

*Elmira City
School District
Every Student Succeeds*



2006-07

STEP

into the FUTURE

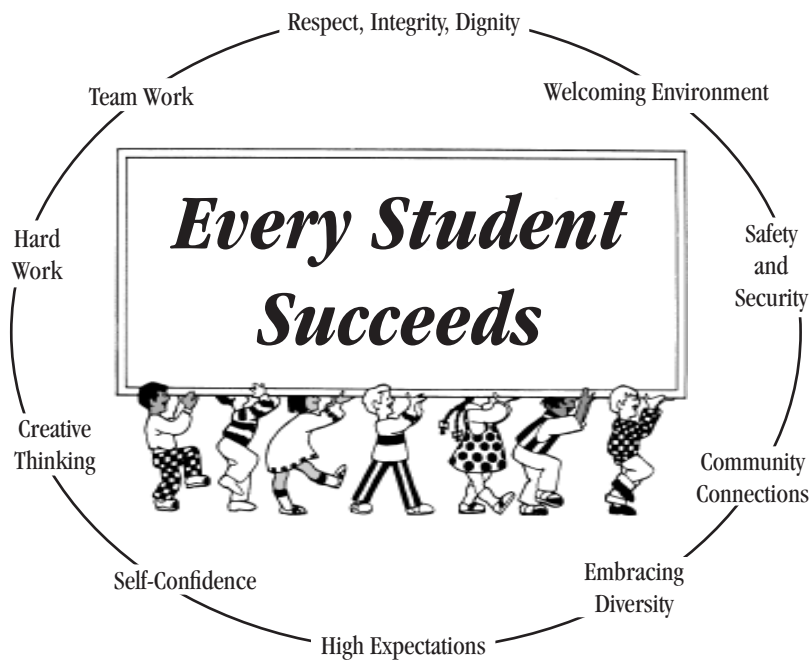
Course Selection Guide

Table of Contents

Mission Statement, Introduction	5
New York State Required Assessments	6
Diploma Requirements	7-8
High School Course Selection Sheet.....	9-10
Advanced Options	11
Course Descriptions (Selections with an asterisk are additions to the print version)	12-32
English	12-13
Social Studies	14-15
Science	15-17
Mathematics	17-20
Languages Other Than English	21-22
Work-Based Learning.....	23-24
Fine Arts.....	25-26
Family and Consumer Science	27
Career and Technical Education	28-29
Project Lead the Way.....	30
Technology Systems.....	31
Personal Wellness	32

Our Mission

Essentials for success in school,
at home and in life:



We believe:

Everyone learns at different rates
and in different ways.

High expectations maximize results.

Achievement inspires self-confidence.

Laughter and a sense of humor enhance learning.

Creative thinkers excel in a changing world.

Learning is life long.

Diversity is an asset to be celebrated.

A safe, secure and welcoming
environment promotes learning.

Teamwork requires each individual's
commitment, responsibility and accountability
to the larger community.

The dignity of any individual
must never be compromised.

Introduction

Students who successfully graduate in the 21st century face a world in which continuous learning and training are a part of every adult life. The world of work is rapidly changing, as existing jobs become more complex and new jobs demand increased levels of education. Students must acquire increased academic competencies, advanced technical skills and greater problem-solving abilities to become successful citizens and employees. To prepare our graduates for both college and the work place, the high school program is organized to help students combine both scholarship and employment competencies in making career-related decisions. Students are encouraged to connect school work with its practical application. Practical opportunities allow students to apply what they've learned, raising their achievements in both school and, eventually, the world.

Students in grades 9 through 12 develop a high school educational and career pathways plan that will maximize post-secondary opportunities and success for all students. Students participate in goal-setting and decision-making activities to develop a personal portfolio and educational plan. Choices are made in a collaborative process involving teachers, counselors and parents. Students enter their post-secondary year with a graduation resumé that includes an in-depth community-supported experience related to their chosen educational pathway.

For entering students, all
educational plans require:

English.....	4 units
Social Studies.....	4 units
Mathematics.....	3 units
Science.....	3 units
Second Language.....	1 or 3 units
Health Education.....	.5 units
Art and/or Music.....	1 unit
Physical Education.....	2 units
Career & Financial Management.....	.5 units
Software Applications.....	.5 units

Additional units of study are
selected from application-related
elective programs. Specific
descriptions for courses can be
found in this booklet.

New York State Required Assessments

For students entering grade 9 in September 2005, for Regents or Local diploma

Assessment	Math A	EnglishR	Global History and U.S. History & Government	1 Regents Science
Requirement	65% or above on Exam for Regents Diploma 55% or above on Exam for Local Diploma	65% or above on Exam for Regents Diploma 55% or above on Exam for Local Diploma	65% or above on Exam for Regents Diploma 55% or above on Exam for Local Diploma	65% or above on Exam for Regents Diploma 55% or above on Exam for Local Diploma

Additional requirements for students seeking Advanced Designation Regents

Assessment	Math B	2nd Regents Science	Language Regents
Requirement	65% or above on Exam	65% or above on Exam	65% or above on Exam

For students with disabilities entering Grade 9 in September 2005 ...

Assessment	Math A	English 11R	Global History and U.S. History & Government	1 Regents Science
Requirement	65% or above on Exam for Regents Diploma 55% or above on Regents Exam OR Passing Math RCT for Local Diploma	65% or above on Exam for Regents Diploma 55% or above on Regents Exam OR Passing English RCT for Local Diploma	65% or above on Exam for Regents Diploma 55% or above on Regents Exam OR Passing Global RCT and U.S. History RCT for Local Diploma	65% or above on Exam for Regents Diploma 55% or above on Regents Exam OR Passing Science RCT for Local Diploma

Diploma Requirements

Diploma requirements based on June 2005 Board of Regents action to phase in the graduation standard on required Regents exams.

Entering Freshman Class	Local Diploma Requirements	Regents Diploma Requirements	Regents Diploma with Advanced Designation Requirements
2005	Score 65 or above on 2 required Regents exams and score of 55 or above on 3 exams. Earn 22 units of credit.	Score 65 or above on 5 required Regents exams. Earn 22 units of credit.	Score 65 or above on 8 required Regents exams. Earn 22 units of credit.
2006	Score 65 or above on 3 required Regents exams and score of 55 or above on 2 exams. Earn 22 units of credit.	Score 65 or above on 5 required Regents exams. Earn 22 units of credit.	Score 65 or above on 8 required Regents exams. Earn 22 units of credit.
2007	Score 65 or above on 4 required Regents exams and score of 55 or above on 1 exam. Earn 22 units of credit.	Score 65 or above on 5 required Regents exams. Earn 22 units of credit.	Score 65 or above on 8 required Regents exams. Earn 22 units of credit.
2008		Score 65 or above on 5 required Regents exams. Earn 22 units of credit.	Score 65 or above on 8 required Regents exams. Earn 22 units of credit.

Note: The Regents Competency Test safety net for students with disabilities will continue to be available for students entering grade 9 prior to September 2010. Students using the safety net will receive a local diploma. The low-pass option of scoring between 55 and 64 on the required Regents exams to earn a local diploma will continue to be available for students with disabilities without local option.

Diploma Requirements

For students entering grade 9 in September 2004 or later

Courses	Number of Credits Required for a Regents Diploma	Number of Credits Required for an Advanced Regents Diploma	Number of Credits Required for a CTE Endorsement on a Regents Diploma
English	4 (a)	4 (a)	4 (a)
Social Studies	4	4	4
Math	3 (b)	3 (d) (g)	3 (b)
Science	3 (c)	3 (c) (d)	3 (c)
Health	.5	.5	.5
The Arts	1 (e)	1 (e) See Below	1 (e)
Languages Other Than English	1	(f) See Below	1
Physical Education	2	2	2
Software Applications	.5	.5	.5
Sequence Courses / Electives	3	4	4.5
TOTAL Required Minimum	22	22	23.5
			Internship 1+
			Pass National Assessment

Footnotes ...

(a) The fourth unit of English may be satisfied by completing "Multimedia Communications"; (b) The third unit of Math may be satisfied by completing "Math and Financial Applications"; (c) One course shall be from the life sciences, one unit from the physical sciences, and the third unit may be either life or physical; (d) A commencement-level course in technology may be used as the third credit in science or in math, but not both; (e) The Arts' requirement can be satisfied by completing either an Art or Music course or by completing Design and Drawing for Productions or Introduction to Engineering Design; (f) To earn an Advanced Designation, the student must complete ONE of the following: Language Other than English (3 credits), Career & Tech Education (5 credits) or The Arts (5 credits); (g) To earn Advanced Designation, the student must pass three years of math, which includes Math B/Trig.

High School Course Selection Sheet

All courses are (1) credit, unless otherwise designated.

English

- A550 English I
- A560 English I Honors
- A650 English II
- A660 English II Honors
- A750 English III
- A760 English III Honors
- A770 English/Journalism & Creative Writing
- A850 English IV
- A890 EN1010/EN1020 (ACE)

Social Studies

- B040 Anthropology
- B550 Global History I
- B560 Global History I Honors
- B650 Global History II
- B660 Global History II Honors
- B700 Freedom and Law (.5)
- B750 US History and Government Regents
- B780 US History and Government (AP)
- B850 Economics (.5)
- B851 Participation in Government (.5)
- B890 Principles of Macro-Economics (ACE) (.5)
- B891 American Federal Government (ACE) (.5)

Science

- C550 Earth Science
- C551 Integrated Science
- C650 The Living Environment (Biology)
- C700 American Wildlife
- C720 Anatomy & Physiology
- C740 Applied Chemistry
- C750 Chemistry
- C780 Chemistry (AP)
- C800 Forensic Science
- C801 Astronomy
- C850 Physics
- C880 Physics (AP)
- C891 Advanced Biology (AP)**

Mathematics

- D440 Basic Algebra
- D550 Algebra A
- D650 Geometry A
- D750 Intermediate Algebra A
- D555 Algebra B
- D655 Geometry B
- D755 Algebra IIB/Trig
- D855 Pre Calculus
- D890 Statistics (ACE)
- D891 Calculus 1 (ACE) (.5)
- D892 Calculus 2 (ACE) (.5)

Languages Other Than English

- E454 ASL I
- E554 ASL II
- E654 ASL III
- E451 French 1
- E501 French Conversation and Culture I
- E551 French 2
- E651 French 3
- E791 French 4 (ACE)
- E891 French 5 (ACE)
- E991 French 6
- E452 Spanish 1
- E502 Spanish Conversation and Culture I
- E 552 Spanish 2
- E 652 Spanish 3
- E792 Spanish 4 (ACE)
- E892 Spanish 5 (ACE)
- E992 Spanish 6 (AP)

Work Based Learning

- F701 Career Exploration Internship Program (.5 or 1)

- F702 COOP (.5 or 1)

GST BOCES courses

- 820V New Visions Health Career Exploration (4)
- 830V New Visions Unique Career Placement (3)
- 840V New Visions Education & Human Services (4)
- 850V New Visions Engineering Technology (4)
- 860V New Visions Communications & Media Careers (4)

- BOCES (3)

More ...

Art

G001 Digital & Traditional Photography
G002 Advanced Photography
G003 Studio in Art
G004 Drawing and Painting
G005 Studio in Advertising Design
G006 Ceramics
G007 Digital Design
G008 Advanced Ceramics
G800 Essentials of Art (ACE)

Music

H001 Music Theory
H002 Music History
H003 Voice**
H004 Orchestra
H005 Concert/Marching Band
H006 Symphonic/Marching Band
H007 Festival Chorus
H009 Concert Choir (Audition Only)

AIS

T005 AIS / English
T007 AIS / Math

Family and Consumer Science

K002 Food & Nutrition 1 (.5)
K003 Food & Nutrition 2 (.5)
K004 Child Development (.5)
K005 Parenting (.5)
K006 Independent Living (.5)
K008 Human Development 1 (.5)
K009 Human Development 2 (.5)
K010 Sports & Fitness Nutrition (.5)
K020 Clothing & Textile Design (1)

Career & Technical Education

F700 Career and Financial Management
J001 Computer Applications (.5)
J002 Advanced Software Applications (.5)
J003 Website Construction (.5)
J004 Desktop Publishing (.5)
J005 Fashion Marketing (.5)
J006 SMART Course
J007 E-Commerce (.5)
J010 Accounting I
J011 Accounting II
J012 Business Law
J013 Multi-Media Communications
J014 Sports and Entertainment Marketing (.5)
J015 Math and Financial Applications
L051 Introduction to Engineering Design (PLTW)
L052 CIM Computer Integrated Manufacturing (PLTW)
L053 Civil Engineering and Architecture (PLTW)
L054 Digital Electronics (PLTW)
L055 Principles of Engineering (PLTW)
L041 Design and Drawing for Production
L042 Material Processes (.5)
L043 Energy Systems (.5)
L044 Production/Construction Systems (.5)

Personal Wellness

Health Education

P500 Health (.5) (Freshmen)
P700 Health (.5) (Juniors-Seniors)

Physical Education

N501 Physical Education 9 & 10 (Semester 1)(.25)
N502 Physical Education 9 & 10 (Semester 2)(.25)
N503 Physical Education 9 & 10 (.5)
N701 Physical Education 11&12 (Semester 1)(.25)
N702 Physical Education 11&12 (Semester 2)(.25)
N705 Physical Education 11&12 (.5)
N001 Adaptive Physical Education(Semester 1)(.25)
N002 Adaptive Physical Education(Semester 1)(.25)
N703 Lifeguarding (Semester 1) (.25)
N704 Lifeguarding (Semester 2) (.25)
N040 Lifeguarding (Semester 2) (.5)

** Southside only

Advanced Options

Corning Community College Accelerated College Education (ACE)

Through an agreement between the Elmira City School District and Corning Community College, students may enter into a dual enrollment arrangement. That is, students may take certain courses at the high schools, pay a tuition fee to Corning Community College, and receive both high school and college credit. The course credit counts toward graduation from high school and may also transfer to a large number of colleges and universities. ACE courses are available to all students who meet the necessary academic criteria. For more information about this program, see your school counselor.

Advanced Placement Courses (AP)

AP courses are college-level courses which follow a nationally standardized curriculum developed by the College Board. Students who enroll in AP courses are expected to take the corresponding AP examination in May. Depending on the AP exam score, the college which the student chooses to attend may grant college credits or advanced placement to the student. AP courses are available to all students who meet the academic criteria. For more information about this program, see your school counselor.

Corning Community College Registration

Corning Community College registration takes place early in the fall and spring semesters. A student who wishes to receive college credit **must register with the college at this time**. Registration takes place in the student's home high school and bills are mailed by Corning Community College directly to the student. Registration and tuition billing are on a semester rather than school-year basis. Fall tuition is due in middle October, spring tuition in early March.

Rochester Institute of Technology

College credit through the Project Lead the Way program.

Through an agreement between the Elmira City School District and Rochester Institute of Technology, students who successfully complete the requirements for their Project Lead the Way courses qualify for the articulated RIT credit:

- Earn an 85 percent or higher in Introduction to Engineering Design, Digital Electronics, Computer Integrated Manufacturing, Principles of Engineering or Civil Engineering and Architecture AND
- Earn 70 percent or higher on the RIT college credit exam.

To register for RIT credit:

- Students have until December 31 of the year that their requirements were completed to register for RIT credit.
- The tuition charge for each quarter-credit course is \$200.
- RIT will send a grade report at the end of the quarter in which a student registers.
- RIT will forward a transcript to other colleges, upon student request, at no charge.

Additional Information

Your School Counselor

EFA 735-3112

SHS 735-3212

Dr. Louise Paul, ACE Coordinator

GST BOCES

459 Philo Road • Elmira, NY 14903

739-3581

Karen McCarthy, Director of Admissions & Enrollment Services

Corning Community College

Corning, NY 14830 • 962-9221

Darlene Slack, Rochester Institute of Technology

Course Descriptions

English/Language Arts

English for Grade 9

A550 English I

1 Unit

This required course will offer a variety of English experiences through the reading of short stories, poetry, the classics in translation, the novel, drama and non-fiction. The study of grammar and vocabulary as necessary tools for improved composition will be an integral part of the student's program. Emphasis will also be given to improving the students' study and research skills. This is the first of a required sequence leading to the New York State English Language Arts Assessment. **Research Project:** Includes: Cited quotations, works-cited page, evidence of adhering to research process, and criterion provided by teacher.

A560 English I Honors

1 Unit

The ninth-grade English Honors Program utilizes and extends the regular Regents-level course to help the student develop writing, research and literary analysis skills. Students are urged to read actively and to question as they read. Class discussions require students to understand literature at several different levels: factual; evaluative (relate literature to the world, to their lives); and interpretative (analyze the author's intentions, the work's various meanings). Writing assignments stress well-structured paragraphs and compositions and encourage students to reach their own conclusions based upon their thoughtful interpretation of the literature. **Research Project:** Includes: Cited quotations, works-cited page, evidence of adhering to research process, and criterion provided by teacher.

English for Grade 10

A650 English II

1 Unit

This required course will offer the student a wide variety of readings in various literary forms such as short story, poetry, novel, drama and non-fiction. The study of vocabulary in relation to literature will be an integral part of the course. The student will also strengthen his/her knowledge of grammar as part of the composition component of this course. Emphasis will also be placed on study, research and library skills as the student masters the skills needed for writing a research paper. Listening and speaking skills will also be an important part of this course as the student participates in class discussions, practices note-taking and engages in other speaking/listening activities. **Research Project:** Includes: Cited quotations, works-cited page, evidence of adhering to research process, and criterion provided by teacher.

A660 English II Honors

1 Unit

The 10th-grade English Honors Program also utilizes and extends the Regents-level course. This course expands upon the skills practiced in ninth grade – reading, writing, thinking, discussion and research. Writing assignments stress well-structured compositions in which students are encouraged to use argument and persuasion to reach their own conclusions based upon discussion and analysis of literature. **Research Project Choices:** Includes: Cited quotations, works-cited page, evidence of adhering to research process, and criterion provided by teacher.

English for Grade 11

A750 English III

1 Unit

This course is required of all students. During this year, the student will study the development of American Literature. The student will read, discuss and write analytically about short stories, plays, poems, novels and essays in order to become more fully aware of the various genres. The study of vocabulary as it relates to the reading will be an important feature of this course. Composition will focus primarily on the development of thoughtful, well-organized expository essays with a focus on preparation for the Regents exam. A literature-based performance task will be given. This includes a typed research paper and oral presentation. Students will take the New York State English Language Arts examination. **Research Paper:** Discuss influences on writing or particular style of a chosen Author.

A760 English III Honors

1 Unit

The 11th grade English Honors program also utilizes and extends the regular Regents-level American Literature course. In addition to whole class study of classic works by Hawthorne, Emerson, Steinbeck and others, individual study and outside reading of works by selected American authors is required. Class discussions, oral presentations, reading assignments, writing assignments, research assignments and small group work all center on the challenging task of formulating and supporting an arguable thesis. The benchmark tasks are the same; however, a greater depth of research and sophistication of development is expected from students at this level. A literature-based performance task will be required. This includes a typed research paper and an oral presentation. **Research Paper:** Discuss influences on writing or particular style of a chosen Author.

A770 English/Journalism & Creative Writing

1 Unit

Gr. 11-12

This course is an elective based on one year/two semesters of study and is in addition to required English. For the journalism half of the course, students will polish writing techniques; examine the purposes, success and failures of the mass media; learn production techniques, including computer use; study history, law and ethics; achieve a feeling of pride in meeting the challenges of working as part of a team; and become adept in the ability to think and communicate important information to others. For the creative writing part of the course, students will examine how plays, poems, short stories and feature articles are put together and will write originals of these genres of literature. They will learn a wide range of forms and techniques.

English for Grade 12

A850 English IV

1 Unit

This course will offer a study of British literature from Beowulf to the 20th century. The readings for this course will focus on the English literature with vocabulary study consistent with the level of study for a college-bound student. Reasoning and inference will be developed through class discussion and compositions. The writing will consist of formal essays, reaction papers and a research paper.

Each student will submit a typed position paper, including quotations from primary sources, a works cited page, and evidence of adhering to the research process as required by the teacher. This is designed to be a culminating project demonstrating writing and research skills. The paper may function as the final exam for the course.

A890 EN1010/EN1020 (ACE/AP English)

1 Unit

College composition (three semester hours of credit) is a course in essay writing designed to sharpen the student's perception of the world and to facilitate communications with clarity, unity, organization and depth. Assignments will include expository writing, argumentation and research techniques. A research paper is required. Student may not continue on to EN106 without successful completion of EN105.

Note: In addition to earning high school credit, students who satisfactorily complete the one- or two-semester sequence in these courses will earn either three or six hours of college credit from Corning Community College. These courses are open to seniors who have passed the English Regents Exam and have completed English II and III successfully. It is suggested that only those students with an average of 90 or above or with a recommendation from an 11th grade teacher enroll in this course.

Social Studies

B040 Anthropology (SHS only)

1 Unit

Gr. 11-12

This course gives students an overview of the Five Main Subfields of Anthropology:

Cultural Anthropology – The study of living peoples' ways of life, mostly in the non-Western world, mostly through fieldwork.

Physical Anthropology – The study of peoples and non-human primates as biological beings, both in the past (evolution) and the present.

Anthropological Linguistics – The study of languages, mostly non-Western and mostly preliterate, and of the nature of language.

Archaeology – The study of past peoples' ways of life, through the excavation and analysis of artifacts.

Applied Anthropology – The use of any of the above four other subfields to solve practical, and often pressing, problems.

B550 Global History I

1 Unit

Gr. 9

This course is the first part of a required two-year course of study designed to develop student perspectives on the major themes and developments of World History. The course follows a chronological approach to World History, starting in the Neolithic Era and concluding with the Scientific Revolution of the 1700s. Students will study the social, cultural, economic, political and geographical factors that impacted the development of history. Emphasis will be placed on the use of primary source documents and data-based questions.

B560 Global History I Honors

1 Unit

Gr. 9

The Global Studies Honors program will require that a student successfully complete benchmark components related to the identified areas of study. Each of the individual components is intended to challenge students to go beyond regular Regents requirements.

B650 Global History II

1 Unit

Gr. 10

This course is the second part of the required two-year sequence in World History that is designed to develop student perspectives on the major themes and developments in World History. The course continues the chronological approach of Global History I. This companion course starts in the Scientific and Nationalist Revolutions of the 17th and 18th centuries and concludes in the current world environment. Students will study the social, cultural, economic, political and geographical factors that have impacted the development of modern history. Emphasis will be placed on the use of primary source documents and data-based questions. At the conclusion of this course, students will sit for the New York State Regents Exam in World History.

B660 Global History II Honors

1 Unit

Gr. 10

The Global Studies Honors program will require that a student successfully complete benchmark components related to the identified areas of study. Each of the individual components is intended to challenge students to go beyond regular Regents requirements.

B700 Freedom and Law (1/2)

.5 Unit

Gr. 11-12

The objectives of this course are to introduce the student to the basic structure of law, its moral and practical justification, the various agencies of law enforcement and the administration of criminal justice in the United States. Special emphasis will be placed on the due process of law from the point of pre-trial and post-trial process in current usage. Various films will be shown, guest speakers will meet with the class and tours will be conducted at local police stations, courts and correctional facilities. The ultimate goal of the course is to establish positive lines of communication between students and all police agencies. The course is taught by local law enforcement agency representatives.

B750 U.S. History and Government

1 Unit

Gr. 11

The history emphasis in this course, in addition to the early development of the Constitution and constitutional issues, is on the development of the United States since its emergence as an industrial nation and as a significant world power. As a result of this emphasis, the history examined is primarily from the end of the civil War to the present and deals with the issues and events that have created the modern-day United States. The skills, concepts and content of this course will be tested in a Regents examination in June.

B780 U.S. History and Government (AP)

1 Unit Gr. 11

Advanced Placement U.S. History provides students with an opportunity to pursue and receive credit for college-level course work. The course is premised on the belief that college-level material can be taught successfully to high school students. This course traces the story of America from the Colonial Era to the Modern Era. Course methodology focuses on the use of primary source documents, historical scholarship and seminar discussions.

B850 Economics (1/2)

.5 Unit Gr. 12

This course gives the student an overview of the structure and functioning of the U.S. economy. It includes national economic goals, the market system, price determinations, taxation and government spending, business cycles, fiscal and monetary policy and international trade. The emphasis is on an understanding of the current economic events and issues so that students may become more responsible citizens and voters.

B851 Participation in Government (1/2)

.5 Unit Gr. 12

This course emphasizes the interaction between citizens and government at all levels: local, state and federal. The course will build upon the student's foundation from U.S. History and Government by discussing current public issues and utilizing the skills of analysis, assessment and decision-making. Students will be encouraged to participate in the democratic process.

B890 Principles of Macro-Economics (ACE/AP)(1/2)

.5 Unit Gr. 12

In this course, the following will be discussed: elements of supply and demand, the circular flow model of economic activity, the classical theory of output determination, the Keynesian Theory of output determination, natural income accounting and the use of fiscal and monetary policy throughout the business cycle.

B891 American Federal Government (ACE/AP) (1/2)

.5 Unit Gr. 12

Theories and Practices of American Government are examined with emphasis on the national level. Through written assignments, discussions, group work and library research, the students explore the following: constitutional foundations, political socialization, policy formulation, the roles of pressure groups and the media in the political process and the roles of the president, Congress and the Supreme Court in balancing individual liberties with the common good.

Science

C550 Earth Science

1 Unit Gr. 9-12

This course is designed for all ninth-grade students, but other grade levels are also welcomed. Through an investigation of such topics as Earth's motions and location in space, energy in Earth processes, insolation and the seasons, weather and climate, weathering and erosion, deposition, rocks and minerals, plate tectonics, geologic history and landscape evolution, students develop thinking and problem-solving skills along with subject mastery. Students who meet the laboratory requirement are eligible to take the Regents examination at the conclusion of the course.

C551 Integrated Science

1 Unit Gr. 9

This course is designed for ninth-graders who need further preparatory work in acquiring science skills in order to be successful in the Regents science core curriculums. The coursework will focus on laboratory techniques, organizational skills, data collection and interpretation, written lab reports and journals.

C650 The Living Environment (Biology)

1 Unit Gr. 9-12

This course is required for the students working toward a Regents diploma. The topics should provide a broad general understanding of the fundamental principles of biology dealing with the study of life, maintenance in plants and animals, reproduction and development, heredity, evolution, species diversity and ecology. During laboratory periods students analyze recent data revealed by the electron microscope, the DNA and RNA molecules. Also, the students will learn of the use of radioisotopes to unlock the secrets of the living world. Students who meet the lab requirement are eligible to take the Regents exam at the end of the course.

C700 American Wildlife

1 Unit Gr. 10-12

This is a non-lab elective course designed for students to obtain a foundation in human ecology and zoology. The course focuses on human's impact on wildlife in the past and present. The ethics of human activity as a cause for such things as endangerment, extinction and ecosystem imbalance and destruction will be discussed as well as human's effort at conservation. The evolution of animals and their unity and diversity is also explored. Some activities involve research projects, debate and journal readings.

Recommended: Regents Living Environment.

C720 Anatomy and Physiology

1 Unit **Gr. 11-12**

Anatomy and Physiology emphasizes the structure and function of the human body, at an advanced level. All major systems are examined in depth. Students will learn through cooperative activities, research and projects. A mink dissection is required. Various guest speakers have included a radiologist, athletic trainer, neonatal nurse and surgical technician. **Prerequisites:** Regents Biology, English 10.

C740 Applied Chemistry

1 Unit **Gr. 11-12**

This is an elective course designed for the average student who would profit from an understanding of the chemical principles that he/she may encounter at home, in industry and in himself/herself as a living organism. Principles are developed from laboratory-oriented activities. At the end of the year, laboratory skills are evaluated and constitute one-tenth of the final examination grade. The core area deals with similarities and dissimilarities of matter; preparation and separation of substances; and the structure and properties of simple organic compounds. Two optional areas are chosen from five subject files: more organic compounds, chemistry in the home, water and air pollution, some modern materials and their uses and chemical analysis. **Prerequisite:** Regents credit for Math A.

C750 Chemistry

1 Unit **Gr. 10-12**

This is an elective course for the Regents or advanced Regents student seeking a science sequence to become acquainted with the study of matter, its properties and uses and the changes that different kinds of matter undergo. Modern theory of atomic structure serves as the basis for the study of chemical principles and their applications in understanding elements, solutions, calculations, metals, non-metals, nuclear chemistry and organic chemistry. Semi-micro equipment is used for individual laboratory work. **Prerequisite:** Regents credit in Math A and Earth Science or Biology.

C780 Chemistry (AP)

1 Unit **Gr. 11-12**

This course is designed as either an intensive first-year college-level course in Chemistry or an opportunity for a student who wants to further his/her knowledge beyond Regents Chemistry. This is not calculus-based. Topics include atomic structure, matter and solutions, chemical reactions and equilibrium and nuclear chemistry. A laboratory requirement must be met each of the six marking periods. **Prerequisites:** Regents Chemistry credit and Regents credit for Math B exam.

C800 Forensic Science (SHS only)

1 Unit **Gr. 10-12 only**

This is a basic science course dealing with the collection, preservation and evaluation of physical evidence from a scientific standpoint. Included in this course are laboratory methods in analyzing fingerprints, blood, trace evidence, firearm discharges, chemical evidence and other forms of physical evidence. The purpose of this high school course is to familiarize students with forensic science and its capabilities in bringing criminals to justice. **Prerequisite:** Chemistry or The Living Environment.

C801 Astronomy

1 Unit **Gr. 11-12**

The course will explore the history of astronomy, as well as delineate observation tools. Our solar system, along with the nearby stars, life cycle of stars and cosmology will be investigated. Students of astronomy will describe the properties of light and how light is used to observe celestial bodies. The course will require students to describe and calculate relativistic effects of space travel. **Prerequisite:** A Regents science, Math A

C850 Physics

1 Unit **Gr. 11-12**

This is an elective for the science sequence Regents student with a proficiency in mathematics. The core areas are: mechanics – linear motion, force dynamics, momentum, work, energy and kinetic theory; wave phenomena – characteristics of waves, light, lenses, Doppler effect; electricity – static electricity, electric current, magnetism, electromagnetic induction and electron beams; atomic and nuclear physics – dual nature of light, quantum theory, models of the atom and atomic spectra. Additional material in at least two areas must be expanded in depth. The student must be able to handle the computations with ease so he/she may concentrate on the physics principles being developed. **Prerequisite:** Regents credit in Math A.

C880 Physics (AP)

1 Unit **Gr. 11-12**

This college-level course is designed as either an intensive first-year course in physics or an opportunity for a student who wants to further his/her knowledge beyond Regents Physics. The first-year student in this course will be required to take both the AP exam in May and the Regents exam in June. This course is equivalent to a freshman college physics course that is not calculus-based. Topics explored include: Mechanics 1 and 2 dimensional, dynamics of single and double particle systems, work, momentum and impulse, rotational dynamics, harmonics, thermodynamics, electromagnetics, waves and optics, modern physics, atomic physics, nuclear physics and special relativity (Einstein's Theory). **Prerequisites:** Regents Physics or passing the Math B exam.

C891 Advanced Biology (AP)

1 Unit **Gr. 12**

AP Biology is an advanced course intended to offer students an experience similar to what they would have in an introductory college biology course. The course focuses on three broad topics: Molecules and Cells, Heredity and Evolution, and Organisms and Populations. As part of the AP program, there is a corresponding exam administered in May, which is used as the measure of performance when admitted to college. **Prerequisites:** Regents Biology, Regents Chemistry.

Mathematics

Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Math 8	Basic Algebra	Algebra A	Geometry A	Intermediate Algebra Math and Financial Applications
This path could prepare students for a job or for a 2-year college experience.				
Math 8	Algebra A	Geometry A	Math and Financial Applications	Intermediate
This path could prepare Business Majors for a job or for a 2-year college experience.				
Math 8	Algebra A	Geometry A	Intermediate Algebra	Algebra IIB/Trig
This path allows the "Late Bloomer" in Math to still obtain an Honors Designation on his diploma.				
Math 8	Alegbra B	Geometry B	Algebra IIB/Trig	Pre-Calc Statistics
Advanced Regents Designation is possible with this path.				
Algebra B	Geometry B	Algebra IIB/Trig	Pre-Calc or Statistics	Calc Pre-Calc
Advanced Regents Designation is usually an expectation. Path for Engineering, Science or Math Majors.				

Mathematics

State Assessments

Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Math 8 (May – Math 8 Assessment)	Basic Algebra	Algebra A	Geometry A (June –Math * Assessment)	
Math 8 (May – Math 8 Assessment)	Algebra A	Geometry A (June – Math A* (Assessment)		
Math 8 (May – Math 8 Assessment)	Algebra A	Geometry A (June – Math A* Assessment)	Intermediate Algebra	Algebra IIB/Trig (June – Math B** Assessment)
Math 8 (May – Math 8 Assessment)	Alegrebra B	Geometry B (January – Math A* Assessment)	Algebra IIB/Trig (June – Math B** Assessment)	
Algebra B (May – Math 8 Assessment)	Geometry B (January – Math A* Assessment)	Algebra IIB/Trig (June – Math B** Assessment)		

* Graduation Requirement

** Advanced Regents Designation

Mathematics

D440 Basic Algebra

1 Unit

This course is required for those students who have not met New York State grade 8 performance standards. This course includes basic skills that will prepare students for entrance into Algebra A. Students will be expected to work outside of class daily and be willing to seek extra help before or after school. **Assessment:** Department Final

D550 Algebra A

1 Unit

This is the first of a required sequence of courses that prepare students for a Regents diploma and the New York State Mathematics A assessment. This course includes, but is not limited to, the study of integers, rational numbers, polynomial and quadratics measurements, ratio, proportions, statistics and probability, equations and inequalities and coordinates geometry. The course will focus on mathematical problem solving based on real-life experiences and applications. Students will be expected to work outside of class daily and be willing to seek extra help before or after school. **Prerequisite:** 7th and 8th grade math course or Basic Algebra. **Assessment:** Department Final.

D555 Algebra B

1 Unit

This is the first of a sequence of required courses leading to an Advanced Regents Diploma. Topics include, but are not limited to, operations on algebraic expressions, solutions to various types of equations and inequalities, ratios, and proportion, rectangular coordinate system, probability, statistics, solutions of fractional equations, quadratic equations and systems of quadratic linear equations. Students will be expected to work outside of class daily and be willing to seek extra help before or after school. **Assessment:** Department Final.

D650 Geometry A

1 Unit

This is a continuation and expansion of Algebra A. Expanded topics include, but are not limited to, systems of inequalities, geometry of lines, geometric figures and measurements, quadratic functions and congruency, polygons, areas, transformational geometry, informal proof, probability and trigonometry. Problem solving in a real-world context continues to be a focus. The Mathematics A assessment will be administered upon completion of this course. Students will be expected to work outside of class daily and be willing to seek extra help before or after school. **Prerequisite:** Credit in Algebra A or Algebra B. **Assessment:** Department Final.

D655 Geometry B

1 Unit

This is the second of a sequence of required courses leading to an Advanced Regents Diploma. The topics covered include, but are not limited to, mathematical structure and related algebraic skills, Euclidean and Solid geometry, congruency, similarity, right triangle geometry, geometric and coordinate geometry proofs, transformational geometry, locus, and geometric probability. **Prerequisite:** Credit for Algebra B. **Assessment:** Department Final.

D750 Intermediate Algebra A

1 Unit

This course completes the required three units of credit needed for high school graduation. It will expand upon topics from the previous courses, including systems of equations, unit circle trigonometry, advanced algebra, probability and statistics, including, but not limited to, standard deviation and normal distribution. Solving problems in a real-world setting will be emphasized. This course is intended for students who wish to continue their study of mathematics for college preparation or technical training but are not interested in an advanced Regents sequence in mathematics. Students will be expected to work outside of class daily and willing to seek extra help before or after school. **Prerequisite:** Algebra (A or B) and Geometry (A or B). **Assessment:** Department Final. At the end of the course, the students will be prepared to enter a Community College and take a credit-bearing, entry level Math Course.

D755 Algebra IIB/Trig

1 Unit

This course is a continuation of Geometry B and culminates in the Math B Exam. Topics include, but are not limited to, proofs, roots of quadratic equations, complex fractions, imaginary numbers, operations with fractions, transformations, isometrics, fractional exponents, complex numbers and conjugates, laws of rational exponents, Power of I, graphs based on equations, functions, inverse variation, sequences, exponential equations, logarithms, circles, right triangle trigonometry, graphs of trigonometry, law of sines and cosines, trig identities, statistics and probability. Students will be expected to work outside of class daily and be willing to seek extra help before or after school. **Prerequisite:** Passing Math A exam or successful completion of Geometry B or Intermediate Algebra. **Assessment:** Math B exam.

D855 Pre-Calculus

1 Unit

This course is designed as a continuation and expansion of the topics of the three-year integrated sequence. It is especially suited for college-bound students. It prepares the student for modern courses in calculus. Topics include, but are not limited to, sequences, series, limits, algebra of vectors, functions, field of complex numbers, graphs of polynomial, rational, exponential and logarithmic functions (students will be using a graphing calculator and a computer), analytic geometry, elementary matrix theory, polar coordinates, conics and parametrics. Students will be expected to work outside of class daily and be willing to seek extra help before or after school. **Prerequisite:** Credit in Algebra IIB. **Assessment:** Department Final.

D890 Statistics (ACE/AP)

1 Unit

This course is an intuitive approach to statistics. Analysis and description of numerical data using frequency distributions, histograms and measures of central tendency and dispersion, elementary theory of probability with applications of binomial and normal probability distributions, sampling distributions, hypothesis-testing, chi-square, linear regression and correlation. The TI-83 and statistical computer language Minitab will be used. Students must have been accepted by the Accelerated College Education Program Admissions Committee to receive college credit (D891). Students will be expected to work outside of class daily and be willing to seek extra help before or after school. **Prerequisite:** Credit in Intermediate Algebra A, Algebra IIB/Trig. **Assessment:** Department Final.

D891 Calculus 1 (ACE/AP) (1/2)

.5 Unit

The first semester of a year sequence in differential and integral calculus, including elements of analytic geometry. Basic theory and physical applications are covered concurrently. Topics include the derivatives, considered both algebraically and graphically and as applied to velocity and acceleration; differentials and their use for approximations; the indefinite integrals with applications to areas and volumes. Students must have been accepted by the Accelerated College Education Program Admissions Committee to receive college credit (D890). Students will be expected to work outside of class daily and be willing to seek extra help before or after school. **Prerequisite:** Pre-calculus. **Assessment:** Department Final.

D892 Calculus 2 (ACE/AP)(1/2)

.5 Unit

Calculus 2 continues the study of the indefinite and definite integrals with applications to length of curves and surfaces. Topics include the calculus of conics, trigonometric, logarithmic, exponential and hyperbolic functions. Included also are techniques in integration and infinite series. Students must have been accepted by the Accelerated College Education Program Admissions Committee to receive college credit (D891). Students will be expected to work outside of class daily and be willing to seek extra help before or after school. **Prerequisite:** Credit in Calculus 1. **Assessment:** Department Final.

Languages Other Than English

(LOTE)

American Sign Language (ASL)

E454 American Sign Language I (ASL I)

1 Unit **Grade 9 - 12**

This is an introductory course in ASL. It provides students with a functional signing vocabulary with equal emphasis on expressive and receptive skills. Expressive is the ability to sign. Receptive is the ability to write in English words for what was signed. Students will learn basic grammar and sentence structures of ASL as well as history and culture of the deaf.

E554 American Sign Language II (ASL II)

1 Unit **Grade 9 - 12**

This course is a continuation of the vocabulary and grammar taught in ASL I. Students will begin to work on more complex sentences and stories. Students will be able to sign dialogues and have conversations in ASL with peers and deaf visitors to the class.

E654 American Sign Language III (ASL III)

1 Unit **Grade 10 - 12**

At the third level, emphasis is on stories and dialogues. Understanding what is being signed and responding appropriately in sign is emphasized.

French

E451 French 1

1 Unit **Gr. 9-12**

This is an introductory course to the study of French. It provides the student with basic language skills with equal emphasis on speaking, listening, reading and writing. Students are introduced to culture through projects, class activities and reading materials.

E501 French Conversation and Culture I

1 Unit **Gr. 9**

This course is designed for the students who needs to meet the New York State LOTE requirement for a Regents diploma and who wants to investigate in greater detail the cultural nuances of everyday French life and communication. The curriculum is prescribed under Checkpoint A of the New York State Syllabus. Assessments will be based on a variety of methods, including evaluation of communication skills as they pertain to relevant situations. In addition, a variety of projects will be completed by the student as a means of demonstrating cultural awareness.

E551 French 2

1 Unit **Gr. 10-12**

French 2 is a continuation of the skills studied in French 1. Students further develop oral, written and comprehensive skills and more extensively study grammatical structures. The program emphasizes conversational techniques and broadens cultural studies, giving students a better understanding and knowledge of the French-speaking world. Freshmen who elect to study French 2 must have passed the New York State Proficiency Exam in Grade 8. Students entering French 2 in Grades 10-12 must have earned one unit of credit.

E651 French 3

1 Unit **Gr. 10-12**

At the third level, each phase of language study is expanded, especially that of conversation and oral presentation. Reinforcement of reading and writing skills is emphasized. The final assessment is the NYS Regents examination.

E791 French 4 (ACE)

1 Unit **Gr. 11-12**

This course focuses on the development of greater facility in reading, writing, speaking and understanding the language through a systematic review of its structures and readings that reflect cultural patterns of French-speaking societies. Readings include short literary pieces and current newspaper or magazine articles. Research projects, composition exercises and oral reports are included. Students can earn College credits through Corning Community College for this course.

E891 French 5 (ACE)

1 Unit **Gr. 11 - 12**

Students will further develop writing skills, aural comprehension, grammar use and depth of vocabulary while reading and analyzing literature of the target language. This course is also a survey of French literature from the late 19th century through the 20th century. Included are current news items and topics of conversation that apply to daily life.

E991 French 6*

This course is designed for students who have successfully completed French IV ACE and French V ACE. The curriculum centers on the completion of the required reading list prescribed by Advanced Placement for French Literature. Attention is given to literature from Molière to the pre-Modern period. Students are responsible for meeting course requirements that include, but are not limited to, inter-semester reading assignments; tutorials and related assignments as they pertain to points of grammar; selected enrichment activities and a variety of oral and written presentations. Students will be evaluated on their ability to read, interpret, analyze and note commonalities among a significant number of literary works. Assessments will be varied in form, however, the final assessment will include the standard examination in AP French Literature.

Spanish

E452 Spanish 1

1 Unit

Gr. 9-12

This is an introductory course to the study of Spanish. It provides the student with basic language skills with speaking, listening, reading and writing. Students are introduced to culture through projects, class activities and reading materials. Students will take the New York State Proficiency Exam for Spanish at the end of this course.

E502 Spanish Conversation and Culture I

1 Unit

Gr. 9

This course is designed for the students who needs to meet the New York State LOTE requirement for a Regents diploma and who wants to investigate in greater detail the cultural nuances of everyday Hispanic life and communication. The curriculum is prescribed under Checkpoint A of the New York State Syllabus. Assessments will be based on a variety of methods, including evaluation of communication skills as they pertain to relevant situations. In addition, a variety of projects will be completed by the student as a means of demonstrating cultural awareness.

E552 Spanish 2

1 Unit

Gr. 9-12

Spanish 2 is a continuation of the skills studied in Spanish 1. Students further develop oral, written and comprehensive skills and more extensively study grammatical structures. The program emphasizes conversational techniques and broadens cultural studies giving students a better understanding and knowledge of the Spanish-speaking world.

E652 Spanish 3

1 Unit

Gr. 10-12

At the third level, each phase of language study is expanded, especially that of conversational and oral presentation. Reinforcement of reading and writing skills is emphasized. The final assessment is the New York State Regents examination.

E792 Spanish 4 (ACE)

1 Unit

Gr. 11-12

This course focuses on the development of greater facility in reading, writing, speaking and understanding the language through a systematic review of its structures and readings that reflect cultural patterns of Spanish-speaking societies. Readings include short literary pieces and current newspaper or magazine articles. Research projects, composition exercises and oral reports are included.

E892 Spanish 5 (ACE/AP) (EFA only)

1 Unit

Gr. 12

Students will further develop writing skills, aural comprehension, grammar use and depth of vocabulary while reading and analyzing literature of the target language.

This course is also a survey of Spanish literature from the late 19th century through the 20th century. Included are current news items and topics of conversation that apply to daily life.

E992 Spanish 6 (AP) (SHS only)

1 Unit

This course is designed for students who have successfully completed Spanish IV ACE and Spanish V ACE. The curriculum centers on the completion of the required reading list proscribed by Advanced Placement for Spanish Literature. Attention is given to literature of the Siglo de Oro and pre-Modern periods. Students are responsible for meeting course requirements that include, but are not limited to, inter-semester reading assignments; tutorials and related assignments as they pertain to points of grammar; selected enrichment activities and a variety of oral and written presentations. Students will be evaluated on their ability to read, interpret, analyze and note commonalities among a significant number of literary works. Assessments will be varied in form, however, the final assessment shall include the standard examination in AP Spanish Literature.

Work Based Learning

F701 Career Exploration Internship Program (CEIP)

1/2 to 1 Unit unpaid work experience

This program provides students with the opportunity to explore their career interests in an entry-level work setting in a local business or industry. Students will be assigned an adult mentor within the business to oversee the internship along with the school Work-Based Learning Coordinator. **This program is certified through the New York State Education Department and can fulfill the internship requirement for any student seeking Career and Technical Education Endorsement on their Regents diploma. Contact:** School Counselor or Work-Based Learning Coordinator.

F702 Cooperative Exploration Work Experience (COOP)

1+ units paid work experience in a targeted career interest area for students 16 years or older

This internship program consists of a minimum of 150 hours to as many as 600 hours of paid, school-supervised work experience, supported by related in-school instruction in an Occupational Education (CTE) discipline for which the student can earn 1-4 to units of credit toward a 5-unit CTE sequence. Students will be assigned an adult mentor/supervisor within the business to oversee the internship along with the Work-Based Learning Coordinator. **This program is certified through the New York State Education Department and can fulfill the internship requirement for any student seeking Career and Technical Education Endorsement on their Regents diploma. Contact:** School Counselor or Work-Based Learning Coordinator.

GST BOCES

Elmira City School District offers occupational education for students to prepare for employment or further technical and occupational training. There are successful students at GST BOCES TEC Center at all ability levels.

The courses at the TEC Center are designed to meet a broad range of interests and abilities. The aims of these courses are:

1. To develop a positive work ethic.
2. To develop decision-making and problem-solving skills.
3. To explore a student's ability and interest in an occupation.
4. To acquire skills for employment.
5. To promote appreciation for the world of work.
6. To provide practical experience while learning.
7. To provide high school credit.

Students enrolled in an occupational education program attend the TEC Center for one half of each school day. Students then take academic and other required subjects at EFA or Southside High School during the other half of the day. Transportation to the TEC Center is provided by the Elmira City School District.

820V New Visions Health Careers Exploration Program

4 Units Gr. 12

Rotation sites include Arnot Ogden Medical Center, St. Joseph's Hospital and local medical offices.

Curriculum Content:

- Introduction to Human Anatomy & Physiology
- Senior English/Senior Government/Senior Economics (Integrated)
- Exploration of Health-Related Departments & Careers
- Medical Terminology (college credit through CCC)

Special Clothing/Materials Needed: Lab coats are provided and at least one set of navy scrubs must be purchased.

Job Opportunities with Post-Secondary Education include:

Licensed Practical Nurse	Athletic Trainer
Registered Nurse	Physical Therapist
Nurse Practitioner	Occupational Health
Physician's Assistant	Chiropractor
Doctor/Surgeon	Speech Therapist
Psychiatrist/Psychologist	Dietician
Dentist	Pharmacist
Pathologist	Forensics
Hospital Administrator	Veterinarian
Radiology Technician	
Biomedicine Technologies	
Emergency Medical Technician	

Articulation Agreements With: Corning Community College

830Y Unique Career Placement Program

3 Units Gr. 12

This program provides opportunities for students to explore career options not offered at their home school, or at the TEC Program. This one or two semester, half-day program enables students to learn through individualized training at a work site, related classroom instruction and career assessment, career counseling and portfolio development. Students who successfully complete the program may earn one and one-half to three credits. Students are placed in customized work settings with a selected mentor. Each student will have an individualized training plan that outlines program objectives, job-specific outcomes and skills necessary for entry-level employment or selecting a program to continue their post-secondary education. Some examples of past placements include athletic trainer, computer programmer, investment broker and legal assistant. At the end of their experience, students will prepare a five minute presentation for the SCT BOCES Board of Education. **Contact:** TEC Office 607-739-3581 Ext. 2316

840Y New Visions Education & Human Services Program

4 Units Gr. 12

Rotation sites include schools in Elmira, Elmira Heights and Horseheads school, districts and local human service agencies. Students are provided with hands-on workplace experiences.

Curriculum Content:

- Introduction to Education & Human Services
- Senior English/Senior Government/Senior Economics (Integrated)
- Exploration of Education & Human Services Careers

Special Clothing/Materials Needed: Business or educational attire

Job Opportunities with Post-Secondary Education Include:

Adult Educator	Counselor
Secondary Educator	Childcare Worker
Middle School Educator	Social Worker
Elementary Educator	School Social Worker
Preschool Educator	School Psychologist
Family Services Caseworker	Special Educator
Speech & Hearing Educator	Occupational Educator

Articulation Agreement With: Corning Community College

850Y New Visions Engineering Program

Up to 4 Units Gr. 12

With rotation sites at Cutler-Hammer, Hilliard, Hardinge, Sear Brown, Hunt Engineering, Schweizer Aircraft and Corning, Inc., students are exposed to a wide variety of engineering fields. Mentors at each site will introduce students to a real-life project.

Curriculum Content:

- Introduction to Engineering
- Fiscal Management
- Teamwork Problem-Solving
- Quality Assurance
- The Engineering Process

Prerequisites: Taking a CAD and/or drawing course prior to taking this course is recommended.

Job Opportunities with Post-Secondary Education Include:

Civil Engineering/Structural	Aerospace Engineer
Electrical Engineer	Architectural Engineer
Manufacturing Engineer	Automotive Engineer
Mechanical Engineer	Chemical Engineer
Computer Science/Robotics	

Articulation Agreement With: Rochester Institute of Technology and Corning Community College.

860Y New Visions Communication & Media Careers Program

Up to 4 Units Gr. 12

Rotation sites include local and regional broadcasting, publishing and media production facilities. Students are provided with hands-on workplace experiences.

Curriculum Content:

- Introduction to Media Production
- Senior English/Senior Government/Senior Economics (Integrated)
- Principles of Communication & New Technology
- Media Literacy

Special Clothing/Materials Needed: Business Attire

Job Opportunities with Post-Secondary Education Include:

Advertising/Marketing	Audio Production
Educational Communications	& Recording
Print Media	Graphic Design
Radio Production	Public Relations
Television Production	
Industrial/Corporate Communications	
Media Production & On-Line Technologies	

Fine Arts

The New York State learning standard for the Arts requires every student to be able to demonstrate commencement-level achievement in one of the four disciplines of dance, music, theater or visual arts by graduation.

Art

GO01 Digital & Traditional Photography

1 Unit **Gr. 10-12**

This course explores photography through both traditional darkroom and contemporary digital computer applications. There will be an emphasis on artistic photographic composition and creativity of expression through photographic means. Students will be required to build a traditional and digital photographic portfolio through this class. Students will learn to operate both traditional and digital cameras and will understand the application and use of each. Students will employ technology as a means of creating photographic illustrations and preparing students for the work world. **Prerequisite:** Studio In Art.

GO02 Advanced Photography

1 Unit **Gr. 11-12**

Advanced photography is a course offered to those students who have successfully completed Studio in Art and Digital and Traditional Photography and would like to further gain photographic knowledge in such areas as filter use, double exposure, multiple exposures, digital imaging, digital compositing, and

toning. Topics may include: digital, medium and large format cameras, unconventional film types such as infrared film, low speed film and high speed films, digital and traditional image manipulation, and creative photographic processes and media. Both traditional and digital darkrooms will be utilized. It is recommended that students who enroll in this class have the use of their own 35mm SLR camera.

GO03 Studio In Art

1 Unit **Gr. 9-12**

This entry-level course is required of all students seeking any art credit, sequence or art-related career. The course covers fundamentals of art and design with an emphasis on life drawing. Students will complete lessons in drawing, painting, computer graphics and a variety of other media and processes including 3D design. A portfolio will be developed and maintained by the student for presentation and a note/sketchbook will be kept.

GO04 Drawing and Painting

1 Unit **Gr. 10-12**

Various drawing and painting media such as charcoal, pencil, pastel, watercolor, acrylics and computer applications may be explored in black and white and in color. Students will demonstrate an understanding of art criticism, art history, aesthetic principles and show their connections to works of art. The portfolio will be updated and a note/sketchbook kept. **Prerequisite:** Studio In Art.

GO05 Studio in Advertising Design

1 Unit **Gr. 10-12**

This course covers the development of advertising, its function and production. Graphics, logo, layout, print media and package design will be explored via computer graphics and digital design to prepare the student for the world of work. (The portfolio will be updated and a note/sketchbook kept.) **Prerequisite:** Studio In Art.

GO06 Ceramics

1 Unit **Gr. 10-12**

Ceramics is a course for students who wish to learn the fundamentals of working with clay. The student will undertake a series of art works in pinch, slab coil and wheel thrown methodology. This course will involve application and calculation. The nature of this course dictates that the student will be aware of three-dimensional design concepts. A history of ceramics, both traditional and contemporary will be discussed. (The portfolio will be updated and a note/sketchbook kept.) **Prerequisite:** Studio In Art.

GO07 Digital Design

1 Unit **Gr. 10-12**

In this class, students will create digital art and an interactive/animated portfolio website using the computer as the primary design tool. Students will apply their skills using the following computer applications: Adobe PhotoShop, Illustrator, Go Live, Live Motion, PageMaker and Image Ready. Learning will be divided into two parts:

1. The computer as a digital tool for producing fine art and digital illustrations. In this section, a variety of fine art and illustrative digital works will be produced using a variety of applications, materials, and techniques.

2. Constructing an interactive and animated portfolio website. Students will create a unified artist's portfolio site that will include an opening animation, bio, artist's statements and portfolio of works produced in any of our art classes. Sites will be uploaded to the BOCES server and will remain there until 1 year after graduation. **Prerequisite:** Studio in Art.

GO08 Advanced Ceramics

1 Unit

This course is for students who wish to develop additional skill with clay and enhance the medium with creative artistic expression. Students will be involved with advanced wheel work, slip and glaze preparation, kiln operation and other advanced techniques. Prerequisites: Ceramics 1 or the permission of the instructor.

G800 Essentials of Art (ACE)

1 Unit Gr. 11-12

An introduction to the visual arts emphasizing the understanding and appreciation of art through a review of the elements and principles of art and design. Two- and three-dimensional art forms, method and media will be examined.

Music

HO01 Music Theory

1 Unit Gr. 10-12

This course focuses on reading, writing, and analyzing music. Topics will include notation, rhythm, dictation, scales, key signatures, melody writing, harmonization, ear training, keyboard skills, and analyzing musical literature. Required for a sequence in music, and recommended for students planning to pursue music in college.

HO02 Music History

1 Unit Gr. 11-12

This course includes an in-depth study of the history and literature of music from the middle ages to modern ages to modern times. Composers and their works will be studied and analyzed. Historical perspective and other forms of art are also incorporated in the study of music. Required for a sequence in music, and recommended for students planning to pursue music in college.

HO03 Voice

1 Unit Gr. 9-12

This course is an excellent opportunity for those interested in improving their vocal skills and knowledge of singing. A basic repertoire is developed throughout the course for each student. This course can be taken towards a sequence in music and is recommended for students planning to pursue music in college.

HO04 Orchestra

1 Unit Gr. 9-12

The orchestra is composed of a select group of instrumentalists including string, woodwind, brass and percussion players. This group performs for various concerts throughout the year. Orchestra membership provides an opportunity to learn the varied styles found in symphonic literature. **Prerequisite:** Ongoing music lessons and teacher recommendation.

HO05 Concert/Marching Band

1 Unit Gr. 9-12

The Concert Band is open to instrumental music students who wish to participate in a large instrumental performing organization. This group performs standard works from band literature and plays for school and community functions throughout the year, as well as giving several concert performances. **Prerequisite:** Ongoing music lessons.

HO06 Symphonic/Marching Band

1 Unit Gr. 9-12

The Symphonic Band/Wind Ensemble is composed of instrumentalists who have achieved advanced technical and rhythmic performance skills. This group, because of its selectivity, is able to perform more difficult works for band and performs numerous school and community concerts throughout the year. **Prerequisite:** Audition Only. Ongoing music lessons, auditions to demonstrate skill level to instructor, counselors to be notified of audition results before scheduling students for this course.

HO07 Festival Chorus

1 Unit Gr. 9-12

This chorus is an entry-level choral group serving as an introduction to the other vocal ensembles at the high school. Festival Chorus performs several times during the school year, and sings a wide variety of repertoire. This chorus is a prerequisite for Concert Choir.

HO09 Concert Choir

1 Unit Gr. 10-12

Concert Choir is an advanced vocal ensemble that performs a varied repertoire of the highest quality literature. The Choir performs at several concerts during the school year. Entry to this group is through audition only.

Family and Consumer Science

K002 Food and Nutrition I

.5 Unit Gr. 9-12

This course is designed to acquaint students with a variety of foods and how to prepare them. Consideration is given to developing skills in food purchasing, menu planning, identifying nutrients found in various foods, using the Food Guide Pyramid, meal preparation and meal service. This course is recommended for students interested in any food-, health- or child care-related career. Career opportunities will be presented.

K003 Food and Nutrition II

.5 Unit Gr. 9-12

This course is designed to further develop skills in areas related to nutrition, food purchasing, menu planning, meal preparation and special meal service. Students will research career opportunities.

K004 Child Development

.5 Unit Gr. 10-12

The physical, emotional, intellectual and social development of the infant, toddler, preschooler, school-age child and child with special needs will be studied. Daily care, guidance, discipline, parenting, care giving and social concerns will be studied and practiced in a variety of situations. Students will have opportunities to develop competence in working with children and a framework for understanding the forces that shape a child.

K005 Parenting

.5 Unit Gr. 10-12

This course is designed to help young adults become aware of the importance of caring for their own personal health, practice informed decision-making related to different lifestyles and develop positive ways of meeting physical, psychological and social needs of both parent and child.

K006 Independent Living

.5 Unit Gr. 9-12

This course identifies the challenges of adolescents as they assume adult responsibilities and provides opportunities to explore future trends and important decisions. Areas such as money management, living on your own, meal preparation, buying a car and finding a place to live will be discussed. Careers related to the previous areas will be identified.

K008 Human Development 1

.5 Unit Gr. 9-12

This course is designed to give students an opportunity to explore contemporary issues facing society and to investigate alternative choices as they deal with these issues. Ways in which the adolescent can relate more effectively to others will be identified and practical applications will be developed. They will examine the family unit and analyze the adolescent's role within the family structure. Opportunities for employment in human development fields will be studied.

K009 Human Development 2

.5 Unit Gr. 9-12

In this course, the student will examine the dynamics of family life and apply the learning to the individual's present and future family situation. This course will help the student plan, make decisions and solve problems that will continue to face them in future years. Understanding personal problems, alternatives to marriage, marriage, consumer decisions, parenting and aging are among the topics offered.

K010 Sports and Fitness Nutrition (EFA only)

.5 Unit Gr. 9-12

Students taking this course identify personal needs concerning health, fitness and nutrition and then identify and utilize appropriate resources to meet those needs. In this course, students will relate the concepts of nutrition, diet and exercise to good health. The content of this course will examine the role of nutrients in the body, diet-related health conditions, special diets, diet analysis, nutrition for athletes, lifetime fitness, the effect of food preparation techniques on diet and careers in the field of nutrition.

K020 Clothing & Textile Design

1 Unit Gr. 9-12

This course is designed for the beginning sewer. It includes the study of textiles, the selection and care of clothing, working with a pattern and garment construction. Careers in the fashion industry will also be explored.

Career and Technical Education

F700 Career and Financial Management

.5 Unit Gr. 10-12

In Career & Financial Management, the students will explore the following five key areas: Business & Economic Systems, Career Planning, Career Selection Process, Career Success, and Financial Literacy. Regardless of individual career and academic goals, all students share one important need – the need to be prepared to succeed in the world of work. (Career & Financial Management is a requirement for graduation in the Elmira City School District and is a prerequisite for a CTE Diploma).

J001 Computer Applications (Tech Prep)

.5 Unit Gr. 9-12

Software Applications is a one-semester course that helps students meet the benchmarks of the district's Technology Plan. Students become familiar with the fundamentals of word processing, databases, spreadsheets and presentation software such as Power Point. Basic formats for reports, letters, database reports, spreadsheet reports, term papers and a Power Point presentation are covered. (This course is a requirement for graduation in the Elmira City School District.) Those who complete J003 and wish to advance their computer skills should consider enrolling in course J008, Advanced Software Applications. Students may also earn up to 4 Tech Prep Credits in Computer Applications for WP 106 and WP 150.

J002 Advanced Software Applications (Tech Prep)

.5 Unit Gr. 10-12

This course is open to all students who are interested in expanding their knowledge of software programs for word processing, database, spreadsheets and graphics. Students will learn to integrate the various software packages, learn to use the digital camera and scanner and develop a Web page portfolio. T

J003 Website Construction

.5 Unit Gr. 10-12

This course is designed for students interested in learning more about website design and construction. Every business today, large and small, has a website highlighting their services and products. The use of the Internet is based on websites. Students will learn how to plan, build and maintain a website for personal or business use. Other concepts to be covered include the use of themes, graphics and sound in websites. Professional, legal and ethical issues will also be emphasized.

J004 Desktop Publishing

.5 Unit Gr. 10-12

This course is designed for the student who would like to enhance their computer software skills, which are essential in today's workplace environment. Students will use the latest technology from today's business world including Microsoft PowerPoint, FrontPage and Publisher to produce publications such as flyers, reports and advertisements. Students will also utilize scanners, digital cameras, video cameras etc. in the production of these materials including individual and group projects.

J005 Fashion Marketing

.5 Unit Gr. 10 - 12

Fashion Marketing is designed to introduce students to the fashion industry. Focusing on current fashion trends, students will acquire an understanding of fashion terminology, the consumers of fashion, and the specific marketing strategies used to retail fashion as they are applied to the seven basic functions of marketing.

J006 Sales, Marketing and Retail Training (SMART) Course

1.5 Units Gr. 11-12

Plus Internship

Sales, Marketing and Retail Training will provide students with in-depth knowledge and application of the National Skills Standards for Customer Service and Sales. Furthermore, students will be prepared to participate in a national customer service assessment process. This is the capstone course to the Sales, Marketing and Retail Training Career Pathway. Upon successful completion of this pathway, course and the national assessment, students will qualify to earn Career and Technical Education Endorsement on their Regents Diploma.

J007 E-Commerce

.5 Unit Gr. 10-12

E-Commerce is the basis for which business supports and/or completes their transactions. It is necessary knowledge not only today's working world but as personal consumers. This course will provide students with the basic skills necessary to be a knowledgeable E-Commerce user including Marketing, E-Retailing, Business and Technology Basics, Internet Communications, Information Management and Customer Needs.

JO10 Accounting I (Tech Prep)

1 Unit Gr. 11-12

This course is designed to develop competence in the application of accounting theory and principle. Students will process transactions through the accounting cycle and learn to complete end of fiscal period documents and statements. This is a desirable elective for the college-bound student.

JO11 Accounting II (Tech Prep)

1 Unit Gr. 11-12

This course allows students an opportunity to broaden and enhance the skills developed in Accounting I. Accounting II is designed for those students interested in pursuing an Accounting or Business Administration major in college. The course includes a review of the 10 steps of the accounting cycle, notes receivable, inventories, accruals and deferrals for sole proprietorships, partnerships and corporations.

JO12 Business Law

1 Unit Gr. 11-12

Business Law is designed to help students understand U.S. Civil Law and how it applies to both their business and personal life. Students will learn the sources of law in the United States and understand its dual court system. Court related cases from both the text and the media (including the internet) will help students develop an understanding of torts, contracts, warranties, consumer protection, automobile insurance, bailment, agencies, and future personal contracts (marriage, leases and mortgages).

JO13 Multi-Media Communications

May fulfill 4th unit of English

1 Unit Gr. 12

Multi-Media Communications is designed to provide students with the skills and strategies necessary to communicate successfully in the work world. They will learn to analyze information, compose documents, develop and strategize concepts and ideas, and present information to others in a professional manner and through the use of current technology. Students will also learn to apply the principles of technical communications (reading and writing) to their work.

JO14 Sports and Entertainment Marketing

.5 Unit Gr. 10 – 12

Sports and Entertainment Marketing is designed for students with a career interest in the sports and entertainment industry. Instructional areas will include: orientation to the sports and entertainment industry, economics, decision-making, event marketing, sales and sales promotion, event execution, legal aspects/contracts and career opportunities. Classroom instruction will be reinforced through the use of outside lectures, case studies, field trips, job shadows, current periodicals and the Internet.

JO15 Math and Financial Applications

May fulfill 3rd unit of Math

1 Unit Gr. 11-12

Math and Financial Applications is designed to prepare students to effectively manage their finances by relating to practical applications including payroll information, budgeting, banking, credit and investment. Through the use of technology including Internet projects, QuickBooks software and the Microsoft Office package, students will gain skills necessary to better understand and function in the complex financial world they will encounter during their lives.

Project Lead the Way

LO51 Introduction to Engineering Design (PLTW)

1 Unit

Gr. 9-12

This is an introductory course that provides students with opportunities to be creative and develop problem-solving skills. Students will apply the design process through the use of powerful computer software to develop solid renderings of objects. This will involve working in a team environment to design, test, evaluate, and improve a product. **Prerequisite:** Concurrent enrollment with a college preparatory mathematics course. **This course can be used to gain Rochester Institute of Technology credit and also meets the Art/Music high school graduation requirements.**

LO52 CIM Computer Integrated Manufacturing (PLTW)

1 Unit

Gr. 10 -12

This course applies the principles of prototyping, robotics and automation. It builds on the solid modeling skills developed in Design and Drawing for Production. Students use computer-controlled equipment to solve problems by constructing models of their three-dimensional designs. Students are also introduced to the fundamentals of robotics and how this equipment is used in an automated environment. Students evaluate their design solutions using various techniques and modifications before they produce the prototype. **Prerequisite:** Successful completion of DDP and recommendation of the instructor. **This course can be used to gain Rochester Institute of Technology credit.**

LO53 Civil Engineering and Architecture (PLTW)

1 Unit

Gr. 10-12

The major focus of the Civil Engineering and Architecture (CEA) course is a long-term project that involves the development of a local property site. As students learn about various aspects of civil engineering and architecture, they apply what they learn to the design and development of this property. Students work in teams, exploring hands-on projects and activities to learn the characteristics of civil engineering and architecture. **This course can be used to gain Rochester Institute of Technology credit.**

LO54 Digital Electronics (PLTW)

1 Unit

Gr. 11 – 12

The focus of this course is on applied digital logic. The use of digital circuits is increasing so rapidly that it's hard to imagine the limits. Students are introduced to the digital circuits found in video games, watches, calculators, digital cameras and thousands of other devices. Students study the application of digital logic and how digital devices are used to control automated equipment. They use industry-standard, electronic design software to build circuits and to export designs to a printed circuit auto routing program that generates printed circuit boards using chips and other components. **Prerequisite:** Successful completion of DDP and Math A and recommendation of the instructor. **This course can be used to gain Rochester Institute of Technology credit. This course can also fulfill the 3rd year math/science requirement.**

LO55 Principles of Engineering (PLTW)

1 Unit

Gr. 10-12

This is an integrative, hands-on, laboratory-based course which introduces students to the concepts of engineering (ethics, design, modeling, optimization systems, and technology/society interactions). These concepts are applied to solving problems contained in "real world" case studies. Case study abstracts relate to auto safety, computer automation and control, energy, communications, structural design and designing technology for people with disabilities. **Prerequisite:** Successful completion of DDP and recommendation of the instructor. **This course can be used to gain Rochester Institute of Technology credit. This course can also fulfill the 3rd year math/science requirement.**

Technology Systems

L041 Design and Drawing for Production

1 Unit

Gr. 9-12

This is a course designed to challenge students using the creativity of design, the exactness of technical drawing and the fun of model building. Students will use technical drawing and computer aided design techniques and apply them to various materials and machine processes. This course will have plenty of “hands-on” time with career activities as an important part of the classroom setting. The course will fulfill the required Art/Music credit for graduation, as well as the Computer and Careers credit.

L042 Material Processes

.5 Unit

Gr. 9-12

This course is designed to introduce students to the materials that are found in industry. Through hands-on activities, students will learn the machine and tool processes necessary to modify materials, create projects, and solve problems. Students will be involved in both individual and group projects under teacher guidance.

L043 Energy Systems

.5 Unit

Gr. 9-12

This course will study the evolution of energy sources as a foundation of technology, and as a fundamental to systems of communication, transportation, and production. The instruction provides students with the opportunity to analyze systems and applications of energy sources through testing and experimentation. The forms and sources of energy, energy conversion, the laws of thermodynamics, solar heating and cooling, energy-conscious design, and photovoltaics will be included.

L044 Production/Construction Systems

.5 Unit

Gr. 9-12

This course will provide students with hands-on learning activities in the manufacturing industry. Students will learn about the resources of manufacturing as well as specific roles within the industry. As a group or class project, students will identify a need or want of the school community, then design and produce a product to fill this need.

Students will be introduced to the various aspects of the construction industry; including architecture, residential construction, commercial design, wiring and finish carpentry. Through individual and group projects, students will complete hands-on activities that apply discussion topics to practical applications.

Personal Wellness

Health Education

P500 Health (.5) (Freshmen)

P700 Health (.5) (Juniors/Seniors)

.5 Unit

This is a mandated course for all students. The major course goals are to provide students with the knowledge, positive self-concept and skills to make rational, responsible decisions. Students are encouraged to develop behaviors that will result in mental, physical and social well-being. The State Department of Education requires units in alcohol, tobacco and other drugs, child sexual abuse avoidance and AIDS education. The course includes units on emotional health, diseases, family life education, consumer/environmental education, community health, nutrition and safety education.

Physical Education

N501/502 Physical Education (Gr. 9-10) (.25)

N503 Physical Education (G 9-10) (.5 SHS only)

N701/702 Physical Education (Gr. 11-12)(.25)

.25 to .5 Unit

The goal of Physical Education is to develop the necessary knowledge and skills to establish and maintain physical fitness, participate in physical activity and maintain personal health. The students should acquire the knowledge and skills to create and maintain a safe and healthy lifestyle. They should also understand and be able to manage their personal and community resources.

Students must successfully complete two units of Physical Education for graduation. Students receive 1/2 unit per year.

All students are required to complete units in swimming instruction in ninth and 10th grades. Stroke techniques, survival skills, water fitness and water games are covered in these units. Adult CPR is included in the instruction.

NO01/NO02 Adaptive Physical Education

1/4 Unit Per Semester

Offered to the student who has been determined to be in need of an individualized program.

Red Cross Lifeguard Training

N703 Semester 1 (EFA only) (.25)

N704 Semester 2 (EFA only) (.25)

NO40 (SHS only) (.5)

1 Semester SHS: 80-minute class every fourth day

Gr. 9-12 EFA: 44-minute class every other day

The primary purpose of the course is to provide entry-level lifeguard candidates with the skills and knowledge to prevent, recognize and respond to emergencies and to provide care for injuries and sudden illnesses until medical personnel arrives.

Prerequisites: Students must be 15 years old on or before the final scheduled session of the course; be able to swim 500 yards continuously using front crawl with rhythmic breathing and breaststroke; and be able to swim 20 yards either front crawl or breaststroke, surface dive to a depth of 7-10 feet, retrieve a 10-pound object, return to the surface and swim 20 yards back to the starting point with the object.

