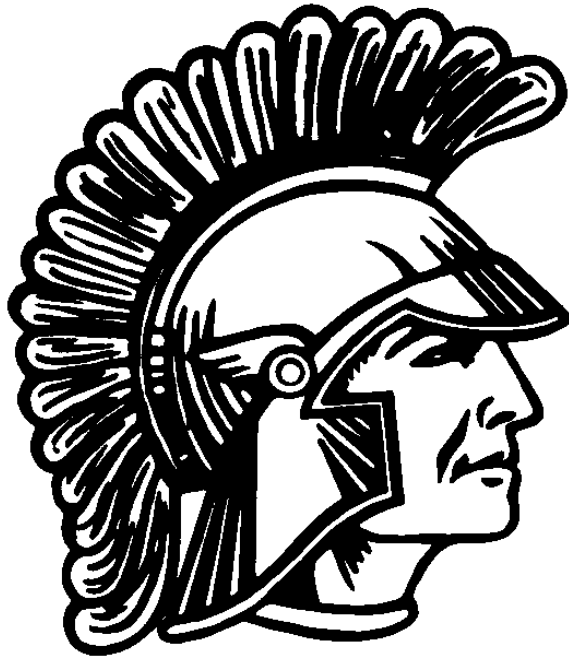


**BELIEVE IT! ACHIEVE  
IT!**

at

*Chenango Valley*



High School  
**“Where Warriors  
Excel”**

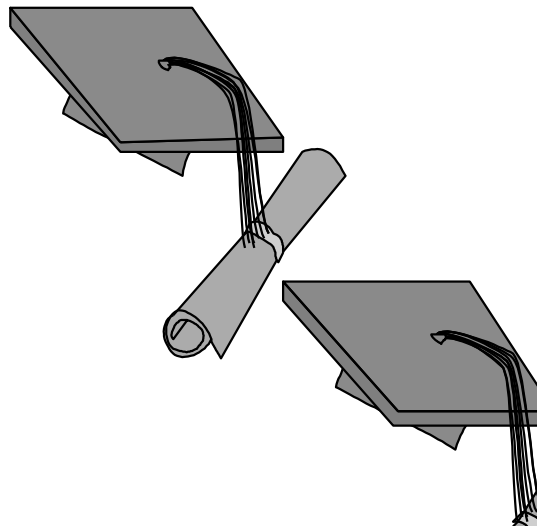
# Course Description Booklet

## **Introduction**

This handbook describing the course offerings at Chenango Valley High School is to be used as a guide in your present and future educational planning. You are urged to read it carefully before making choices concerning your immediate and future programs of study.

However, regardless of the help and advice of counselors and teachers concerning your future studies, the final responsibility for these choices remains with you and your parents. Planning a course of study should be considered as one of the most important decisions you will ever make; this decision will have a direct bearing on your educational and career goals.

Obviously, no course description handbook can answer all questions. Therefore, you and your parents are urged to contact your school counselor to help you resolve any questions pertaining to course programming.



# Chenango Valley High School

## Board of Education

Kelly Warwick	President
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## District Office

David Gill	Superintendent of Schools
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Terrence Heller	High School Principal 9-12
Eric E. Attleson	Middle School Principal 6-8
Brad Tomm	Director of Pupil Services
Tara Williams-Whittaker	Director of Special Education

## School Counselors

Judy Hayes	School Counselor	Grades 10-12 <b>A-L</b>
Karen Mullins	School Counselor	Grades 10-12 <b>M-Z</b>
Shelby Samson	School Counselor	Grades 8 & 9
Deborah Lally	School Counselor	Grades 6 & 7
Jackie Arnold	School Social Worker	Grades 9-12
Elizabeth Hubenthal	School Social Worker	Grades 6-8

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**New York State Education Department**  
**Requirements for High School Graduation**  
**Students Entering Grade 9**  
**2001 and Thereafter**

*Earning a Regents Diploma*

The student shall meet the New York State Commencement Learning Standards by successfully completing twenty-two units of credit and five New York State assessments or approved alternatives as specified in (a) through (k) below.

- (a) English, 4 units of credit, and the Comprehensive English Regents Examination, or an approved alternative.
- (b) Social Studies, 4 units of credit, the Regents Examination in United States History and Government and the Regents Examination in Global History or an approved alternative.
- (c) Mathematics, 3 units of credit and one of the Regents Examinations in Mathematics, or an approved alternative.
- (d) Science, 3 units of credit and one of the Regents Examinations in Science, or an approved alternative. In order to qualify to take a Regents Examination in any of the sciences, a student must complete 1200 minutes of actual hands-on (not simulated) laboratory experience with satisfactory laboratory results.
- (e) Arts (including dance, music, theatre, visual arts), one unit of credit, which may be a specialized course that meets the arts standards at the commencement level as established by the Commissioner.
- (f) Health, one-half unit of credit, which may be a specialized course that meets the health standards at the commencement level as established by the Commissioner.
- (g) Second language, one unit of credit
- (h) Physical Education, two units of credit.
- (i) Additional units in any subject area approved by the Commissioner to a total of 22 units of credit.
- (j) The learning standards in Technology Education, met either through a course in Technology Education or through a specialized interdisciplinary course combining technology with Mathematics and/or Science.
- (k) The learning standards for parenting, met either through a course in parenting or through integration in a course in Health or Family & Consumer Sciences.

**New York State Education Department**  
**Requirements for High School Graduation**  
**Students Entering Grade 9**  
**2001 and Thereafter**

*Earning a Regents Diploma with Advanced Designation*

To earn a Regents diploma with advanced designation, a student must complete the following in addition to the requirements for a Regents diploma outlined on the previous page:

- (a) Three Regents Examinations in Mathematics; and
- (b) Two Regents Examinations in Science, at least one in life science and at least one in physical science; and
- (c) Two additional units in a second language for a total of three units.

Students completing a 5-unit sequence in Career & Technical Education or the Arts (dance, music, theatre, visual arts) are not required to complete the additional two units of the second language requirement for the Regents diploma with advanced designation, but must still meet the requirements for the total number of units of credit.

**New York State Education Department**  
**Requirements for High School Graduation**  
**Students Entering Grade 9**  
**2001 and Thereafter**

<b>CORE CREDIT REQUIREMENTS</b>			
<b>Content Area</b>	<b>Regents Diploma</b>		<b>Regents Diploma with Advanced Designation</b>
English	4		4
Social Studies	4		4
Mathematics	3		3
Science	3		3
Languages Other Than English (LOTE)	1	Select One Content Area for Advanced Designation Option	2 Additional LOTE or  5 CTE or  4 Additional Arts Credits
Career & Technical Education (CTE)			
The Arts	1		
Health	.5		.5
Physical Education	2		2
Total Units in Core	18.5		20.5
Electives	3.5		1.5
Required Minimum Units of Credit	22.0		22.0

# Grade Placement

At the high school, grade placement is used primarily for organizing each class, reporting attendance and placing students together so they may better plan their activities. A guide of units for grade placement is:

A FRESHMAN must earn 5 units in order to become a sophomore.

A SOPHOMORE must earn 10 units in order to become a junior.

A JUNIOR must earn 15 units and be able to schedule all remaining graduation requirements in his/her program in order to become a senior.



# ART DEPARTMENT

## **Mission Statement**

The Arts program at CVCSD is designed to meet the national and state standards using a progressive art curriculum. Within a studio environment students will develop a foundation of artistic techniques as well as an understanding of various materials and processes. In addition, students will create works that explore different subject matter, topics, and themes. Through group and individual critiques students will reflect, interpret, and evaluate artwork using the language of art criticism. By exploring artifacts from different cultures and historical periods, students will discover how time and place influence visual characteristics of artwork as well as the effect of art on different societies.

## **Grade 8 - Accelerated Studio**

**1 Unit**

*Two Semesters*

This course is for the 8<sup>th</sup> grade students that have a serious interest in Art. Selection into this program will be based on your Art 7 portfolio, and may include other examples of your work and an interview. One semester is Drawing & Painting. The second semester is Studio in Design & 3-Dimensional Art. These course descriptions are listed below.

## **Studio in Drawing & Painting**

**½ Unit**

*One Semester*

This is an introduction to basic skills and information needed to prepare the beginning art student for further study in the arts, and to meet the requirements set forth by the State Board of Regents. The fundamentals of drawing are taught with the use of a variety of media such as pencil, pen & ink, charcoal, and pastels. An introduction to painting is part of the course with lessons in color mixing, blending, and application. Media such as watercolor, tempera, and acrylic paint are used. These experiences increase the students' understanding of art and their esthetic sensitivity.

Studio in Drawing & Painting is a prerequisite for all advanced studio courses.

## **Studio in Design & 3 Dimensional Art**

**½ Unit**

*One Semester*

This course is designed to meet the state and national standards in art. The course is an introduction to basic skills and information needed to prepare the beginning art student for further study in art. The fundamentals of artistic design (Elements and Principles of Design) are taught along with the basic skills needed to create three-dimensional artwork. Students will use various mediums; clay, paper mache, wood, metal, plaster, fiber, cardboard, and other found objects to create works of art. Students will be introduced to the uses and influence of three-dimensional art on various societies and cultures, historical and present.

## ART DEPARTMENT

### **Studio in Sculpture (3-D I) – Sculpture, Ceramics, Jewelry, Mixed-Media, & Crafts 1 Unit**

*Two Semesters*

Prerequisite: Studio Art

This course is designed to meet the state and national standards in art. The course is designed to introduce the three-dimensional arts through the study of form and function. The students will create a collection of artworks that will represent various techniques and mediums. The students will develop the technical knowledge and skill needed to create three-dimensional works of art through hands-on projects that develop skills and artistic understanding in various mediums; sculptural media, clay, paper mache, wood, metal, plaster, fibers, cardboard, and found materials.

### **Studio in Ceramics I**

**½ Unit**

*One Semester*

Prerequisite: Studio Art

This course is designed to meet the state and national standards in art. The students will create a collection of art work in clay based on a range of individual and collective experiences. The students will explore various techniques and methods within the creation of clay arts. The students will participate in the production of clay and glazes. They will also be introduced to and participate in various firing techniques.

Students will reflect upon, interpret, and evaluate works of art using the language of art criticism. Students will explore ceramics and artifacts from various historical periods and world cultures to discover the roles that art plays in the lives of people of a given time and place. Students will gain an understanding of how time and place influence visual characteristics of artwork as well as their effects on various societies. The emphasis of the Ceramic I course will be the exploration of various hand-building techniques and methods, with an introduction to the pottery wheel.

### **Studio in Ceramics II**

**½ Unit**

*One Semester*

Prerequisite: Studio in Ceramics I

This course is designed to meet the state and national standards in art. The course is designed to continue the study in ceramic art. The students will create a collection of advanced art works in clay based on a range of individual and collective experiences. The students will explore various advanced techniques and methods within the creation of clay arts. The students will participate in the production of clay and glazes. They will also participate in various firing techniques.

Students will reflect upon, interpret, and evaluate works of art using the language of art criticism. Students will continue to explore ceramics and artifacts from various historical periods and world cultures to discover the roles that art plays in the lives of people of a given time and place. Students will master an understanding of how time and place influence visual characteristics of artwork as well as their effects on various societies. Students will have occasional projects in hand-building.

The emphasis of the Ceramic II course will be the exploration of various throwing techniques, methods, and shapes on the pottery wheel.

## ART DEPARTMENT

### **Art 106-Intro to Three Dimensional Design (BCC college course)**

**½ Unit**

#### **3 College Credits**

*Fall Semester*

Prerequisite: Studio in Sculpture or Studio in Ceramics

The fundamental purpose of the course is to create a visual dialogue between form and space. An emphasis will be in creating a visual sensitivity within three-dimensional composition, utilizing the core principles and elements of design.

The projects will be centered on building a relationship through structural process and the methods of form building. The objective of this course will be to create a visual and structural relationship defined by a developing sensitivity and awareness of our spatial environment. Aesthetic and functional elements of three-dimensional design are explored. Through reading, projects, lectures, and field trips, techniques are explored to assist in heightening awareness. This enables the student to understand the functional and aesthetic examples of the three dimensional environment. Emphasis is placed on studio projects.

### **Art 130-Ceramics (BCC college course)**

**½ Unit**

#### **3 College Credits**

*Spring Semester*

Prerequisite: Studio in 3-D and Studio in Sculpture or Ceramics

The fundamental purpose of the course is to create a visual dialogue between form and space. An emphasis will be in creating a visual sensitivity within the study of ceramics. The core artistic foundations utilizing the core principles and elements of design will be structured around the understanding and use of clay.

The projects will be centered on building a relationship through ceramic techniques and the methods of form building. Creating a visual and structural relationship defined by developing sensitivity and awareness of the history of clay and the importance it plays upon human development.

Aesthetic and functional elements of ceramics will be explored. Through reading, projects, lectures, and field trips, techniques are explored to assist in heightening awareness. This enables the student to understand the functional, utilitarian, and aesthetic examples of ceramics. Emphasis is placed on studio projects.

## ART DEPARTMENT

### **Drawing and Painting I**

**1 Unit**

*Two Semesters*

Prerequisite: 1 Unit of Studio

This is an advanced drawing and painting course planned to develop the techniques, concepts, and skills learned in the Studio courses. The student will be encouraged to develop and improve his/her individual strengths through problem solving and class critique.

### **Design and Illustration**

**1 Unit**

*Two Semesters*

Prerequisite: 1 Unit of Studio

This course provides opportunities for the student to produce drawings, paintings, pen and ink, collage, etc. that are specifically used for publication, product design and packaging, and general advertising projects. The student is made aware of practical applications for artwork and the function of the artist in the marketing world. Work composed by the students will be abstract as well as realistic.

### **Art 155 Beginning Drawing (BCC college course)**

**1 Unit**

*Two Semesters*

Prerequisite: 3 Units in Art Courses

Students will develop more comprehensive drawings while improving their drawing techniques and observation skills. The practice of using formal elements and principles of organization will be explored through still life, self-portrait, and figure drawing. Students will earn 3 college level elective credits.

## **BUSINESS EDUCATION DEPARTMENT**

Business Education is a broad and diverse discipline that enables students to prepare for entry-level employment after graduation in business office occupations or for post- secondary education. The Business Education curriculum provides a variety of courses for all students. Students learn from a broad range of business disciplines which include: Accounting, Entrepreneurship, Career Exploration, Digital Photography, Financial Management, Law, Sports Marketing, and Multimedia/Web Design. Students will become proficient using several electronic hardware devices and software programs

### **Middle School**

#### **Computer 6**

*Grade 6 – 10 weeks*

This course is designed to help develop basic keyboarding and word processing skills using Microsoft Word. Students will progress through 20 Typing Time lessons learning the entire alphabet, capitalization, and punctuation keys. Culminating projects include writing a personal business letter, a one page research essay including a cover and a works cited page. *This is a required course for all sixth graders.*

#### **Computer 7**

*Grade 7 – One Semester*

Over a 20 week period students will be brushing up on proper keyboarding techniques and applying computer software to solve financial problems they will face. Some of the topics covered are: career exploration, creating their own business, the cost of going to college, understanding a paycheck, the cost of purchasing a car and home, budgeting, and investing money for long term goals. Important computer terminology and a study of the history and development of computers are presented. *This is a required course for all seventh graders.*

# **BUSINESS EDUCATION DEPARTMENT**

## **High School Business**

### **Dollars & Sense**

**1 Unit**

*Two Semesters*

Do you know what you want to do when you graduate? Do you want to learn how to manage your money better? The financial decisions you make as a young adult will affect you for many years to come. Taking this course will help guide you along a realistic financial journey. Using the Finance Park Curriculum created by Junior Achievement®, students will start by taking a personality/psychology test to determine career choices that best fit them. Using the results, students will choose a college or decide on career options. After that, the focus will be on answering the question “Where’s all my money?” and students will explore topics such as taxes, budgeting, investing money, banking and checkbook management, managing debt, using insurance to minimize risk, and filling out income tax forms. This course will help you get ready for the real world by ending in a real-life, virtual simulation that will help students put everything they’ve learned to the test.

### **Entrepreneurship**

**½ Unit**

*One semester*

What does Bill Gates, Warren Buffett, and Jeff Bezos have in common? Besides being filthy rich they own their own business. Do you have any aspirations or dreams of owning your own business? Do you want to set your own hours, decide how much money you will make, what products you will sell, and make all the decisions?

This class will show you what it takes to open your own business as an entrepreneur. Concepts include identifying your business, designing, planning and opening your business, as well as marketing and advertising your business. Students will be competing in a “Shark Tank” like environment at the Greater Binghamton Scholastic Challenge held in May at Binghamton University. Students will present their new businesses to judges and awards will be given based on best presentations.

### **Marketing**

**½ Unit**

*One semester*

Sales make the world go round. Ever wonder what it takes to market a product or a service in today’s fast paced business environment? This course will provide students with in depth knowledge of how marketing is a major driver toward demand of a product. Students will learn ways to conduct research in determining trends, tastes, preferences and target markets. Ultimately students will be working together to market a product or service by creating a marketing plan.

## **ENGLISH DEPARTMENT**

The English program at Chenango Valley has two positive functions: (1) to improve each student's ability to convey information, ideas and emotions, both in speaking and writing, as clearly and effectively as possible, and (2) to improve each student's ability to receive through reading, viewing, and listening the information and inspiration available to him through spoken and written English.

### **English 7**

*Two Semesters*

The Grade 7 curriculum is structured to build on and enhance students' skills for their success in meeting the New York State Common Core Standards. The standards focus on emphasizing techniques for finding facts from sources, improving reading comprehension, and applying what was read to given assignments; exposing students to several genres of literature so that the students can understand and respond to social, historical and cultural features of literary products; demanding that students be able to analyze, synthesize, evaluate, and discuss ideas using various forms of discussion and written products; and improving students' communication skills by involving the Internet, giving/listening to oral reports, and writing invitations, editorials and letters.

### **English 8**

*Two Semesters*

The Grade 8 curriculum is largely a continuation of skills begun in the English 7 curriculum. There is a strong emphasis on reading comprehension and application of basic literary terms to enhance understanding and discussion of the works of literature studied. Concentrated work on the establishment and development of basic writing skills is stressed in order to prepare students for the New York State 8<sup>TH</sup> Grade English Language Arts exam administered in the spring. This exam largely tests the students according to the Standards explained above in the English 7 course description. The results of the 8<sup>th</sup> grade NYS ELA exam are used to determine whether students need additional academic support in ninth grade. The support may come in the form of monitoring within the student's English class, or the student may be placed in an AIS class.

### **AIS 7 & 8**

Students who have been identified at below acceptable levels, or show serious deficiencies in reading or writing skills, are assigned to AIS. Students are scheduled into AIS, based on ELA proficiency and teacher recommendation, on alternating days. The more individualized attention enables a student to focus on particular problem areas and improve reading and writing skills.

# ENGLISH DEPARTMENT

## Grades 9-12

All students are required by the New York State Board of Regents to complete four years of English during their high school career. In order to meet the needs of all students, during the 11<sup>TH</sup> year, all students are required to take and pass the English Language Arts Regents exam for graduation.

### **English 9**

**1 Unit**

*Two Semesters*

Prerequisite: English 8

The Grade 9 curriculum is structured to build on and enhance students' skills for their success in meeting the New York State Common Core Standards. The standards focus on emphasizing techniques for finding facts from sources, improving reading comprehension, and applying what was read to given assignments; exposing students to several genres of literature so that the students can understand and respond to social, historical and cultural features of literary products; demanding that students be able to analyze, synthesize, evaluate, and discuss ideas using various forms of discussion and written products; and improving students' verbal and written communication skills.

### **English 9 Enriched**

**1 Unit**

*Two Semesters*

This is an optional course for advanced level students who have the ability, interest and enthusiasm to read and write on a more critical and analytical level. **Students are selected for English 9 Enriched based on a process that includes (1) consideration of the student's class work and average in English 8, (2) recommendation of the student's English 8 teacher, and (3) results of state ELA tests completed in 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> grade.** The English 9 Enriched curriculum reinforces the studies of reading, writing, speaking and listening, but it also focuses on a more sophisticated approach to literature and writing. Students will work extensively on their own writing skills, seeking to improve their style, development, organization and conventions. Students in English 9 Enriched are required to complete a research project and independent study of a teacher-selected novel. Each student in this course is expected to maintain a minimum average of 85 during the year.



## ENGLISH DEPARTMENT

### **English 10**

**1 Unit**

*Two Semesters*

Prerequisite: English 9

The Grade 10 curriculum is structured to build on and enhance students' skills for their success in meeting the New York State Common Core Standards. The standards focus on emphasizing techniques for finding facts from sources, improving reading comprehension, and applying what was read to given assignments; exposing students to several genres of literature so that the students can understand and respond to social, historical and cultural features of literary products; demanding that students be able to analyze, synthesize, evaluate, and discuss ideas using various forms of discussion and written products; and improving students' verbal and written communication skills.

### **English 10 Enriched**

**1 Unit**

*Two Semesters*

English 10 Enriched is an option for advanced level students who have the ability, interest, and enthusiasm to read and write on a more critical and analytical level. Students selected for English 10 Enriched should have maintained a 90 or above average in English 9, or an 85 or above in English 9 Enriched, demonstrate a genuine enthusiasm for reading, exercise high proficiency in writing, and possess the maturity necessary for in-depth study of literature. The enriched class is characterized by a more intense analysis of texts, including two full-length works not studied in the regular English 10 curriculum, and development of more varied and sophisticated writing skills. Students in English 10 Enriched also are required to complete a research project. Each student in this course is expected to maintain a minimum average of 85 during the year.

### **AIS 9/10**

Students who have been identified at below acceptable levels, or show serious deficiencies in reading or writing skills, are assigned to AIS. Students are scheduled into AIS, based on ELA proficiency and teacher recommendation, on alternating days. The more individualized attention enables a student to focus on particular problem areas and improve reading and writing skills.

## ENGLISH DEPARTMENT

### **English 11**

**1 Unit**

*Two Semesters*

Prerequisite: English 10

The Grade 11 curriculum is structured to build on and enhance students' skills for their success in meeting the New York State Common Core Standards. The standards focus on emphasizing techniques for finding facts from sources, improving reading comprehension, and applying what was read to given assignments; exposing students to several genres of literature so that the students can understand and respond to social, historical and cultural features of literary products; demanding that students be able to analyze, synthesize, evaluate, and discuss ideas using various forms of discussion and written products; and improving students' verbal and written communication skills. Students are required to complete a research project in order to pass the course. The NYS ELA Regents Exam is the culmination of the course, and students must pass the NYS ELA Regents in order to graduate.

### **English 11 Enriched**

**1 Unit**

*Two Semesters*

This is an optional course for advanced level students who have the ability, interest and enthusiasm to read and write on a more critical and analytical level. Students selected for English 11 Enriched should have maintained a 90 or above average in English 10, or an 85 average in English 10 Enriched, demonstrate a genuine enthusiasm for reading at an above-average level, exercise high proficiency in writing, and possess the maturity necessary for highly interpretive, analytical study of literature. The enriched class is characterized by a more intense analysis of texts, including works not studied in the regular English 11 curriculum - and development of more varied and sophisticated writing skills. Each student is expected to maintain an 85 average during the year.

### **English 12**

**1 Unit**

*Two Semesters*

Prerequisite: English 11

The English 12 curriculum prepares students for independent critical thinking and writing necessary in a college environment. Students will practice writing for an academic audience, and gain confidence as writers creating college application essays, informal writing, personal essays, and academic essays to help prepare for any college courses that require writing. Another goal is to foster an appreciation and understanding of literature. Students will read classical and modern tragedies as well as fiction and nonfiction works in order to appreciate some of the great ideas in Western literature. In addition, all English 12 students must successfully complete a research paper.

## ENGLISH DEPARTMENT

**English 110 College Writing I**      **Semester 1**      **1 Unit**  
**Enr. English 12**      **Semester 2**

*Two Semesters*

Prerequisites:

- Score of 85 or better on the ELA
- Successful completion of Enriched English 11 or teacher recommendation

The first semester of College English is a Broome Community College “Fast Forward” course called College Writing I (ENG110). In this course students learn to use writing to develop their thinking and to read texts critically for both form and content. They practice different writing processes and rhetorical strategies in order to write essays that are purposeful, thoughtful, and coherent, and that conform to the conventions of standard written English. They understand writing as a social and collaborative process, both as a mode of individual expression and as a rhetorical act. During the second semester, the course changes into Enriched English 12. Students will read various literary works, learn different approaches to their interpretation, and practice the process of literary analysis in oral and written forms. They will continue to practice and expand their college-level writing skills. In addition, all English 12 students must successfully complete a research paper.

### **AIS 11/12**

Students who have been identified at below acceptable levels or show serious deficiencies in reading or writing skills are assigned to AIS. Students are recommended by their teacher as a result of benchmark and diagnostic assessments in English 11 or as a result of failing to score an acceptable grade on the ELA Regents exam. The class meets on alternating days. The more individualized attention enables students to focus on particular areas of weakness and to improve reading and writing skills in preparation for the ELA Regents exam.

## **FAMILY & CONSUMER SCIENCES (FACS) DEPARTMENT**

### **Grades 6-8**

Introduction to FACS 6, 7 and 8 are courses designed to help adolescents live in a society of constant change by preparing them to meet present and future responsibilities as individuals, family and community members, consumers, home managers, and wage earners. The goal is to educate students to think constructively, make sound decisions, solve problems and manage resources to achieve optimal quality of life.

#### **Grade 6**

*One term (10 weeks)*

This course is an introduction to Family and Consumer Sciences and allows opportunity for students to apply their academic knowledge to real world situations. Topics include teamwork, decision-making, problem solving, goal setting, management, kitchen and food safety, food preparation, the family life cycle and caring for young children.

#### **Grade 7**

*One term (10 weeks)*

This course further allows opportunity for students to apply their academic knowledge to real world situations. Topics include consumerism, foods, nutrition and wellness, culture in foods and financial literacy.

#### **Grade 8**

*One Semester (20 weeks)*

In this course, students develop human literacy as they master a complex set of essential skills and knowledge needed to achieve quality of life. They gain career preparedness as they acquire readiness to participate in a rapidly changing workforce and global economy. Other areas explored over the 20 weeks include, interpersonal relationships, food science, housing, interiors and design and textiles, apparel and fashion.

### **Grades 9-12**

#### **Child Psychology**

**½ Unit**

*One Semester*

*No prerequisite required.*

This course offers a student's practical experience in child development from prenatal through school age. Recommended for males and females who are interested in a career in the fields of psychology, social work, health care, medicine, education, childcare or wish to develop parenting skills for the future.

- Discuss issues in parenting, teen pregnancy, preventing birth defects, newborn care, infants, toddlers, preschoolers, etc.
- Prepare a parenting project that may include a baby simulator.
- Field trip to a preschool class.
- Research and present information on a birth defect.

## **FAMILY & CONSUMER SCIENCES (FACS) DEPARTMENT**

### **Fashion in our Lives**

**½ Unit**

No prior sewing experience required.

Fulfills one-half unit of Fine Art Requirement

*One Semester*

Explore your own personal clothing style as you select and **construct** a garment and several accessories. Discover how the past influences the present trends in fashion. If you are creative, fashion conscious, and enjoy constructing items by hand this is the course for you.

In this course students will:

- Study contemporary designers.
- Investigate the cultural, social, and economic influences on clothing uses and styles.
- Demonstrate the ability to read and follow directions while constructing several sewing projects.

### **Culture & Foods**

**½ Unit**

*One Semester*

This course is designed to create an understanding of cultural differences in regions of the United States and other countries around the world through food. The students will explore a variety of culture specific foods and basic preparation techniques. They will relate their own cultural heritage, travel experiences and a genuine interest in foods to this course. We are always preparing and trying new foods!

### **Gourmet Foods**

Elective – Juniors/Seniors Only

**½ Unit**

*One Semester*

Students will prepare and taste a wide variety of foods. A few examples are chicken risotto, lasagna, cinnamon rolls and apple pie. They will learn about preparation techniques and the use of varied equipment. Students will practice sanitation procedures, plan menus, apply nutrition principles, work in a team and identify current trends in foods. Prepare to be challenged and have fun.

### **Interior Design**

**½ Unit**

Fulfills one-half unit of Fine Art Requirement

*One Semester*

Explore some of the dimensions of architecture and interior decorating in this introductory course. If you are a person who enjoys working with colors, rearranging furniture and choosing accessories for your own space, this is the course for you.

- Develop knowledge of housing styles.
- Identify and create room color schemes.
- Make accessories for use in their own homes.
- Demonstrate skills learned by designing and furnishing a teen's bedroom

# **HEALTH**

## **HEALTH EDUCATION**

All students attending public school are mandated by NYS Education Law to complete and pass one semester of Health Education by the completion of the 8th grade year. In addition, one semester of Health Education needs to be completed by the end of their 12th grade year with a passing grade to earn a ½ unit of credit towards graduation requirements. The curriculum for Health Education is in alignment with the NYS Scope and Sequence for Health Education and New York State Learning Standards. The overall objective of our Health Education curriculum is to provide sound learning experiences and assessments that reach to the following standards: 1. Personal Health and Fitness; 2. Safe and Healthy Environment; and 3. Resource Management. Through these learning experiences and personal skill development, students will be able to make positive decisions in developing and maintaining a healthy personal lifestyle.

### **6TH GRADE HEALTH EDUCATION**

Students in 6th grade will take 10 weeks (1 marking period) of Health Education. Each student will complete and pass a 10 week unit of instruction. The course begins with an introduction to wellness and appropriate life skills needed to achieve and maintain a high level of wellness. Units of instruction include: 1. Life Skills; 2. Physical Fitness; 3. Self-Esteem; 4. Personal Hygiene; 5. Healthy Relationships; 6. Disease Prevention; and 7. Alcohol, Tobacco and Other Drug Awareness.

### **8TH GRADE HEALTH EDUCATION**

Students in the 8th grade will take 10 weeks (1 marking period) of Health Education. Each student will complete and pass a 10 week unit of instruction. The course begins with a brief introduction to Health and Wellness. Units of instruction include: 1. Stress and Stress Management; 2. Communication/Conflict Resolution; 3. Nutrition; 4. Alcohol, Tobacco, and Other Drugs; 5. Human Sexuality and Prevention of STD's; 6. Personal Safety/First Aid/CPR; 7. HIV/AIDS Education; 8. Consumer Health

### **10<sup>th</sup>-12<sup>th</sup> GRADE HEALTH EDUCATION**

Our Chenango Valley High School Health Education class is a mandatory twenty week course using state and national health educational standards to establish the instructional curriculum. Units of instruction include: 1. Life Skills & Character Education; 2. Understanding & Promoting Wellness; 3. Personality & Mental Health; 4. Fitness & Nutrition; 5. Stress & Stress Management; 6. Drug Education; 7. Sexuality & Family Living. One of the goals of the course is to present updated, factual health information in a manner that will increase the student's knowledge base, as well as help the students develop life time skills necessary to promote a safe, healthy existence. Another important aspect of our health education program is utilizing community resources and professional agencies to increase student knowledge and provide strategies that promote positive behavior. At times, certain unit instruction allows for cross curricular involvement with other disciplines. Programs like physical education, science and family and consumer science classes are an excellent method of reinforcing student learning.

## LANGUAGES OTHER THAN ENGLISH

Languages have always been instrumental in broadening a student's general knowledge, in expanding their grasp of English grammar and vocabulary, and in solidifying college preparatory skills. The goals of the Chenango Valley Language Department include an emphasis on the ability to understand and communicate in the new language, a familiarity with and an understanding of cultural traditions of the new language. Students are prepared for a world in which nations and people are increasingly interdependent.

### **French IA - Grade 8**

*Two Semesters*

The students are exposed to all four aspects of language learning-speaking, listening, reading and writing. Basic vocabulary pronunciation of sounds and present tense of verbs are covered. CDs, DVDs, songs, the internet and technology supplement the text to develop an awareness of French speaking cultures.

### **French IB - Grades 9-12**

**1 Unit**

*Two Semesters*

French IA Recommended

The student continues to speak, listen, write, and read in French through the introduction of basic vocabulary and grammar principles. The structures of present tense and future are covered. Elements of French culture and civilization are discussed as they relate to the material being introduced. Students are prepared to take a comprehensive exam, testing the four skills of the language from levels IA and IB.

### **French II – Grades 10-12**

**1 Unit**

*Two Semesters*

Prerequisite: French IB

The basic skills of speaking, listening, writing and reading are further developed with more emphasis on comprehension of written materials, including those from sources other than the text. The basic vocabulary is increased and the student learns new verb structures which enable him to communicate more fully in the present and past. French culture is included through the use of songs, skits, DVDs and projects.

### **French III – Grades 11-12**

**1 Unit**

*Two Semesters*

Prerequisite: French II

French III reviews many of the basic verbs, grammar, vocabulary and pronunciation skills learned in the first three years. The new material aims at continuing to develop the use of French on the four levels of reading, writing, speaking, and listening. DVDs, CDs, movies, informal conversations, songs and occasional skits supplement the text. The student is fully prepared to take an advanced comprehensive exam at the end of the course.

## LANGUAGES OTHER THAN ENGLISH

### **FRE 201 & FRE 202**

**1 Unit**

#### **Intermediate French I & II Broome Community College**

*Two Semesters*

Prerequisite: French 102 or equivalent; 85 or higher overall average in French IB, II and III combined and teacher recommendation

Intermediate French 201 and 202 are two college level courses offered at the high school through SUNY Broome. The goal of these courses is to improve upon the four basic language skills: oral comprehension, speaking, reading and writing. **All students must be prepared to participate actively in the classroom and speak in French.** The course will also be taught entirely in French with exceptions made only for the clarification of some grammatical concepts. Since grammar is clearly explained in the textbook and much of the grammar has already been taught, **the student will be responsible for preparing before class in order to use the language in class.** This will allow the students to speak French rather than talk about French in English. English may be used after class for individual questions. Culture is an important aspect of this class and it is integrated in every listening and reading exercise through the use of authentic materials taken from French resources. **Regular class attendance is highly recommended and extremely important.**

### **Latin IA – Grade 8**

*Two Semesters*

This is an introductory course in which students learn to read, write, and pronounce basic Latin sentences and vocabulary. The textbook, Cambridge Latin Unit I, contains stories of a Roman family in Pompeii. Through the stories, students learn about Roman families, cities, and customs. Roman culture, history, mythology, the relationship of Latin to English, and the cultural legacy of the Romans are also part of the curriculum.

### **Latin IB**

**1 Unit**

*Two Semesters*

Latin IA Recommended

In this course, students learn Latin grammar and vocabulary as they continue to improve their Latin reading skills. The study of mythology continues as students are introduced to Ovid's Metamorphoses and stories of heroes such as Jason, Perseus, and Odysseus. Roman history and the relationship of Latin to English continue to be an important part of the curriculum.

At the end of the year students will be given a comprehensive examination in Latin covering levels IA and IB.



## LANGUAGES OTHER THAN ENGLISH

### **Latin II**

**1 Unit**

*Two Semesters*

Prerequisite: Latin IB

This course includes more intensive grammar study and reading assignments. Roman history topics covered include the Punic Wars, the rebellion of Spartacus, and the events of the late republic. Students will learn about Roman government and social structure. Students will continue to study English vocabulary and spelling through Latin.

### **Latin III**

**1 Unit**

*Two Semesters*

Prerequisite: Latin II

In this course students complete their grammar lessons and are ready to read Latin literature. In addition to textbook stories, students will be introduced to Caesar's Commentaries on the Gallic War, and selections from other Roman authors. Students will review history and culture, mythology, and English derivatives as they prepare for an advanced comprehensive examination in June.

### **Latin IV<sup>1</sup>**

**1 Unit**

*Two Semesters*

Prerequisite: Latin III

This is an elective course for seniors. The course begins with a general review of grammar. Works read and discussed in class include Caesar's Commentaries on the Gallic War, Cicero's First Oration Against Catiline, and Vergil's Aeneid. Selections from other Roman authors are also included.

### **Spanish IA – Grade 8**

*Two Semesters*

The students learn the basic sounds of the Spanish language and practice the language in listening, speaking, reading and writing. Basic vocabulary and structures are introduced, and an awareness of the Spanish-speaking communities and their cultures are emphasized.

## LANGUAGES OTHER THAN ENGLISH

### **Spanish IB**

**1 Unit**

*Two Semesters*

Mandatory Prerequisite: Spanish IA

The student improves skills in speaking, listening, reading and writing by learning more vocabulary and grammar. The structures of present and simple future tense are covered, and the Spanish-speaking communities and their cultures are studied through dialogues and readings in the text. Students are prepared to take a comprehensive final exam, testing the four skills of the language from levels IA and IB.

### **Spanish II**

**1 Unit**

*Two Semesters*

Prerequisite: Spanish IB

The student continues to practice the basic skills of speaking, listening, reading and writing, and will learn more advanced grammar structures and vocabulary the Spanish-speaking communities and their cultures are emphasized in readings and articles that are used in class.

### **Spanish III**

**1 Unit**

*Two Semesters*

Prerequisite: Spanish II

Spanish III reviews and adds to the vocabulary and grammar learned in Level I and II. Oral dialogues, directed compositions, reading and listening comprehension, as well as projects and presentations, are all put to practice to prepare the student to take an advanced comprehensive examination at the end of the course. The various verb conjugations are highly emphasized.

### **SPA 201 & 202**

**1 Unit**

### **Intermediate Spanish I & II**

#### **Broome Community College**

*Two Semesters*

Prerequisite: Spanish 102 or equivalent; 85 or higher overall average in Spanish IB, II and III combined and teacher recommendation.

Intermediate Spanish 201 and 202 are two college level courses offered at the high school through SUNY Broome. The goal of these courses is to improve upon the four basic language skills: oral comprehension, speaking, reading and writing. **All students must be prepared to participate actively in the classroom and speak in Spanish.** The course will also be taught entirely in Spanish with exceptions made only for the clarification of some grammatical concepts. Since grammar is clearly explained in the textbook and much of the grammar has already been taught, **the student will be responsible for preparing before class in order to use the language in class.** This will allow the students to speak Spanish rather than talk about Spanish in English. English may be used after class for individual questions. Culture is an important aspect of this class and it is integrated in every listening and reading exercise through the use of authentic materials taken from Spanish resources. **Regular class attendance is highly recommended and extremely important.**

# MATH DEPARTMENT

## Middle School

### Math 7

Topics include Number sense, Algebraic equations, three-dimensional geometry, measurement, Conversions, Law of Pythagorus, Integer operations, statistical graphs and probability in preparation for the NYS Math 7 assessment.

### Math 7 Accelerated

*Placement is based on recommendations.*

This course combines both seventh and eighth grade topics in one year. Students must relate and apply their algebra, geometry, and problem solving skills to real life situations, in preparation for the NYS Math 7 Assessment.

### Math 8

Prerequisite: Math 7

Topics include algebra with polynomial operations and factoring, geometric angle relationships, transformations, constructions, simple inequalities, function notation, linear equations and graphing. Students must relate and apply these skills in preparation for the NYS Math 8 Assessment.

### Accelerated Regents Geometry (8th graders)

**1 Unit**

*Two Semesters*

Prerequisite: Math 7 accelerated

This is a full year course that is aligned with the NYS Common Core Geometry curriculum. Topics include informal and formal geometric proofs, geometric relationships with congruent and similar triangles, quadrilaterals, coordinate geometry, transformational geometry, circles, constructions and right triangle trigonometry. Students will take the Common Core Regents exam in June.

## MATH DEPARTMENT

### **Modified Math 9**

**1 Unit**

*Two Semesters*

This course will reinforce pre-algebra topics from grades 5-8 and students will be introduced to the basics of several Algebra topics. This course is designed to prepare students for Algebra Part 1.

### **Integrated Algebra Part 1**

**1 Unit**

*Two Semesters*

Prerequisite: Math 8

This is the first year of a two-year requirement designed to meet the NYS Common Core Algebra standards. Students who need intensive work with their fundamental skills should select this course. Topics included are polynomial operations, solving/graphing linear and quadratic equations, linear inequalities and using algebra to solve word problems.

### **Integrated Algebra**

**1 Unit**

*Two Semesters*

Prerequisite: Math 8

This is a full year course that is aligned with the NYS Common Core Algebra curriculum. Topics include operations with polynomials, linear equations and inequalities and their graphs, systems of linear equations and inequalities, quadratic and other non-linear functions, real world applications of algebra, and some basic statistical methods. The Regents exam is taken in June.

### **Geometry Part 1**

**1 Unit**

*Two Semesters*

Prerequisite: Regents Algebra

This course is designed for students who need to strengthen their math skills while studying geometry and algebra applications. These students will have passed the Algebra Regents but need to strengthen their math skills in order to pursue Geometry 10 Regents or need to get a third credit of High School math. The students will cover many geometric concepts without the need for reliance on proof. Topics include geometric relationships dealing with the triangle, quadrilateral, polygons, coordinate geometry, circles, systems of equations and trigonometry. Graphing calculators will be used.

### **Geometry**

**1 Unit**

*Two Semesters*

Prerequisite: Regents Algebra

This is a full year course that is aligned with the NYS Common Core Geometry curriculum. Topics include informal and formal geometric proofs, geometric relationships with congruent and similar triangles, quadrilaterals, coordinate geometry, transformational geometry, circles, constructions and loci. Students will take the new Common Core Regents exam during the first week of June.

## MATH DEPARTMENT

### **Math 11**

**1 Unit**

*Two Semesters*

Prerequisite: Geometry Part 1 or Regents Geometry

This course is designed for the student who needs additional algebra for a intro college course or extra preparation for Algebra II Regents. All topics are included in the Algebra II Regents curriculum, but they are presented at a slower pace. Topics include rational expressions, solving a variety of equations and inequalities (quadratic, irrational, logarithmic, exponential), functions, systems of equations, basic unit circle trigonometry and graphs of trigonometric functions.

### **Algebra 2 (Regents)**

**1 Unit**

*Two Semesters*

Prerequisite: Regents Geometry

This is the third and final math course needed to get a Regents sequence with advanced distinction. This course is much more rigorous and fast-paced than the previous two Regents courses. Topics include algebraically solving equations (quadratic, rational, irrational, exponential and logarithmic), modeling with functions, systems of equations, circle trigonometry, graphs of polynomial/exponential/logarithmic/trigonometric functions, basic probability and statistics. Students will take the Regents exam in June.

### **Foundations for College Mathematics**

**1 Unit**

*Two Semesters*

Prerequisite: must be in 12<sup>th</sup> grade, Algebra Regents

This course has been designed in conjunction with SUNY Broome. Students passing the course with a 70 average or higher will be exempt from taking the placement test and any remedial, non-credit bearing courses should they choose to attend SUNY Broome. Topics include: modeling with linear, quadratic, exponential and trigonometric functions; number sense without a calculator; data analysis; polynomial and rational expressions/equations; right triangle trigonometry; compound interest.

### **Career and Financial Management**

**1 Unit**

*Two Semesters*

Do you know what you want to do when you graduate? Students start by taking a personality/psychology test to determine career choices that best fit them, picking and financing college, the employment process including interviewing and resume writing, budgeting, investing money, banking and checkbook management, and filling out income tax forms. This course prepares students for the real world of work. This course fulfills the third unit of math required for graduation.

## MATH DEPARTMENT

*College Level*

### **MAT 124-College Statistics I**

**½ Unit**

**SUNY Broome-*One Semester- Spring***

Prerequisite: Three years of high school math or permission of the department.

Students will have the opportunity to gain college credit in statistics as part of the University in the High School program offered by State University at Albany. There is a fee associated with Albany, if the student chooses to enroll for college credit. The course will cover sampling theory, organization and presentation of data, measures of central tendency, variance, standard deviation, data analysis, correlation and regression, normal distribution, Student's t-distribution, statistical inference, hypothesis testing, and confidence intervals, using a statistical software package.

### **MAT 156-Algebra and Trig for Calculus (Pre-Calculus)**

**1 Unit**

*Two Semesters-SUNY Broome Fall semester*

Prerequisite: Algebra 2/Trig Regents (passed both course and Regents exam)

This is a Pre-Calculus course designed for students who will be taking college Calculus. In the first semester, students will have the opportunity to gain college credit in Pre-Calculus as part of the Fast Forward program offered by SUNY Broome. There is no tuition fee associated with SUNY Broome, however they must purchase the textbook required for the course. Topics include graphs of rational functions, asymptotes, exponential and logarithmic equations, conic sections, matrix arithmetic and matrix solutions to systems of equations, determinants, trigonometric identities and equations, Law of Sines, Law of Cosines, vectors, polar graphs, parametric graphs, polar form of complex numbers, powers and roots of complex numbers. In the second semester, students opting to continue will be introduced to Calculus topics such as sequences, limits, continuity, derivatives and curve sketching with derivatives.

### **MAT 181 Calculus I**

**½ Unit**

**SUNY Broome**

*One Semester*

Prerequisite: College Pre-Calculus

This course is equivalent to a full semester of college calculus at Broome Community College. There is no tuition, however the students are required to purchase the BCC determined textbook. Topics included: limits and continuity, derivatives, integration, area between curves, and volumes of solids of revolution.

### **MAT 182 Calculus II**

**½ Unit**

**SUNY Broome**

*One Semester*

Prerequisite: Calculus I

This course is equivalent to a full semester of college calculus at Broome Community College. There is no tuition, however the students are required to purchase the BCC determined textbook. Topics included: exponential and logarithmic functions, hyperbolic functions, advanced integration techniques, sequences and series, and polar coordinates.

# MUSIC DEPARTMENT

## Middle School Band and Chorus

Students in 7<sup>th</sup> and 8<sup>th</sup> grades may elect to be in the band and /or chorus. The band meets one class period every other day, and members are required to take a small group lesson each cycle. The lessons are scheduled in a rotation in order to minimize missed class time. The chorus also meets one class period every other day. Each group performs two public concerts per year and often takes part in the New York State School Music Association's Major Organization Festival (NYSSMA) each spring. Students are also provided opportunities to participate in the NYSSMA solo festival and BCMEA Festivals. Additional performances may be scheduled at the discretion of the director. The director will make every effort to schedule events well in advance in order to minimize the potential for schedule conflicts.

## Music 7

This course is required for 7<sup>th</sup> graders who are not members of the band or chorus and meets one class period every other day for the school year. The New York State and National Standards for the Arts provide the objectives and performance expectations for the course. Included in this class are units on composition using technology, musical theatre, and introduction to guitar.

## **Eighth Grade Accelerated Instrumental Music Performance Class** **½ Unit**

This course is designed to provide advanced 8<sup>th</sup> grade instrumental music students with a more intensive course of study on their band instrument. In addition to the requirements for Middle School Concert Band, students will meet one additional instructional period per six-day cycle.

Lessons will be given once a cycle on a small group basis and students will be required to successfully complete the goals and objectives established by the instructor. This course is open only to students recommended by the instructor. One half weighted high school credit will be earned upon successful completion of this course.

# MUSIC DEPARTMENT

## Grades 9-12

### Senior Band and Mixed Choir

½ Unit

These two music performance courses are open to students in grades 9-12. Each class meets every other day (currently Mixed Chorus meets period 9 on days 1, 3 and 5 and Band meets period 9 on days 2, 4 and 6). In addition, students are required to attend a small group lesson each cycle for Band and Mixed Chorus. Mixed Chorus and Band are involved in the rehearsal and performance of music of various styles, historical periods and composers. Both perform inside and outside of the school environment.

Students wishing to take part in Band who do not play a band instrument should meet with Mrs. Jensen to discuss joining the Band. The purpose of the discussion will be to determine the student's interest, instrument availability and a course of action to bring the student up to the skill level required to successfully take part in the high school band.

Students will earn 1/2 credit for satisfactory participation in each group. Interested students should contact the appropriate director for further information regarding course requirements and performance schedules.

Students will earn ½ credit for satisfactory participation in Senior Band and Mixed Chorus.

### Applied Music

Applied music credit is available for students studying an instrument or voice under the guidance of a professional private instructor outside of school. Generally this involves study on an instrument upon which study is not available through the CV curriculum. However credit is available for study on any instrument or voice. Students must apply for credit no later than the end of the first week of school.

Some requirements are: keeping a record of practice time by the student and parents, quarterly reports from the private instructor and an end of year exam such as the NYSSMA solo festival or the National Guild of Piano Teachers evaluation.

### Music Theory I

½ Unit

Music Theory is a course which covers how music is constructed, how scales and chords are formed, and the relationship between keys and how music is composed through melody, harmony and chord progressions. This course is open to students who have foundational skills in music. Students must be able to read music before entering the class. A pretest may be required for this course.



## **PHYSICAL EDUCATION DEPARTMENT**

All students in the Chenango Valley School District are required to attend and participate in physical education classes in accordance with the New York State Education Department. The Physical Education Curriculum has been designed and is aligned with the New York State Learning Standards. Students in grades 7 through 12 are required to participate in class, which meets every other day for one period. Evaluation of course mastery is dependent upon successful completion of various health and physical activities as described below. Assessment in physical skills, cognitive knowledge and affective arenas ensure a well-rounded program. All students will experience activities and instruction in team building and group dynamics geared towards character building and respect for others. Physical fitness testing using a nationally reputable program is completed once a year and all students have the opportunity to experience aquatics in addition to many other physical fitness activities. The skills needed to choose a healthy lifestyle are emphasized.

### **Grades 7 and 8**

This program concentrates on the five health-related components of physical fitness. Cooperative group activities, team sport skills, individual sport skills, strategy and an introduction to lifetime fitness activities are emphasized. Basic swimming and aquatic safety is a required part of this program with a focus on stroke development, personal safety and boat safety. The introduction of a wide variety of activities allows the student to mature and develop healthy lifestyle habits.

### **Grades 9 and 10**

This program is a continuation of the 7<sup>th</sup> and 8<sup>th</sup> grade program allowing for more sequential in-depth instruction regarding the topics covered. Exploration regarding fitness opportunities outside the school setting is discussed. Basic swimming and aquatic safety skills and concepts continue to be taught at this level. Positive sportsmanship behaviors are emphasized through healthy competitive tournament activities and in class challenges. The opportunity to use the climbing wall promotes skills needed to be a team player in school and beyond.

### **Grades 11 and 12**

This program is the culmination of the sequential Physical Education program. Students are expected to demonstrate competence and proficiency in a variety of skills relating to lifetime skills, team sports, individual sports, and personal fitness. Swimming and aquatic skills/concepts continue to be reinforced in these grade levels. A higher level order of thinking about the role of fitness in one's life as well as the knowledge to create a personal fitness plan and avoid health problems associated with a lack of physical fitness is emphasized.

### **Adaptive Physical Education**

The general Physical Education program is modified on a personal basis to meet the needs of students with special needs. If a student is unable to participate in the general program, the activities are modified by the instructor to accommodate the limitations. Each individual program is set up with the cooperation of the Health Office. Special attention is given to provide the least restrictive environment.

## SCIENCE DEPARTMENT

### Science 7

This course in 7<sup>th</sup> grade biology is intended to develop basic biological concepts that may be used as building blocks in establishing an overall picture of life. Reinforcement of concepts in mini-lab situations and promotion of project work, including the material covered, are an integral part of the 40-week course. Areas of study include the scientific method, the microscope, life functions, the cell, microorganisms, chemistry topics, classification, invertebrates, vertebrates, plants, energy pathways, conservation and heredity.

### Science 8

This course prepares students for both their high school science courses and covers some of the material on the 8<sup>th</sup> grade State exam. Physics and chemistry predominate the course. Math and writing skills are incorporated into the curriculum. Students will be involved in completing traditional labs, research projects and computer-related activities. Basic skills such as note taking, graphing, lab safety, and measuring in the metric units are emphasized.

### Earth Science – The Physical Setting

**1 Unit**

*Two Semesters*

Students have experienced this world for almost 15 years and have probably accepted how it works without much question. This course strives to instill in the students a curiosity for why the physical world works the way it does.

This course introduces students to the study of astronomy and space sciences, meteorology and weather forecasting, geology and earth history. These topics include celestial phenomena, rock and mineral identification, topographic maps and field maps, and investigations of environmental issues.

Student work combines class discussion with hands-on laboratory investigation. Problem solving strategies are used to interconnect ideas central to the physical sciences. Connection between ideas and thinking skills are made through the use of mathematics, science, technology, and the environment. Students address real life issues and make connections between scientific ideas and thinking skills through the incorporation of mathematics, technology and environmental awareness in the classroom. This course prepares students for the NYS Regents Earth Science exam.

## SCIENCE DEPARTMENT

### **Living Environment**

**1 Unit**

*Two Semesters*

This course provides students with an awareness of the natural world, basic scientific concepts and inductive reasoning. Students achieve a basic understanding of biological processes through classroom, laboratory and field experiences. The use of scientific equipment, exposure to careers in science and familiarization with local environmental problems are stressed. Students planning on science-related careers or college should elect Living Environment. Students will perform and submit written reports for 30 laboratory periods. This course prepares students for the NYS Regents Living Environment (Biology) exam.

### **Genetics**

**½ Unit**

*One Semester*

Students will gain an understanding of the basic principles of genetics. Beginning with the cell and basic cellular structure, we will investigate the relationship between the sub-cellular organelles and how they all function to support the nucleus and nuclear components. Discussion will then focus on the development of the idea that the nucleus (and especially DNA) was central to the theory of genetics. Students will learn about DNA replication, DNA transcription to mRNA, mRNA translation to functional proteins, and finally, how those proteins control who and what we are. Genetic theories will be taught using both human and non-human (*Drosophila*, *Sarcophagi*, and *Brassica*) cases. Current topics in genetics and genetic engineering will be addressed.

### **Chemistry – The Physical Setting**

**1 Unit**

*Two Semesters*

This course presents a modern view of the unifying principles of chemistry which is basic to the understanding of our environment. The core topics of the course are: Atomic Structure; The Periodic Table; Moles and Stoichiometry; Chemical Bonding; Physical Behavior of Matter; Kinetics and Equilibrium; Organic Chemistry; Oxidation-Reduction; Acids, Bases and Salts; Nuclear Chemistry; Chemistry Laboratory Skills. Fascinating advances are made daily in Chemistry and this course should help students make intelligent interpretations of this research. Students enrolled in Regents Chemistry should also be enrolled in trigonometry in order to meet the more demanding math requirements of this course.

Students will perform and submit written reports for 30 laboratory periods. This course prepares students for the NYS Regents in Chemistry exam.

## SCIENCE DEPARTMENT

### **General Chemistry**

**1 Unit**

*Two Semesters*

General Chemistry provides students not majoring in high school science with a course of study that may better prepare them to meet their special goals in life. It provides students with an increased understanding of the work of the chemist. The laboratory approach is stressed, and students are expected to satisfactorily complete and write-up experiments prescribed by the teacher.

Core areas of the course include similarities and dissimilarities of matter, atomic structure, the periodic chart, the gas laws, alternative energy sources, preparation and separation of substances, and structure and properties of simple organic compounds. This course may be used as one unit of Group III as an elective toward a New York State Regents Diploma.

### **Regents Physics**

**1 Unit**

*Two Semesters*

Physics is a study of the interrelationships between matter and energy.

As a course of study, the modern view of physics will be presented with the major emphasis on the areas of mechanics, wave phenomenon, electricity and magnetism, and atomic and nuclear physics. Although treated independently, the above areas are united through Conservation Laws of energy, momentum and charge.

Mathematics is a powerful tool that is used throughout the course of study. Therefore, a logical and mathematical process of problem solving is an integral part of the course. A thorough understanding of algebra is needed for this course of study. Students enrolled in Regents Physics should also be enrolled in trigonometry.

A minimum of 30 class periods will be spent performing appropriate laboratory investigations of physical concepts. These will aid in the understanding of the major conceptual ideas of physics. This course prepares students for the NYS Regents Physics exam.

**SCIENCE DEPARTMENT**  
**College Courses**

**CHM 121 Forensic Sciences**  
**SUNY Broome (dual enrollment)**  
*One Semester*

**½ Unit**

This course is a dual enrollment class offered through SUNY Broome. All students enrolling in college coursework for the first time should understand the implications of beginning a college transcript.

The goal of this course is to provide students with the scientific principles, concepts, and methodologies to understand the interesting field of Forensic Science. The term “forensic” is derived from the Latin *forensic* meaning “of or belonging to the forum, public. In contemporary terms, forensic mean “pertaining to, connected with, or used in courts of law, public discussion and debate.” Simply put, forensic science is the application of law and debate to the field of science. We often think of forensic science as solving crimes, but it can be so much more than that!

We will examine the science behind firearms, explosives, drugs, body fluids, death, and many other fields and then apply this science to solving crimes and questions that are posed. Emphasis on proper handling of substances found at the crime scene as well as securing the crime scene will be included. Laboratory techniques will include as many modern instrumental methods as possible, including gas chromatography, infrared and mass spectroscopy, and DNA gel electrophoresis.

Successful completion of this course (grade of C or higher) will result in the student being awarded 3 college credits from SUNY Broome.

## **SCIENCE DEPARTMENT**

### **College Courses**

<b>CHM 123 Environmental Science</b>	<b>Semester 1</b>	<b>½ Unit</b>
<b>CHM 124 Environmental Science II</b>	<b>Semester 2</b>	<b>½ Unit</b>
<b>SUNY Broome (dual enrollment)</b>		
<i>Two Semesters</i>		

This course is a d class offered through SUNY Broome. All students enrolling in college coursework for the first time should understand the implications of beginning a college transcript.

The goal of this course is to provide students with the scientific principles, concepts, and methodologies to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, and to evaluate the risks associated with these problems and examine alternative solutions for resolving and/or preventing them. Humans are dependent on their environment in many areas (fiber production, food production, shelter and infrastructure, water supply, etc.). Negative impacts to the environment will have a subsequent negative effect on humans and other animals as well as plants and living organisms. It is essential that students understand natural environmental systems and the interactions between various science fields of study (physics, chemistry, biology, etc.).

Is your water safe to drink? Worry about hotter climates, holes in the ozone layer, pesticide residues in food, and extinction of species? Chemistry 123- Environmental Science I, is designed to give the student a better scientific background for understanding the environment from a chemical viewpoint and do hands-on laboratory investigations to better appreciate the ecosystem in which we live. Chemistry 124- Environmental Science II is a continuation of the first semester class. This course will include biotechnological, geologic, hydrologic, and atmospheric factors of the environment, human impacts and interdisciplinary issues. Federal and State regulations and approved methodology for monitoring and remediation will also be discussed as illustrated by case studies.

## SCIENCE DEPARTMENT

### College Courses

**CHM 145 General Chemistry I semester 1** **½ Unit**  
**CHM 146 General Chemistry II semester 2** **½ Unit**  
**SUNY Broome (dual enrollment)**

*Two semesters*

*This course is offered every other year. See your counselor for offerings.*

This course is a dual enrollment class offered through SUNY Broome. All students enrolling in college coursework for the first time should understand the implications of beginning a college transcript. This course is designed for students that are highly motivated and plan to further their education in a science (chemistry or physical science) related field.

It is the objective of this course to present the student with a college level general chemistry course. As such, its contents are roughly equivalent to other college level general chemistry courses taught at two and four year colleges throughout the United States. Students taking this course will find it a good foundation for further study in biology, chemistry, medicine, engineering, geology, physics, or related subjects. It is assumed that the student has a good knowledge of algebra and has taken regents chemistry and received a passing grade.

**Prerequisite: Regents Chemistry (75 minimum final grade)**

**College Biology 104** **½ Unit**  
**College Biology 105** **½ Unit**  
**Tompkins-Cortland Community College (dual enrollment)**  
*Two Semesters Juniors & Seniors Only*

This course is a concurrent class offered through Tompkins-Cortland Community College (TC3). All students enrolling in college coursework for the first time should understand the implications of beginning a college transcript. This course is designed for students that are highly motivated and plan to further their education in a science (biology) related field such as ecology, genetics, medicine, or molecular biology. The course of study will be rigorous and intended to help develop students into lifelong learners. The first semester will include the following topics: Organic and Biochemistry, Cellular Ultrastructure, The Cell Cycle and Its Regulation, Cellular Energetics (photosynthesis and respiration), Molecular Biology, and Classical Genetics.

The second semester will focus on the topics of: Evolution and Phylogenetics/ Systematics, The Diversity of Life, Structure and Function of Animals, Structure and Function of Plants, Ecology, and Animal Behavior. Lectures will emphasize the major overarching themes and concepts of biology; laboratories will be designed to introduce students to new technologies and higher level thinking skills.

Successful completion of Regents Chemistry and Algebra 2 (as evidenced by a passing score on both Regents examinations) is required for enrollment in Biology 104. Successful completion of Biology 104 from the fall semester is required for continued enrollment in the second semester.

Successful completion of these courses (grade of C or higher) will result in the student being awarded 8 college credits from Tompkins-Cortland Community College

**SCIENCE DEPARTMENT**  
**College Courses**

**Physics 104 General Physics I** **½ Unit**  
**Physics 105 General Physics II** **½ Unit**

*Two Semesters*

**Tompkins-Cortland Community College (dual enrollment)**

*This course is offered every other year. See your counselor for offerings.*

This course is a dual enrollment class offered through Tompkins-Cortland Community College (TC3). All students enrolling in college coursework for the first time should understand the implications of beginning a college transcript. This course is designed for students that are highly motivated and plan to further their education in a science (physics or engineering and/or physical science) related field. By successfully completing this course, the student will understand the basic concepts associated with Newtonian and non-Newtonian physics. Be able to do understand and do problems, employing algebra and trigonometry techniques along with laws of physics, in the topics mentioned below and be able to build a lab experiment, make measurements to test the theories studied in class, and analyze the data thus obtained using error and graphical analysis. The course is intended for those with an interest in physics and without a background in calculus

Topics for the first semester include motion, statics, dynamics, conservation of energy and momentum, rotation, waves, thermodynamics, fluids, vibrations, and sound. Topics For the second semester include electricity, magnetism, electromagnetic induction, optics, relativity, quantum physics, atomic, nuclear and elementary particle theories. In the laboratory sessions, error analysis and graphical analysis are emphasized.

College writing and reading skills are required. College Math skills are required including arithmetic operations, proficient algebra and trigonometry skills as well as graphing. Basic computer skills, including but not limited to word processing, Excel spread sheets and graphing, as well as internet research. Completion of 3 years of high school Regents Mathematics (as evidenced by a passing score on all regents exams).



## **SOCIAL STUDIES DEPARTMENT**

The social studies curriculum is designed to develop the concepts, skills, and values that students will need throughout their lifetime as a worker, community member, and citizen.

### **The Eastern Hemisphere – Grade 6**

*Two Semesters*

Social Studies is based on the geography and history of the Eastern Hemisphere, including the development of cultures, civilizations, and empires; interactions between societies; and the comparison of trends in government and economics. It also incorporates some elements of other social sciences. The course begins with an examination of the Eastern Hemisphere today, using geographic skills. This provides the foundation for making connections between the past and the present throughout the course. The remainder of the course is divided into seven Key Ideas that cover a time span from pre-history into the 1300s. Students are provided the opportunity to explore belief systems across time and to examine the foundations of democracy.

### **United States and New York State History – Grades 7 and 8**

*Four Semesters*

Social Studies content in grades 7 and 8 focuses on a chronologically organized study of United States and New York State history. Course content is divided into 11 units, tracing the human experience in the United States from pre-Columbian times to the present, and tying political, geographic, economic, and social trends in United States history to parallel trends and times in New York State history. Grade 7 covers pre-Columbian times through the Civil War. Grade 8 covers Reconstruction to the present.

### **Global History and Geography – Grades 9 and 10**

**2 Units**

*Four Semesters*

The Global History and Geography core curriculum is designed to focus on the five social studies standards and common themes that recur across time and place. This curriculum provides students with the opportunity to explore what is happening in various regions and civilizations throughout history. In addition, it enables students to investigate issues and themes from multiple perspectives and make global connections and linkages that lead to in-depth understanding. Grade 9 covers ancient civilizations through the Enlightenment and the 18<sup>th</sup> Century. Grade 10 covers the French Revolution to the present.

### **United States History and Government – Grade 11**

**1 Unit**

*Two Semesters*

This course is a chronological approach to the study of United States History from the colonial period to today. Students learn about the important political, economic, social and cultural events of our history. Students also study the structure and function of the United States Government through historical example and current events. Emphasis is placed on recognizing patterns of change, cultural thinking skills and understanding avenues of popular control over government in a democracy.

## **SOCIAL STUDIES DEPARTMENT**

### **Participation in Government—Grade 12**

**½ Unit**

*One Semester*

The primary purpose of this course is to facilitate and encourage the development of civic-minded individuals capable of effectively fulfilling their role as citizens. The ideal citizen should be committed, informed, skillful and active. Thus, this course places emphasis on civic mindedness, civic intelligence, civil literacy, and civic enterprise as it functions on the various levels of government. Students are required to visit one town board meeting and one school board meeting and/or participate in a community activity each quarter, reporting in oral presentation to the class. The course will develop an awareness of public policy issues, proposals, and solutions through several methods of research and survey techniques concentrating on local and community issues. Students will write a public policy position paper.

### **Economics and Economics Decision Making—Grade 12**

**½ Unit**

*One Semester*

This course provides students with the economic knowledge and skills that will enable them to function as informed and economically literate citizens in our society and in the world. Included are the fundamental microeconomics and macroeconomic concepts; comparative economic systems; the global economy, and the political and social impact of economic decision-making.

### **Enriched Global History – Grade 9**

### **Enriched World History– Grade 10**

**2 Units**

*Four Semesters*

These courses cover all topics identified in the NYS curriculum, but explore some topics in greater depth. Students who wish to be successful in these courses must be able to summarize, explain and analyze what they read, participate in public speaking and complete short- and long-term projects alone or with an assigned group. Writing assignments are more frequent and reading assignments are longer and will include primary sources. Students must have exemplary homework habits. Enriched 10 will have a mandatory long-term project in addition to the Regents exam.

## SOCIAL STUDIES DEPARTMENT

### **HIS 130 US History I**

**½ Unit**

*One Semester*

#### **SUNY Broome dual enrollment**

This college-level course will provide students with both knowledge of United States history and the ability to think like an historian. The course is a survey of political, economic, social and cultural developments in the United States from 1607 to 1877. The topics of the course include the nature of the English colonies, the causes and significance of the American Revolution, the struggle to create a republic, the Federal Era, the expansion of democracy and other early reform movements, early industrialization, territorial expansion, the development of sectional differences, the causes and significance of the Civil War, and the ideals and realities of Reconstruction. The course focuses on these topics through the social science themes of conflict, culture, democracy, diversity, justice, and power. The course will utilize the fundamental features of historical thinking: change, continuity, and context; perspective; historical sources and evidence; causation and argumentation. Students will learn about history as an academic discipline, learn how history is written, and learn to write and speak using the conventions of the discipline of history. Additionally, students will take the NYS Regents examination in U.S. History and Government at the end of grade 11. This course, along with College U.S. History 131, satisfies the NYS *U.S. History and Government* high school graduation requirement. This course satisfies the SUNY Broome *civic education* requirement.

### **HIS 131 US History II**

**½ Unit**

*One Semester*

#### **SUNY Broome dual enrollment**

This college-level course will provide students with both knowledge of United States history and the ability to think like an historian. The course is a survey of political, economic, social and cultural developments in the United States from 1877 to the present. The topics of the course include industrialization, urbanization, immigration, the Progressive reform era, U.S. imperialism and WWI, The Roaring Twenties, the Great Depression and the New Deal, WWII, The Cold War, 1950s culture, the crises and changes of the 1960s and 1970s, Neo-Conservatism, and contemporary domestic and foreign events. The course focuses on these topics through the social science themes of conflict, culture, democracy, diversity, justice, and power. The course will utilize the fundamental features of historical thinking: change, continuity, and context; perspective; historical sources and evidence; causation and argumentation. Students will learn about history as an academic discipline, learn how history is written, and learn to write and speak using the conventions of the discipline of history. Additionally, students will take the NYS Regents examination in U.S. History and Government at the end of grade 11. This course, along with College U.S. History 131, satisfies the NYS *U.S. History and Government* high school graduation requirement. This course satisfies the SUNY Broome *civic education* requirement.

## SOCIAL STUDIES DEPARTMENT

### **SOS 111 Public Policy**

½ Unit

*One Semester*

#### **SUNY Broome dual enrollment**

This course offers students an analytical survey of policy formulation and implementation in the United States, together with an examination of the impact of policy upon individuals and groups in American society. Topics covered will include: the policy making processes, policy analysis, federal and state policies, rationality and irrationality in public policy, incrementalism, special interests, public choice, and institutional influences. This course will show you how to think critically about the actions of government and form intelligent opinions about the extent to which government is serving you and the American public. Upon successful completion of this course students will be able to: define some of the major concepts in the study of public policy; describe the context within which policy decisions are made, including the institutional, economic, cultural; apply their general knowledge of public policy to the analysis of specific policy issues such as economic, environmental, educational, and foreign policy issues; evaluate arguments for various policy options; assess public policy as an approach to dealing with public issues. This course satisfies the NYS *Participation in Government* high school graduation requirement. This course satisfies the SUNY Broome *civic education* requirement.

### **Electives**

#### **Current Events and Local History—Grades 12 & 11**

½ Unit

*One Semester*

This course provides students with the most recent current events by using the following: CNN 10 student news video clips, 60 Minutes video clips, and other news media to cover topics that range from politics, sports, entertainment, science, etc. Included are the fundamental pillars and the backbone of the Southern Tier through the use of media and many WSKG films by Brian Frey such as: George F. Johnson, Thomas J. Watson, Edwin A. Link, The Dusters, Harvest (farming), The Dusters (Hockey), and Cornell (The Birth of an American Institution), The Gray Riders (State Troopers), etc. We also watch inspirational films and tie them in to current events (ex: Miracle, 42, Rudy, Hoosiers). Students will be allowed to look up current events in class on their iPads weekly as well to enhance their perspective on the world.

#### **Cold War Through Cinema—Grades 12 & 11**

½ Unit

*One Semester*

Examining the Cold War Through Cinema investigates the many perceptions and mental paradigms that were formed during that era. The course also uncovers little known truths behind the origination of the many *Godzilla* films, *The Invasion of the Body Snatchers*, *The Thing*, and the James Bond series, as well as many others. Students engage in discussions in order to arrive at individual conclusions regarding film interpretation.

## **TECHNOLOGY EDUCATION DEPARTMENT**

The Technology Education Department is geared toward the interpretation of our technological society. Technology education provides the students with the basic learning skills, self-understanding and positive attitudes to make choices about programs based upon knowledge of abilities needed to pursue a career. The curriculum includes a variety of courses that will permit students to have an early exposure to the understanding of concepts about work and workers of our technological society. All students will be able to pursue purposeful goals for future education, preparation for employment, or both.

The key concept that the Technology Education Department shares with students is one of “discovery” specifically our technological society and how to operate within it; also, the discovery of the societies’ careers, and most of all, the students’ discovery of him or herself.

All 7<sup>th</sup> and 8<sup>th</sup> graders are required to take Technology Education. All other courses are free choice electives open to all male and female students.

### **Middle School Technology**

#### **7th Grade Technology Education**

*One Semester*

The content of the course will cover five main areas: Getting to Know Technology; What is the Need for Technology; How People Use Technology to Solve Problems; What Must be Known About Systems and Subsystems; and How Technology Affects People and the Environment. The student will go through concrete experiences which involve a variety of senses. The use of hands-on, laboratory-based activities will be used to provide successful experiences that help to build the skills and confidence needed to live in an ever-changing environment.

The progress of the human race has always been directly linked to the management of technology. Today technology is more important than it ever was in the development of human culture. Technology Education will emphasize that people control technology and that only people can determine whether it will be applied to their benefit, or to their ultimate disadvantage.

#### **8th Grade Technology Education**

*One Semester*

For children to learn technology they must first become a technologist. Students learn by doing. We at CV encourage such experimental learning by integrating concepts from science, math, technology and computers into hands-on activities with an emphasis on cooperative problem solving.

# **TECHNOLOGY EDUCATION DEPARTMENT**

## **High School Technology**

The Technology Education Department is geared toward the interpretation of our technological society. Technology education provides the students with the basic learning skills, self-understanding and positive attitudes to make choices about programs based upon knowledge of abilities needed to pursue a career. The curriculum includes a variety of courses that will permit students to have an early exposure to the understanding of concepts about work and workers of our technological society. All students will be able to pursue purposeful goals for future education, preparation for employment, or both.

The key concept that the Technology Education Department shares with students is one of “discovery” specifically our technological society and how to operate within it; also, the discovery of the societies’ careers, and most of all, the students’ discovery of him or herself.

All 7<sup>th</sup> and 8<sup>th</sup> graders are required to take Technology Education. All other courses are free choice electives open to all male and female students.

## **Middle School Technology**

### **7th Grade Technology Education**

*One Semester*

The content of the course will cover five main areas: Getting to Know Technology; What is the Need for Technology; How People Use Technology to Solve Problems; What Must be Known About Systems and Subsystems; and How Technology Affects People and the Environment. The student will go through concrete experiences which involve a variety of senses. The use of hands-on, laboratory-based activities will be used to provide successful experiences that help to build the skills and confidence needed to live in an ever-changing environment.

The progress of the human race has always been directly linked to the management of technology. Today technology is more important than it ever was in the development of human culture. Technology Education will emphasize that people control technology and that only people can determine whether it will be applied to their benefit, or to their ultimate disadvantage.

### **8th Grade Technology Education**

*One Semester*

The progress of the human race has always been directly linked to the management of technology. Today, technology effects nearly every part of the human culture. Technology Education will inspire students to solve problems, create for the betterment of society, and be overall technologically literate. This course is designed to give middle school students an introduction to how technology is created, how it evolves, and how it impacts our lives and our environment. Through project based learning students will; learn about various technological systems and subsystems, develop technical skills through hands on activities, and practice engineering thinking by actively problem solving.

# TECHNOLOGY EDUCATION DEPARTMENT

## High School Technology

The following is a list of high school electives open to all students in grades 9-12. Technology Education uses a hands-on approach to learning. These classes are designed to provide the students with hands-on activities/projects 70% of the time and academic work in the form of lectures and textbook assignments 30% of the time. Students can choose from a number of courses that will test their problem solving skills with real world problems. Many students who want to be engineers will often take technology classes as an introduction to the major. The other side of the high school electives are the media courses that prepare students to work in the vast media field.

### **Design & Drawing for Production (D.D.P.)**

**1 Unit**

*Two Semesters*

#### **Technical Drawing with Hands-On Projects**

This course is designed to provide an introduction to the tools and techniques utilized in the field of mechanical drawing. An emphasis is placed on the elements of orthographic and pictorial representation, including sketching and production illustration. Throughout the course, you will use the design process to construct models of your designs out of wood, plastic and foam core.

### **EGR 150 - Engineering Design I with Graphics (2 college credits from BCC)**

**1 Unit**

*Two Semesters*

**The main focus of this class is learning AutoCad and Inventor. Any student thinking about Engineering as a major in college needs to know how to use CAD software to generate drawings and designs.**

Engineers must be able to communicate their design ideas to others. Thus, this first course in Engineering Design focuses on the improvement of communication skills. These include written, oral presentation, sketching, and computer application skills. Since our world is three-dimensional, some effort is made to improve the spatial visualization ability of students. In addition, the principles of orthographic projection are learned and applied in drawing by hand and in modeling using the computer. Students work in teams on projects with the goal of recognizing and developing behaviors associated with consensus decision-making and cooperative teamwork. The steps of the engineering design process are learned.

# TECHNOLOGY EDUCATION DEPARTMENT

## High School Technology

### Digital Photography

½ Unit

*One Semester*

Students get to work with computers, digital cameras, scanners, and photo quality printers during this course. Basic photography skills will be addressed along with using Photoshop software to alter and enhance your photographs. A number of desktop publishing and graphics-type projects will be utilized to demonstrate the possibilities that digital photography holds.

### Multi-Media

½ Unit

*One Semester*

Video Production, Animation and Screen Printing

An introductory course (semester) emphasizing media design principles, techniques, processes and related careers. It will focus on the basics of graphic and multimedia design and production. Students will create short movies and video animation using Macintosh computers. Screen printing and audio production will also be studied during this course. This course is recommended for students who want to study Video Production, Media Arts or Graphic Design in college.

Prerequisite: Good functional reading and basic computer skills are recommended.

### Principles of Engineering

½ Unit

*Two Semesters*

Hands on Problem Solving, Design and Testing of Prototypes

This course was designed by engineers for students who are thinking about studying engineering in college. This is a hands-on course that lets you apply your mathematical, technical and scientific knowledge to solve real engineering problems. You will analyze the potential success of your creations and forecast an outcome. Material analysis, ergonomics and societal impacts will also be studied.

### Production Systems

½ Unit

*One Semester*

Woodworking and Construction Technology

This course is divided into two major sections: Construction and Manufacturing. During the construction portion of the course, you will use some of the materials, tools and building techniques used in the construction of a conventional wood frame house. You will also build a scaled model structure of a house, including everything from the framing to the shingles. In the second part of the course, you will learn how a modern day manufacturing facility is run. Classes will set up and run a production of their choice.



## **Introduction to Robotics**

**½ Unit**

One Semester

Students will learn to use Lego Mindstorms and VEX robotics during this class. Many challenges will be presented to the students to solve. Most challenges will be in the form of a competition between class teams. Students will study design and building of robots, programming, problem solving and communication skills. This course is recommended for students in 10<sup>th</sup> – 12<sup>th</sup> grade that like to work with their hands and bring designs to life.

## **Career & Technical Education BOCES**

The public schools of Broome, Tioga and Delaware Counties offer career and technical education for students to prepare them for immediate employment and/or further education and training.

No junior or senior at CV should be considered as having too much or too little ability to be eligible for the BOCES Career & Technical Center. There are successful students at the Center in all ability levels.

Prerequisites for courses are suggestions and are not used to eliminate a student who has a positive goal that could be served by the Career & Technical Center.

The courses at the Center are designed to meet a broad range of interests and abilities. The purpose of these courses is to allow a student to:

1. Explore his or her ability and interest in an occupation
2. Acquire skills for employment
3. Career coursework
4. Gain practical experience while learning
5. Provide high school graduation credits
6. Potential for college credits
7. Business partnerships
8. Industry endorsed credentials

Students enrolled in an occupational education course remain regular students in their own high school where they attend one-half of each school day. Many career and technical education students participate in extra-curricular and sports activities at their home school. Transportation to the Career & Technical Education Center is provided by the local school.

Successful completion of these occupational courses earns 3 credits per year toward high school graduation. All courses are an extension of a local school district's educational program and these units of credit are earned with related attendance and achievement in the BOCES curriculum.

Students interested in attending a CTE Program at BOCES should communicate with their home school counselor early in the school year. Prospective students must formally apply for admission to any program and must have earned the necessary credits at the home school in order to attend.