Length: 40 weeks
Prerequisite: Accuplacer math score of 238+ or meets eligibility requirements, Students must have 1 year of HS Algebra
Credit: 1.0
Level: College

COMPUTER APPLICATION SOFTWARE II
This course is an advanced project-based course utilizing all program knowledge learned in MOUS I. All projects are chosen from real-life needs from the district/community. This course will study advanced uses of major microcomputer applications; word processing, spreadsheets, web design, graphic manipulation, animations, and database management plus Windows fundamentals. The students are required to take at least 2 certifications in either Microsoft (MOS) or Adobe (ACA) Certification areas. The focus will be on the completion of projects using commercially available applications such as: Word, Access, Excel, PowerPoint, Publisher, Front Page Web Design, Adobe Photoshop, Adobe Illustrator and Macromedia Flash. This is a project-based course designed to teach the students how to use and integrate all applications named above (One certification test completion is required) ***Required for CTE endorsement for CAS**

Grade: 11, 12
Length: 40 weeks
Prerequisite: CAS I
Credit: 1.0
Level: G

INTRO TO COMPUTER ART and DESIGN (ART 1730 - JCC 3 credits)
This is a JCC College Connections Course where students will be introduced to techniques and processes of creating artwork and graphic design using the computer. Students will be required to take and pass at least one Adobe Certification Test (ACA) in Photoshop, Illustrator, Premiere, or InDesign. They are also encouraged to take and pass as many ACA certifications tests as they wish so that they can better position themselves in a competitive market in the real world. Students will get an overview of electronic image manipulation, illustration, and page layout and design. This course is a prerequisite to other computer art/graphic courses at JCC. Students will be using Adobe Photoshop, Adobe Illustrator, Adobe InDesign, Adobe Premiere, Microsoft Gif animator, as well as Adobe Flash Students will be using peripherals such as digital camera, video and Wacom Graphic Tablets. This course is designed for all students interested in increasing their presentation and graphic manipulation skills that would be useful for all pre and post-secondary graphic design fields. This course is required for the CTE in Computer Graphics. Student focus is Advance Computer Graphics with an intense focus on certifications of the ACA exams in Adobe: Illustrator, InDesign, Dreamweaver, Flash, and Premiere (at least 1 certification is required). Students will also be required to create and help with District projects requiring graphic design and advertising.
***Required for CTE endorsement for Computer Graphics**

Grade: 10, 11, 12
Length: 40 weeks
Prerequisite: None
Credit: 1.0
Level: College

COMPUTER GRAPHICS II
This course is required for the CTE in Computer Graphics. Student focus is Advanced Computer Graphics with an intense focus on certifications of the ACA exams in Adobe: Illustrator, InDesign, Dreamweaver, Flash, and Premiere (at least 1 certification is required). Students will also be required to create and help with District projects requiring graphic design and advertising.
***Required for CTE endorsement for Computer Graphics**

Grade: 10, 11, 12
Length: 40 weeks
Prerequisite: Intro to Computer Art and Design
Credit: 1.0
Level: G

COLLEGE & CAREER PORTFOLIO
(GS 111 College Success Skills ECC 3 Credits)
Students will develop a complete digital portfolio, which will showcase their preparation for the workforce and post-secondary education. This portfolio allows students to highlight their interests and achievements in school. This course provides an opportunity for students to learn and adopt methods and strategies to promote personal growth and success in college, in the workforce, and in life. Topics include: skills employers and colleges look for, learning styles, problem-solving and creativity, time/task management, methods of inquiry and critical thinking, academic policies and procedures.

Note: Students who take this course may receive 3 college credits for College Success Skills through Erie Community College. The curriculum for the College Success Skills class is the same as for College & Career Portfolio class with additional chapter work from the College Success Skills textbook.

Students enrolling in College Success Skills should have an 80% or above cumulative average from grades 9-12 with at least an 80% average in English class.
***Required for CTE endorsement for CAS, Accounting and Computer Graphics**

Grade: 11, 12
Length: 20 weeks
Prerequisite: None
Credit: 0.5
Level: College

HOSPITALITY AND TOURISM
In Hospitality and Tourism students will learn the basic concepts of tourism, hospitality, restaurant, recreation, sports and entertainment. Students will have a chance to become ServSafe certified as well as learning how to use POS terminals (these are the machines that are in restaurants where a person takes an order using the terminal). Students will be utilizing the Virtual Restaurant simulation. In this class students will be creating their own restaurants, their own hotels, their own sporting events, researching cruise lines, and researching a country of their choice.

Grade: 9, 10, 11, 12
Length: 40 weeks
Prerequisite: None
Credit: 1.0
Level: G

ACCOUNTING FUNDAMENTALS (BUS 1410 JCC 3 credits)
The first half of the course will be the JCC BUS 1410 Accounting course. This is a college level introductory accounting class. Topics that are covered include: journalizing business transactions that affect a service business, posting of transactions to a general ledger, and the preparation of financial statements. Students will also journalize business transactions for a merchandising business into special journals, posting to various ledger accounts, and preparation of financial statements. Most of the work will be done using accounting software. The second half of the course will be examining various aspects of the accounting principles and their effects on management decisions. Students will examine notes receivable, notes payable, adjusting and closing entries, inventory calculations, bad debt expense calculations, tax liabilities, employment payroll requirements and necessary filing requirements. ***Required for CTE endorsement for Accounting**

Grade: 10, 11, 12
Length: 40 weeks
Prerequisite: None
Credit: 1.0
Level: College

ENTREPRENEURSHIP
If you are someday hoping to open up your own business, this course is for you. The course is designed to help students be successful in creating and running a small business. The focus will be on selecting a business and preparing a business plan. Topics will include: types of business ownership, management principles, Internet organization, and human resource management, with marketing, finance and risk management. Students will also be utilizing the Virtual Business Retailing Simulation.
***Required for CTE endorsement for Accounting**

Grade: 9, 10, 11, 12
Length: 40 weeks
Prerequisite: None
Credit: 1.0
Level: G

SPORTS AND ENTERTAINMENT MARKETING
Get ready for two of the most exciting and most competitive businesses in the world. The sports and entertainment industries are two of the most profitable industries in the United States. Sports and entertainment marketing is a subject to which all students can relate. Sports and entertainment marketing are everywhere-not just ballparks and theatres, but at schools, on television and radio, in stores and on the Internet. Students will learn about the key functions of marketing and how those functions are applied to the sports and entertainment industry.

Grade: 9, 10, 11, 12
Length: 20 weeks
Prerequisites: None
Credit: 0.5
Level: G

INTERNSHIP
An innovative learning experience where students participate in a non-paid, part-time community based learning experience. Students are paired with local organizations to learn about work that goes on in a particular field. Students are generally scheduled for Work Study in the afternoon and are released early from the HS so they can work with their internship host at a local business or government agency. Students involved in Work Study may earn up to one credit (awarded in half credit units) by fulfilling between 80-100 hours of on-site experience and participating in seminars. The in-school seminars focus on safety, job skills, human relations skills and career-making decisions. A supervisor will coordinate all Internships and determine an academic grade
Students accepted and enrolled in Work Study must be in good academic standing and maintain that standing during their enrollment. Students need to provide their own transportation.

Grade: 11, 12
Length: 40 weeks
Prerequisite: None

Credit: 1.0
Level: G

LDR 1300 LEADERSHIP ENGAGEMENT
Students will focus on the understanding of leadership theory and elements of self-awareness, understanding personal leadership style, and followership as it applies to the leader/follower relationship. The goal of this course is to focus on students' leadership style and to prepare them for further leadership study and application. Students will be guided through self-exploration exercises to liberate the leader within themselves.

Grade: 11, 12 preference
Length: 20 weeks
Prerequisite: None
Credit: 0.5
Level: College

Career and Technical Education Endorsement

The Business Department offers 3 Career and Technical Education Endorsements for students who complete a sequence of courses in our Business Department. The Career and Technical Education endorsement is New York State recognition of successful completion of career-based courses. Under the new "4+1" pathway assessment option, students must take and pass four required Regents Exams or Department-approved alternative assessments (one in each of the following subjects: English, math, science, and social studies) and a comparably rigorous assessment for the fifth required exam to graduate. The fifth assessment required for graduation may be an approved Career and Technical Education technical assessment. Additionally the student's diploma would contain a technical education endorsement indicating successful completion of a CTE approved program.

SALAMANCA HIGH SCHOOL BUSINESS DEPARTMENT'S CAREER & TECHNICAL EDUCATION ENDORSEMENTS Required Courses		
CTE CAS	**CTE ACCOUNTING**	**CTE COMPUTER GRAPHICS**
Keyboarding (.5 credit 9th grade generally) may be taken in grades 8-12	Keyboarding (.5 credit 9th grade generally) may be taken in grades 8-12	Keyboarding (.5 credit 9th grade generally) may be taken in grades 8-12
Financial Management (.5 credit 9th grade generally) may be taken in grades 8-12	Financial Management (.5 credit 9th grade generally) may be taken in grades 8-12	Financial Management (.5 credit 9th grade generally) may be taken in grades 8-12
Career Planning (.5 credit--10th grade generally) may be taken in grades 9-12	Career Planning (.5 credit--10th grade generally) may be taken in grades 9-12	Career Planning (.5 credit--10th grade generally) may be taken in grades 9-12
College & Career Portfolio (.5 credit—11th or 12th grade) ECC GS 111 College Success Skills 3 college credits	College & Career Portfolio (.5 credit—11th or 12th grade) ECC GS 111 College Success Skills 3 college credits	College & Career Portfolio (.5 credit—11th or 12th grade) ECC GS 111 College Success Skills 3 college credits
CAS I (1 credit—10th-12th grades) JCC CSC 1560 Computer Application Software--4 college credits	Entrepreneurship (1 credit—10th-12th grades)	Intro Comp Art Design (1 credit—10th-12th grades) JCC ART 1730 Graphic Design--3 college credits
CAS II (1 credit – 11th-12th grades)	Accounting (1 credit—10th-12th grades) JCC BUS 1410 Accounting Foundations—3 college credits	Computer Graphics II (1 credit—10th-12th grades)

ENGLISH

ENGLISH 9
English 9 will be following the Common Core Curriculum in preparation for the ELA exam it is comprised of two primary components: literature and composition. In the literature portion of the course, students will learn to make connections between life and literature while also learning to view ideas from diverse perspectives. This part of the course also emphasizes reading comprehension and the analysis of literature in four genres: the short story, the novel, drama and poetry. Major works include The Odyssey, Romeo and Juliet, and The Giver. The composition portion of the course compliments the literature and emphasizes analytical skills and the writing process, as well as grammar and mechanics. Students will also be introduced to research and will compose a research paper utilizing the MLA format. This course follows closely with the curriculum of Global Studies 9.

Grade: 9
Length: 40 weeks
Prerequisite: None
Credit: 1.0
Level: R

ENGLISH 9 HONORS
This course is intended to challenge the more academically able student and designed for students who exhibit outstanding abilities and skills in English. In addition to skills covered in the regular freshman English course, the content of this course will be accelerated and enriched to provide an extensive study of grammar, vocabulary, composition, and literature.

Grade: 9
Length: 40 weeks
Prerequisite: *See page 11*
Credit: 1.0
Level: H

ENGLISH 10
The main focus of the class is critical thinking skills demonstrated through discussion of literature and in writing (both formally and informally). Students are reading, writing, thinking, listening and speaking our English skills on a daily basis. Working with independence in mind, the students start by reading complex text and writing essays with support from the teacher, and slowly meet with success on their own, learning their own strengths and weakness to improve upon. The selections for this course support the curriculum of the global history, to aid in better comprehension of the materials of that two-year course, including the interdisciplinary research project. Short stories, articles, poetry, and longer works such as The Wave, Animal Farm, and Macbeth make up the syllabus.

Grade: 10
Length: 40 weeks
Prerequisite: None
Credit: 1.0
Level: R

ENGLISH 10 HONORS
This course is designed to challenge the more academically able student and designed for students who exhibit outstanding abilities and skills in English. In addition to skills covered in the regular sophomore English course, the content of this course will be accelerated and enriched to provide an extensive study of grammar, vocabulary, composition, and literature.

Grade: 10
Length: 40 weeks
Prerequisite: *See page 11*
Credit: 1.0
Level: H

ENGLISH 11
English 11 is the third of three English courses in the sequence prior to New York State's English Language Arts Common Core Exam. Heavy emphasis is placed on skills, which are associated with the standards and are measured by the state test: Reading for Information, Reading for Literature, Listening, Speaking, and Writing. Other skills include argumentative writing, text analysis, and reading comprehension. The majority of the course addresses these skills through various unit activities, including working in small and large groups, performing small and large-scale research projects, making individual and group presentations, reading and writing workshops, and small and large group discussion sessions. Literature read during this course includes *The Great Gatsby, The Crucible, The Color of Water,* and various short stories and poems. Students must also complete and successfully pass an argumentative research assignment using MLA format.

Grade: 11
Length: 40 weeks
Prerequisite: None
Credit: 1.0
Level: R

ENGLISH 11 HONORS/ENGLISH COMPOSITION I (ENG 1510 JCC 3 credits)
Dual enrollment course earning 1 credit in high school along with 3 credit hours of college level English. **Fall Semester of English 11 Accelerated fulfills credits for .5 high school credit**. **Spring Semester of English 11 Accelerated fulfills credits for college level ENG 1510 (College Composition I)**.

This is an introductory course of writing in the various rhetorical modes. The course starts with career and technical writing of applications, resumes, and cover letters. Then students will read works from a specific mode of writing (of several we will work through) and learn to write their own essay in that mode. The modes are persuasive, expository, narrative/descriptive, procedural, position, comparison/contrast, and cause-effect. Along with this, students will annotate their readings, peer-edit essays in class, and work through the writing process to obtain a final draft displaying clarity, substance, and analytical thinking in standard written English. These skills will be utilized in other academic courses, employment and in life.

Grade: 11
Length: 40 weeks (20/20)
Prerequisite: Accuplacer –Reading score 250+ and/or meets other eligibility requirements and HS English 10 course of 85+. Teacher or Administrator Recommendation. Earning 85% on January NYS Common Core ELA Exam is required before continuing to 2nd Semester English 1510.

Credit: 1.0 (0.5/0.5)
Level: H/College

ENGLISH 12
The English 12 curriculum is comprised of a variety of components to further develop the senior student's ability to think and to communicate effectively. These skills are required in other academic courses, employment and life. The year will begin with a basic technical writing unit in which the students will create a working resume and practice filling out job, college, and scholarship applications. The Common Core Curriculum will be incorporated to help build student skill levels in the areas of analytical, informational, and argumentative reading, writing, listening and speaking (New York State ELA Standards). In addition, students will be required to a research project and write a full argumentative research paper using MLA format.

Grade: 12
Length: 40 weeks
Prerequisite: None
Credit: 1.0
Level: R

ENGLISH COMPOSITION II (ENG 1530 JCC 3 credits)/WRITING about LITERATURE (ENG 1540 JCC 3 credits)
Dual enrollment course earning 1 credit in high school along with 6 credit hours of college level English. **Fall Semester of English 12 Accelerated fulfills credits for college level ENG 1530 (College Composition II)**.
After reading works in varied writing styles, students will learn to write various types of essays (persuasive, expository, narrative/descriptive, procedural, position, comparison/contrast, and cause effect) with precision, clarity, substance, and logic as well as develop critical thinking and writing skills that are required in other academic courses, employment, and in life. Students will also conduct full college-level research and write a research paper using MLA format on the information gathered. A short speech will also be a requirement of this course. Successful completion of the semester earns ½ high school credit as well as 3 JCC college English credits. The selected text is the Norton Reader (13th Ed.), along with other supplemental texts.

Spring Semester of English 12 Accelerated fulfills credits for college level ENG 1540 (Writing about Literature):
Students will experience a variety of literary genres (novels, poetry, drama and short stories) from several cultures and times, and then demonstrate perceptive reading and analysis of the literature through writing, class discussions and exams. Emphasis will be placed on understanding the use of literary terms and techniques in the genres. In addition, each student will create and present a short speech on a literary topic as part of the course. Students will also conduct full college-level research and write a research paper using MLA format on the information gathered. A short speech will also be a requirement of this course. Successful completion of the semester earns ½ high school credit as well as 3 JCC college English credits. Texts are varied for this course, and will be provided digitally in all cases, and in print for many as well.

Grade: 12
Length: 40 weeks (20/20)
Prerequisite: Successful completion of ENG 1510 w/ GPA of 3.0 (B) & Teacher or Administrator recommendation.
Credit: 1.0 (0.5/0.5)
Level: College

COLD WAR EVENTS
Students will dissect Billy Joel's famous song "*We Didn't Start the Fire",* which covers Cold War events from the 1950's through the 1980's. This half -year course will use a multi-media approach to cover political figures, international crises, pop culture, music and literature from the Cold War period.

Grade: 10, 11, 12
Length: 20 weeks
Prerequisite: passed Global Studies 9 and English 9, and possession of a school- issued electronic device.
Credit: 0.5 credit for ELA or history
Level: G

MYSTERIES – PERCEPTION, DECEPTION, AND MISCONCEPTION
This half-year course is designed to develop logical and critical thinking skills through research and analysis of various authors, true crimes, forensics, independent reading, observation, and public speaking. Students will finish the course by presenting their own mystery that they have written during the semester.

Grade: 10, 11, 12
Length: 20 weeks
Prerequisite: none
Credit: 0.5
Level: G

WORLD WAR II: UNBROKEN
Join Mrs. Eaton and Mrs. Roesser for a half year course where we'll dive into a thorough examination of Laura Hillenbrand's World War II-era novel *Unbroken*. Students will have an opportunity to build on their previous knowledge of World War II through the eyes of Louis Zamperini, a veteran with local connections and an epic tale of heroic survival. Weekly grades will focus on vocabulary, writing prompts, and in-class discussions. A final project will utilize components of the novel in conjunction with text-to-self and text-to-world connections of everyday heroism and sacrifice.

Course: 10, 11, 12
Length: 20 weeks
Prerequisites: Passing 9th grade history and ELA
Credit: 0.5 credit for ELA or history
Level: G

PUBLIC SPEAKING (CMM 1610 JCC 3 credits)
Surveys show that more people are afraid of public speaking than dying. This course will introduce students to various aspects of public speaking required to help them succeed in their academic and collegiate lives as well as how to handle speaking to large and small groups in their places of employment and social lives. Students will watch speeches and analyze the good and not so good aspects of each. In addition, students will learn how their behavior and physical movements, or lack thereof, will determine the success of their speech and performance. Students will have their choice of topics as they explore various speech types, including how to speak on Pet Peeves, Personal Idols, Impromptu, and Values, Morals, and Ethics. Students will also learn how to increase eye contact, voice volume, and inflection, as well as how to properly include quotes, grabbers, and conclusions. Students will continuously give speeches in class to increase their comfortable-ness in presenting in front of their peers and will not only have their speeches analyzed and critiqued but will also have the opportunity to provide feedback to their classmates.

Grade: 11, 12
Length: 20 weeks
Prerequisite: Accuplacer reading score of 250+ or meets eligibility requirements
Credit: 0.5
Level: College

PRINT JOURNALISM
The primary objective of the class is to create a quality high school yearbook. Students will learn how to organize a yearbook, write copy, work with the yearbook publishers, and tackle yearbook financing. Students will be responsible for gathering digital photographs for specific yearbook spreads as well. This entire course is based on meeting deadlines. Late work is not acceptable, because it slows production and will affect yearbook financing.

The secondary objective of the class is to publish *The Warrior* in *The Salamanca Press.* Students will be introduced to newspaper journalism. Emphasis will be on the development of reporting, interviewing, and writing for print. Students will be responsible for proofing, editing, and creating a layout for their written work.

Grade: 12 (11 with recommendation from English teachers)
Length: 40 weeks
Prerequisite: Teacher recommendation
Credit: 1.0
Level: G

PRINT JOURNALISM II
The primary objective of the class remains the same, creating a quality high school yearbook. These students will become peer instructors, leading first year staff on how to organize a yearbook, write copy, work with the yearbook publishers, and tackle yearbook financing. Students are still responsible for gathering digital photographs for specific yearbook spreads as well, but will be expected to utilize Photoshop for better final pictures.

The secondary objective of the class still is to publish *The Warrior* in *The Salamanca Press.* Journalism II students will become leaders in newspaper journalism. Emphasis will be on a higher level of reporting, interviewing, and writing for print. Students will be responsible for proofing, editing, and creating a layout for their written work. *Journalism II students will be highly considered for editors of both the newspaper and yearbook productions.*

Grade: 12
Length: 20 weeks
Prerequisite: Print Journalism, Teacher Recommendation
Credit: 0.5
Level: G

INTRODUCTION TO COMMUNICATIONS AND MEDIA PRODUCTION
This will be a full-year course that places an emphasis on development, structure, organization, and function of communications in society. Students will be introduced to techniques and terminology of media productions. Students will learn basic production technique used to communicate visual images and sound. Topics such as lighting, video composition, sound, editing may be covered.
*This course fulfills the 1 credit for the Fine Arts graduation requirement.
This class is geared towards sophomores; however, juniors and seniors may take it as well.

Grade: 9, 10, 11, 12
Length: 40 weeks
Prerequisite: None
Credit: 1.0
Level: G

TELEVISION PRODUCTION I
Students will be introduced to the fundamentals of audio and video electronic media production. The course will cover terminology and technique, with an emphasis on the function and operation of digital equipment. The basic skills of television studio production will be covered. Electronic field production will be introduced, including portable camera operation, lighting, scripting, and video editing. Morning announcements and Warrior Vision productions are a required element of the course.

Grade: 11, 12
Length: 40 weeks
Prerequisite: Intro to Communications & Media Production preferred, not required
Credit: 1.0
Level: G

TELEVISION PRODUCTION AND DIRECTION II
This advanced studio production course builds upon the basic studio and field production techniques covered in Television Production I. Additional production skills, concepts, techniques, and aesthetic analysis will be required for multi-camera productions. Through producing, writing, and directing a variety of programs, students will apply production theories and concepts within a digital production environment. Morning announcements and Warrior Vision productions are a required element of this course as well.

Grade: 11, 12
Length: 40 weeks
Prerequisite: Television Production I
Credit: 1.0
Level: G

TELEVISION PRODUCTION AND DIRECTION III - INDEPENDENT STUDY ONLY
This advanced studio production course builds upon the basic studio and field production techniques covered in Television Production II. Additional production skills, concepts, techniques, will be covered, especially the use of after effects. Students will produce, write, and direct an original program as their culminating final project. Students will apply production theories and be expected to work collaboratively with a crew that they assign for this project. Morning announcements and Warrior Vision productions are still a required element of this course as well.

Grade: As determined by Instructor
Length: 40 weeks
Prerequisite: TV I & TV II
Credit: 1.0
Level: G

POST PRODUCTION EDITING - INDEPENDENT STUDY ONLY

Grade: As determined by Instructor
Length: 40 weeks
Prerequisite: Intro to Communication Media Production, TV I & TV II
Credit: 1.0
Level: G

LOTE: LANGUAGE OTHER THAN ENGLISH
(Foreign Language/World Language)

Ninth grade students who have not completed the two-year sequence AND have not passed the Checkpoint A exam in grade eight must successfully complete the course in high school to meet NYS graduation requirements. Students who fail the exam will take the ninth-grade level 1 course for one high school credit. The goal of the Language Department is to have all students continue their language experiences beyond that first level.
After the third level of language, another comprehensive exam, Checkpoint B will be used as the final exam. This exam will comprise of level one, level two, and level three content. Upon successful completion of Checkpoint B, students are encouraged to continue in the higher levels of language learning; level four and level five.

SENECA I
This course develops comprehension and conversational skills in the Seneca language. Students will be able to communicate using the Seneca language. Emphasis will be placed on using the Seneca alphabet to read and write the language. Iroquois traditions will be studied.

Grade: 9, 10, 11, 12
Length: 40 weeks
Prerequisite: None
Credit: 1.0
Level: R

SENECA II
Seneca II is a concentration of advanced conversational skills with emphasis on Seneca/Iroquois culture. Students will continue to develop listening, speaking, reading and writing skills at an advanced level.

Grade: 9, 10, 11, 12
Length: 40 weeks
Prerequisite: Successful completion of Seneca I
Credit: 1.0
Level: R

SENECA III
Student's work on advanced Seneca grammar, reading, writing, speaking and listening comprehension according to the learning standards mandated by the New York State Syllabus. A comprehensive exam that covers content from level II, III, and I will be required at the end of this course. Seneca/Iroquois culture is incorporated in all areas.

Grade: 10, 11, 12
Length: 40 weeks
Prerequisite: Successful completion of Seneca II
Credit: 1.0
Level: R+

SENECA IV
Students will focus on traditional lessons (traditional gardening, clothing, tools, and crafts) and Seneca philosophies with an emphasis on language immersion through listening and speaking in the form of authentic language experiences.

Grade: 11, 12
Length: 40 weeks
Prerequisite: Successful completion of Seneca III and passing Checkpoint B exam
Credit: 1.0
Level: R+

SENECA V
Students will continue their lessons on the Seneca traditions and Seneca philosophies. An emphasis will be placed on traditional speeches used in the Seneca community.

Grade: 12
Length: 40 weeks
Prerequisite: Successful completion of Seneca IV
Credit: 1.0
Level: R+

SPANISH I
Students develop the skills necessary to read, write, speak and listen in Spanish at a beginner level. The goal of this class is to be able to form simple sentences in order to communicate at a basic level.

Grade: 9, 10, 11, 12
Length: 40 weeks
Prerequisite: None
Credit: 1.0
Level: R

SPANISH II
This is an intermediate course in which students begin to learn grammar at a more advanced level, such as communicating in the past tense. Students will continue to build on their vocabulary, listening, reading and writing abilities through more informal as well as formal communicative interactions. A more student centered approach will be taken, in which students will begin writing more fluid sentences, paragraphs and essays in Spanish on their own. Emphasis will be placed on reading for comprehension, as students continue to develop their vocabulary and begin reading longer passages in Spanish.

Grade: 10, 11, 12
Length: 40 weeks
Prerequisite: Successful completion of Spanish I
Credit: 1.0
Level: R

SPANISH III
Students deepen their understanding of Spanish by focusing further on the communicative aspect of the language in the areas of speaking, reading, writing and listening. They will communicate with others through more informal speaking and writing interactions and express their thoughts and opinions in both formal and informal spoken and written contexts. Students are expected to be actively engaged in their learning, using correct vocabulary terms and phrases naturally and incorporating a wide range of grammatical concepts consistently while speaking and writing in Spanish. The course is conducted mostly in Spanish.

Grade: 10, 11, 12
Length: 40 weeks
Prerequisite: Successful completion of Spanish II
Credit: 1.0
Level: R+

SPANISH IV
This is an advanced course for those students looking to sharpen their skills in the four areas of language learning: reading, writing, listening and speaking. Students will develop advanced grammar skills and continue to strengthen their vocabulary through formal and informal instruction. Students will read several short stories in Spanish, in which there will conduct informal discussions. Students will also identify literary elements within those stories, compare and contrast and analyze the works through formal and informal writing and essays. Students will gain knowledge of culture in Latin America but also of the diversity within it. This course is conducted mostly in Spanish.

Grade: 11, 12
Length: 40 weeks
Prerequisite: Successful completion of Spanish III and passing Checkpoint B exam.
Credit: 1.0
Level: R+

AP SPANISH LANGUAGE AND CULTURE
This advanced course is intended for students who are ready to learn Spanish at the college level. This course is a continuation of Spanish IV, as students will continue to build advanced grammar skills and widen their vocabulary range. Students will engage in authentic short stories and readings that delve into Latin American culture. We will discuss, analyze and compare works through informal and formal conversations as well as writings (essays, short answer responses, etc.). Students will also continue to identify literary elements within these stories and use their knowledge of such to create their own short stories. Readings will not only consist of short stories but other authentic texts, such as newspapers and magazines. Students will come prepared to class to discuss these texts. Class will be conducted mostly in Spanish and students will be expected to speak Spanish in class with little to no use of English.

Note: Students will take the AP Spanish Language and Culture exam at the end of this course.

Grade: 12
Length: 40 weeks
Prerequisite: Successful completion of Spanish IV
Credit: 1.0
Level: Advanced Placement

MATH

PRE-ALGEBRA
This full year course is designed for students who have completed a middle school mathematics sequence but are not yet ready for Algebra. This course reviews key algebra readiness skills from the middle grades and introduces basic Algebra 1 work with appropriate support. Students revisit concepts in number and operations, expressions and equations, ratio and proportion, and basic functions. By the end of the course, students are ready to begin a more formal high school Algebra I study.

Grade: 9
Length: 40 weeks
Credit: 1.0
Level: G

ALGEBRA IA
This is part 1 of the 2-year Algebra I course. Students will study the relationships between quantities, reasoning with equations, graphs, statistics, and linear and exponential functions. Students are placed in this course based on results of 8th grade testing.
After completion of this course students will take a local final exam, which will count as 15% of their final grade and will advance to Algebra IB.

Grade: 9
Length: 40 weeks
Prerequisite: Completion of 8th grade Math and received a 1 or 2 on NYS Math 8 Exam
Credit: 1.0
Level: G

ALGEBRA IB
This is part 2 of the 2-year Algebra I course. Students will study polynomials, quadratics, and modeling equations in addition to continuing their study of functions.
After completion of this course students take the Algebra I Regents Exam, which will count as 15% of their final grade and will advance to Geometry if they pass the regents or Explorations of Geometry if they do not pass the regents.

Grade: 10
Length: 40 weeks
Prerequisite: Algebra IA
Credit: 1.0
Level: R

ALGEBRA I
This course will cover the entire Common Core Algebra I in one year. Students will study quantities, expressions, equations, graphs, statistics, functions, polynomials, quadratics and more. Students are placed in this course based on results of the NYS Math 8 Exam.
After completion of this course students take the Algebra I Common Core Exam, which will count as 15% of their final grade and will advance to Geometry if they pass the CC exam or Explorations of Geometry if they do not pass the exam.

Grade: 9

Length: 40 weeks
Prerequisite: Completion of 8th grade Math and received a 3 or higher on the NYS Math 8 Exam.
Credit: 1.0
Level: R

EXPLORATIONS OF GEOMETRY
This course will review equations, inequalities, polynomials, and functions to get students ready to retake the Algebra I CC exam in January. Second semester the course will focus on basic Geometry concepts such as quadrilaterals, polygons and triangles. After completion of this course students will take a local exam, which will count as 15% of their final grade and will advance to Geometry, Statistics or Consumer Math.

Grade: 10, 11
Length: 40 weeks
Prerequisite: Algebra I CC or Algebra IB CC and did not pass the Algebra I CC exam
Credit: 1.0
Level: G

GEOMETRY
ACCELERATED GEOMETRY
This course will cover a thorough study of geometric concepts involving polygons, circles, coordinate geometry, proofs, logic, locus, quadratic equations, and more.
After completion of this course students will take the Geometry Common Core Exam, which will count as 15% of the final grade and will advance to Algebra II CC, Statistics, or Consumer Math.

Grade: 10, 11
Length: 40 weeks
Prerequisite: Algebra I CC or Algebra IB CC/ Accelerated
Credit: 1.0
Level: R

APPLIED MATH for TECHNOLOGY I (MAT 1260 JCC 3 credits)
Students will learn how to solve technology related problems using algebra, geometry, and trigonometry. Special emphasis will be placed on applications to machinist work, welding, and similar disciplines. This course is designed to meet the specialized needs of students in technology-related disciplines and is not recommended for engineering or mathematics majors.

Grade: 11, 12
Length: 40 weeks
Prerequisite: Successful completion of 2 math credits
Credit: 1.0
Level: College

CONSUMER MATH
This course is designed to fulfill general math credits for high school students. The focus is on applying basic math skills to mathematical techniques used in real life situations. The courses will include a review of basic math skills, applications of basic algebra, and the practice of solving practical business problems. The practical applications include payroll calculations, planning a budget, managing checking and savings accounts, managing expenses, credit card use, loans, vehicle and housing cost, insurance cost, investments, business decisions and business finances.

After completion of this course students will take a local final, which will count as 15% of their final grade.

Grade: 11, 12
Length: 40 weeks
Prerequisite: Completion of Geometry or Explorations of Geometry
Credit: 1.0
Level: G

ALGEBRA II
This course will include solving specialized equations and the development of concepts of functions, especially trigonometric.
After completion of this course students will take the Algebra II Common Core Exam, which will count as 15% of their final average and will advance to Pre-Calculus, Statistics, or Consumer Math.

Grade: 11, 12
Length: 40 weeks
Prerequisite: Completion of Geometry
Credit: 1.0
Level: R+

ACCELERATED ALGEBRA II
This course will include solving specialized equations and the development of concepts of functions, especially trigonometric.
After completion of this course students will take the Algebra II Common Core Exam, which will count as 15% of their final average and will advance to Pre-Calculus.

Grade: 10
Length: 40 weeks
Prerequisite: Completion of Geometry & passed Geometry Exam.
Credit: 1.0
Level: R+

PROBLEM SOLVING WITH MATHEMATICS (MAT 1500 – JCC 3 credits)
Students will develop problem solving skills through a detailed study of topics such as financial mathematics, linear and exponential modeling, and geometry, in concert with specific problem-solving strategies such as drawing, diagrams, making systematic lists, looking for patterns, identifying subproblems and working backwards. Solution presentations and communication are emphasized.

Grade: 11, 12
Length: 20 weeks
Eligibility: ENG 1510 without supports or Corequisite: ENG 1510 with supports AND one of the following criteria: HS GPA 80+ and either Algebra I Regents 75+ or Algebra I course average of 80+ ACCUPLACER QAS score 246+ or meets eligibility requirements for any higher-level math course
Credit: 0.5
Level: College

ELEMENTARY STATISTICS (MAT 1540 – JCC 3 credits)
Students will investigate various topics in both descriptive and inferential statistics including measures of central tendency and spread, graphical analysis of data, probability, random sampling, correlation

and regression, hypothesis testing and confidence intervals. Practical applications are emphasized throughout the course. An approved graphing calculator is required, as is Minitab software.

Grade: 11, 12
Length: 20 weeks
Prerequisite: Successful completion of MAT 1500 or Successful completion HS Algebra II or higher & HS GPA 80+ or Accuplacer QAS score of 255+
Credit: 0.5
Level: College

PRE-CALCULUS (MAT 1600 Pre-calculus JCC 4 credits)
This course includes a thorough study of functions, and their graphs, linear, polynomial, and exponential logarithmic and trigonometric functions, analytic trigonometry and a preview of Calculus. It is intended for students who have completed the 3-year NYS math sequence and have passed at least two common core math exams. The JCC math department designs the curriculum and final exam. This is a one-semester college course take for the entire year. (MAT 1600). This course will give the student 4 college credits from Jamestown Community College if passed with a "D" or better. A grade of "C" or better is required for transferring to other colleges.
After completion of this course students will take a local for college final which will count as 15-20% of their final grade and will advance to JCC Math 1710.

Grade: 11, 12
Length: 40 weeks
Prerequisite: Successful completion of Algebra II w/ 80+, Algebra II Regents score 80+, Accuplacer QAS score of 280+ or completion of MAT 1590
Credit: 1.0
Level: College

CALCULUS and ANALYTIC GEOMETRY I (MAT 1710 JCC 4 credits)
A course in college Calculus with elementary functions. JCC math department designs curriculum and final exam. A one-semester college course taken for the entire senior year, College Course #1710. This course will give the student **four college credits** from Jamestown Community College if passed with a "D" or better. A grade of "C" or better is required for transferring to other colleges. After completion of this course students will take a college final, which will count as 25% of their final grade for the JCC course and 15% for the high school course

Grade: 12
Length: 40 weeks
Prerequisite: Successful completion of HS Pre-Calculus or MAT 1600
Credit: 1.0
Level: College

CALCULUS and ANALYTIC GEOMETRY II (MAT 1720 JCC 4 credits)
Students will further their study of calculus. Topics include applications of the definite integral such as volume, surface area and arc lengths, logarithmic and exponential functions, trigonometric and hyperbolic functions, techniques of integration, polar coordinates, parametric equations, improper integrals, and sequences and series including power series and Taylor series. An approved graphing calculator is required. A computer algebra system such as DERIVE is incorporated into the course.

Grade: 12

Length: 40 weeks
Prerequisite: Successful completion of MAT 1710
Credit: 1.0
Level: College

AP COMPUTER SCIENCE PRINCIPLES
Introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. You can pursue your interests in digital projects like: apps, films, games or music – that showcase your creativity, and use your creations to make a difference in your community. In today's digital world, it is imperative students gain a working knowledge of technology and how to leverage that knowledge for school and beyond.

Note: Computer Science Principles can be used as a third unit of Math or Science. Students will also have the opportunity to take the AP exam in Computer Science Principles.

Grade: 10, 11, 12
Length: 40 weeks
Prerequisite: none
Credit: 1.0
Level: Advanced Placement

SAT PREP
SAT Prep is designed to help prepare students for the SAT test. In addition to reviewing the basic verbal and mathematical skills assessed on the SAT test, students learn test-taking strategies specific to the exam. Although all sections of the SAT will be covered, emphasis will be placed on mathematics.
The Math Test will focus in depth on the three areas of math that play the biggest role in a wide range of college majors and careers:

- Heart of Algebra, which focuses on the mastery of linear equations and systems.
- Problem Solving and Data Analysis, which is about being quantitatively literate.
- Passport to Advanced Math, which features questions that require the manipulation of complex equations.

The Math Test also draws on Additional Topics in Math, including the geometry and trigonometry most relevant to college and career readiness.
Material includes samples with explanations, grading rubrics for peer and self-assessment, practice tests with complete multiple-choice assessments, and study resources. Independent practice is followed by guided collaborative review. Upon successful completion, students will possess the tools necessary to complete the SAT to the best of their ability.

Grade: 11, 12
Length: 20 weeks
Prerequisite: none
Credit 0.5
Level: G

COMPUTER SCIENCE/INFORMATION TECHNOLOGY

COMPUTER GAME DESIGN
The field of game design encompasses everything to do with creating and publishing games. Game design draws from the fields of computer science and programming, creative writing, psychology and graphic design. Game designers are the creative force behind imagining and bringing to life video game experiences. In this course students will be applying principles of coding to create various video games which will be designed using the 5-Step Design Process. Students learn to type coding languages like JavaScript, Python and HTML as well as learning the fundamentals of computer science and ethical hacking.

Grade: 9, 10, 11, 12
Length: 20 weeks – 1st semester
Prerequisite: none
Credit: 0.5
Level: G

INTRODUCTION TO COMPUTER SCIENCE (JCC CSC 1510 - JCC 3 credits)
In this course students will develop computer literacy by studying an overview of computing and a brief introduction to programming through hands on activities with Spheros, AR/VR and Raspberry Pi. Topics include a history of computers and computing, computer system components, data representation, the impact of computers on society, cyber security, computer ethics, an introduction to data communications and programming in a structured language.

Grade: 9, 10, 11, 12
Length: 20 weeks - 2nd Semester
Prerequisite: none
Credit: 0.5
Level: College

INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS (GIS 201- Fredonia 1.5 credits)
Geographic Information Systems (GIS) is a technology that plays a significant role in our daily lives. Location influences many aspects of our decision-making processes about where we live, shop, recreate, receive medical care, and even volunteer. This class will provide students with an understanding of how location-based information stored in local databases or from the Cloud can be integrated with local digital data to yield new visual insights into spatial data analysis. Come learn the art, science, and technology behind map apps such as Google Maps, Waze, The Johns Hopkins Covid-19 map site, etc.

Grade: 10, 11, 12
Length: 20 weeks- 1st semester
Prerequisite: None
Credit: 0.5
Level: College

APPLIED GIS FOR COMMUNITY SERVICE (GIS 201 – Fredonia 1.5 credits)
This course gives students practical experience applying GIS skills to meet specific needs of the Seneca Nation, the City of Salamanca, your own neighborhood. Projects related to natural resource management, land boundary disputes, housing inventory, social services, flood modelling, water

quality and erosion mitigation, as well as emergency response will be undertaken to give students a leg up when applying for GIS related summer jobs or internships.

Grade: 10, 11, 12
Length: 20 weeks – 2nd semester
Prerequisite: GIS 201
Credit: 0.5
Level: G

PROGRAMMING CONCEPTS/APPLICATIONS (CSC 1570- JCC 3 credits)
Students will learn the components of the programming cycle including problem analysis, algorithm development, design implementation, debugging, and acceptable documentation standards. Students will implement their algorithms using an object-oriented programming language.
Master Course Syllabus

Grade: 10, 11, 12
Length: 20 weeks - 1st semester
Prerequisite: MAT 1590 (or higher)
Credit: 0.5
Level: College

COMPUTER PROGRAMMING, I (CSC 1590- JCC, 3 credits)
Students will learn algorithm development and object-oriented program design using an object-oriented language such as Java. Topics include control structures, program debugging, documentation, user-defined methods, parameter passing, graphical user interfaces, arrays, and user-defined classes. Students spend a substantial amount of out-of-class time working on computer projects. This class is college credit through JCC; *students can also choose to register and take the AP Computer Science A exam*.

Grade: 10, 11, 12
Length: 20 weeks – 2nd semester
Prerequisite: CSC 1570
Credit: 0.5
Level: College & Advanced Placement

MUSIC

MIXED CHORUS
This course will give any student the opportunity to improve their vocal skills through accompanied, A Cappella and solo performances. Students will learn how to read music and rhythms at a music level of III-IV. A rotation system is used for pull out of class lessons for this course. Performances and concerts in and out of school are a mandatory part of the course requirement.
*Mixed Chorus will fulfill the 1 Fine Arts graduation requirement.

Grade: 8, 9, 10, 11, 12
Length: 40 weeks
Prerequisite: None
Credit: 1.0
Level: G

SELECT CHORUS
This course will give select students the opportunity to improve their vocal skills through accompanied, a Cappella and solo performances. Students will learn how to read music and rhythms at a music level of V-VI. Students will be expected to prepare pieces for solo festival, various competitions and individual assessments. A rotation system is used for pull out of class lessons for this course. Performances and concerts in and out of school are a mandatory part of the course requirement.

Grades: 8, 9, 10, 11, 12
Length: 40 weeks
Prerequisite: Audition and Music Teacher Recommendation
Level: G

SYMPHONIC BAND
This course will give experienced students the opportunity to improve their instrumental skills through ensemble and solo situations. Students will learn how to read music and rhythms at a music level of III-IV. A rotation system is used for pull out of class lessons for this course. Performances and concerts in and out of the school are a mandatory part of the course requirement.
*Symphonic Band will fulfill the 1 Fine Arts graduation requirement.

Grade: 8, 9, 10, 11, 12
Length: 40 weeks
Prerequisite: None
Credit: 1.0
Level: G

CONCERT BAND
This course will give experienced students the opportunity to improve their instrumental skills through ensemble and solo situations. Student will learn how to read music and rhythms at a music level of V-VI. Students will be expected to prepare pieces for solo festival, various competitions and individual assessments. A rotation system is used for pull out of class lessons for this course. Performances and concerts in and out of school are a mandatory part of the course requirement.

Grade: 8, 9, 10, 11, 12
Length: 40 weeks
Prerequisite: Audition and Teacher Recommendation
Credit: 1.0
Level: G

MUSIC THEORY
Students will study the fundamentals of music, which includes Major and Minor Scales, intervals chord structure, beginning composition and arranging, plus simple rhythmic and tonal dictation. This course is open to any student.

Grade: 9, 10, 11, 12
Length: 40 weeks
Prerequisite: None
Credit: 1.0
Level: G

MUSIC THEORY II
Building upon the Music Theory course, this course is the advanced study of the fundamentals of music, which includes Major and Minor Scales, intervals chord structure, beginning composition and arranging, plus simple rhythmic and tonal dictation.

Grade: 10, 11, 12
Length: 40 weeks
Prerequisite: Music Theory
Credit: 1.0
Level: G

INTRO TO PIANO
This will be an introduction to piano and music for those who have little to no experience or need a review of the very basics. You will learn how to read music, find notes on the piano and other essentials so you can begin playing pieces. Students who have experience will also be able to take this course as it is a “learn at your own pace” class. This class will use the Alfred Method.

Grade: 9, 10, 11, 12
Length: 20 weeks
Prerequisite: At least 1 year of Chorus/Band OR if any student has taken privately, they can take a beginner assessment.
Credit: 0.5
Level: G

INTRO TO GUITAR

This will be an intro course to study beginning guitar and guitar styles. All students will be introduced to a core curriculum of basic techniques that includes: correct instrument posture, aural skills, folk/pop/rock chord types (major, minor, and 7th chords) and standard strumming styles for accompaniment and blues patterns. In addition, students will learn how to read music notation and chord symbols. Students will be able to learn at their own pace. This class will use the Mel Bay Method.

Grade: 9, 10, 11, 12
Length: 20 weeks
Prerequisite: None
Credit: 0.5
Level: G

HEALTH/PHYSICAL EDUCATION

HS HEALTH

The World Health Organization states “Health is a state of complete physical and social well-being, not merely the absence of disease or infirmity.” Health is a dynamic, multi-dimensional state of well-being (physical, mental, emotional, social, and spiritual) that is variable, constantly changing and never stable. Upon completion of the course, a student will have a basic understanding of the following components of Health.

Mental Health – The student will be able to think clearly, express feelings, make responsible decision and handle stress.

Social Health – The student will become aware of friendship and dating skills, effective communication and peer pressure.

Nutrition – The student will become aware of nutritious eating habits, eating disorders, weight control and consequences of improper nutrition.

Drugs– The student will attain a foundation for responsible decision making in the use of medicine, in prevention, treatment, rehabilitation, and legal action in the misuse/abuse of chemicals.

Disease & Disorders – The student will explore various communicable diseases and disorders.

Community and Environment – The student will study ways to maintain and promote the health of people and places around you.

Parenting-Students will attain information on responsible parenting, including care and healthy family dynamics.

Grade: 10, 11, 12
Length: 20 weeks
Prerequisite: None
Credit: 0.5
Level: G

PHYSICAL EDUCATION

A change of clothing is needed – sneakers, shorts or sweatpants, t-shirt or sweatshirt; a swimsuit and towel are needed for pool activities.

Over twenty activities are offered with an emphasis on lifetime sports. Students are required to take two or three activities each marking period. Students are graded on attendance, participation, social skills and unit skills. The only time a student can receive credit without participation is a medical excuse from the doctor and they will need to complete a physical education work packet.

** 2 credits of Physical Education are required for graduation.

Students in senior high schools shall be provided instruction in hands-only (CPR) cardiopulmonary resuscitation and the use of an automated external defibrillator. Students must participate in CPR instruction to meet HS graduation requirements.

Grade: 8, 9, 10, 11, 12
Length: 40 weeks/alternate days
Prerequisite: None
Credit: 0.5 (Grades 9-12)
Level: G

STRENGTH AND CONDITIONING
This class will provide students with an opportunity to learn how to properly and safely workout in the weight room. Each student will be taught and will practice specific strength, speed, conditioning, power, and flexibility techniques. Workout routines will be developed and recorded using our PLT4M (Platform) program along with individualized workouts based off different students.

Grade: 9, 10, 11, 12
Length: 40 weeks/alternate days
Prerequisite: None
Credit: 0.5
Level: G

SCIENCE

LIVING ENVIRONMENT
ACCELERATED LIVING ENVIRONMENT
This class focuses upon biological processes such as photosynthesis, cellular respiration and protein synthesis. We will immerse ourselves into the body systems and take an in-depth view on digestion, circulation, excretion, reproduction, skeletal and muscle systems, to name a few. There will be videos throughout the year that reinforce the class topics. Additional topics of study will include Evolution, as we follow in the footsteps of Charles Darwin, and Genetics as we look at the findings of the Austrian Monk Gregor Mendel. We will also look at the interactions of organisms in their food webs with a unit on Ecology. There will be several projects that allow students to demonstrate their knowledge of the class material in creative ways. This course features four New York State required labs. Students will be tested on these four labs on the Regents Exam.

Grade: 9
Length: 40 weeks
Prerequisite: None; Accelerated
Credit: 1.0
Level: R

EARTH SCIENCE
ACCELERATED EARTH SCIENCE
Earth Science incorporates four branches of Science including Astronomy, Meteorology, Oceanography and Geology. Students will explore the Cosmos with a focus on our own Solar System including our neighboring stars, the Sun, planets, the moon and our own Earth. Students will discover the nature and history of our dynamic planet learning about the forces that influence, affect and create the landscape around us. We will investigate the forces of gravity, wind, water, plate tectonics, weather systems, and volcanology that help to change our planet in our daily life. Critical thinking skills will prepare you for the ever changing and new technological advances in society. Earth Science Lab is required and is incorporated into the students schedule to follow the Earth Science Class. Students will perform experiments that are analogous to the functioning Earth.

Grade: 10
Length: 40 weeks
Prerequisite: None; Accelerated
Credit: 1.0
Level: R

ZOOLOGY (BIO 1515/1520/1540/1560 - JCC 1 credit each)
This College Credit Course is actually four separate 1-credit courses. 1st Quarter: **Insects 1540**, 2nd Quarter: **Reptiles and Amphibians 1515**, 3rd Quarter: **Mammals 1560**, 4th Quarter: **Birds 1520**. Field Trips are tentatively planned for Owl Banding, Insect Collecting, Niagara Falls Aquarium, Jamestown Audubon Society, and Roger Tory Peterson Institute. Students that are absent on the day of a test or quiz will get a 0%. (JCC Policy)

INSECTS 1540: COURSE DESCRIPTION:
This course studies insects, the most abundant and diverse group of animals on our planet. Students will learn about basic anatomy and physiology, evolutionary history, classification and identification, behavior, and ecological and economic importance. Field trips and an insect collection are required. Outdoor fieldwork included (weather permitting).

MAMMALS 1560: COURSE DESCRIPTION:
This course studies mammals, a group of animals that include the largest and some of the most intelligent animals on the planet. Students will learn about basic characteristics, evolutionary history, classification and identification, behavior, and ecological and importance. Field trips and outdoor fieldwork included (weather permitting).

BIRDS 1520: COURSE DESCRIPTION:
This course studies birds, one of the most colorful and easily observed groups of animals on the planet. Students will learn about basic characteristics, evolutionary history, classification, identification by sight and song, behavior, and ecological and importance. There is a mandatory project that will be a part of the School's Science Fair in May. Field trips and outdoor fieldwork included (weather permitting).

REPTILES & AMPHIBIANS 1515:
This course studies amphibians and reptiles, the first terrestrial vertebrates to evolve. Although these two groups of organisms tend to be thought of together, they are quite different. Students will learn about basic anatomy and physiology, evolutionary history, classification and identification, behavior, and ecological and economic importance. A field trip, videos and dissection are all part of this course.

GENERAL STUDENT LEARNING OBJECTIVES: At the completion of this course, the student will be able to:

1. Identify and compare insect, mammal, and bird morphologies to other insects, mammals, and birds.
2. Utilize scientific classification, organization, and taxonomic nomenclature.
3. Explain the principle of evolution and its application to the evolutionary history of insects, mammals, and birds.
4. Identify and explain environmental influences.
5. Apply a basic knowledge of the evolution of insect, mammals, and bird behaviors.

Grade: 11, 12
Length: 40 weeks
Prerequisite: Accuplacer Reading 80+/250+
Credit: 1.0
Level: College

CHEMISTRY
In this college-preparatory class students will perform in-depth studies about phases of matter, atomic structure and theory, radioactivity, nuclear power, and chemical bonding. Students will unravel the mystery of the periodic table, learn about the formation of compounds, and research several laws of nature. The fledgling scholars will also learn how to control the rates of chemical reactions, create and classify solutions, and how electricity and many products we use are created. To help reinforce these concepts, students will see demonstrations that go boom, chemical reactions that go zoom, and experiments that make a smoke plume. This course features New York State required labs.

Grade: 10, 11
Length: 40 weeks
Prerequisite: must have earned a 90 class average in Regents Living Environment and scored an 85 on the Regents Living Environment Examination or instructor permission.
Credit: 1.0
Level: R+

AP CHEMISTRY
The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first college year. The course centers around six big ideas and seven science practices:

Big Ideas	Science Practices
1. Structure of Matter	1. Drawing, explaining, and interpreting representations
2. Bonding and Intermolecular Forces	2. Using mathematics and logical routines appropriately
3. Chemical Reactions	3. Asking and refining scientific questions
4. Kinetics	4. Designing and implementing data collection strategies
5. Thermodynamics	5. Analyzing and evaluating data
6. Chemical Equilibrium	6. Making predictions and justifying claims with evidence
	7. Connecting chemistry concepts across the big ideas.

Students who take the AP Chemistry course, designed with this curriculum framework as its foundation will develop a deep understanding of the concepts within the big ideas through the application of the science practices in the required laboratory component of the course. Students must complete a minimum of 16, hands-on lab investigations to support the learning objectives in the curriculum framework. At least six of the lab investigations must be guided inquiry-based labs. The result will be readiness for the study of advanced topics in subsequent college courses
Students must pass their Chemistry Regents final exam with an 85% or better or must get instructors approval before entering the course.

Grade: 11, 12
Length: 40 weeks
Prerequisite: Pass Regents Chemistry exam with 85+ or instructor permission
Credit: 1.0
Level: Advanced Placement

PHYSICS (not offered 22-23)
Students will use various laboratory experiments to learn the fundamental phenomena, principles, and laws of physics. They will study motion, Newton's Laws, torque and the principles of work and energy using algebra and trigonometry. Student will also study applications of these concepts in various fields of manufacturing.

Grade: 11, 12
Length: 40 weeks
Prerequisite: See instructor for requirements
Credit: 1.0
Level: R+

FORENSICS
This third year of science will explore evidence collected by investigators at a crime scene. The course will start with learning the proper way to collect evidence at a crime scene, along with the roles of police, investigators, and CSI and lab technicians. Students will primarily study class evidence including fingerprints, hair, fiber, handwriting, tool marks and impressions. Additionally, students will study the Innocence Project along with high profile cases such as the OJ Simpson case, Casey Anthony and Jon Benet Ramsey. Grades will be collected through guided notes, group projects and discussions, videos, lab work and regular assessments.

Grade: 11, 12
Length: 20 weeks
Prerequisite: None
Credit: 0.5
Level: G

ENVIRONMENTAL SCIENCE
Environmental Science incorporates more of the social science for understanding human relationships, perceptions and policies towards the environment. Students will study our Environment and our role in it. We will explore the Earth's processes, both natural and human related. Students will explore the problems of the Environment and possible solutions. Students will study endangered animals across the globe and provide research for an animal of their choice. Human related disasters will be explored with a concentration on the close proximity of the Love Canal located in Niagara Falls. The course will provide awareness of a need for action in addressing environmental problems. Events that spurred this development included the publication of Silent Spring, written by the late Rachel Carson. Alternative energy and other forms of energy will be reviewed with an overlook of the nuclear fallout of Chernobyl. Lab activities will include decomposition, global warming, and alternative energy.

Grade: 11, 12
Length: 20 weeks
Prerequisite: None
Credit: 0.5
Level: G

EMERGENCY MEDICAL/SEARCH & RESCUE
This science course is an elective for students interested in personal and community safety and basic emergency response. This course is modeled after the TEEN CERT (Community Emergency Response Team) program and will include basic first aid, emergency preparedness and response, incident command structures, community engagement.
This course is teamed with Computer Science A, & Robotics, Drones and Rovers

Grade: 11, 12
Length: 40 weeks
Prerequisite: None
Credit: 1.0
Level: G

INTRODUCTION TO DRONES
This course will guide students through a web-based LMS where students will learn about the structure, function, rules and regulation of drones as well as practical application and hands on skills practice using a variety of different drones. The students' final exam will be the FAA Part 107 exam to become a certified remote pilot (must be 16 years old when taking the exam). This license will be required to take the advanced drones' course.

Grade: 11, 12
Length: 20 weeks
Prerequisite: None
Credit: .5
Level: G

ADVANCED DRONES
Students will use their skills, knowledge and pilot license learned from Intro to Drones and apply them to real-world scenarios and will take part in numerous school and community projects that will put students' skills to the test. Students will work with a variety of different software programs and will use them with the drone to accomplish many different objectives. This course will give students the skills and knowledge necessary to become gainfully employed as a remote pilot. Successful completion of Intro to Drones, minimum age of 16 and receiving the pilot's license is required to enter this course.

Grade: 11, 12
Length: 20 weeks
Prerequisite: Introduction to Drones
Credit: .5
Level: G

ROBOTICS
Robotics is an introductory course designed for students who are interested in learning more about robots, programming, engineering and manufacturing. Each student will learn the basics of computer programming and its place in the world of robotics, how to take an idea from design to proto-type to final production, and each student will build their own robot designed specifically to accomplish certain tasks. Students will explore design and functions of different sub-systems of a robot including elevator lifts, claws and pickup mechanisms, linear motion systems and slides, chassis and drive train and pneumatics. Students will be given the opportunity to enter into several robotics competitions including a VEX robotics regional competition (mandatory) as well as be a part of the FRC and FTC robotics teams. Students should have an interest in robots, computers, programming, tools and working with their hands and with others. There are no pre-requisites for this course. Other components to the course include competition strategy, working with alliances, team scouting, tools and work space organization. Students who successfully complete the first semester of Robotics and are interested in building on that knowledge and experience can continue with a 2nd semester of Robotics. Students will be required to help with the FRC and FTC robotics teams to design and proto-type robotics sub-systems. Students will also be required to help build an archive of different sub-systems such as elevator lifts, claws and pickup mechanisms, linear motion systems and slides, chassis and drive train and pneumatics. The culminating project for the course will include a unique build of a subsystem that accomplishes the goals provided in the final project outline. Students may enroll for 1 or 2 semesters.

Grade: 9, 10,11,12
Length: 40 weeks
Prerequisite: None
Credit: 1.0
Level: G

SOCIAL STUDIES

GLOBAL STUDIES 9
Ninth grade Global Studies covers ancient world history. The curriculum contains the themes of world history, geography, economics, and political systems from pre-history to 1750. The ninth-grade curriculum has 4units of study and 9 Regents standards integrated within it.

Grade: 9
Length: 40 weeks
Prerequisite: None
Credit: 1.0
Level: R

GLOBAL STUDIES 9 HONORS
Global Studies 9 Honors covers ancient work history. The curriculum contains the themes of world history, geography, economics, and political systems from pre-history to 1750. The ninth-grade curriculum has 4 units of study and 9 Regents standards with in it, and provides the foundation for the content tested on the Global Studies 10 regents exam.

Grade: 9
Length: 40 weeks
Prerequisite: See *pg. 11, *Completion of Summer Reading program required &* 8th grade teacher recommendation
Credit: 1.0
Level: H

GLOBAL STUDIES 10
Global Studies 10 covers modern world history. The tenth-grade curriculum contains the regents themes of world history, geography, economic systems, and political systems from 1750 to the present day. The tenth-grade curriculum has 4 units of study and 10 Regents' standards within it. The assessment is a state Regents exam based on document based comprehensive questions, document-based constructed response questions, and an enduring issue essay.

Grade: 10
Length: 40 weeks
Prerequisite: Successful completion of Global Studies 9
Credit: 1.0
Level: R

GLOBAL STUDIES 10 HONORS
Global Studies 10 Honors covers modern world history. The tenth-grade curriculum contains the regents themes of world history, geography, economic systems, and political systems from 1750 to the present day. The tenth-grade curriculum has 4 units of study and 10 Regents' standards within it. The assessment is a state Regents exam based on document based comprehensive questions, document based constructed response questions, and an enduring issue essay.

Grade: 10
Length: 40 weeks

Prerequisite: *See pg. 11*, **Completion of Summer Reading program required,* successful completion of Global Studies 9 Honors, and 9th grade teacher recommendation
Credit: 1.0
Level: H

US HISTORY AND GOVERNMENT
This course contains units about U.S. geography, background of U.S. Government, the Constitution as a foundation of our society, and Constitutional issues reflected in court decisions. It also includes a chronologically organized course in U.S. History from pre-colonial days to the present with an emphasis on the U.S. as an industrialized nation and our relationships with the rest of the world. Passing this Regents exam is required for graduation.

Grade: 11
Length: 40 weeks
Prerequisite: Successful completion of Global Studies 10
Credit: 1.0
Level: R

AP US HISTORY AND GOVERNMENT
This advanced course contains units about US geography, background of the US constitution as a foundation for our society, and constitutional issues reflected in court decisions in much deeper depth than regular class. It also includes a chronologically organized course in US History from pre-colonial days to the present with an emphasis on the US as an industrialized nation and our relationships with the rest of the world. Passing this regents exam is required for graduation.
Admission to this class is based on Honors Class criteria listed on page 11 of this guide.

Grade: 11
Length: 40 weeks
Prerequisite: *See pg. 11*
Credit: 1.0
Level: Advanced Placement

ECONOMICS (transfer students only)
Economics is a semester long course that provides students with an overview of basic economic concepts/principles and how it applies to the real world. Both microeconomics and macroeconomics will be included. There will be a heavy emphasis on current events and local, state and national issues. Finally, a basic understanding of economics in Seneca Territory will be addressed. This course fulfills senior level graduation requirements.

Grade: 12
Length: 20 weeks
Prerequisite: None
Credit: 0.5
Level: R

PARTICIPATION IN GOVERNMENT (transfer students only)
Government is a semester long course that examines the general structure and functions of the local, state, and national government in the United States and including the Seneca Nation of Indians. Students will be required to do community service and attend meetings. They will learn their basic rights and responsibilities as a citizen. This course fulfills senior level graduation requirements.

Grade: 12
Length: 20 weeks
Prerequisite: None
Credit: 0.5
Level: R

ECONOMICS AND GOVERNMENT
Economics/Government Honors is a full year course that combines the NYSED graduation and standards requirements for Government and Economics. The course focuses on the decision-making process, problem solving and civic participation in contemporary times. The premise is that no decision is purely political or economic but a combination of both. Students will be required to analyze current events, perform community service, and attend meetings.

Grade: 12
Length: 40 weeks
Prerequisite: None
Credit: 1.0
Level: R

HONORS ECONOMICS AND AP GOVERNMENT
Honors Economics & AP Government is a full year course that combines the NYSED graduation and standards requirements for Government and Economics. However, this is a more rigorous, reading intensive and writing intensive course. The course focuses on the decision-making process, problem solving and civic participation in contemporary times. The premise is that no decision is purely political or economic but a combination of both. Students will be required to analyze current events, perform community service, and attend meetings.

Note: Students will take the AP Government exam at the end of this course.

Grade: 12
Length: 40 weeks
Prerequisite: *See pg. 11*
Credit: 1.0
Level: H/Advanced Placement

SENECA HISTORY
The course will focus on the history, culture, arts and contemporary experiences of the Seneca. Whereas previously acquired student knowledge focuses on the American Indian experience from pre-Columbian times to the early National period, this course of study is designed for students in grades 11-12 and seeks to connect that knowledge with contemporary issues of Seneca sovereignty, land, government, law, and economic development. Most importantly, students will learn that the Seneca experience is an integral aspect of the American experience from the beginning to the present day.

Grade: 11, 12
Length: 40 weeks
Prerequisite: None
Credit: 1.0
Level: G

INDIGENOUS STUDIES
Students in this full year course will study the journey of the Onodowaga (Refers to Seneca People) that live here in the area of the Allegheny Mountains. Students will make and follow a time line that will give an overview of their historical events and celebrations of the seasonal ceremonial cycle. Along with this timeline, students will utilize hands-on activities that embrace the culture of this great nation, which includes but not limited to: corn husk doll making, basket making, beadwork, traditional food preparation and tasting as well.
This course is an elective and does not meet the WL graduation requirement

Grade: 9,10
Length: 40 weeks
Prerequisite: None
Credit: 1.0
Level: G

SOCIAL HISTORY of ROCK and ROLL
In Social History of Rock and Roll students will examine the creation and social commentary embedded within the most influential music of the modern era. This class will encourage the analysis of music through multiple perspectives including lyrical commentary, the reception from the American/World population, and the coverage/criticism of music by the mainstream media and government. The course will feature an enduring project that will last the entirety of the course. The goal of this project is to connect a student's favorite band or musician to the history of music. Students will identify the influence that musicians and artists, past and present, have had on their chosen band, specifically through the lens of social commentary and historical discourse culminating in a capstone project presentation.

Grade: 11, 12 (10^{th} with Teacher Recommendation)
Length: 20 weeks
Prerequisites: None
Credit: 0.5
Level: G

HUMAN RIGHTS VIOLATIONS (20/21st centuries)
Human rights advocates agree that, sixty years after its issue, the Universal Declaration of Human Rights is still more a dream than reality. Violations exist in every part of the world. Students will learn about the historical context for the creation of the United Nations Declaration of Human Rights, and international organizations who address human rights violations. They will also study several human rights violations and the actions or inaction taken to address them.

Grade: 11, 12
Length: 20 weeks
Prerequisites: Must have passed ELA 9/10; Global History 9/ 10; & passed Global History Regents exam
Credit: 0.5
Level: G

CURRENT EVENTS (How Can You Impact the World?)
Students will select a current issue on which to focus their attention, and examine whether / how the issue is being covered by community leaders, political figures, grassroots initiatives, social media, major local, domestic, and international news outlets, talk shows, online blogs, documentaries,

celebrity initiatives, non-profit organizations, podcasts, cable news shows, books and articles written on the issue, as well as other sources of information. Students will be responsible for delving deeply into the issue and increasing awareness for it across various outlets (social media, writing articles meant for publication, etc.) as well as preparing to present their research to a panel of peers, teachers, and others at the end of the semester. Students will be required to engage in classroom discussions (and possible debates) regarding the issue, as well as interact with individuals beyond the classroom in their quest to gain information and raise awareness. Topic selection will be student-driven. Possible topics include (but are not limited to): social justice; Native American rights; the rise of hate speech in America; the global immigrant crisis; water scarcity; the rise of totalitarian leaders across the world; the loss of land for National Parks; gender inequality; racism; global warming; food waste; sustainability; etc.

Grade: 8, 9, 10, 11, 12
Length: 20 weeks
Prerequisite: None (Grade 8-final course average of 80% or higher to earn honors credit)
Credit: 0.5
Level: G

CIVICS ENGAGEMENT PROGRAM

The Civic Engagement Program or CEP was created by our district to address the civil unrest and lack of civic engagement in our local area and country. Students in this program will gain skills and knowledge in civics, political science, community and peer organizing, social justice, public speaking, and advocacy. Students will be required to participate in class discussions and presentations on these topics. This course is organized into phases by marking period to educate students on our government and social justice institutions and gradually release them to complete a civic based service-learning project that directly impacts their community. These projects qualify as a High School Capstone Project in the New York State Diploma Seal of Civic Readiness. Students will also participate in our district's yearly lobbying for Federal Impact Aid which includes a trip to Washington DC and meetings with multiple, elected Congressional Representatives and Senators. This course requires both rigor and knowledge of multiple disciplines of the social studies and therefore requires a recommendation from a Social Studies teacher for a student to qualify.

Grade: 11, 12
Length: 40 Weeks
Prerequisite: Recommendation from a Social Studies Department Teacher.
Credit: 1
Level: H

TECHNOLOGY AND ENGINEERING

DESIGN AND DRAWING FOR PRODUCTION
This is a Technology and Art Education course, which upon completion will fulfill their fine art requirement needed for graduation. Design and Drawing for Production is also the start to a sequence in Technology and possibly a career. Course content includes orthographic projection, pictorial drawing, sections, auxiliaries, revolutions, and single view drawings. At the end of the course students will have the chance to explore two CAD programs. This course is open to all 9th -12th grade students and is a prerequisite for CAD.
*This course will meet the 1 credit Fine Arts graduation requirement.

Grade: 9, 10, 11, 12
Length: 40 weeks
Prerequisite: None
Credit: 1.0
Level: G

ENGINEERING & DRAWING with AUTOCAD (C.A.D.) (MCT 1240 - JCC 4 credits)
The second step in the technology sequence in which students use computers to produce various types of drawings using AutoCAD and Google Sketchup. The drawings can be turned into solid objects with the magic of our 3D printers. This course will give students a head start with college credit and the possibilities of a career in CAD or engineering. Currently, there is a shortage of people in these fields and the average starting salary for a two years degree in CAD is between $40,000 and $60,000. Every new piece of technology starts with an idea and that idea starts in this room. With the successful completion of this course students will receive College-Credit Engineering certificates in partnership with Jamestown Community College. This course is a prerequisite for Principles of Engineering.

Grade: 10, 11, 12
Length: 40 weeks
Prerequisite: Design and Drawing for Production/Accuplacer Reading 70+
Credit: 1.0
Level: College

INTRODUCTION to SOLID MODELING (MCT 1380 - JCC 3 credits)
Students will be introduced to 3-D modeling software. Much of the course is spent on application of a parametric solid modeler such as Solid Works. Students will learn to create and sketch geometry and parametric solids. Students will also be introduced to detailing and assembly modeling. Emphasis is placed on establishing constraints that correctly convey the design intent.

Grade: 11, 12
Length: 40 weeks
Prerequisite: co-requisite CAD/MCT 1240 or equivalent Accuplacer
Credit: 1.0
Level: College

BASIC ELECTRICITY/ ELECTRONICS
This is a project-based hands on course. Students construct projects such as a lamp, voltage tester, electric motor, electronics kits, and learn home wiring. The course begins with the very basics and continues to study AC and DC voltage, resistors, magnetism, diodes, capacitors, semi-conductors,

power supplies, and integrated circuits. This course introduces students to better understand the function and maintenance of electronic equipment for personal and commercial use, and to aid students in career choices within the vast electronics industry.

Grade: 9, 10, 11, 12
Length: 20 weeks
Prerequisite: None
Credit: 0.5
Level: G

TRANSPORTATION SYSTEMS
Students will be introduced to various transportation systems involving land, air, water and space. Students will practice problem-solving skills by creating vehicles to perform certain tasks such as speed or distance. These vehicles could be a hovercraft, rockets, off-road vehicles, airplanes, or mousetrap powered. Students will be provided with basic information on care and maintenance of two cycle gasoline engines, four-cycle gasoline engines, rotary engines, rocket engines, and diesel engines. Information and test equipment for automobiles will also be covered. Hands on activities with RC cars, show cars, and daily drivers will be a part of this class.

Grade: 9, 10, 11, 12
Length: 20 weeks
Prerequisite: None
Credit: 0.5
Level: G

PRINCIPLES OF ENGINEERING I
PRINCIPLES OF ENGINEERING II
This course puts emphases on STEM (Science, Technology, Engineering and Math) and is designed to challenge students with problem solving exercises. Solutions are formed using resources that are not limited to the Internet, lessons, books, and other classes. This information is used to create, model, build, draw, or construct to make their solution a reality. Students will have the ability to design items that can print with our 3D printers. This course qualifies for a third year of Math or Science. PRINCIPLES OF ENGINEERING II expands and enriches the topics discussed in POE I.

Grade: 11, 12
Length: 40 weeks
Prerequisite: CAD and Design and Drawing for Production
Credit: 1.0
Level: G

PROJECT SAMI– AGRICULTURAL LANDSCAPE TECHNOLOGY
Small Drones/UAVs (Unmanned Aerial Systems) are employed in agriculture for crop observation, crop monitoring, field analysis and map generation through aerial surveys. With the software and 'mission planning tools' available on the market, there is a growing demand for knowledge and understanding of its usage and limitations. According to the Bureau of Labor Statistics (2020), skilled agricultural, or "ag" pilots typically make from $60,000 to $100,000 a year, and those who own spraying businesses can earn much more. This online program consists of fourteen units of study to help students gain the knowledge and skills relevant to the field of agricultural landscaping with a specialization in drone and GIS Technology. Classes will cover landscape ecology, plants, soils,

erosion prevention, GIS-drone mapping and crop inspection technology, as well as landscape modeling and construction, with a special emphasis on agricultural farm management. Practical, hands-on experience will be cultivated with commercial drone flight experience, ArcGIS data collection and mapping labs as well as remote sensing data interpretation, field crop inspection drones, and a capstone community needs project. For the automated and manual flight labs, we will provide a browser-based drone flight simulator and a physical drone for outdoor practice. Additionally, students will be able to utilize a commercial-grade inspection drone for capstone field work. Students who complete this program will secure SUNY college credit in Geographic Information Systems. Students will be qualified to take an industry standard GIS exam (offered by Esri), which will confirm the technician's ability to perform entry-level mapping, visualization, editing, and file geodatabase tasks, the Landscape Industry Certified Technician Exam, required for landscaping technician work and the FAA Commercial Drone Pilot Part 107 exam, which is required in order to fly drones commercially.

Grade: 9, 10, 11, 12
Length: 40 weeks – Distance Learning
Co/Prerequisite: Drones, Introduction to GIS, Applied GIS For Community Service
Credit: 1.0
Level: College

PROJECT SAMI– WILDLIFE & FORESTRY TECHNOLOGY

There are over 900 million hectares of natural forests used for wood production, with the economic value of industrial wood of over $200 billion dollars. Managing such vast tracts of land, properly, can be incredibly time-consuming and expensive. With operations managers surveying such large swaths of land, their conclusions are often muddled or inaccurate. The Wildlife & Forestry Technology certificate program seeks to remedy this industry limitation with cutting-edge technical training on drones & GIS technology. This 20-module program prepares students for an entry-level position in the field of Wildlife and Forestry Conservation. Practical hands-on experience will be cultivated with commercial drone flight, ArcGIS data collection and mapping as well as remote field experiences using forest inspection drones. For the automated and manual flight labs, we will provide a browser-based drone flight simulator and a physical drone for outdoor practice. Moreover, students will be able to utilize a commercial-grade inspection drone for capstone field work. Students who complete this program will secure SUNY college credit in Geographic Information Systems. Additionally, students will be qualified to take an industry standard GIS exam, in ArcGIS (developed by Esri), which verifies a technician's ability to perform entry-level forest mapping, visualization, data editing as well as the FAA Commercial Drone Pilot Part 107 exam, which is required in order to fly drones commercially. Once completed, students will be prepared to work in the natural resources management field, coordinate search and rescue missions with drone technology or assist with forest operations in the logging, mining or oil industry. Their civic capstone project will also verify their understanding of Ecology, GIS & Forestry and must be presented to a forestry operation or local, county or state officials in regard to findings or recommendations.

Grade: 9, 10, 11, 12
Length: 40 weeks-Distance Learning
Co/Prerequisite: Drones, Introduction to GIS, Applied GIS For Community Service
Credit: 1.0
Level: College

PROJECT SAMI– ELECTRICAL CODE & DRONE INSPECTIONS

Unmanned Aerial Vehicles (UAV), also known as drones, are revolutionizing data acquisition in the fields of surveying, construction and inspections. In the energy and utility fields, companies are using drones to survey storm damage, perform equipment inspections, and facilitate preliminary work on electrical structures. In this 15-module program, students will be prepared to conduct entry-level work in electrical system inspection and repair using cutting-edge GIS and drone technology. Students will learn foundational topics such as the nature of electricity, circuit analysis, and types of transmission media. As they progress through the programs, students will become familiar with electrical code, Part 107 drone flight regulations and GIS mapping software. Students who complete this program will secure SUNY college credit in Geographic Information Systems. Additionally, students will be qualified to take an industry standard GIS exam, in ArcGIS (developed by Esri), which measures a technician's ability to perform entry-level utility corridor mapping, visualization, and data editing. For the automated and manual flight labs, we provide a browser-based drone flight simulator and a physical drone for outdoor practice. Students will be able to borrow a commercial-grade inspection drone for capstone field work. Students will receive vouchers to sit for the Electronics Technicians Associations (ETA) International Certification Exam, which verifies the student's ability to troubleshoot and repair electronic devices, The NFPA Certified Electrical Safety Compliance Professional (CESCP) exam, which assesses their learned knowledge of electrical code, ArcGIS Exam and the FAA Commercial Drone Pilot Part 107 Exam, preparing them for an emerging and rewarding career in commercial drone inspections. Once finished, students will be prepared to work for a utility company to check, diagnose and repair the electronic components of the emerging "smart" electronic systems as well as inspect & map conventional power systems, using drone and GIS technology.

Grade: 9, 10, 11, 12
Length: 40 weeks-Distance Learning
Co/Prerequisite: Drones, Introduction to GIS, Applied GIS For Community Service
Credit: 1.0
Level: College

PROJECT SAMI– INFORMATION TECHNOLOGY AND DIGITAL FORENSICS

The Computer Information Systems program will prepare students for entry-level work as Network Managers and Information Forensic examiners. This program covers programming Visual Basic, Java, and HTML coding as well as PC Hardware and Network Design. Students will learn about information technology, the inventory system, email, networks, file and servers, internet marketing and e-commerce, network protocols. Additionally, they will explore how to facilitate a high-tech investigation, from acquiring digital evidence to reporting the findings.
Students who complete this program will secure college credit in Cyber Security. They will receive vouchers for the CompTIA A+, Network+ & Security Exams, which evaluate the knowledge and skills needed to deploy, configure, manage, troubleshoot and secure wireless and wired networks as well as the Global Information Assurance Certification Forensic Examiner (GCFE) Exam, which validates a practitioner's knowledge of computer forensic analysis, with an emphasis on core skills required to collect and analyze data from Windows computer systems. Once finished, students will be able to work as entry-levels Network Managers, IT Support and Information Forensic examiners.

Grade: 9, 10, 11, 12
Length: 40 weeks-Distance Learning
Co/Prerequisite: None
Credit: 1.0
Level: College

PROJECT SAMI– MANUFACTURING TECHNOLOGY
The Manufacturing Technology provides in-depth training of industrial processes to help students prepare to work as an engineering or production technician. The program curriculum includes courses on drafting with AutoCAD, manufacturing materials and processes, quality control systems & engineering technology. Students who complete this program will receive vouchers (4) to sit for the, NIMS CNC Operator Exam, which verifies a technician's ability to program a CNC Mill and Lathe, Autodesk AutoCAD, Inventor & Fusion 360 Exams, which test knowledge and skills in generative design for manufacturing, the Association for Manufacturing Excellence (AME) Lean Manufacturing Exam, that validates industry-driven standards for lean manufacturing practices, and the OSHA Site Safety Train the Trainer Exam, which will certify the student to facilitate OSHA Safety courses at their manufacturing site. Once finished, students will be able to work as entry-levels engineering or production technicians with the skills and certifications necessarily to put their resume at the top of the hiring pile.

Grade: 9, 10, 11, 12
Length: 40 weeks -Distance Learning
Co/Prerequisite: None
Credit: 1.0
Level: College

PROJECT SAMI– ENGINEERING TECHNOLOGY
Mechanical engineering technicians often work as assistants to mechanical engineers in emerging fields such as automation, three-dimensional printing, robotics, and alternative energies. This program is designed to provide in-depth training to help design, build, troubleshoot, and repair a variety of production systems and products. In this program, students will learn the skills necessary to speak and understand the language of the industry and to use the tools of the trade including AutoCAD. Students who complete this program will receive vouchers (4) to sit for the, NIMS CNC Operator Exam, which verify a technician's ability to program a CNC Mill and Lathe, Autodesk AutoCAD, Inventor & Fusion 360 Exams, which test knowledge and skills in generative design for manufacturing. Once finished, students will be able to work as engineering technicians, with the skills and certifications necessarily to put their resume at the top of the hiring pile.

Grade: 10, 11, 12
Length: 40 weeks-Distance Learning
Co/Prerequisite: None
Credit: 1.0
Level: College

PROJECT SAMI– AGRICULTURAL BUSINESS MANAGEMENT (Not available at this time)
Our Agriculture Business Management program provides students with foundational business concepts such as business law, economics, corporate finance that are transferrable across various industries but applied directly to corporate farming. This unique program will grant students with the education they need to launch their own business or join an established agricultural business in an entry-level management position, developing the strategies, plans, procedures, and policies that guide a business on both a day-to-day and long-term basis. Additionally, students will have the opportunity to complete one of five agricultural concentrations in precision aerial technology (drones), large machine mechanics, animal care, carpentry & repair, or organic farming. Students in certain concentrations, will receive vouchers to sit for the Microsoft Office Specialist (MOS) Exam, Project Management Professional (PMP) Exam & OSHA Site Safety Train the Trainer Exam. Students in certain concentrations, who complete this program, will also receive vouchers to sit for the relevant

specialist exams for their major, which validates the business professional's knowledge and skills: Tractor & Machinery Certification (TMC) Exam, Veterinary Technician Education & Activities (CVTEA) Exam. Once finished, students will be able to work as agricultural business managers, with the skills and certifications necessarily to put their resume at the top of the hiring pile.

Grade: 10, 11, 12
Length: 40 weeks -Distance Learning
Co/Prerequisite: None
Credit: 1.0
Level: College

PROJECT SAMI– BIOMEDICAL DRAFTING TECHNOLOGY

Biomedical drafting technologists combine engineering technology principles with medical sciences to design or install equipment, prosthetics, and systems, used in medical care. With the job growth for the medical field projected to grow much faster than average through 2028, our need for well-informed and empathic designers is ever more highlighted. The Biomedical Drafting Technology certificate program seeks to address this need with cutting-edge technical training in combined engineering technology, human anatomy, physiology, electronics, and medical terminology study. This customized program prepares students for an entry-level position in the biomedical drafting field. Students will learn how to help design, build, troubleshoot, and repair a biomedical product. Students will refine the skills necessary to speak and understand the biomedical industry's language and use the tools of the trade, including computer-aided design software. During their final semester, students will apply their knowledge to create an original biomedical technology solution, to address a community need. Additionally, students who complete this program will receive vouchers to sit for the Autodesk AutoCAD & Inventor exams, which test the student's knowledge and skills in generative design, as well as the Electronics Technicians Associations (ETA) International Certification Exam, which verifies the student's ability to troubleshoot and repair electronic devices. Once finished, students will be able to work in the biomedical drafting field, with the skills and certifications necessary to put their resume at the top of the hiring pile.

Grade: 9, 10, 11, 12
Length: 40 weeks
Co/Prerequisites: None
Credit: 1
Level: College

CA BOCES
(Cattaraugus-Allegany Board of Cooperative Services)
Career and Technical Education

CTE CENTER AT ELLICOTTVILLE

Animal Science I and II
Auto Technology I and II
Carpentry and Construction, Trades I and II
Collision Repair Auto Body I and II
Cosmetology I and II
Criminal Justice I and II
Culinary Arts I and II
Early Childhood/Human Services I and II
Heavy Equipment Operation I and II
Media Communication Technology I and II
Medical Assisting, I and II
Natural Resources I and II
Power Equipment Technology I and II
Welding and Metal Fabrication, I and II

Course descriptions can be found online at www.CABOCES.org

Grade: 11, 12
Length: 40 weeks
Prerequisites:
Credit: 6 career & technology credits including 1 -Integrated Math, 1 -Specialized Science and 1 – Integrated ELA
Level: G

CTE CENTER AT OLEAN

NEW VISIONS - HEALTH PROFESSIONS
A one-year, senior-level, highly academic program that allows students to explore the health care field while gaining high school and college credits. The program provides students the opportunity to learn basic medical concepts, exposure to many medical careers and settings, and familiarize students with anatomy and physiology of the human body at both the microscopic and macroscopic levels. The program also provides accumulation of up to 150 clinical hours in local hospitals/health care facilities.

Full course description can be found online at www.CABOCES.org

Grade: 12
Length: 40 weeks

Prerequisites: 3 years of regent's math and science, 90% or higher attendance record, 85% or higher GPA, New Visions application & essay, school counselor and two academic teacher recommendations, and ability to provide own transportation.
Credits: 17 college credits (JCC) and 1 high school credit in Economics & Participation in Government

NEW VISIONS – EDUCATION PROFESSIONS
A one-year, senior level, highly academic program that allows students to explore the education field while gaining high school and college credits. Students will participate in rotations in a variety of educational settings which include: elementary, middle, and high school, as well as specialty areas such as special education, music, art, occupational therapy, physical therapy, speech, counseling and administration at various locations in Olean.

Full course description can be fund online at www.CABOCES.org

Grade: 12
Length: 40 weeks
Prerequisites: 90% or higher attendance record, 85% or higher GPA, New Visions application & essay, school counselor and two academic teacher recommendations, and ability to provide own transportation
Credits: 6 college credits (JCC), and 1 high school credit in Economics & Participation in Government