

# Program of Studies



## An Educational Planning Guide for Students and Parents

2010-2011 School Year

Updated as of January, 2010

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# High School Staff

Principal ..... Mr. Douglas VanEtten  
Vice Principal ..... Mrs. Karen Lang  
Guidance Counselors .....  
    **Grades 10 - 12**  
..... Mrs. Lisa Eves, Director  
..... Mrs. Darlene Latten  
..... Mr. David Merry  
    **Grade 8 - 9**  
..... Mrs. Audrey Fairchild

## Types of Diplomas:

**Advanced Regents Diploma:** Students must score 65 or above on 9 Regents exams and earn 22 units of credit.

**Regents Diploma:** Students must score 65 or above on 5 Regents exams and earn 22 units of credit.

**Local Diploma: (Students entering 9th grade 2008 or after)** This diploma is being phased out for non-special education students, and requires a 65 or higher on the following 5 Regents exams: one regents exam in Science, Math, Global Studies, United States History and Government, and Comprehensive English.

RCT's (Regency Competency Tests) will continue to be available to students in Special Education only.

### **REQUIRED REGENTS EXAMINATIONS:**

**Advanced Regents Diploma:** Two Regents in science, three regents in math, Global Studies (Gr. 10), United States History & Government (Gr. 11), Comprehensive English (Gr. 11), Foreign Language (after third year).

**Regents and Local Diploma:** One regents exam in science, math, Global Studies (Gr. 10), United States History & Government (Gr. 11), Comprehensive English (Gr. 11)

All students are expected to take **FIVE** subjects each year in addition to physical education AND **earn 22 units of credit to earn a New York State diploma.**

# Planning Your Program

## Requirements For Graduation

English	4 units of credit
Social Studies	4 units of credit
Science	3 units of credit
Mathematics	3 units of credit
Health.	1/2 unit of credit
Physical Education	1/2 unit each year
Art/Music/Technology	1 unit of credit
Foreign Language	1 unit of credit for a Regents or Local Diploma OR 3 units for an Advanced Regents Diploma

\*Successful completion of a foreign language in Junior High will earn a student one unit of credit. The Class of 2007 and beyond **MUST** pass the foreign language proficiency exam given at the end of 8th grade.

## Class Rank/G.P.A.

Students receive a weighted average their senior year to determine class rank and G.P.A. (grade point average) for college applications. **Final** class rank is determined after the 2nd marking period of their senior year (7 semesters).

**Courses are weighted as follows:**

- 1.10 College courses, Advanced Placement (AP), and CLEP**
- 1.05 Honors classes**
- 1.00 All other courses**

**An unweighted average will determine a student's eligibility for co-curricular activities, honor roll, parking privileges, National Honor Society, Merit and Senior Honor Study Hall, and lunch privileges.**

### MISSION STATEMENT

*The Homer Central School District promotes  
excellence in education  
through a variety of opportunities  
in a collaborative environment  
built on respect, equity, trust, and responsibility.*

## Studio in Art I

40 Weeks, 1 credit

Note: This course may be utilized to satisfy the Regents requirement for 1 credit art, music, or technology.

The foundation program for crafts, architecture and visual arts, students are presented with a variety of projects covering design, color, sculpture, graphics, art history, and 20 weeks of drawing.

## Studio in Art II

40 Weeks, 1 credit

Prerequisite: *Studio in Art I*

Intensive study of the mechanics of drawing (i.e., line, shape, form, shading). Materials: ebony pencil, soft and hard lead pencils, charcoal, pastels, oil pastels, conté, crayon, and ink. Techniques (types of lessons): anatomy, still life, landscape, design, fantasy, illustration, cartooning, printmaking. A sketchbook and colored pencils are required.

## Studio in Art III

40 weeks, 1 credit

Prerequisites: *Studio in Art I and II*

88+ average - recommended

While Studio III has been planned to meet state guidelines for "Advanced Drawing and Painting," it has been expanded to offer a broader range of study. Students can expect to undertake advanced work in drawing, painting, design, sculpture and three dimensional design.

## Studio in Art IV/V Honors

40 weeks, 1 credit

Prerequisites: *Studio in Art I, II and III*

88+ average - recommended

AND

Teacher recommendation

Studio IV offers advanced versions of the problem areas undertaken in Studio III, with a strong emphasis on creative problem solving. Only students who are Regents art majors and have done well in Studio III should attempt the course.

Students may be required to purchase materials throughout the year (ex: colored pencils, matt boards).

## 3D Design and Sculpture

40 weeks, 1 credit

Prerequisite: *Studio in Art I*

This class is an in depth exploration into sculpture and 3D jewelry design. Students will work with metal, silver, copper, bronze, nickel, castings, hammer forging, plaster and clay. In 3D design we will become accustomed to the uses of adobe photo shop and jewelry design as well as product production and advertising. There will be studio costs associated with this class for market prices of precious metal.

## Adobe Photo and Digital Photography

20 weeks, 1/2 credit

Prerequisite: *Students must have successfully completed Studio Art I.*

Grades 11 and 12

This art elective introduces students to the techniques of creating and manipulating images using a digital camera and Adobe Photoshop. The emphasis of the course will be the production of creative concurrent graphics and printer photography. Students will learn to use imaging scanning and printers. A studio fee will be assessed. This class can only accommodate 15 students - preference will be given to upperclassmen.

# Computer

## **Introduction Computer Applications**

*20 Weeks, 1/2 credit*

This course is designed for sophomores or students who desire to learn some basic computer skills. The course is designed to enrich computer skills while moving at a manageable level.

Students will learn how to use the features of Microsoft Office (Word, Excel, and PowerPoint) and other software programs.

## **Computer Applications**

*20 Weeks, 1/2 credit / 3 college credits*

*Grade level: 11 and 12.*

This Junior/Senior elective is a college credit course offered in conjunction with TC3 for 3 units of college credit. The course is designed to provide students with the essential computer skills they will need in college and/or any career area.

Students will learn how to use the advanced features of Microsoft Office (Word, Excel, and Access). More importantly, they will learn how to use the powerful integration features.

## **Creating Videos and Making Movies**

*20 Weeks, 1/2 credit*

*Grade level: 11 and 12.*

Students will learn the skills needed to create professional-quality movies and videos. They will learn techniques for shooting good video, editing existing video, adding special effects, and more.

## **Yearbook**

*20 Weeks, 1/2 credit (more than one section may be taken)*

*Grade level: 11 and 12*

Students will work on yearbook activities. Some tasks require time outside of class, after school, evenings and weekends. Grades are based on performance, meeting deadlines, demonstration of leadership inside and outside the class.

**All students are strongly encouraged to take Computer Applications prior to Graduation!**

# English

Emphasizing reading and writing skills on all levels, the 9th grade program focuses on genre. The English Department offers in grades 10, 11, and 12 a multi-level program: Honors, Academic (Regents), and non-Regents (NR). The 10th grade curriculum focuses on American Literature, the 11th grade curriculum on British Literature, and the 12th year of English provides work in World Literature.

The NYS Comprehensive English Regents Examination is given in January of the Junior year.

## REQUIRED COURSES

### English 9

*40 Weeks, 1 credit*

This course is designed particularly for students who need more individualized instruction. A team approach is used with both the resource and English teachers. Like English 9R, it stresses composition, vocabulary, reading and speech activities.

### English 9 R

*40 Weeks, 1 credit*

The course offers a study of each of the literary genres: short story, drama, poetry, the epic, the novel, and nonfiction. Composition, vocabulary, research, oral interpretation and outside reading are important components of the course. In addition, students receive instruction in the use of the library and computer lab.

### English 9 Honors

*40 Weeks, 1 credit*

*Prerequisite: 8th Grade teacher recommendation*

The course follows the English 9 curriculum, offering a study of each of the literary genres: short story, drama, poetry, the epic, novel, and nonfiction. The honors program emphasizes the listening and speaking strand to prepare for the junior year's Regents exam. Supplementary readings and writings will expose students to a more enriched literary background in preparation for English 12AP.

### English 10

*40 Weeks, 1 credit*

This course uses a chronological approach of American Literature for students who need more individualized instruction. A team approach is used with both the resource and English teachers. Like English 10R, it stresses composition, vocabulary, reading, and speech activities.

### English 10 R

*40 Weeks, 1 credit*

This course is a survey of American Literature from the Puritan Era to the Modern Era. American ideas and philosophies

are the focus. Other requirements include: public speaking, Power Point, one research paper, and monthly essay writing.

### English 10 Honors

*40 Weeks, 1 credit*

*Prerequisite: teacher recommendation*

This elective course is a survey of select American literature from the Puritan to the Modern Era. Public speaking is required. Emphasis is on higher-level problem-solving and writing skills, reading comprehension, and class discussion. A year long Humanities project may be assigned instead of a final exam. Also, challenging pieces of literature are taught in preparation for English 12AP.

### English 11

*40 Weeks, 1 credit*

This course focuses on preparation for the English Regents. Literature is a survey of British Classics. There is a career planning unit which stresses technical writing.

### English 11 R

*40 Weeks, 1 credit*

British Literature is studied in chronology. In addition to continued practice in writing and vocabulary, there is a special unit on career planning. The NYS Comprehensive English Regents exam is given in January.

### English 11 Honors

*40 Weeks, 1 credit*

*Prerequisite: Participation in Honors 10 and/or teacher recommendation*

English 11 Honors involves the intensive study of select writers/eras of British Literature. The focus is on study, discussion, vocabulary, and writing at the college level. Literature is selected in preparation for students continuing on to English 12AP. The NYS Comprehensive English Regents exam is given in January.

### English 12

*40 Weeks, 1 credit*

English 12 returns to the study of literature by genre and continues the practice of composition, vocabulary study, and outside reading.

### English 12R

*40 Weeks, 1 credit*

This course offers a chronological study of World Literature. Students will begin with epic readings from the ancient cultures and will proceed through other genres into the Modern Age. Composition, vocabulary, speech, and a portfolio project are also an integral component of the course.

# English (con't)

## English 12 AP

*40 Weeks, 1 credit*

*Prerequisite: Participation in Honors II and teacher recommendation*

English 12AP is a course designed for those who will sit for the English Literature and Composition AP exam in May. The curriculum has been approved by the National AP Audit board. The first twenty weeks is an intense study of ancient writing: Sumerian, Greek, Roman, and Arabic writings will be examined. The second twenty weeks is a survey of classical world literature (novels, non-fiction, drama) from French, Italian, Russian, British and American writers commonly used on the AP exam. Students will submit papers throughout the forty weeks. These papers will include exercises in: analysis, argument, comparison, and research. In addition to the AP exam, there is a comprehensive final exam.

## ELECTIVE COURSE OFFERINGS (English)

(Contingent on Staffing)

### Creative Writing

*20 Weeks, 1/2 unit credit*

This workshop course will expose the novice writer to a variety of writing projects designed to foster self-expression and individual growth in multiple forms. We will practice short fiction, drama, poetry, and the modern essay through published models and peer-response. The student's pieces will move through private writing to public writing in forms chosen by and comfortable to the individual. Students will be evaluated according to personal growth toward the standards of published works. Students will do a lot of work with grammar, punctuation, and effective sentence structure.

As this is a workshop course, each student will be expected to proceed in an engaged and timely manner through the assignments to the completion of a semester project in consultation with the teacher. The Homer High School literary magazine, *The Ionian*, will publish original works of quality.

### Death and Society

*20 Weeks, 1/2 unit credit*

The idea of death will be examined in three ways: through literature and film, through discussion of controversial issues (abortion, suicide, euthanasia, AIDS), and through a pragmatic approach examining funeral practices in our community. The exploration of death in various areas will enable students to deepen their understanding of their world and themselves.

# Foreign Languages

The high school foreign language program is designed to meet the NYS Regents standards. Language Level II is to be a continuation of the junior high Level I (grades 7 & 8). Language Levels II and III courses are called ‘intermediate,’ and cover material for success in the Regents Comprehensive Exam taken at the end of the year. Levels IV and V are ‘advanced’ foreign language electives, and they can result in a student taking exams to earn college credits.

Homer offers a choice of three modern languages—French, German, and Spanish. The program begins in the Junior High School, currently at grade 7. As students conclude their two years of foreign language study at the end of grade 8, they will take the NYS Foreign Language Proficiency Exam. Upon passing the exam, students who will be earning an Advanced Regents Diploma will enter Grade 9 foreign language study at Level I or II. They could complete Level III in their sophomore year.

High school students must study only one foreign language for the Advanced Regents Diploma, but are welcome to study another foreign language if their schedule allows. Also, when the foreign language teachers and students find it possible, exchange and travel opportunities are made available. Foreign language teachers conduct student trips to Quebec, France, Germany, Mexico, Spain, and Costa Rica. In addition, the department maintains an International Club composed of students who study foreign languages. The club sponsors various trips and activities and raises funds to support this travel, along with student scholarships and awards.

## **French I** **German I** **Spanish I**

*40 Weeks, 1 credit*

This course is offered at the High School to those students who want to study a second foreign language at the beginning level or who did not successfully complete their requirement at the end of Grade 8.

## **French II** **German II** **Spanish II**

*40 Weeks, 1 credit*

*Prerequisite: Grades 7 and 8 study and passing NYS Foreign Language Proficiency Exam.*

A continuation of the skills development of Level I. It is the beginning of the ‘intermediate’ level. More in-depth information is given with greater emphasis on speech patterns and correct structures. Cultural enrichment is an on-going part of this course through the use of language CD’s, video programs, texts and workbooks. Readers and authentic materials are used in a variety of ways.

## **French III** **German III** **Spanish III**

*40 Weeks, 1 credit*

*Prerequisite: Level II*

Level III, the completion year of the ‘intermediate’ level, ends the year with the Regents Exam. The course involves the review of all grammar points and structures, with equal emphasis on the skills of listening, speaking, reading, and writing. Video programs, texts and workbooks, language readers, language tapes and authentic materials are used in the course. Cultural enrichment is continually emphasized.

## **French IV** **German IV** **Spanish IV**

*40 Weeks, 1 credit*

*Prerequisite: Completion of Level III*

Level IV studies are considered to be ‘advanced.’ The methods of teaching the courses involve formal discussion, reading and writing. Surveys of foreign literature, histories and cultures enhance the course. Oral reporting, role-playing, letter and composition writing, and research will be frequent. A review of more advanced grammar and language is included, and a possible time of ‘student teaching’ at the Homer Elementary School may be arranged at the discretion of the teacher.

## **French V** **German V** **Spanish V**

*40 Weeks, 1 credit*

*Prerequisite: Level IV and teacher recommendation*

This advanced course is offered in French, German and Spanish to students who have completed Level IV in the language. College level work is presented, as well as expected of these students. Seniors in this course will prepare to take a foreign language exam for college credits. (C.L.E.P. - College Level examination Program)

# Health

## Sports Medicine

20 Weeks, 1/2 credit

Prerequisite: Health

Grade Level: Juniors or Seniors

Designed for entry-level student's initial exposure to the athletic training profession. This course is intended to serve as an overview to the vast science of athletic health care.

## Health

20 Weeks, 1/2 credit

Health is a mandated subject in New York State. A student cannot graduate without having a passing grade of 65.

Topic areas included in this curriculum are wellness, nutrition, physical fitness, disease prevention & control, alcohol, tobacco and other drugs, interpersonal relationships, human sexuality, and HIV/AIDS.

## Psychology

20 Weeks, 1/2 credit

Prerequisite: Health

Grade Level: Seniors

This is a general psychology course that includes the study of human relations; awareness and perception, memory and thought, body and behavior, psychological growth, personality theories and disturbance and breakdown.

The course is fashioned after college Psychology 101. Good reading and vocabulary skills are necessary along with a high level of interest.

# Mathematics

The emphasis of the math program is to develop logical thinking and reasoning skills. We hope to provide a basis for further study for those going beyond high school, as well as a background in necessary math skills for those choosing not to continue.

## Introduction to Math Concepts

40 Weeks, 1 credit

This course helps reinforce mathematical fundamentals for the student who needs additional time to master the Algebra curriculum. Emphasis will be on reasoning and communication skills, decision-making and problem solving.

## Algebra I

40 Weeks, 1 credit

Prerequisites: **Successful** completion of Math 8

This course is parallel to the Algebra program but moves at a less rigorous pace. This is the first course of a two-year program leading to the Regents exam in Algebra at the end of the second year.

## Algebra IR

40 Weeks, 1 credit

Prerequisites: Algebra I

This is the second year of the Algebra I curriculum with the Algebra regents exam given in June.

## Algebra R

40 Weeks, 1 credit

Prerequisites: **Successful** completion of 8th Grade Math

This is the first course of a three-year sequence. Among topics considered are polynomials, equations, verbal problems, factoring, powers, roots, radicals, ratio, proportions, systems of equations, graphing, quadratics, probability, statistics, logic, right triangle trigonometry, and introduction to geometry. The Integrated Algebra Regents exam will be taken in June.

## Geometry I

40 Weeks, 1 credit

Prerequisites: Algebra IR

This is a course parallel to the geometry program but moves at a less rigorous pace. This is the first course in the geometry program that allows students to understand the basics of geometry but is not as rigorous as Geometry R. The Regents exam is not required.

## **Geometry R**

*40 Weeks, 1 credit*

*Prerequisites: Algebra and a 75 or higher on the Algebra Regents exam.*

This is the second year of a 3-year sequence in mathematics. Topics included are sets and operations, conic section, Euclidean and coordinate geometry proofs, indirect proofs and solid geometry. The Geometry Regents exam will be given in June.

## **Trigonometry I**

*40 Weeks, 1 credit*

*Prerequisites: Geometry I*

This is a course parallel to the trigonometry program but moves at a less rigorous pace with no regents exam at the end of the course. This is designed for students planning on furthering their education but not strong math students, and will first be offered in 2009 -2010 school year. The Regents exam is not required.

## **Trigonometry R**

*40 Weeks, 1 credit*

*Prerequisites: Geometry and 65 or higher on Geometry Regents*

This is the third year of a 3-year sequence in mathematics that will begin in the 2009 - 2010 school year. Topics included are sets and operations, factoring, posers, roots, radicals, exponents, systems of equations, complex numbers, graphing functions and higher degree equations, variations, trigonometric functions, application of trig. functions, statistics, and binomial theorem. The Trigonometry Regents will be given in June.

## **Math Applications**

*40 Weeks, 1 credit*

This course is designed for the student who has successfully completed two years of math and needs a third year of math in order to meet the graduation requirements. It covers topics such as gross and net income, creating a budget, car purchases such as buying a home and buying a car, as well as credit cards and charge accounts. The course teaches basic banking skills, such as handling checking and savings accounts, making investments (stocks and bonds), mortgage loans, and both homeowners and life insurance.

## **Pre-Calculus I**

*20 Weeks, 1/2 credit*

*Prerequisite: Math B*

Students planning a college major that requires calculus, especially mathematics or science majors, should take this course. Topics include fundamentals of algebra with an emphasis on the principles needed for calculus, functions and their graphs, and applications of both linear and quadratic functions.

## **Pre-Calculus II**

*20 Weeks, 1/2 credit (3 units college credit)*

*Prerequisite: Pre-Calculus I*

This course is a continuation of Pre-Calculus I. Topics include the study of the four conic sections, polynomial and rational functions, synthetic division along with the factor, remainder and rational root theorems, composition and decomposition of functions, radical functions, inverse functions, exponential and logarithmic functions, and trigonometric functions. The emphasis is placed on how these functions are used in the study of calculus.

## **Calculus I**

*40 Weeks, 1 credit (4 units college credit)*

*Prerequisites: Pre-Calculus I/II*

This is a college course offered in conjunction with TC3 for 4 units of college credit. Topics include: fundamentals of algebra, linear, rational, radical, exponential and logarithmic functions and equations, trigonometry, the circular functions, sequences and series, limits, techniques of differentiation and integration, related rates and applied maximum and minimum problems.

# Music

Participation in music groups and classes is fun and rewarding! Homer High provides students with the opportunity to experience excellent band, choral, as well as in-depth historical, theoretical, and computer-assisted instruction in music. Offerings for students are broken down into:

*Curricular offerings*, with little or no after school requirements, include Senior Choir, Freshman Choir, Band, Band Lessons, Beginner Instrumental Instruction, Music Theory I and II, Bach to Rock, and many small ensembles.

*Extracurricular offerings* (membership in which normally involves a co-requisite membership in a curricular ensemble) include Instrumental Jazz Ensemble, the “Blue Notes” Vocal Jazz Ensemble, the annual Winter Holiday Ensemble, Ruby Rhythms Women’s Choir, Pep Band, Indoor Color Guard, and the annual High School Musical with its Theatre Orchestra.

In addition to a full complement of band instruments, students have access to computers, synthesizers, and mixing and sound reinforcement equipment for technology-assisted student instruction in arranging, composition, sequencing, music theory, and sound reinforcement/recording studies.

## Vocal Music

### Senior Choir

*40 Weeks, 1 credit*

The Senior Choir is a major performing ensemble of the high school. Participation in the numerous performances are required of all members. Major performances include a Holiday Concert, an All-District Choral Concert, NYSSMA choral competition, and a Spring Concert. The Senior Choir may also travel to other locations for exchange concerts, workshops, and festivals whenever possible.

The ensemble studies many genres of music including classical, folk, pop, show tunes, vocal jazz, ethnic, etc. Selected students are also given solo performance opportunities. This is a high level ensemble that has a history of performing very difficult music (level V and VI) with strong ratings of silver or gold.

Students receive one unit of credit for the year’s participation in Senior Choir; however, Senior Choir members who are also band members and who therefore attend rehearsals of each organization on alternate days will receive 1/2 credit for the year from each organization.

Students in the Senior Choir have the option of receiving group voice lessons during the school day, which is highly encouraged. Students may also select to prepare a NYSSMA solo, which can qualify them for participation in All-County and Area All-State in the following year.

## Freshman Choir

*40 Weeks, 1 credit*

The Freshman Choir is a performing ensemble designed to ease the transition from Junior High to High School level music. Major emphasis is placed on music reading, ear training, intonation, sight-reading, tone, balance, and blend. Required performances include The Winter Concert, All-District Vocal Concert, and the Spring Concert. Participation in both performances is required of all members. As a member of the Freshman Choir, students are eligible for participation in Ruby Rhythms, Blue Notes, and Christmas Ensemble.

The Freshman Choir studies many genres of music including classical, folk, pop, show tunes, vocal jazz, ethnic, etc. All students will have the opportunity to audition for solo performance opportunities in choral pieces. This is a chamber ensemble, where students will have more individualized attention and the opportunity to hone their skills in preparation for participation in Senior Choir the following year.

Students in the Freshman Choir have the option of receiving group voice lessons during the school day, which is highly encouraged. Students may also select to prepare a NYSSMA solo, which can qualify them for participation in All-County and Area All-State in the following year.

## Instrumental Music

### Senior High Band

*40 Weeks, 1 credit*

*Co-requisite: weekly lessons*

This group, meeting during school every day, performs public concerts and judged performances throughout the year. Out-of-town competitions, and optional small-group performances, are also arranged.

The organization’s repertoire explores many different styles of music—classical, show tunes, concert Marches, pop selections, ethnic music, jazz, etc. The band has a tradition of performing challenging music (level 5 or 6) to high standards (silver or gold). The ensemble has won awards in competitions in Canada and the United States, and in 1995 was proud to release a compact disc recording.

Members of band may be selected for the Area All-State, or (the highest honor) the All-State music ensembles based on participation in the state’s Spring solo festival.

Students may, on an individual basis, request band every other day for 1/2 credit, if chorus is scheduled during the same period. Students may not request band every other day to participate in another class or study hall.

When enrollment permits, a second, more select “Wind Ensemble” is formed through auditions.

# Music (con't)

## Instrumental Lessons

40 Weeks, ¼ credit (Certain conditions apply—see instrumental music teacher)

One lesson per week for students not enrolled in concert band and for extracurricular co-requisite lesson requirement.

## EXTRACURRICULAR OFFERINGS

### Jazz Band

*Co-requisites: Membership in Sr. High Band OR weekly school lessons and permission of director. All students must be in good academic standing to be eligible to perform*

The Jazz Ensemble participates in competitions, school assemblies, and concerts performing all types of jazz, swing, and rock music. Through this group, an opportunity is provided for the interested students to perform, in a serious way, this important facet of the American music scene.

### Marching Band

*Co-requisites for winds and percussion: Membership in Sr. High Band OR weekly school lessons and permission of director.*

*Co-requisites for Color guard: Participation in fall or winter guard.*

*All students must be in good academic standing to be eligible to perform*

The marching band performs in the spring for various local parades including the Memorial Day and Dairy parades. Students are instructed in proper marching technique, the playing techniques specific for the outdoors, and the memorization of music. In appreciation for their participation, students receive points on their band average or weekly average as well as an exemption from performing a final exam.

### Pep Band

*Co-requisites: Membership in Sr. High Band OR weekly school lessons and permission of director. All students must be in good academic standing to be eligible to perform*

The Pep band performs during home football games during the regular school year. Students entertain themselves and others by playing a wide array of popular music which includes movie sound tracks, jazz, rock, and funk.. Students musical arrangements are encouraged. Students receive extra credit on their band or weekly lesson averages for each football game they participate in.

## Pit Orchestra

*Co-requisites: Membership in Sr. High Band OR weekly school lessons and permission of director. All students must be in good academic standing to be eligible to perform*

The Pit orchestra provides the accompaniment for the school musical which takes place in early March. The music (which is the exact same music that the professionals on Broadway use) is difficult and demanding, but at the same time rewarding and a terrific musical learning experience. Rehearsals take place one 9th period per week starting in January. As the musical gets close to its performance time, the orchestra meets nightly with cast, crew, and tech to put the whole show together. Students receive extra credit on their band or weekly lesson averages.

## Blue Notes

*Co-requisites: Membership in the Freshman or Senior Choir*

While the main focus of this ensemble is vocal jazz, other styles such as rock, swing and popular music are studied and performed. Emphasis is placed on vocal style, blend, tone, intonation, balance and music reading. This vocal jazz ensemble rehearses once a week and performs concerts for the school, parents, and community throughout the year. The Blue Notes also competes at the NYSSMA Choral competition and performs at local festivals.

## Ruby Rhythms

*Prerequisite: Membership in the Freshman or Senior Choir*

Ruby Rhythms is a select women's chorus. They perform a varied repertoire of music from classical to contemporary selections. Concerts include the Winter Concert, Cabaret, the Spring Concert, competitions, as well as various performances in and around the community.

## Winter Color Guard

*Prerequisite: Successful audition (Participation in the Cadet winter guard program and/or Marching Band color guard is recommended though not required.)*

This activity is called "The Sport of the Arts." It combines elements of musical theater, dance, and color guard equipment with the athleticism and competitive aspects of sports. Members perform a show that visually interprets music using flags, rifles, sabers, and dance. This ensemble competes with other units around New York State as a member of the Mid-York Color Guard Circuit and nationally in competitions sponsored by Winter Guard International.

# Music (con't)

## ELECTIVES

### **Bach to Rock**

*40 Weeks, 1 credit*

This is a project based course that covers a broad range of topics related to music. Many styles of music will be discussed from ethnic to jazz, to classical to pop/rock. It will discuss the role of music in television and film, and on the internet and related careers in music. It will also look at how music is created from acoustic instruments to the use of modern synthesizer.

NOTE: This course may be utilized to satisfy the regents requirement for 1 art, music, or technology credit.

### **Independent Study Music**

*40 Weeks, ½ to 1 credit*

*Prerequisite: High ability and interest in music, and permission of the music department*

This course, designed specially for each specific student, allows for intensive preparation for the theoretical and historical part of college auditions. Ear training, dictation, composition, beginning through advanced theory, and computer assisted instruction are some of the topics of past independent studies.

### **Music Theory I**

*40 Weeks, 1 credit*

*Prerequisite: Students must be enrolled in band or choir or permission of instructor*

This course is a study of the components of music notation and structure, including intervals, triads, harmonization, melodic structure, and basic music composition. Instruction will include use of music notation and sequencing programs on computers. The course is designed for serious music students.

### **Music Theory II**

*40 Weeks, 1 credit*

*Prerequisite: Students must be enrolled in band or choir or permission of instructor*

This course will help students develop advanced knowledge of musical structure, composition, and analysis with the intent of preparing students for study of music at the college level and the AP Music Theory Exam. Students will develop aural skills, oral music reading skills, and keyboard skills.

# Physical Education

## Introduction

In the Physical Education curriculum students will participate in activities that will empower them to continue regular, lifelong physical activity as a foundation for a healthy, productive life. The physical education student will leave Homer High School as an individual well rounded in a variety of individual/team sports, social skills, selected areas of wellness, and lifetime fitness. Students will have the knowledge and basic skills to establish and maintain physical fitness, participate in physical activities, and maintain good personal health.

The high school curriculum builds upon the program at the junior high school with a progression of activities that are activity based, preparing students for lifetime wellness through physical activity. Active participation, skill and knowledge, and positive values expressed through “character education” are the foundation of the high school program. Understanding that all students will not excel in all areas of physical education, the goal of the curriculum is to assist student in:

- Developing competency/proficiency in a variety of activities.
- Understanding the benefits of regular physical exercise.
- Understanding the effects of activity on the body and risks associated with inactivity.
- Understanding the basic components of health-related fitness (cardo-respiratory, muscular strength, muscular endurance, flexibility, and body composition) and how to include them in the development of a personal fitness program.
- Demonstrating responsible social behavior while participating in physical activity or as a spectator.
- Performing cardo-respiratory activities within the target heart range by using the FITT principle.
- Understanding diversity in groups and how to work through differences.
- Promoting health and wellness.
- Developing a positive self-image.
- Developing sound safety habits and attitudes.
- Finding opportunities to develop leadership abilities.

## Student Activities

**\*\* The Prudential Fitnessgram Testing is done at all grade levels.\*\***

### 9th - 10th -

Aussie Footie, Basketball, Cardio-Respiratory Fitness, Cricket, Dance, Field Hockey, Fitness Circuits, Flag Football, Frisbee Games, Karate, Lifetime Games, Orienteering, Power Walking, Project Adventure, Rugby, Soccer, Softball, Track and Field, Volleyball, Weight Training, Wrestling.

### 11th - 12th

Archery, Badminton, Bocce, Bowling, Broomball, Canoeing/ Kayaking, Cardio-Respiratory Fitness, Cardio Kick Boxing, Dance, Flag Football, Field Hockey, Fitness Circuits, Fly Fishing, Geo caching, Golf, Hiking, Ice Skating, Lifetime Games, Mountain Biking, Paddleball, Pickle Ball, Power Walking, Project Adventure, Soccer, Snow Shoeing, Softball, table Tennis, Team handball, Tennis, Volleyball, Weight Training.

The student has the opportunity to learn the array of concepts, related facts and laboratory skills of science through a program of numerous offerings. Laboratory work is incorporated into all levels. At least one Regents exam is required in science by the state for graduation. The Regents sequence is designed for those students who do not necessarily have college in mind but are exploring the fundamental ideas in each science. The Advanced Regents sequence requires three years of science and passing two regents exams. It is designed for the student who wishes to go to college. The Honors sequence is designed to those students who are contemplating majoring in science in college or wish a more rigorous course than the Core Regents course. The Advanced Placement program is for the higher ability student who wishes to gain college credit for a particular course. This credit may be granted upon successful completion of the AP exam.

In Regents level courses, laboratory exercises representing at least 1200 minutes of laboratory periods and accompanied by satisfactorily written reports are **state mandated** for Regents examination eligibility. Each student in a Regents, Honors and AP level course will be scheduled for 9 classes in a six-day cycle to meet time requirements and accomplish this work. The Regents exam is the final exam in all Regents and Honors level courses.

**Graduation requirements** - Every student is required to successfully complete three full years of science. At least two of these courses must be based on the NYS Core, and the student must pass at least one of the Regent's exams.

## CORE COURSES

### Earth Science Regents

*40 Weeks, 1 credit*

*Prerequisite: All 9th graders will take this course unless they qualify for Honors Earth Science.*

This is a course that will follow the Earth Science Core Curriculum. The three main areas of study are: 1. Geology—rocks and minerals, plate tectonic theory, and Earth history; 2. Meteorology—atmospheric energy and its relation to weather and climate; 3. Astronomy—the universe, our solar system, and motions of the Earth and Earth's moon.

Laboratory investigations are employed to involve the students in three topics. The investigative approach to learning is emphasized. Satisfactory skill in writing lab reports is essential. At the completion of the course, students will take the NYS Regents Exam in Earth Science.

### Honors Earth Science

*40 Weeks, 1 credit*

*Prerequisites: 89.5 or above on Algebra IR exam and 8th grade science final average AND recommendation of 8th grade science teacher. Students are expected to demonstrate their qualification as an honor student and must maintain an average of 80% or higher to remain in the course.*

This is a course that will follow the Earth Science Core Curriculum as described for Regents Earth Science, but there will be increased depth and detail to each main area of study. Additional content may also be included that involves an increased emphasis on scientific inquiry as determined by the instructor. This may include an increased emphasis on student's use of technology or a long-term independent field or laboratory research project in addition to the required lab reports. At the completion of the course, students will take the NYS Regents Exam in Earth Science.

### Biology Regents

*40 Weeks, 1 credit*

*Prerequisite: Successful completion of Earth Science Regents*

The course presents a concentrated study of unity and diversity among living things, maintenance of living things, human physiology, reproduction and development, transmission of traits from generation to generation, evolution, and ecology. The requirements include the satisfactory completion of all assigned laboratory reports and mastery of laboratory skills. The final exam is the Regents exam in Living Environment.

### Honors Biology

*40 weeks, 1 credit*

*Prerequisite: Successful completion of the Earth Science regents and a math regents course with at least 89.5 on both exams.*

*Recommendation of Earth Science teacher. Students are expected to demonstrate their qualification as an honor student and must maintain an average of 80% or higher to remain in the course.*

This is a course offered to students as an alternative to regents biology. Students planning to take honors chemistry, or advanced placement biology are encouraged to take honor's biology.

Honors biology will cover the same topics required in the regents biology/living environment curriculum. These topics include ecology, botany, genetics, anatomy and physiology. Students in honor's biology will study these topics in more depth and detail. More long term investigations and relationships with current research will take place in this class.

The final for this course will be the Living Environment Regents Exam.

# Science (con't)

## ELECTIVE COURSE OFFERINGS

### Advanced Placement Biology

40 Weeks, 1 credit / 8 college credits

*Prerequisite: Regents biology and Regents chemistry or permission of the instructor.*

This course is designed for seniors wishing to take an advanced study of Biology. Major topics of the course include biochemistry and cellular structure, genetics and evolution, and organisms as populations. Course requirements will include in-depth laboratory activity and reports, essays, exams, a midterm and a final. A major focus of the course will be preparation for the Advanced Placement Exam given in May. Note: Students who successfully complete this course will earn 8 credits (Biology 104 & 105) from the TC3 Concurrent Enrollment Program..

### Chemistry Regents

40 Weeks, 1 credit

*Prerequisite: Successfully completed Algebra Regents Exam and enrolled in Regents Geometry or Trigonometry.*

This course enables the student to learn the skills and content dealing with a modern study of matter. Units include matter and energy, atomic structure, bonding, periodic table, mathematics of chemistry, kinetics and equilibrium, acids and bases, redox and electrochemistry, organic chemistry, and an in-depth study of any of the required units. Requirements for the Regents include satisfactory completion of assigned laboratory reports.

### Honors Chemistry

40 Weeks, 1 credit

*Prerequisite: 89.5 or higher on each of TWO science Regents Exams and the Algebra Regents exam. Students are expected to demonstrate their qualification as an honor student and must maintain an average of 80% or higher to remain in the course.*

This course is designed for the student wishing Regents credit in chemistry, but desiring a more rigorous course than the normal Regents level course. College level laboratory exercises and material will be covered. The major units will include atomic structure, bonding, stoichiometry, thermodynamics, kinetics, equilibrium, acids and bases, electrochemistry, and an introduction to organic chemistry. Laboratory reports, homework, tests, a final, and the Regents will be required.

Note: Students who successfully complete this course will earn 8 credits (CHEM 101 and 102) from the .TC3 Concurrent Enrollment Program

### Physics Regents

40 Weeks, 1 credit

*Prerequisite: Average to above average performance in two previous Regents sciences. Completion of Algebra and Geometry Regents or permission of instructor.*

This course presents a modern view of Physics with the major emphasis placed on the fundamental concepts underlying this basic science. Topics studied are mechanics, energy, wave phenomena, electricity and magnetism, modern physics, and motion in a plane. The underlying themes of the course are problem solving and the development and application of skills, particularly math, needed to solve problems. Class work is reinforced through laboratory experiences.

NOTE: Laboratory exercises representing at least 30 lab periods and accompanied by satisfactorily written reports are required for Regents exam eligibility. Proficiency in seven laboratory skills is also required for exam eligibility.

### Physics Honors

40 Weeks, 1 credit / 4 college credits

*Prerequisite: 89.5 or above on each of TWO science Regents exams and two Math Regents exam. Students are expected to demonstrate their qualifications as an honor student and must maintain an average of 80% or higher to remain in the course.*

This course will cover the Regents Physics curriculum as well as other topics at an advanced level. The pace will be more rapid than that of the Regents Physics course and will include more complex laboratory assignments. The course will focus on problem solving, skills development, applications, and error analysis. Students are required to complete all assignments including written laboratory reports, the Regents exam, a midterm, and a final exam.

NOTE: Students who successfully complete this course will earn 4 credits (Physics 104) from the TC3 Concurrent Enrollment Program.

### Physics Applications

40 Weeks, 1 credit

*Prerequisite: Successful completion of one previous science and math course is required. Math skills essential for success: decimals, exponents, algebra and basic trigonometry.*

This course is designed for the non-college bound student, the student who is planning to attend technical school, or the student who is planning to continue his/her education at a two year school. Core areas of study include motion, sound and light, and electricity and magnetism. Optional topics include atomic and nuclear physics, simple machines, fluids, and heat.

## NON LAB ELECTIVES

*Prerequisite: Successful completion of both a Physical Science Core course and a Living Environment Biology Core course.*

### Animal Science

20 weeks, 1/2 credit

Do you like animals? This course will include selection, care, and management of animals; health care, nutrition, and breeding and genetics of both large and small animals. The livestock and pet care industry is a large and growing source of interesting occupations including veterinarians, research technicians, and business owners.

# Science (con't)

## Astronomy

20 Weeks, 1/2 credit

*Prerequisite: Successful completion or current enrollment in Chemistry or Honors Chemistry*

This is an introductory course in Astronomy designed for students with an interest in the basic physical principles governing the universe. The course will include the history of man's explorations of space and the current theories of the formation and evolution of stars, galaxies, and the universe itself. Course requirements will include exams, current event reports, class activities and a final exam.

## Forensic Science

20 Weeks, 1/2 Credit

This course is a course designed for students interested in enhancing their observation and deductive reasoning skills. Students will be engaged in problem solving through inquiry based and long-term investigative methods; with an emphasis placed on these specialized areas of science. Students will view historical development of scientific research and analyze case studies. This course hopes to use this class as an opportunity to tap into some of our local resources including, but not limited to the Materials Science Dept. at Cornell Univ., current research projects at SUNY Cortland and Cornell, and the pathology and investigative department of our State Police Dept. and Cornell's Veterinary School.

## Plant Science/Landscaping

20 weeks, 1/2 credit

Students have the opportunity to become aware of the vast field of plant science in this course. We will explore plant identification, reproduction, growth and growth regulators, pests and their control, floral design, soil management, and propagation techniques. We will grow our own plants in the greenhouse and bring out your artistic talent with landscape design and computer assisted planning. Actual installation and maintenance of a landscape planting will add to your learning.

## Geology

20 Weeks, 1/2 credit

*Prerequisite: Successful completion of Physical Setting: Earth Science and Living Environment. Preferred Prereq: Mastery level performance in Regents Earth Science or instructor permission.*

The course will use local geology for the basis of study in the areas:

- Landscapes and Mapping
- Forces Shaping the Land
- The Rocks Beneath Us
- Building Up the Land
- Learning About the Past from The Land

Because of the connections with local geology, each unit of study will involve a fieldwork component. A final project will

involve student research of a specific aspect of our local geology and its relation to the course.

## Human Anatomy & Physiology

20 Weeks, 1/2 credit

*Recommended: Biology & Chemistry*

This course will be a challenging course exploring the intricate details of the human anatomy. Students will take an in depth look at human health and nutrition. Students will investigate physiological processes and human disease. Although not a requirement, students should have taken biology and chemistry.

## Current Issues in Science

20 Weeks, 1/2 credit

This course is designed to provide students with a basic grasp of the scientific principles necessary to understand current scientific issues. Potential topics include stem cell research, cloning, transgenic organisms, global diseases (chronic wasting, avian influenza, AIDS), natural disasters, nuclear waste disposal and development of alternative energy sources. Students will be asked to help identify topics of interest, and will be required to write current events reports.

## Meteorology

20 Weeks, 1/2 credit

This course is designed for those who want a better understanding of the weather and how it is changing. Students will start with the history of weather prediction and end with the current advances in weather technology. Sections of the course will include; history, weather instruments, mapping, predictions, storms, climate and future weather. Emphasis will be on man's role in not only predicting the weather but also how we have changed our climate. Students will produce a daily weather forecast by the end of the semester.

## Senior Thesis

40 Weeks, 1 credit

*Prerequisite: concurrent enrollment in Regents or honors physics*  
*Grade Level: college bound seniors only or AP Biology*

This course is designed for seniors seeking an opportunity to conduct individual scientific research. Students will be paired with a college research scientist who will act as a mentor, allowing students to design and carry out an independent research project. The research project will be presented in a 20 page research paper and will culminate with a presentation in front of peers, parents, teachers, mentors and fellow research students.

# Science (con't)

## SUMMER COURSE OFFERINGS

### Marine Science

*1 Week, 1/2 credit—Summer*

*Prerequisite: Successful completion of Regents or Honors Biology.*

This course, held during the summer months, is open to highly motivated ninth, tenth, and eleventh grade students. Included in the course are intensive studies of marine life through laboratory and field work. Applications and selection take place during the spring of the year. The site is a field station on Long Island. A written exam may be required upon return to Homer.

### Adirondack Field Studies

*1 Week, 1/2 credit—Summer*

*Prerequisite: Successful completion of Regents or Honors Biology or permission of the instructor.*

This course, held during the summer months, is open to ninth, tenth, and eleventh grade students with high interest in the biological sciences. Included in the course are intensive studies of aquatic and terrestrial environments. Applications and selection take place during the spring. This is a rigorous course with a final project required on site.

# Social Studies

The Social Studies Program has been developed to enable students to better understand the world they live in and the events that have shaped their lives. In order to attain these goals a four-year state mandated curriculum is offered.

## REQUIRED COURSES

### Global Studies I:

#### Grade 9

*40 Weeks, 1 credit*

*Prerequisite: Social Studies 8*

This course will be a chronological examination of world cultures, physical setting, and world history. The areas to be studied will include the following:

**Unit I:** *Ancient World Civilizations and Religions*

*(4000 bcd - 500 ce)*

Early Peoples and River Civilizations, Classical Civilization, Rise and Fall of Great Empires, and Emergence and Spread of Belief Systems

**Unit II:** *Expanding Zones of Exchange (500 - 1200 ce)*

Gupta Empire, Tang and Song Dynasties, Byzantine Empire, Islamic Civilization, Medieval Europe, and The Crusades

**Unit III:** *Global Interactions (1200 - 1500 ce)*

Early Japan and Feudalism; Mongols and Their Impact; Global Trade and Interactions, Resurgence of Europe, and African Civilizations.

**Unit IV:** *The First Global Age (1450 - 1770 ce)*

Mesoamerican Civilizations, Ming Dynasty, Ottoman Empire, Explorations, Encounters, Imperialism, Absolutism and the Puritan Revolution

### Global Studies II:

#### Grade 10

*40 Weeks, 1 credit*

*Prerequisite: Global Studies I*

This course will be a chronological examination of world cultures, physical setting, and world history. All students will be required to take a two-year cumulative state examination at the conclusion of the course. Passing the examination is a requirement for graduation. The areas to be studied will include the following:

**Unit I:** *Absolutism to Revolution (1500 - 1900 ce)*

Absolute Monarchs in Europe, Enlightenment and Revolution, French Revolution and Napoleon, Nationalist Revolutions Sweep the West

**Unit II:** *Industrialism and the Race for Empire*

*(1700 - 1914)*

The Industrial Revolution, Age of Democracy and Progress, Age of Imperialism

**Unit III:** *The World at War (1900 - 1945)*

The Great War, Revolution and Nationalism, Years of Crisis, World War II

# Social Studies (con't)

## **Unit IV Perspectives on the Present (1945 - Present)**

Restructuring the Postwar World, Colonies Become New Nations, Struggles for Democracy, Global Interdependence.

## **United States History and Government**

40 Weeks, 1 credit

*Prerequisite: Global Studies II*

A survey course covering the major themes and events in American History and Government. Emphasis will be placed upon cultural heritage, political systems, and economic history. Foreign relations and the Constitution will also be major topics. All students will be required to take a state examination at the conclusion of the course. Passing the examination is a requirement for graduation.

## **Studies in Economics and Government: Grade 12**

40 Weeks, 1 credit

*Prerequisite: United States History and Government Passing both of these courses is a requirement for graduation.*

A twenty week segment will examine the workings of the American Government at all levels: Local, State and Federal. The studies will emphasize the role of the individual in government. Students will examine how government policies are established and what they can do to have their voice heard in the process. They will be required to complete five hours of community projects. 1/2 credit

A twenty week segment will examine economics from a world-wide, national, local and personal aspect. It will emphasize the role of economic conditions and policies upon the individual. Students will examine different economic systems and conditions and how they can respond to these conditions. 1/2 credit

## **ELECTIVE COURSE OFFERINGS**

### **You and the Law**

40 Weeks, 1 credit

*Prerequisite: Global Studies II*

This course is a guide to law that is of practical use in everyday life. The course is designed to provide you with an understanding of your legal rights and responsibilities, knowledge of everyday legal problems, and the ability to analyze, evaluate, and, in some situations resolve legal disputes. The topics covered include criminal law, consumer law, family law, housing law, and the laws associated with current events.

### **American Military History I:**

### **Guerrilla Warfare & Counterinsurgency**

20 Weeks, 1/2 credit, Fall semester only

Grade Level: 10,11,12

This course explores Americans fighting in guerrilla wars. The course covers selected conflicts beginning with the French & Indian War, and includes the current conflicts in Iraq and Afghanistan..

The course centers on study of films, current and historically articles, and class discussion. Each student will read three or four books on guerrilla warfare during the semester..

### **American Military History II: Conventional Warfare**

20 Weeks, 1/2 credit, Spring semester only

Grade Level: 10,11,12

This course covers American infantry, naval, and air units in combat during selected major conflicts in which the United States has participated. The Civil War, World Wars I and II, the Korean Conflict, and the first Golf War are studied.

The course centers on study of films, current and historical articles, and class discussion. Each student will read four books on conventional warfare during the semester.

### **AP OFFERINGS:**

#### **Advanced Placement (AP)**

#### **Recommendations**

These college level courses are designed to give students an opportunity to take demanding courses for college credit while attending high school. The College Board curricula are extremely rigorous and required a serious commitment of time and purpose. Students who have shown a serious commitment to academics and have achieved mastery level (85 or above) scores on state exams are most likely

- to be successful in these courses and
- to achieve AP exam scores that will deliver college credit.

We recommend the following:

- A minimum combined class average of 90 for Global Studies I and II and American History, where applicable
- A minimum combined Regents test average of 85 for Global Studies I and II and American History, where applicable
- The recommendation of previous social studies teacher(s)
- It is expected that students will maintain at least an 80 average in this course.

\*Students obtain college credit by scoring successfully on the AP exam in the spring

Students who do not meet the recommendations above, and students who fall below an 80 average in the course, will have a conference with the AP teacher, department chair and guidance counselor to counsel the student on the best course of action. Our goal is to balance the integrity of our rigorous curricula with the desire of students to take challenging courses.

## AP American Government And Economics

40 Weeks, 1 credit

This course is designed to satisfy the state mandated fourth year of government and economics and allow students to obtain advanced placement college credit for government. Research papers and extensive readings on a college level will be required. Also, a five hour community involvement project will be mandated for the successful completion of the government portion.

## AP American History

40 Weeks, 1 credit

This course is designed for students wishing to take the Advanced Placement American History Test given each May. Those who successfully complete the test may receive college credit for American History, thereby removing the requirement at college. The course has students implement the knowledge of American History to interpret historical materials analytically and to arrive at conclusions on the basis of an informed judgment. Periodic oral reports, exams, short research papers, outside readings, and class participation are all a part of the grading procedure.

## AP European History

40 Weeks, 1 credit

*Prerequisites*

- *successful completion of Regents Global History & Geography I*
- *recommendation of Global I instructor*
- *written essay*
- *substantial summer assignments.*

This course is designed primarily for self-motivated 10th grade students as a highly enriched replacement for Regents Global History & Geography II. (Juniors and seniors are welcome to study this course as an elective.)

The syllabus covers Europe from the Late Middle Ages (c. 1300) to the fall of the Berlin Wall and the USSR (1990) in great breadth and considerable depth. Emphasis is placed on individual, independent reading and writing and on class participation. All students completing this course are expected to sit for the College Board AP European History Examination in early May. The course's final examination is the Global History & Geography Regents Exam..

# Technology Education

Homer high school's **Technology Education** courses provide a broad base of skills that will prepare the student for a variety of careers. With a focused sequence in Technology Education, students have the means to link their years in high school with those in post-secondary educational programs or employment. High paying careers in the fields of design, architecture, construction, communication, computer-aided design and pre-engineering are all obtainable with the right academic preparation and the hands-on skills offered through a Technology Education sequence.

## Design and Drawing for Production\* (also referred to as "DDP")

40 Weeks, 1 credit *\*This course satisfies the Art/Music & Technology requirement.*

DDP is an introductory course, which develops student problem-solving skills, with emphasis placed upon the concept of developing a digital 3-D model or actual prototype of the students' design. Students focus on the application design tools provided by state-of-the-art computer hardware and software - including AutoCad LT, Google SketchUP and SoftPlan among others. The course will emphasize the design development process of products and how a model of that product is produced, analyzed and evaluated, using a Computer Aided Design System. Students will learn to communicate their solutions to creative problem-solving challenges. Career planning and self-assessment are an integral part of this course.

## Architectural Design - I (formerly known as Construction Drafting)

40 Weeks, 1 credit

*Prerequisite: DDP preferred*

Students learn the basics of residential architectural design. The primary emphasis will be to use computer software to develop CAD drawings that are used in the construction and architectural design industries. During the course, students will design several homes and produce a complete set of blueprints including floor plans, elevations, plot plans as well as model building.

Students will learn to communicate the concepts behind their designs as well as 'critique' the designs produced by others. The course culminates in each student designing their own sustainable "dream house." This course may be used for partial fulfillment of the Fine Arts requirement for graduation as part of a sequence of courses.

# Technology Education (con't)

## **Architectural Design - II** (formerly known as **Construction Drafting - II)**

*40 Weeks, 1 credit*

*Prerequisite: Architectural Design - I required*

The advanced architecture student will further enhance his or her experience and skill set by creating working drawings potentially for actual clients as well as hypothetical design scenarios. An understanding of historical architectural styles and contemporary construction techniques will be explored. An emphasis is placed on environmentally responsible design also referred to as “Sustainable” or “Green” design.

## **CAD - Computer Aided Design And Drafting (Dual credit with TC3 available)**

*40 Weeks, 1 credit (2 college credits)*

*Prerequisite: Successful completion of DDP or permission from instructor.*

This full course will concentrate on concepts learned in DDP and apply the concepts on the computer. The students will learn to draw gears, gaskets, molds, and a variety of other mechanical devices on the computer. This course uses the TC3 syllabus and brings a college level course right into the high school. Auto CAD is the standard today in industry and having knowledge of Auto CAD will look great on a resume. This course is for students interested in Engineering, Drawing, Designing, Interior Decorating, Architecture, or any students interested in any field that involves construction.

## **Application in Technology**

*40 Weeks, 1 credit*

*Prerequisite: 80 or better average in DDP or permission of instructor.*

Applications in Technology is 40 week course designed to introduce students to various applications in different technological fields. Students will be introduced to a variety of technological applications which might include video production, alternative energy solutions, transportation systems, manufacturing, industrial design, and other relevant technological concepts. Each session will focus on a different application in technology. Students will work together in groups in a hands-on laboratory setting based on the selected technological application.

## **Principles of Engineering**

*40 Weeks, 1 credit*

*Prerequisite: DDP*

Principles of Engineering is a broad-based survey course designed to help students understand the field of engineering and engineering technology and its career possibilities. Students will develop engineering problem-solving skills that are involved in post-secondary education programs and engineering careers. They will explore various engineering systems and manufacturing processes. They will also learn how engineers’ address concerns about the social and political consequences of technological change. If you’ve wondered, “*Is a career in engineering for me?*” you should take this course as an exploratory foundation.

## **Independent Study**

*20 weeks -1/2 or 40 weeks -1 credit*

Motivated students may wish to propose an independent area of study suited to their specific needs and aspirations. Instructor approval is required along with guidance counselor recommendation.

# Careers & Technical Education Course Offerings

Careers and Technical Education (CTE) is the learning of knowledge and skills necessary to become a skilled worker in a chosen area or occupation. No matter how you plan to earn a living, all jobs require some special knowledge and skills. Some students obtain this training after high school in college, some in apprenticeship programs and some in high school at the McEvoy Educational Center.

You should plan on attending during your junior and/or senior years of high school.

Most programs will require you to purchase a uniform.

## Auto Collision Technology

*Two years, 3 credits per year*

Today is an exciting time for a young man or young woman entering the world of automotive body repair. Today's auto body technician is a skilled professional with expertise in many areas. All areas of auto collision repair are covered in this two-year program, including: auto body materials, color matching, custom painting, paint products, hand and power tools, basic measurement skills, high-strength steels, plastic and composite part repair. Greater emphasis on ASE certification and I-Car standards in the auto collision technology class involves students in a hands-on training program for a career in the Auto Collision profession.

## Auto Technology NATEF

*Two years, 3 credits per year*

**The National Automotive Technicians Education Foundation** was created by the Association for Career and Technical Education formally (AVA) and the Industry Planning Council (IPC). The IPC consists of both representatives of vocational education and the automotive service industry and are concerned with the quality of automotive education.

The McEvoy Educational Campus and OCM BOCES are proud to be a "Program of Excellence" supporting NATEF standards. Within a two-year course of study at OCM BOCES four mandatory NATEF modules are covered: Brakes,

Suspension/Steering, Electrical/Electronic Systems, and Engine Performance.

Automotive students will be responsible for NATEF classroom theory, and NATEF applied communications, mathematics, and science. Students will have the opportunity to complete over 200 NATEF shop labs within the four areas. Some labs may be performed at local repair facilities. Students are responsible for professional NATEF work ethics and safety.

## Building Trades

*Two years, 3 credits per year*

The Building Trades program stresses the development of skills in rough carpentry, masonry and concrete work, residential electricity, plumbing and heating, finish carpentry, and roofing and siding.

Students in this program gain valuable experience in all phases of residential construction. In addition, students have the opportunity to specialize in the construction trade area of their choice.

## Cosmetology - Appearance Enhancement Profession

*Two years, 3 credits per year*

Appearance Enhancement/Cosmetology Program provides training in areas of hair, skin, and nail analysis. Product knowledge, technical application and procedures are taught in the areas of shampooing, massage, styling, shaping, coloring, and hair restructuring. Elective areas include esthetics and nail specialists. Curriculum is designed to provide 1000 hours of interactive instruction and allows practice and theory in individualized and group settings. Those students who have completed 1000 hours of training are eligible to take the written and practical examination to obtain a New York State license.

## Criminal Justice

*Two years, 3 credits per year*

**YEAR ONE:** The first year of instruction focuses on traffic, criminal and civil law, arrest and court procedures, report writing and communication skills. Examples of subjects taught include patrol techniques, self defense, military police, security, fingerprinting, civil rights, and current crime scenarios. Time is split between lecture, physical activities, field trips, and interaction with special guest.

**YEAR TWO:** The second year is more intense and career centered with focus on criminal investigation, and police-community relations. Subjects include forensics, accident and crime scene reconstruction, investigative case management, first aid and CPR, digital photography, video production, life skills, and career development. Time is split between classroom discussion, team based labs, and hands-on field activities. This program of study is an excellent tool for preparation for college, military service, or direct employment in law enforcement or security fields.

There is an articulation agreement with TC3 that will enable qualified students to receive six credits towards their Criminal

# Careers & Technical Education Course Offerings (con't)

Justice Program. Additionally, as part of our Tech-Prep Program, students may qualify to attend courses at TC3 tuition free.

CPR and First Aid certification is possible.

## Culinary Arts

*Two years, 3 credits per year*

This course is offered to juniors and seniors in the morning and afternoon at the McEvoy Campus. First year students will concentrate on food service careers, sanitation, safety, tools and equipment, applied math, basic arts of baking, cold food, and food preparation stations. Emphasis is on instructional cooking and preparation skills in the food service area.

Second year students will complete modules not completed the first year and explore careers in related areas of: restaurant management, institutional facilities, franchise management, grocery purveyors and suppliers, public health department, and facilities layout and design. They will also acquire certification in sanitation and beef. Project based portfolios will finalize second year. Communication skills both written and verbal are emphasized.

## Graphic Communications

*Two years, 3 credits per year*

The Graphic Communications class encompasses many areas of graphics and computer design.

The design program is centered around computer generated projects. Adobe PhotoShop, Macromedia Freehand, Pagemaker, and I Movie software offers students opportunities to digitally design and illustrates real life and simulated projects. These projects include publications, book covers, logos, flyers, posters, WebPages advertisements, and other commercial applications.

## Health Occupations Technology (Pediatrics to Geriatrics)

*Two years, 3 credits per year*

This course is offered to students who would like to explore options working with young children, adults and the elderly. Those interested in pediatrics will learn about the characteristics needs and behavior of young children from birth through school age. Labor and delivery, prenatal development and children with special needs will be included. Students will also have the chance to explore careers within the health care field. Some of these careers could include nursing, nutrition, and physical therapy, radiology and veterinarian tech.

At the end of the 2nd year, students will sit for the

NYS CNA certification test. This test is not required to pass the course but is an additional opportunity.

## New Vision Health Careers

*One year—Seniors Only*

*Application and interview required*

New Vision Health Careers is a total immersion experience in the field of health care. Students explore a wide variety of career opportunities within the hospital and at some health facilities in the community. The students spend 3 to 4 hours every school day their senior year at Cortland Memorial Hospital. Cortland Memorial Hospital is the call sponsor. Other medical professionals in the community also offer rotation sites for interested students.

**The program offers four credits toward high school graduation which may include Anatomy and Physiology, English 12, Government/Economics, and Health Careers. These subjects are integrated together under the common theme of health care.**

Evaluation in the program consists of daily journal entries, essays, technical writing, textbook questions, oral presentations, group projects, quizzes (both oral and written), tests (both written and oral), and rotation packets. All assignments are interdisciplinary so that the students can integrate the different subject area skills together.

Some of the fields that a New Vision student can explore are Physical Therapy/Occupational Therapy, Emergency Medicine, Cardiology, Radiology/Nuclear Medicine/Ultrasound/CT Scans/MRI, Recreational Therapy, Respiratory Therapy, Nursing (Maternity, ICU, Peds, Geriatrics, and General), Clinical Laboratory, Nutrition, Pharmacy, Bio-Medical Engineering, and others depending upon individual student interest.

## New Visions - Environmental Careers

*One year- Seniors Only*

*Application and interview required*

New Vision Environmental Science Careers is a total immersion experience in the field of Environmental Science. The New Vision students will spend 3 hours of their school day, as seniors, at the Tunisia Laboratory of Aquatic Science. The class is sponsored by the United States Geological Survey at 3057 Gracie Road in Cortlandville, New York.

The program consists of modules of instruction that explore specific areas of Environmental Science. Units include Forestry, Fish and Wildlife, Environmental Issues, Soil and Water, Land Use and Outdoor Recreation. Class time is divided between indoor instruction and outdoor application with the majority of learning being accomplished using the 220 acres of forest surrounding the class location. Other activities that contribute to course curriculum are overnight camping, backpacking, canoeing, cross-country skiing, snowshoeing, fishing, and several college visitations. The curriculum allows for up to four credits toward graduation: English, science, government and economics, and physical education.

Evaluation is portfolio based on each of the six

# Careers & Technical Education Course Offerings (con't)

required modules. The student's knowledge and skill is measured using authentic assessment. A daily journal, book reports, essays, poems, interviews, and a research project are part of each student portfolio, with a portfolio developed for each module. The research findings are presented to a panel of educators in a formal symposium style, and the evaluators measure the student outcomes.

## Data Analysis and Statistics/Business Math Course

*One Credit*

The Data Analysis and Statistics/Business Math Program stress content and the development of skills in mathematics, as they will apply to the workforce preparation area selected. Students in this program learn enhanced problem solving, review skills and gain valuable experiences in related technical applications of mathematical skills. Students may elect to receive college credit from TC3 in Business Math by successfully completing the TC3 final exam. The Data Analysis and Statistics or Business Math Course is a requirement for all students.

## Scientific Inquiry and Research

*One Credit*

The Scientific Inquiry and research Course stress content and the development of skills in science as it applies to the workforce preparation program selected by the student. Students use various application of scientific methods, skills, and gain valuable experiences in related technical applications of science. The Scientific Inquiry and Research course is a requirement for all students.

## General Education Development (GED) High School Equivalency Diploma Program

*Half Day—AM or PM*

*Parent/Student interview required*

This course will offer a uniquely independent study in preparation for the GED test. Students will study "the basics" in math, social studies, science, reading, and writing (grammar and composition). When student takes test for diploma is dependent upon student self-motivation and initiative.

The following courses are required as part of every Career and Technical Education Program.

## Career and Financial Management

*1 credit*

This course, which replaces the Introduction to Occupations course, is required as part of every career and technical education program. It will provide the student with the opportunity to learn about the features of our economy, explore a variety of careers, and learn the skills and competencies needed for success in the workplace to begin to become financially literate. It contains 5 topics: Business systems and economics, career planning, the career selection process, career success and financial literacy.

## Computer Technology Program

*Two Years - 3 credits CTE each year*

*1 Math or Science credit per year*

Do you like computers? How about making machines work? Or figuring out puzzles? Then Computer Technology, the fastest growing career, may be for you. In this two year program students will be prepared to become a Computer Support Specialist. Students will learn basic session layering, networking fundamentals with a host of protocol procedures to name a few. This knowledge and skill will enable students to be certified in computer maintenance (A+) and networking (CISCO Systems). It will provide the foundation necessary to find employment in the field or to achieve advanced standing in a rigorous college program.

## New for 2010 - 2011 Laboratory Technician Program

*Two Years - 3 credits CTE each year*

*1 Math or Science credit per year*

Do you like science? Do you like to work in a clean environment or outdoors? Are you curious about the whys and hows of the world around you? If you answer yes to these questions the Lab Technician is a career for you! The numbers of jobs are expected to increase by 28% over the next 8 years; the pay is good and the work interesting. During this exciting 2 year program you will learn laboratory procedures, collection processes, slide and sample preparation, and biotechnology, laboratory set up, safety and industry practices. In addition, you will be eligible for certification as a Phlebotomist and have an opportunity for college credit. Internships in the 2nd year will be provided by local businesses and medical institutions to allow you to experience a variety of lab techniques. .

## Career Exploration Program

*1 credit each 10 weeks*

Hospitality, child care, small engines, security, basic carpentry, interview techniques, budgeting, resume writing, introductory computer skills, and more. If you aren't sure which career is for you then this program is it. You will learn a little about a wide variety of occupations and how to pursue them.

For further information: Contact OCM BOCES at  
(607) 758-5260  
OR OCMBOCES.org

# TC-3 Dual Credit/ Concurrent Enrollment Program

TC-3 offers several Dual Credit courses to Homer High School students at no cost. Our teachers and curriculum have been approved by TC-3 instructors and are considered “adjuncts,” teaching the same material, with the same textbooks, and to the same college transcript. As part of SUNY, TC-3’s credits are highly transferable to colleges and universities around the nation.

The following courses are approved for the 2010-2011 school year:

Homer HS Course	TC-3 Course	Credits
Chemistry Honors	CHEM 101: Principles of Chemistry I	4
CHEM	102: Principles of Chemistry II	4
Biology AP	BIO 104: General Biology I	4
BIO	105: General Biology II	4
Physics Honors	PHSC 104: General Physics I	4
Pre-Calculus II	MATH 135	3
Pre-Calculus	Math	
Calculus I	MATH 201	4
Calculus	I	
CADD	DRAF 120: Intro to CADD	2

Computer Applications	CAPS 111: Intro to Word Processing	1
CAPS	121: Intro to Spreadsheets	1
CAPS	131 Intro to Databases	1
Intro To The College Experience (taught in the summer)	ACAD 100	1

For more information go to [tc3.edu](http://tc3.edu) and click on CollegeNow, Dual Credit, and In School.

# AP - Advanced Placement Program

AP is a rigorous academic program that provides students with the opportunity to take college-level course work and exams while in high school. It provides motivated and academically prepared students with the opportunity to earn college credit or placement. AP is accepted by more than 3,600 colleges and universities worldwide for college credit, advanced placement, or both on the basis of successful AP Exam grades. Each AP course has a corresponding exam that schools worldwide administer in May. The 2010 exam fee is \$80. (fee waivers are available)

The following AP exams are approved for administration:

1. United States Government and Politics
2. English Literature and Composition
3. United States History
4. European History
5. Biology

For more information about AP courses and exams:  
[apcentral.collegeboard.com/coursehomepages](http://apcentral.collegeboard.com/coursehomepages)

# CLEP - College - Level Examination Program

CLEP is another rigorous College Board program that allows students to demonstrate their mastery of college-level material in introductory subjects and earn college credit. More than 2,900 colleges and universities have CLEP credit and/or placement policies. Students on Level V Foreign Language will prepare for the CLEP exam.  
[www.collegeboard.com/clep](http://www.collegeboard.com/clep)