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PROGRAMS OF STUDY

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INTRODUCTION

This COURSE SELECTION GUIDE has been developed to enable students together with the help of their parents, school counselor, and teachers to set educational and vocational goals for themselves. Course selection should not be viewed as a one year at a time exercise, but as a four year long master plan.

ODD/EVEN DAY CYCLE

Sayre Area High School operates on an eight (8) period day with an additional thirty (30) minute lunch period. A normal class load is seven (7) credits. The school schedule revolves around an odd/even schedule. Therefore, one half (1/2) credit courses can meet every other day (odd or even days) for the entire year or every day for a semester or eighteen (18) weeks. One quarter (1/4) credit courses will meet every other day (odd or even days) for a semester or eighteen (18) weeks).

SCHEDULING

Students should begin to develop a plan for after high school: post-secondary education, military, or employment. Students should put time and effort into the course selection process. Scheduling should compliment those choices. The selection of courses and area of concentration should be a joint effort involving the student, the parents, and the teachers.

Students or parents who would like a conference with Mrs. Richmond, the School Counselor, are encouraged to contact the Guidance Office at 888-2190.

AFTER THE START OF SCHOOL, STUDENTS WILL BE GIVEN A TWO-WEEK TIME SPAN TO MEET WITH THE SCHOOL COUNSELOR TO DISCUSS PROBLEMS WITH THEIR SCHEDULE. AFTER THAT TWO WEEK PERIOD, ALL SCHEDULES ARE FINAL.

Exceptions will be made and only granted in extreme situations and only with the approval of the high school administration.

SAYRE AREA JR. SR. HIGH SCHOOL

GUIDANCE OFFICE

331 WEST LOCKHART STREET

SAYRE, PA 18840

(570) 888-2190

School Counselor – Stacy Richmond

Guidance Secretary - Debra Brandt

School CEEB Code – 394375

Web Site – <http://www.sayresd.org>

COURSE LEVELS

Accelerated College Education (ACE): Courses with this description offer college credit through Corning Community College. Students who wish to receive college credit are given the opportunity to pay for the course at a reduced fee or they may take the course for high school credit only with no fee attached. Students who sign up for an ACE course will be automatically registered through Corning Community College. If a student elects not to take the course for college credit, they need to contact Corning Community College by the deadline (which they will be made aware of). If Corning Community College is not contacted by the drop date, the student will be billed and expected to pay. Advanced Placement (AP): Students who elect this option will receive high school credit but have the option to take an Advanced Placement Exam at the end of the course for possible college credit. **The AP Exam(s) must be paid for by the student in advance of the testing date if the student chooses to take the exam(s).**

Honors (H) – Courses that include more challenging material than the college prep curriculum and require additional in and out of school commitment on the part of the student.

College Prep (CP) – Challenging courses to prepare students for the demands of post-secondary education.

General (G) – Basic level courses for students who plan to go to two year programs (community college, trade, technical, or business school) or enter the work force after graduation.

STUDENTS ARE PLACED IN THE ABOVE LEVELS BY TEACHER RECOMMENDATION. ANY QUESTIONS REGARDING PLACEMENT LEVEL SHOULD BE DIRECTED TO THE TEACHER.

GRADING SCALE

| <u>Numerical Grade</u> | <u>Letter Grade</u> |
|------------------------|---------------------|
| 93 to 100 | A |
| 85 to 92 | B |
| 77 to 84 | C |
| 70 to 76 | D |
| 69 & Below | F |

SENIOR PROJECT COURSE DESCRIPTION

The Senior Project is a graduation requirement required of all students by the Pennsylvania State Board of Education. It is designed to represent an exhibition of the skills a senior has learned throughout their high school experience. The project consists of a research/reflective paper, oral presentation, tangible “final product”, and a documentation of at least 30 hours of independent work. An additional 5 hours of community service will need to be completed and documented during the sophomore and junior years. There is no class time assigned to completing the project, but a student is given an advisor and a scheduled presentation date and time. A committee of faculty members reviews the project to determine if it meets the guidelines for graduation. Advisor Mr. Johnston – djohnston@sayresd.org

COLLEGE PREPARATORY

The College Preparatory program places emphasis on languages, mathematics, social studies and the sciences. This program is tailored to prepare students who wish to continue their formal education at a college or university. While this offering is obviously required for the college bound, it is also valuable for any student who is interested in continuing with an educational program after high school and for students who need to meet eligibility requirements to play a sport in college. It allows for greater career options in later years.

Grade 9

English 9 CP or H
American History 1 CP
Physical Science CP
Geometry
French 1 or Spanish 1
Phys. Ed./MS Office
One elective *

Grade 10

English 10 CP or H
Global History & Culture I CP
Biology 10CP
Algebra 2
French 2 or Spanish 2
Phys. Ed./Driver's Ed./21st Century Skills Course
One elective *

Grade 11

English 11 CP or H
Global History & Culture II CP
Chemistry CP
Pre-Calculus CP
Phys. Ed./Health
Two electives*

Grade 12

English 12 CP or H
Senior Social Studies
Physics and/or Biology 2 and/or Chemistry 2
Calculus H or Statistics CP
Phys. Ed.
One elective *

An elective is any course, which is not specifically required for graduation. Students may choose any elective, provided that they are in the appropriate grade and have completed any pre-requisite.

ACADEMIC REQUIREMENTS FOR COLLEGE BOUND ATHLETES

In order to be eligible to compete athletically as a freshman in college, you will need to make certain that you meet the academic eligibility requirements of the Athletic Association where you are planning to participate, whether you hope to compete in the NCAA, NAIA, or the NJCAA, you must realize that it's not just athletic talent that determines whether you will be able to participate. Just as important, if not more, are the academic requirements that relate to the course schedule you carry each year in high school. Each Athletic Association has their own initial eligibility standard, which is determined using a combination of required core courses, a core GPA, and a standardized test score. Information and a list of requirements and approved courses can be found at the following web sites:

NCAA -- www.ncaaclearinghouse.net
NAIA -- www.naia.org
NJCAA -- www.njcaa.org

It is strongly recommended that you consider these requirements when planning your schedule.
(Wire, Rick: The Student Athlete & College Recruiting)

PLEASE NOTE: General Level Courses do NOT meet core course requirements for the NCAA.

| GRADUATION CREDITS | |
|---------------------------|--|
| Requirements | |
| 4 Credits | English |
| 4 Credits | Social Studies American History Global History & Culture I Global History & Culture II Senior Social Studies |
| 3 Credits | Mathematics |
| 4 Credits | Science |
| 2-1/2 Credits | Health and Physical Education |
| 1/4 Credit | Driver Education |
| 1/4 Credit | 21 st Century Skills Course |
| 5-1/2 Credits | Electives |
| 1/2 Credit | MS Office |
| | Graduation Project |
| 24 Credits | Total |

Students must be scheduled for a **minimum** of six and one-half (6-1/2) credits per year.

| To Be Promoted To Grade | Credits Earned |
|-------------------------|----------------|
| 10 | 6 Credits |
| 11 | 12 Credits |
| 12 | 18 Credits |
| Graduation | 24 Credits |

If you choose to repeat a class that you passed, you will earn 0 credits for the second class. You cannot earn another credit in a course you already passed. The only classes that can be repeated for credit are Journalism, Yearbook, Woodshop, Fitness for Life, Web Page, Instrumental Music and Concert Choir.

COURSE OFFERINGS

ENGLISH

English 9 H
English 9 CP
English 9 G
English 10 H
English 10 CP
English 10 G
English 11 H
English 11 CP
English 11 G
English 12 AP/ACE
English 12 CP
English 12 G
Journalism
Yearbook

SOCIAL STUDIES

American History 1 CP
American History 1 G
Global History & Culture I CP
Global History & Culture 1 G
Global History & Culture II CP
Global History & Culture II G
Modern American History
Principals of Economics

SCIENCE

Science 9 CP
Science 9 G
Biology CP
Biology G
Chemistry CP
Chemistry G
Biology 2 H
Chemistry 2 H/ACE
Science Today
Physics H

MATHEMATICS

Course 3
Algebra 1
Geometry
Algebra 2
Pre-Calculus CP
Statistics CP /ACE
Calculus H/ACE
Math Study

STUDENT ENHANCEMENT

21st Century Skills Course

BUSINESS

Management & Marketing
MS Office (Grade 9)
Computer Apps CP/ACE
FYEX 1000 CP/ACE
Web Page Design
Law for Business & Personal Use
Foundations in Personal Finance

FOREIGN LANGUAGE

French 1
French 2
French 3 CP
French 4 CP
Spanish 1
Spanish 2
Spanish 3 CP
Spanish 4 CP

FAMILY AND CONSUMER SCIENCE

Family & Consumer Science 1
Family & Consumer Science 2
Single Living
Food Service

INDUSTRIAL ARTS TECHNOLOGY

Wood Shop 1
Wood Shop 2
Metal Shop 1
Basic Mech. Drawing/Basic AutoCAD
Basic Electricity & Electronics

PRE-ENGINEERING AND ENGINEERING TECHNOLOGY

Design Drawing & Production
Principles of Engineering
Digital Electronics
Computer Integrated Manufacturing
Civil Engineering & Architecture
Engineering Design and Development

MUSIC

Instrumental Music
Concert Choir
Music Theory

PHYSICAL EDUCATION

Driver Education
Health 11
Fitness for Life
Physical Education 9-12

ART

Design
Ceramics/Sculpture
Oil/Water Painting
Studio Art
Computer Graphics

VOCATIONAL-TECHNICAL COURSES

Auto Body Fender & Repair
Auto Mechanics
Diesel Mechanics
Building Construction
Cosmetology
Computer Service Technology
Electrical Occupations
Food Production, Mgmt & Service
Health Assistant
Medical Office Technology
Precision Machining
Welding Technology
Diversified Occupations

ENGINEERING PROGRAM REQUIREMENTS
(COURSES TAUGHT AT WAVERLY HIGH SCHOOL)

1. Completion of Algebra 1 to begin program and concurrent enrollment in a college level mathematics course for subsequent course
2. You must have a 93% overall average and/or principal or guidance counselor's recommendation.
3. Behavior will be strongly considered.
4. Interview required with principal and guidance counselor prior to enrollment in the program.

PRE-ENGINEERING AND ENGINEERING TECHNOLOGY

| | | | |
|---|--------|----------|-------------|
| DESIGN DRAWING & PRODUCTION (DDP) (Introduction to Engineering Design) | 1 Year | 1 Credit | Grades 9-12 |
|---|--------|----------|-------------|

DESIGN DRAWING & PRODUCTION – DDP is an introductory course, which develops student problem solving skills, with emphasis placed upon the concept of developing a 3-D model or solid rendering of an object. Students focus on the application of visualization processes and tools provided by modern, state-of-the-art computer hardware and software. The course will emphasize the design development process of a product and how a model of that product is produced, analyzed and evaluated, using a Computer Aided Design System. By qualifying for and passing the college credit exam at the end of this course, the student is eligible to earn 4 transcribed undergraduate credits from Rochester Institute of Technology.

| | | | |
|---------------------------------|--------|----------|--------------|
| PRINCIPLES OF ENGINEERING (POE) | 1 Year | 1 Credit | Grades 10-12 |
|---------------------------------|--------|----------|--------------|

PRINCIPLES OF ENGINEERING – Prerequisite: Introduction to Engineering Design. POE is a broad-based survey course designed to help students understand the field of engineering and engineering technology and its career possibilities. Fundamental principles of engineering including dynamics and kinematics, machines, hydraulics, pneumatics, thermodynamics and strength of materials are discussed in preparation of the mechanical and civil engineering disciplines. By qualifying for and passing the college credit exam at the end of this course, the student is eligible to earn 4 transcribed undergraduate credits from Rochester Institute of Technology.

| | | | |
|--------------------------|--------|----------|--------------|
| DIGITAL ELECTRONICS (DE) | 1 Year | 1 Credit | Grades 10-12 |
|--------------------------|--------|----------|--------------|

DIGITAL ELECTRONICS – DE is a course of study in applied digital logic. The course is patterned after the first semester course in Digital Electronics taught in two and four year colleges. Students will study the application of electronic logic circuits and devices and apply Boolean logic to the solution of problems. Such circuits are found in watches, calculators, video games, computers and thousands of other devices. The use of smart circuits is present in virtually all aspects of our lives and its use is increasing rapidly, making digital electronics an important course of study for a student exploring a career in engineering or engineering technology. By qualifying for and passing the college credit exam at the end of this course, the student is eligible to earn 4 transcribed undergraduate credits from Rochester Institute of Technology.

| | | | |
|---|--------|----------|--------------|
| COMPUTER INTEGRATED MANUFACTURING (CIM) | 1 Year | 1 Credit | Grades 10-12 |
|---|--------|----------|--------------|

COMPUTER INTEGRATED MANUFACTURING (CIM) – This course builds upon the computer solid modeling design skills developed in Introduction to Engineering Design. Students will use Computer Numerical Control (CNC) equipment to produce actual models of their three dimensional designs. Fundamental concepts of robotics used in automated manufacturing and design analysis are also included. By qualifying for and passing the college credit exam at the end of this course, the student is eligible to earn 4 transcribed undergraduate credits from Rochester Institute of Technology. (Will be taught alternating years with CEA. **Will be offered 2012/2013 school year.**)

| | | | |
|--|--------|----------|--------------|
| CIVIL ENGINEERING AND ARCHITECTURE (CEA) | 1 Year | 1 Credit | Grades 10-12 |
|--|--------|----------|--------------|

CIVIL ENGINEERING AND ARCHITECTURE (CEA) -- Prerequisite: Introduction to Engineering Design. The major focus of the Civil Engineering and Architecture (CEA) course is a long-term project that involves the development of a local property site. As the students learn about various aspects of civil engineering and architecture, they apply what they learn to the design and development of this property. The course is structured to enable all students to have a variety of experiences that will provide an overview of both fields. Students will work in teams, exploring hands-on projects and activities to learn the characteristics of civil engineering and architecture. By qualifying for and passing the college credit exam at the end of this course, the student is eligible to earn 4 transcribed undergraduate credits from Rochester Institute of Technology. (Will be taught alternating years with CIM. **Will be offered 2011-2012 school year.**)

| | | | |
|--|--------|----------|----------|
| ENGINEERING DESIGN AND DEVELOPMENT (EDD) | 1 Year | 1 Credit | Grade 12 |
|--|--------|----------|----------|

ENGINEERING DESIGN AND DEVELOPMENT – Prerequisites: Introduction to Engineering Design and Principles of Engineering. In this course, students will work in teams of one to three to design and construct the solution to an engineering problem, (original idea, project need from a community or local business, or a national challenge) applying the principles developed in the four preceding courses. Students will maintain a journal as part of a portfolio of their work. Each team will be responsible for delivering progress reports and making final presentations of their project to an outside review panel, administrators and family. The completed portfolio will be invaluable as students apply to college.

LANGUAGE ARTS/ENGLISH

The following are the grade prerequisites for the selection of ENGLISH courses grades 9 - 12.

1. Honors courses 9 – 12:
Grade of 93% or English teacher's recommendation.
 2. Advanced/College Prep courses 9 – 12:
Grade of 85% or English teacher's recommendation.
 3. Students enrolled in a general English class may select an advanced/college prep or an honors course provided they have a 90% average and their English teacher's recommendation.
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|-------------|--------|----------|---------|
| ENGLISH 9 H | 1 Year | 1 Credit | Grade 9 |
|-------------|--------|----------|---------|

ENGLISH 9 HONORS. This course is designed for students who have demonstrated advanced reading and composition skills. It includes in-depth analysis of various genres of literature and composition activities to promote scholarly analysis of materials. This course includes activities for building a more mature vocabulary, and implements editing skills that focus on usage and mechanics to improve writing. Written communication as well as professional presentation is the focus of this class. Texts are used as a means to support analytical thought and critical-thinking is modeled and expected. A report card grade of a minimum of 93 in Advanced 8th Grade English or a 95 in Regular 8th Grade English is recommended, in addition to an English teacher's recommendation.

| | | | |
|--------------|--------|----------|---------|
| ENGLISH 9 CP | 1 Year | 1 Credit | Grade 9 |
|--------------|--------|----------|---------|

ENGLISH 9 COLLEGE PREP. This course is designed for students who have demonstrated proficient reading and composition skills. Students are exposed to various genres of literature and composition activities and are taught to analyze material in a scholarly way. Students will engage in activities to promote critical thinking, build a more mature vocabulary, improve editing skills, and encourage professional, scholarly work. Written communication as well as professional presentation is the focus of this class. Texts are used as a means to support analytical thought and critical-thinking is modeled and expected.

| | | | |
|-------------|--------|----------|---------|
| ENGLISH 9 G | 1 Year | 1 Credit | Grade 9 |
|-------------|--------|----------|---------|

ENGLISH 9 GENERAL. This course is designed for students who have demonstrated basic reading and composition skills. This course exposes students to a variety of readings from many literature genres. Effective, professional communication is emphasized in oral and written assignments. This course strives to instill a sense of responsibility and a respectful appreciation for reading and writing, while helping students to become better readers and writers. Critical thinking strategies are modeled and encouraged.

ENGLISH 10 H

1 Year

1 Credit

Grade 10

ENGLISH 10 HONORS. This course is designed for students who have demonstrated advanced levels of proficiency in language-arts skills and who aim for academic challenge through intense language-arts study. Through a thematic exploration of literature, students will refine their critical thinking and critical reading skills as they are asked to make connections between and among various texts. This literature-heavy course will focus on the analysis and evaluation of literary elements and devices in addition to textual features and structure. Emphasis will be placed on inquiry-based learning methods used to help students construct meaning from texts. Written and oral communication will be emphasized through project-based learning opportunities and 21st Century research skills will be employed. Finally, students will assess the characteristics and functions of the English language through vocabulary-in-context learning.

ENGLISH 10 CP

1 Year

1 Credit

Grade 10

ENGLISH 10 COLLEGE PREP. This course is designed for students who have demonstrated proficient levels of language-arts skills and are seeking a challenging academic learning environment aimed at preparation for post-secondary education. Through a thematic exploration of literature, students will further develop their critical thinking and critical reading skills as they are asked to make connections between and among various texts. As part of an intense study of literature, students will be required to use extended thinking strategies to better develop analytical skills as they focus on the role and function of literary elements and devices in addition to textual features and structures. Inquiry-based learning methods will be used to help students construct meaning from texts. Written and oral communication will be emphasized through project-based learning opportunities and 21st Century research skills will be employed. Finally, students will assess the characteristics and functions of the English language through vocabulary-in-context learning.

ENGLISH 10 G

1 Year

1 Credit

Grade 10

ENGLISH 10 GENERAL. This course is designed for students who may or may not be seeking post-secondary education but who aim to receive supportive, grade-level instruction in the language-arts in order to enhance reading and writing skills. Through a thematic exploration of literature, students will further develop their critical thinking and critical reading skills as they are asked to make connections between and among various texts. As part of an intense study of literature, students will be required to use extended thinking strategies to work on analytical skills as they focus on the role and function of literary elements and devices in addition to textual features and structures. Inquiry-based learning methods will be used to help students construct meaning from texts. Written and oral communication will be emphasized through project-based learning opportunities and 21st Century research skills will be employed. Finally, students will come to understand the characteristics and functions of the English language through vocabulary-in-context learning.

ENGLISH 11 H

1 Year

1 Credit

Grade 11

ENGLISH 11 HONORS. This course is designed to challenge the student who has an interest in language and literature. By studying American Literature, students will explore different forms of reading materials including novels, short stories, plays and poetry. By analysis, students will search for the writer's message and express this literary interpretation through oral and written criticism. Students will be assigned formal writing assignments including a referenced research paper.

ENGLISH 11 CP

1 Year

1 Credit

Grade 11

ENGLISH 11 COLLEGE PREP. This course combines language, literature, and composition skills. Students practice and apply specific skills in reading, writing, speaking and listening. The course explores American Literature through the reading of novels, short stories, plays and poetry. Vocabulary studies are geared to the SAT. Students complete a referenced research paper.

ENGLISH 11 G

1 Year

1 Credit

Grade 11

ENGLISH 11 GENERAL. This course emphasizes practical studies for those students who enter the working world upon graduation or who have had difficulty in advanced English. Extensive work is done to improve grammar, usage and mechanics. The student works to improve reading abilities through short stories and novels. Writing skills focus on compositions, and completing practical business forms, resumes and applications.

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| ENGLISH 12 ACE | 1 Year | 1 Credit | Grade 12 |
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ENGLISH 12 ACE. The work of the advanced placement course will be on the college level. Reading the works of world authors, probing for ideas and meanings, writing analyses and taking part in lively discussions will offer new experiences in English. Short stories, poetry, essays, novels and drama will be examined. Completion of two research papers is required. Students will be able to take the Advanced Placement Examinations for possible college credit upon completion of this course. Up to 6 credits can be earned from Corning Community College (CCC Course # ACE 1010 College Composition I and ACE 1020 College Composition II).

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|---------------|--------|----------|----------|
| ENGLISH 12 CP | 1 Year | 1 Credit | Grade 12 |
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ENGLISH 12 COLLEGE PREP. An intense study of literature from a variety of historical contexts and genres is the foundation of this course, designed to prepare the student for college level work after graduation. Students will engage in a sophisticated study of advanced literary techniques and devices as well as consideration of various perspectives through literary criticism. In addition, students will extend their thinking by developing thesis-driven, evidence-supported writing for an array of audiences. An emphasis will be placed on scholarly, authentic, and research-based writing.

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|--------------|--------|----------|----------|
| ENGLISH 12 G | 1 Year | 1 Credit | Grade 12 |
|--------------|--------|----------|----------|

ENGLISH 12 GENERAL. A study of literature from a variety of historical contexts and genres is the foundation of this course, designed to prepare the student for life after graduation. Students will engage in a study of advanced literary techniques and devices between and among texts. In addition, students will extend their thinking by developing thesis-driven, evidence-supported writing for an array of audiences. An emphasis will be placed on scholarly, authentic, and research-based writing.

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|------------|--------|----------|-------------|
| JOURNALISM | 1 Year | 1 Credit | Grades 9-12 |
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JOURNALISM.

- Prerequisite: English Teacher recommendation and a C average or higher in English.

This course is for the student with an interest in writing for publication. The class takes an in-depth look at journalism and mass communications. Students produce a school newspaper, *The Express*, using basic reporting and photojournalism skills. Students also contribute to the school's district-wide newsletter, *The Redskin Review*. After the successful completion of Journalism 1 and the instructor's recommendation, students may continue their study by taking Journalism 2 and Journalism 3. These students will be expected to take leadership positions in the class and on school publications.

| | | | |
|----------|--------|----------|-------------|
| YEARBOOK | 1 Year | 1 Credit | Grades 9-12 |
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YEARBOOK.

- Prerequisite: Instructor's approval and C average or higher in English

This independent study course will produce the school's yearbook, *The Sayrenade*. Students must have a C average or higher in English and the recommendation of the class instructor. The class will work independently on producing the yearbook by writing stories, taking photographs and designing yearbook pages.

SOCIAL STUDIES

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|---------------------|--------|----------|---------|
| AMERICAN HISTORY CP | 1 Year | 1 Credit | Grade 9 |
|---------------------|--------|----------|---------|

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|--------------------|--------|----------|---------|
| AMERICAN HISTORY G | 1 Year | 1 Credit | Grade 9 |
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AMERICAN HISTORY. American History traces American social, political, economic and geographic development from 1900 to 2000's. It emphasizes evolution of themes in response to continuously changing historical demands and conditions. Individual differences are served through the depth of coverage and type of tests.

| | | | |
|-------------------------------|--------|----------|----------|
| GLOBAL HISTORY & CULTURE I CP | 1 Year | 1 Credit | Grade 10 |
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|------------------------------|--------|----------|----------|
| GLOBAL HISTORY & CULTURE 1 G | 1 Year | 1 Credit | Grade 10 |
|------------------------------|--------|----------|----------|

GLOBAL HISTORY & CULTURE 1. This class will look at the development of western culture starting with the first recognized civilizations in the area of Mesopotamia. It will then follow the spread of civilization from the Persian Empire to Greece, Hellenistic Society, and then the Roman Empire. From the collapse of Rome the focus will be on the development of European history including the Byzantine Empire, Russia, the Middle Ages, Renaissance and decline of feudalism, the influence of the Ottoman Empire, Spain and Portugal's rise and exploration, and finally the ideas of absolutism, enlightenment, and the first global wars. The class will conclude with the state of European culture and politics at the eve of the French Revolution.

| | | | |
|--------------------------------|--------|----------|----------|
| GLOBAL HISTORY & CULTURE II CP | 1 Year | 1 Credit | Grade 11 |
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| GLOBAL HISTORY & CULTURE II G | 1 Year | 1 Credit | Grade 11 |
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GLOBAL HISTORY & CULTURE II. Global History & Culture II is intended to give the student a global and interdisciplinary study of the geography, history and culture of regions throughout the world. Also, this course will stress on awareness of the world's traditions and current problems of mankind.

SENIOR SOCIAL STUDIES

All seniors must have a 70% or higher in both of their ½ credit courses. The two grades do NOT get averaged together.

| | | | |
|-------------------------|----------|----------|----------|
| MODERN AMERICAN HISTORY | 1/2 Year | ½ Credit | Grade 12 |
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MODERN AMERICAN HISTORY. This course is intended to give the student a comprehensive study of the people, places and events of the Modern American history era covering the time period from 1945 - present. The course will focus on foreign relations, culture and diversity as it relates to America becoming a world power.

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|-------------------------|----------|----------|----------|
| PRINCIPALS OF ECONOMICS | 1/2 Year | ½ Credit | Grade 12 |
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PRINCIPALS OF ECONOMICS. This course will examine how individual decision makers, both consumers and producers, and their behaviors affect the larger economic system. Scarcity of resources, the supply and demand for goods and services, and the role of the government in the market will be the primary emphasis. This course will give you, the individual consumer, the opportunity to learn about how economic factors affect consumer transactions, business transactions, and the everyday lives of American citizens.

MATHEMATICS

COURSE 3

1 Year

1 Credit
(Grades 9-12)

COURSE 3.

The early units of Course 3 focus on rational numbers and their operations, equations and inequalities. You will build understanding of these concepts using models, such as algebra tiles, number lines, and verbal models. You will also apply your skills to problem-solving situations and use estimation to check reasonableness. Topics from math strands, such as real number properties, geometric formulas, and averages are introduced early in the course and then integrated and expanded upon throughout.

Later units include topics such as linear equations and their graphs, properties of right triangles, geometric transformations, and probability. The number and variety of problems, ranging from basic to challenging, give you the practice you need to develop your math skills.

Every lesson has both skill practice and problem solving, including multi-step problems. These types of problems often appear on standardized tests (like the Keystone Exams) and cover a wide variety of math topics. To help you prepare for standardized tests, Course 3 provided instruction and practice on standardized test questions in many formats – multiple choice, short response, extended response, and so on. Technology support for course content and standardized test preparation is available throughout the course at classzone.com.

- Passing score on Course 2 final exam.
 - Scientific calculators are useful, but not required, for successful completion.
 - Completion of daily assignments is required for successful completion.
 - Curriculum reflects PA Assessment Anchors and Eligible Content.
-

ALGEBRA 1

1 Year

1 Credit

ALGEBRA 1.

Algebra 1 is organized around families of functions, with special emphasis on linear and quadratic functions. As you study each family of functions, you will learn to represent them in multiple ways – as verbal descriptions, equations, tables, and graphs. You will also learn to model real-world situations using functions in order to solve problems arising from those situations.

In addition to algebra content, Algebra 1 includes lessons on probability and data analysis as well as numerous examples and exercises involving geometry. These math topics often appear on standardized tests (like the Keystone Exam), so maintaining your familiarity with them is important. To help you prepare for standardized tests, Algebra 1 provides instruction and practice on standardized test questions in a variety of formats – multiple choice, short response, extended response, and so on. Technology support for both learning algebra and preparing for standardized tests is also available throughout the course at classzone.com.

- Passing score on Course 3 final exam.
 - Graphing calculators are useful, but not required, for successful completion.
 - Completion of daily assignments is required for successful completion.
 - Curriculum reflects PA Assessment Anchors and Eligible Content.
-

GEOMETRY

1 Year

1 Credit

GEOMETRY.

In Geometry, you will be develop reasoning and problem-solving skills as you study topics such as congruence and similarity, and apply properties of lines, triangles, quadrilaterals, and circles. You will also develop problem-solving skills by using length, perimeter, area, circumference, surface area, and volume to solve real-world problems.

In addition to geometry content, Geometry includes numerous examples involving algebra, data analysis, and probability. These math topics often appear on standardized tests (like the Keystone Exam), so maintaining your familiarity with them is important. To help you prepare for standardized tests, Geometry provides instruction and practice on standardized test questions in a variety of formats – multiple choice, short response, extended response, and so on. Technology support for both learning algebra and preparing for standardized tests is also available throughout the course at classzone.com.

- Passing score on Algebra 1 final exam/Algebra 1 Keystone Exam.
- Graphing calculators are useful, but not required, for successful completion.
- Completion of daily assignments is required for successful completion.
- Curriculum reflects PA Assessment Anchors and Eligible Content.

ALGEBRA 2

1 Year

1 Credit

ALGEBRA 2.

Algebra 2 is organized around families of functions, with special emphasis on linear and quadratic functions. As you study each family of functions, you will learn to represent them in multiple ways – as verbal descriptions, equations, tables, graphs, and matrices. You will also learn to model real-world situations using functions in order to solve problems arising from those situations.

In addition to algebra content, Algebra 2 includes lessons on probability and data analysis as well as numerous examples and exercises involving trigonometry. These math topics often appear on standardized tests (like the Keystone Exam), so maintaining your familiarity with them is important. To help you prepare for standardized tests, Algebra 2 provides instruction and practice on standardized test questions in a variety of formats – multiple choice, short response, extended response, and so on. Technology support for both learning algebra and preparing for standardized tests is also available throughout the course at classzone.com.

- Passing score on Geometry final exam/Geometry Keystone Exam.
- Graphing calculators are useful, but not required, for successful completion.
- Completion of daily assignments is required for successful completion.
- Curriculum reflects PA Assessment Anchors and Eligible Content.

PRE-CALCULUS CP

1 Year

1 Credit

PRE-CALCULUS CP.

This course is a thorough and comprehensive treatment of pre-calculus mathematics. Topics from algebra, geometry, trigonometry, discrete math, probability, and statistics are interwoven to form a fully integrated fourth course of high school mathematics.

Topics explored include trigonometric equations, common and natural logarithms, angular velocity, conic sections, combinations, permutations, systems of inequalities, sinusoidal equations, normal distributions, boxplots, stemplots, linear variation, antilogarithms, logarithmic equations, simple probability, arithmetic and geometric means, exponential growth and decay, and the rational root theorem. Word problems will be developed through the problem sets. All students will be required to learn math vocabulary.

- Passing score on Algebra 2 final exam/Algebra 2 Keystone Exam.
- TI-89 graphing calculator is mandatory for successful completion.
- Completion of daily assignments is required for successful completion.
- Curriculum reflects PA Assessment Anchors and Eligible Content.

STATISTICS CP/ACE

1 Year

1 Credit

Grade 12

STATISTICS CP/ACE.

Statistics is for 11/12th grade students. Seniors may take Statistics concurrently with H/ACE Calculus. The course will stress the development of statistical thinking skills. Students will be introduced to the world of statistics and will later be required to compile data for analysis. This is an introductory course designed to provide basic statistical techniques to all students leaving high school. All students will be required to learn math vocabulary and mathematical terminology specific to the course. This course will also involve specific topics such as one-variable and two-variable analysis, regression, association, correlation, boxplots, stemplots, variance, standard deviation, normal distributions, binomial distributions, chi-square distributions

- Passing score on Algebra 2 final exam/Algebra 2 Keystone Exam.
- TI-83/TI-84 graphing calculator is mandatory for successful completion.
- Completion of daily assignments is required for successful completion.
- Expect college-level content and work load.
- Curriculum reflects Corning Community College's requirements for MA 1310.
- Successful completion earns four (4) college credits.

CALCULUS H/ACE

1 Year

1 Credit

Grade 12

CALCULUS H/ACE.

This course is taught through Corning Community College as an ACE course (CCC Course MA1610); students can earn 4 credits through the college. Topics covered include, but are not limited to, various pre-calculus review topics, limits, derivatives, integrals, techniques of differentiation, techniques of integration, applications of differentiation, applications of integration, and separable differential equations.

- Passing score on Pre-Calculus CP final exam.
- TI-89 graphing calculator is mandatory for successful completion.
- Completion of daily assignments is required for successful completion.
- Expect college-level content and work load.
- Curriculum reflects Corning Community College's requirements for MA 1610.
- Successful completion earns four (4) college credits.

MATH STUDY

1 Year

0 Credit

MATH STUDY.

Math Study is a course designed to help students improve their 4Sight and PSSA scores as well as their regular math class grades. The course envelopes various learning techniques such as the ALEKS computer program where students work independently with a facilitating teacher on topics they need improvement on, flip cards that include important vocabulary terms necessary for success in the classroom and on standardized tests, journaling to help the students log their progress and refer back when studying, hands-on activities used to visualize math in real-world applications, and more.

Students are assigned to this course based on the previous year's test scores. A student may choose to drop the course only if he/she has scored proficient on two consecutive 4Sight exams, is successfully passing his/her math class and is at an appropriate math level for his/her grade.

SCIENCE

SCIENCE 9 CP

1 Year

1 Credit

Grade 9

SCIENCE 9 COLLEGE PREP.

- Prerequisite - grade of 85% or above in Science 8
- Suggested: Algebra I or Algebra I concurrent
- **All science courses meet the Pennsylvania Science Standards. Students will need to complete class work, homework, laboratory activities, quizzes, tests/exams, and special projects as assigned by their teacher. Notebooks are required in most classes.**

This course offers an introduction to scientific laws and principles and their applications. Areas of study will include topics in the fields of ecology and physics. Special concentration is given to the integration of these fields of study. Units will include forces and motion, forms of energy (light, sound, etc.), pollution (air, water, land) and agricultural topics.

SCIENCE 9 G

1 Year

1 Credit

Grade 9

SCIENCE 9 GENERAL.

- **All science courses meet the Pennsylvania Science Standards. Students will need to complete class work, homework, laboratory activities, quizzes, tests/exams, and special projects as assigned by their teacher. Notebooks are required in most classes.**

This course is designed to make students aware of basic scientific laws and principles and how these play a role in our daily life. Areas of study will include topics in the fields of ecology and physics. Special concentration is given to the integration of these fields of study. Units will include forces and motion, forms of energy (light, sound, etc.), pollution (air, water, land) and agricultural topics.

| | | | |
|-----------|--------|----------|----------|
| BIOLOGY G | 1 Year | 1 Credit | Grade 10 |
|-----------|--------|----------|----------|

BIOLOGY GENERAL.

This course is designed to provide a foundation for understanding the fundamental characteristics and functions of living things. Areas of study include: ecology, chemistry, cell, genetics, evolution, and classification. Labs are included. Participation in lab is required.

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|------------|--------|-------------|----------|
| BIOLOGY CP | 1 Year | 1 ½ Credits | Grade 10 |
|------------|--------|-------------|----------|

BIOLOGY COLLEGE PREP.

- Recommended - 85% or higher in Science 9 CP **OR** 93% or higher in Science 8CP.
- Participation in lab is required.

This course is designed to meet college entrance requirements, providing an introduction to the concepts of biology, which include ecology, chemistry, cellular biology, cellular respiration, cellular reproduction, genetics, evolution, and classification. Students taken this course have class every day with a separate lab period built in every other day.

| | | | |
|------------|--------|-------------|----------|
| BIOLOGY 2H | 1 Year | 1 ½ Credits | Grade 12 |
|------------|--------|-------------|----------|

BIOLOGY 2 HONORS.

- Prerequisite –Biology CP or recommendation by instructor. Recommend concurrent with Physics.
- Prerequisite – Grade of 85% or higher in Biology CP.
- Participation in lab is required.
- Good lab techniques and study skills are required.

This course provides in depth coverage of topics covered in Biology 10. Topics include: biochemistry, cell, cellular respiration, photosynthesis, cellular reproduction, genetics, gene expression and biotechnology, evolution, classification review, and an introductory study of anatomy and physiology.

Students taking this course can take the AP Biology exam offered in the Spring (cost approx. \$80.00) to possibly earn 3 college credits (check with your colleges of interest to see if they accept AP Biology credits).

Students planning on furthering their education in medical or biologically related fields are encouraged to enroll in this course.

| | | | |
|-------------|--------|----------|---------------|
| CHEMISTRY G | 1 Year | 1 Credit | Grades 11, 12 |
|-------------|--------|----------|---------------|

CHEMISTRY - GENERAL.

This course gives students hands-on experience in concepts of Chemistry. Areas of study include natural resources, food and pollution.

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|--------------|--------|-------------|----------|
| CHEMISTRY CP | 1 Year | 1 ½ Credits | Grade 11 |
|--------------|--------|-------------|----------|

CHEMISTRY COLLEGE PREP.

- Student will have an overall average of at least an 85% in Biology CP or 90% in Biology G.
- Prerequisite - successful completion of Algebra 1 or Algebra 2 concurrent.
- Lab periods are required.

This course introduces the student to the basic concepts of atomic theory and bonding. Stoichiometric relationships are utilized throughout the course. Emphasis is placed on understanding basics such as chemical symbols, formulas, chemical reactions, periodic table, gas laws, acids and bases.

CHEMISTRY 2 H/ACE

1 Year

1 ½ Credits

Grade 12

CHEMISTRY 2 HONORS/ACE.

- Prerequisites– Grade of 85% or above in Chemistry College Prep.
- Algebra 2 or higher.
- Students must purchase Lab Manual and approved Textbook (\$150.00 estimated cost).

This course is an extension of Chemistry 1 CP, with topics in the following units: thermochemistry, quantum theory, electron configurations, periodic trends, and bonding. The following units will be newly introduced: molecular geometry, colligative properties, kinetics, acid/base, oxidation reduction, electrochemistry, and equilibrium. The course follows the curriculum approved by Corning Community College as an ACE course (CCC Course # CHEM 1510 General Chemistry I and Course # CHEM 1520 General Chemistry II) and a lab manual and course approved textbook are required and must be purchased by the students at an estimated cost of \$150.00. In addition, students taking the course can receive 8 credits through the college.

SCIENCE TODAY

1 Year

1 Credit

Grade 12

SCIENCE TODAY. This course is designed to explore key themes of current science interest. The integrated science course will apply the scientific principles to everyday life. It will explore science-related questions and technologies that will affect the social, political, and economic aspects of your life now and in the future.

PHYSICS H

1 Year

1 ½ Credits

Grade 12

PHYSICS HONORS.

- Prerequisites - successful completion of Algebra 2 with an average of 90% or higher - completion of Pre-Calculus would be advantageous but is not necessary.
- Recommendation of last Math teacher.
- Completion of daily homework assignments is required.
- Completion of assigned laboratory experiments.

The Saxon physics book was written with both the average and honors student in mind. The subject is taught at an introductory level, which will allow the average high school student to grasp the concepts of Newton's laws, static, dynamics, thermodynamics, optics, DC circuits, waves, electromagnetic, and special relativity. The subjects are covered to a depth appropriate for college students majoring in non-engineering disciplines. This program focuses on the solving of physics problems and the student must be diligent in completing the homework assignments. The abilities of each class will determine the extent to which this book will be covered.

FOREIGN LANGUAGE

FRENCH 1

1 Year

1 Credit

Grades
9-12

FRENCH 1.

French 1, introduced in Grade 9, attempts from the outset to bring the student to an acceptable understanding of the spoken word, to speak with grammatical accuracy, and to begin to understand and appreciate cultural differences in our societies.

FRENCH 2

1 Year

1 Credit

Grades
10,11,12

FRENCH 2.

French 2, introduced in Grade 10, although placing stress on the audio lingual skills of foreign language learning, lends more emphasis to reading and writing, and continues to blend essential cultural knowledge into the program.

FRENCH 3 CP

1 Year

1 Credit

Grades
10,11,12

FRENCH 3 – COLLEGE PREP. Students, without exception, must have achieved a final average of 85% or higher in French 2 to go on to French 3. French 3 continues with the audio-lingual approach, making heavier demands on the skills of reading and writing. At this level, all four language skills (listening comprehension, speaking, reading and writing) are challenged by the more advanced concepts of the French language. Cultural materials continue to be an integral part of the program.

FRENCH 4 CP

1 Year

1 Credit

Grades
11,12

FRENCH 4 – COLLEGE PREP. Students, without exception, must have achieved a final grade of 85% or higher in French 3 to go on to French 4 **AND** teacher recommendation. At this level the reading and writing are, by necessity, much more sophisticated and demanding. The student will be able to understand and speak with more grammatical accuracy and with very good pronunciation. He/She will be able to write ideas they would like to express, utilizing concepts which have been taught during the course of his/her foreign language training.

SPANISH 1

1 Year

1 Credit

Grades
9-12

SPANISH 1. Spanish 1 introduced in Grade 9, attempts from the outset to bring the student to an acceptable understanding of the spoken word, to speak with grammatical accuracy and with good pronunciation, to write with grammatical accuracy, and to begin to understand and appreciate cultural differences in our societies.

SPANISH 2

1 Year

1 Credit

Grades
10,11,12

SPANISH 2. Spanish 2 introduced in Grade 10, although essentially placing stress on the audio lingual skills of foreign language learning, lends more emphasis to reading and writing, and continues to blend essential cultural knowledge into the program.

SPANISH 3 CP

1 Year

1 Credit

Grades
10,11,12

SPANISH 3 – COLLEGE PREP. Students, without exception, must have achieved a final average of 85% or higher in Spanish 2 to go on to Spanish 3. Spanish 3 continues with the audio-lingual approach, making heavier demands on the skills of reading and writing. At this level, all of the four language skills (listening comprehension, speaking, reading, and writing) are challenged by the more advanced concepts of the Spanish language. Cultural materials continue to be an integral part of the program.

SPANISH 4 CP

1 Year

1 Credit

Grades
11,12

SPANISH 4 – COLLEGE PREP. Students, without exception, must have achieved a final average of 85% or higher in Spanish 3 to go on to Spanish 4. At this level the reading and writing are, by necessity, much more sophisticated and demanding. The student will be able to understand and speak with more grammatical accuracy and with good pronunciation. He/she will be able to write ideas they would like to express, utilizing concepts which have been taught during the course of his/her foreign language training.

STUDENT ENHANCEMENT

21st Century Skills Course

1/2 Year ¼ Credit Grade 10

21st Century Skills Course. This specialized course is designed to present students with practical, real-world learning opportunities that will help them be competitive in the 21st Century world. For immediate preparation, test-taking skills will be covered to familiarize all students with test formats and strategies for impending assessments. Oral communication skills will be an area of emphasis as students learn to use effective speech and formal presentation strategies purposefully and succinctly to reach an intended audience. Written communication will center on developing, editing, and publishing informational genres through authentic, career-focused tasks such as resume creation. To engage in responsible digital citizenship students will use, access, and manage appropriate technology and media for these learning purposes.

BUSINESS

MS OFFICE

1 Year ½ Credit Grade 9

MS OFFICE. This course is designed to teach students advanced word processing, database management, graphics presentation and spreadsheet development. This is a one-half credit course required for graduation.

LAW FOR BUSINESS AND PERSONAL USE

1 Year 1 Credit Grades 10, 11, 12

LAW FOR BUSINESS AND PERSONAL USE. Explore the foundations of business law, while introducing personal law topics that interest students. LAW FOR BUSINESS AND PERSONAL USE combines strong content with interactive technology and video to maintain student interest and support active learning. Coverage includes contracts, criminal law, consumer protection, wills and estates, marriage and divorce, property law, agency, employment contracts, unions, commercial paper, and credit obligations. Each chapter is divided into short, easy-to-handle lessons, setting a comfortable learning pace. With more than 1,000 cases, there's never a shortage of opportunities for case analysis and research.

MANAGEMENT AND MARKETING

1 Year 1 Credit Grades 10, 11, 12

MANAGEMENT AND MARKETING. Management serves as a one-semester course for marketing and business management students. Using topics in the sports and entertainment industries, the text and multimedia supplements cover the basic functions of management as outlined in national and state standards. Management topics discussed in the 12 chapters include leadership, finance, product management, people management, information management, legal and ethical issues, customer relations, sales management, managing change, and career development. This course reinforces essential application skills, such as word processing, desktop publishing, spreadsheets, databases, and electronic presentations. This intermediate/advanced simulation is different from other typical document production simulations in that it provides students unique opportunities to go beyond the basics as they apply creativity in problem solving, decision making, flexibility and more. The student's position in this simulation is Assistant Director of The Sports Connection, a simulated company. The second half of the year, Marketing, takes you on a step-by-step journey through the world of marketing. Students encounter and learn about the key functions of marketing and how those functions are applied to sports and entertainment. Each marketing function is incorporated throughout the text and highlighted with an icon to indicate how it is used in the marketing process.

WEB PAGE DESIGN

1 Year 1 Credit Grades 10, 11, 12

WEB PAGE DESIGN. This course uses HTML and Dream Weaver programs to learn how to do web pages. Emphasis will focus on updating and maintaining the district web page. The use of scanners and the digital camera will also be included.

COMPUTER APPS CP/ACE

1 Year

1 Credit

Grades 11, 12

COMPUTER APPLICATIONS COLLEGE PREP/ACE. Approval from Mrs. Cole is required.

This course may be taken for 4 ACE credits through Corning Community College (CCC Course # CSIT 1390 – Computer Literacy and Microcomputer Applications) and is designed for the college bound student. This advanced course covers the entire Microsoft Office 2007 suite. This includes the advanced features of Word, Excel, Access, and Power Point. Students will also learn about networking basics, file management, digital media, and Information Systems Analysis & Design.

FYEX 1000 CP/ACE – First Year Ex.

1 Year

1 Credit

Grades 11, 12

FYEX 1000 COLLEGE PREP/ACE – FIRST YEAR EXPERIENCE. Approval from Mrs. Cole is required.

This course facilitates intellectual and social integration of first-year students into the academic community. The course provides specific methods and strategies which students may adopt to promote personal growth and success both in the college environment and throughout life. This course may be taken for 3 ACE credits through Corning Community College (CCC Course # FYEX 1000 – First Year Experience).

FOUNDATIONS IN PERSONAL
FINANCE

1 Year

½ Credit

Grade 12

FOUNDATIONS IN PERSONAL FINANCE.

Foundations in Personal Finance is a premier course for teaching students financial literacy. Topics are presented in an easy-to-understand manner. There are three assessments per chapter, a quarterly unit exam, and a comprehensive final exam. The course uses 72 case studies and over 70 activities that employ the very latest in research based learning strategies

Unit 1: Savings, Understanding Investments, Wealth Building, and College Planning
Unit 2: Dangers of Debt, Consumer Awareness, Credit Bureaus, and Collection Practices
Unit 3: Budgeting 101, Bargain Shopping, and Relating with Money
Unit 4: Careers, Employment Taxes, In and Outs of Insurance, Real Estate, and Mortgages

- Desire to understand how to win with money.
 - Class meets every other day for the whole school year.
 - Curriculum reflects all State and National Standards for Financial Literacy.
 - Should be required of all seniors.
-

ART

DESIGN

1 Year

1 Credit

Grades
9-12

DESIGN.

- For academic success in the field of art the student must achieve a passing grade based on the average of their project grades, art reports, homework, and classroom effort.

This course includes advanced problems dealing with art and design concepts and media in several different areas to be used at the student's discretion in a studio setting. These areas include creative design, drawing, lettering, advertising, figure study, cartooning, graphics, composition elements, calligraphy, computer graphics, and an opportunity for exploration. This class is recommended to be the first studio art class of the art course of study, but it is not required. Upon successful completion of this course, students will be prepared and allowed to select any avenue of art studio available within the art curriculum. A student sketchbook based on creativity is required as well as completed art history worksheets and tests per semester with emphasis on periods of art and its effect on today's culture.

CERAMICS/SCULPTURE

1 Year

1 Credit

Grades
10,11,12
9*

CERAMICS/SCULPTURE. This course is designed for all students with a desire to gain knowledge or to improve their skills in three-dimensional art. The course includes a guided experience in ceramics and sculpture which includes directed lessons in all major techniques and concepts involved with the media such as coil, slab, hand building, pewter casting, plaster construction, assemblage, cardboard construction, clay, armature construction, wheel throwing, and an opportunity to design and create a project based on their skills developed. Weekly sketches and art history reports are required per semester with emphasis on periods of art and its effect on culture today.

- Available to 9th grade students if not able to schedule Design.
-

OIL PAINTING/
WATER BASE MEDIA

1 Year

1 Credit

Grades
10,11,12

OIL PAINTING/WATER BASE MEDIA.

- Recommended - Design or Ceramics/Sculpture

This course is designed for all students with a desire to gain knowledge or to improve their skills in painting. The course includes a guided experience with directed lessons in the three main areas of painting, watercolors, acrylics and oil painting, with variations and opportunity for individual experimentation. Emphasis is placed on the understanding of the various approaches and techniques rather than the resulting product. The intent is not to create artists out of all of our students; it is to have our students understand the process of painting. Creative sketches and art history worksheets are also required in this course for creative development and artistic enrichment.

COMPUTER GRAPHICS

1 Year

1 Credit

Grade 11,12

COMPUTER GRAPHICS.

The course of study involved with this studio option is centered around the techniques and options needed to create computer graphic images: using software available, using layers, importing images/sounds, manipulating images, creating GIF animations, and flash movies. Digital movies are the focus for the second half of the year which covers filming and editing.

*Emphasis will be placed on design and understanding of processes used to make images that can be used in pragmatic applications (i.e. Web-Pages, Reports, School-Related applications).

STUDIO ART

1 Year

1 Credit

Grade 12

STUDIO ART.

- Recommended - Design and Painting or Ceramics/Sculpture **and** teacher recommendation required.

This is a course for the highly motivated student interested in the serious study of art. Every student will be expected to develop a quality portfolio and exhibit a senior show of their work before the end of their senior year. Projects are developed through research development production and presentation stages. All work must be of an advanced art student quality to be accepted. Students work in an independent study studio environment with two graded finished projects due per semester. Projects are required to be matted, framed or mounted to be considered complete at this level. Creative development, art history worksheets and tests are required per semester for artistic enrichment. Students are required to post their work on the Art Department Wikispace on a regular basis during each semester for administrative review of progress.

MUSIC

INSTRUMENTAL MUSIC

1 Year

1 Credit

Grade 9-12

INSTRUMENTAL MUSIC. This course is designed for students in grades 9-12 able to play a musical instrument. Emphasis is on ensemble performance and individual improvement and facility on a musical instrument. This course also develops aesthetic sensitivity, basic musicianship, and an appreciation of various musical styles. Students will perform in the concert band and have the option to join the marching band, jazz ensemble, and/or chamber ensembles. Students will complete written and played assessments related to the concert band literature. Literature will be chosen from a range of styles, historical periods, and cultures. Three public performances are mandatory (winter and spring concerts and the HS graduation ceremony). Students are required to attend one group/private lesson each week and held accountable for the condition of all music, instruments, and equipment. Previous instrumental experience required or permission of director.

CONCERT CHOIR

1 Year

½ Credit

Grades 9-12

CONCERT CHOIR. This course is designed for students who enjoy singing and are interested in improving vocal technique and musicianship. Emphasis is on both ensemble and individual vocal growth. Students will be introduced to various styles of music, from various musical periods and will sing both English and foreign language literature. Proper breathing, vocal technique, diction, and overall musicality will be emphasized through the learning of the selected pieces. Grading is based upon rehearsal attendance, rehearsal behavior and contribution, required public performances, group lesson attendance as well as some written work. Students are required to own professional black and white garments as attire for all performances, unless noted.

MUSIC THEORY

1 Year

½ Credit

Grades 9-12

MUSIC THEORY. This technology based course is designed for students interested in a career in music or the writing of music. Emphasis is on the use of written notation, chord structure, analysis, and harmony. Students will develop skills necessary to identify scales, intervals, triads, and key relationships. Students will create and analyze several musical compositions throughout the course. The class will also include some sight singing, ear training and dictation to develop aural skills. Finale music software, piano keyboards, and internet sources will be utilized during this course.

FAMILY & CONSUMER SCIENCE

FAMILY & CONSUMER SCIENCE 1

1 Year

1 Credit

Grades
9-12

FAMILY & CONSUMER SCIENCE 1. The curriculum in Family and Consumer Science I will include the following topics: Food Science and Nutrition, Child Development - focusing on readiness through 1 year old, Balancing Family, work and community responsibilities and Financial and Resource Management. One marking period will be spent on each area.

FAMILY & CONSUMER SCIENCE 2

1 Year

1 Credit

Grades
10,11,12

FAMILY & CONSUMER SCIENCE 2. Prerequisite: Family & Consumer Science 1.

This is a full year course that will build on information learned in Family and Consumer Science I. The topics covered will be Advanced Food Science and Nutrition – taking a closer look at meal planning principles, food processing and diets to improve health conditions. The Child Development unit will focus on new research in understanding children and parenting, how to successfully meet the needs of children and community resources that impact child development, Financial and Resource management and strengthening family relationships.

FOOD SERVICE

1 Year

1 Credit

Grades
11,12

FOOD SERVICE. Prerequisite: Family & Consumer Science 2.

This is a full year course designed for students interested in a career in the Food Service industry. Teamwork, creativity and exploration with food are essential to be successful in this class.

SINGLE LIVING

1 Year

1 Credit

Grades
11, 12

SINGLE LIVING. This course is designed to assist students with completing their Senior project AND in making the transition to independent living. The topics covered will be budgeting, savings and checking accounts, renting an apartment, buying a car, types of insurance, career search, resumes, job/college applications

The second semester will consist of Food Science and Nutrition, focusing on preparing healthy meals, practical meal planning, comparison shopping and fitness.

INDUSTRIAL ARTS TECHNOLOGY

METAL SHOP 1

1 Year

1 Credit

Grades
9-12

METAL SHOP 1. This is a full year (2 semesters) course for students interested in working with metal and metal fabrication. There are weekly quizzes on materials and machines used in this course. Topics covered will be: sheet metal work and tools, heat treating, foundry casting aluminum, wrought iron work, and different welding techniques. There are mandatory projects that must be completed throughout the course of the school year. Before starting any new project a Bill of Materials MUST be completed by student. Students are responsible for the cost of all materials used for their projects.

Daily Requirements: a writing utensil and a three ring binder dedicated to this class.
Cooperation and participation.

WOOD SHOP 1

1 Year

1 Credit

Grades
9-12

WOOD SHOP 1. This is a full year (2 semesters) course for students interested in working with and learning about wood. There are weekly quizzes on materials and machines used in this course. There are mandatory projects that must be completed throughout the course of the school year. As knowledge and experience progress, students will be able to (with instructor permission) design or make individual projects. Before starting any new project a Bill of Materials MUST be completed by student. Students are responsible for the cost of all materials used for their projects.

Daily Requirements: a pencil (not a pen) and a three ring binder dedicated to this class.
Cooperation and participation.

WOOD SHOP 2

1 Year

1 Credit

Grades
10,11,12

Prerequisite: Passing Wood Shop 1 and teacher recommendation.

WOOD SHOP 2. This is a full year (2 semesters) course for students interested in working with wood. There are weekly quizzes on materials and machines used in this course. There are mandatory projects that must be completed throughout the course of the school year. Student will learn new techniques and more advanced equipment use in the wood shop environment. As knowledge and experience progress, students will be able to (with instructor permission) design or make individual projects. Before starting any new project a Bill of Materials MUST be completed by student. Students are responsible for the cost of all materials used for their projects.

Daily Requirements: a pencil (not a pen) and a three ring binder dedicated to this class.
Cooperation and participation.

BASIC MECHANICAL DRAWING/BASIC
AutoCAD

1 Year

1 Credit

Grades
9-12

BASIC MECHANICAL DRAWING/BASIC Auto/CAD. This is a full year (2 semesters) course designed to introduce drawing techniques used in today's industry. The course uses drawing materials such as T-squares, triangles, and architect scales in the construction of isometric, orthographic, and perspective drawings. Later as this course progresses, students will learn about Computer Aided Drafting (AutoCAD). This is a basic introduction to AutoCAD. AutoCAD is a computer program that is used to create drawings for local businesses and many high-tech global markets.

Daily Requirements: a pencil (not a pen) and a three ring binder dedicated to this class.

Cooperation and participation.

BASIC ELECTRICITY AND
ELECTRONICS

1 Year

1 Credit

Grades
9-12

BASIC ELECTRICITY AND ELECTRONICS. This is a full year (2 semesters) course for students interested in working with electricity (A.C./D.C.). There are weekly quizzes on materials used in this course. There are mandatory projects that must be completed throughout the course of the school year. The first 2 semesters will cover household residential wiring (Alternating Current). Topics covered will be: lights, switches, circuits, and different wiring techniques. The third quarter of the school year will be an exploration into electronics (Direct Current). Students will use solderless circuit boards and electronic components to create many different reusable projects to experiment with electronics. The 4th quarter of the school year, students will learn how to solder and troubleshoot electronic problems. Students will be required to buy small electronic kits to build and keep,

Daily Requirements: a writing utensil and a three ring binder dedicated to this class.

Cooperation and participation.

PHYSICAL EDUCATION

PHYSICAL EDUCATION 9-12

1 Year

½ Credit

Grades 9-12

PHYSICAL EDUCATION 9-12. This course offers encouragement for further development of advanced skills, greater participation in competitive team situations, and emphasis on the enjoyment and skill development of the lifetime individual sports. Swimming, water polo and boating are incorporated into physical education. Students learn to develop basic skills that will lead to a greater interest in aquatic activities in and outside of school. Student grades are based on participation, effort, written assignments and/or written test.

HEALTH

HEALTH 11

1 Year

½ Credit

Grade 11

HEALTH 11. The purpose of this class is to further educate students in areas of health. The class deals with topics that are critical in the life decisions of our future adults. Topics include function of body systems, dealing with mental illness, suicide, fitness/nutrition, tobacco, alcohol, drugs, human development, STD's, among others. Students demonstrate learning and knowledge in multiple intelligence projects, peer tutoring, health assessments, and current event essays.

FITNESS FOR LIFE

FITNESS FOR LIFE

1 Year

½ Credit

Grades 9-12

FITNESS FOR LIFE. **Pre-requisite: Phys Ed Teacher recommendation required to take this course.**

This course introduces students to the many different aspects of fitness including nutrition, goal setting, weightlifting, research and fitness testing. A portfolio is required for this course as well as a daily fitness component.

DRIVER EDUCATION

DRIVER EDUCATION

½ Year

¼ Credit

Grade 10

DRIVER EDUCATION (CLASSROOM PHASE).

- Required for behind the wheel phase

The classroom phase of Driver Education is a 30-hour course, introducing students to the legal, safety and natural limitations of today's cars and driving situations. The car phase is a systematically applied program of practice driving 6 hours and reinforces classroom work. The car phase must be scheduled through the Driver Education Instructor. Completion of both courses results in reduced insurance rates and a senior license at the age of 17-1/2.

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NORTHERN TIER CAREER CENTER

VOCATIONAL-TECHNICAL COURSES

STUDENTS MUST BE PASSING AND ON TRACK FOR GRADUATION IN ORDER TO BE ELIGIBLE TO ATTEND THE NORTHERN TIER CAREER CENTER.

Auto Body Fender and Repair



Program Length: Two years (900 Hours)

Program Objectives: Automotive reconstruction and restoration including: panel replacement and repair, frame repair, plastic repair, refinishing, auto body related mechanics, automotive electricity, estimating. Students study and practice all methods of auto body repair, including the use of hand tools, welding practices, body and frame repair, refinishing processes, spray painting techniques, interior trim removal, upholstering and weather stripping.

Program Competencies:

Hand Tools-Safety
Power Tools-Safety
Body Fillers
Masking
Spray Painting Materials
Oxyacetylene Welding
M.I.G. Welding
Metal Working
Frame Repair
Automotive Electricity
Plastic Repair
Refinishing
Outside Body Trim

Equipment Used:

| | |
|-----------------|-----------------|
| Air Hammers | Dollies |
| Grinders | Sanders |
| Buffers | Compressors |
| Paint Equipment | Cutters |
| Welders | Torches |
| Drills | Specialty Tools |

Suggested Academics:

Algebra I
Applied Mathematics
Applied Communications
Principles of Technology

Occupational Requirements: Dependability, ability to work independently and with others, sense of pride in quality and craftsmanship, oral and written communication skills, good math skills.

Work Environment: Variable, often indoors

Career Opportunities:

Auto Body Technician
Automotive Rustproofers
Automotive Detailer

Related Occupations:

Sheet Metal Worker
Salvage Yard Operator
Industrial Painter
Automotive Parts Person

With Further Education:

Insurance Adjuster
Body Shop Owner/Manager
Frame Straightener
Glass Installer
Front End Alignment Technician
Factory Representative
Vocational Instructor

Employers: New Car Dealerships, Used Car Dealerships, Body Shops, Pennsylvania Department of Transportation, Inspection Stations, Salvage Yards, Detail Shops, Restoration Shops, and Automotive Parts Stores.

Post-Secondary Training Opportunities: Pennsylvania College of Technology, Johnson College, WyoTech, Nashville Auto/Diesel College, and Ohio Technical Institute.

Auto Mechanics



Program Length: Two years (900 Hours)

Program Objectives: Automotive technology including engine diagnosis, engine repairs, heating & cooling systems, power train, brake, suspension, and steering systems, computerized engine controls. Students study and practice all phases of engine repair and overhaul from diagnosis-problem solving to preventative maintenance.

Program Competencies:

- Hand Tools-Safety
- Power Tools-Safety
- Tires and Wheels
- ABS Brake Systems
- Electrical Systems
- Engine Repair
- Electronic Engine Control Diagnosis
- Suspension and Steering Systems
- Manual Drive Train and Axles
- Fuel Injection Systems
- Heating and Air Conditioning
- Pennsylvania State Inspection

Equipment Used:

- Multimeters
- Oscilloscopes
- Engine Analyzers
- Scanners
- Precision Measuring Tools
- Micrometers
- Dial Indicators

Training Experiences:

Work Stations on actual vehicle systems and components, diagnosis of electronic systems on all major manufactures vehicles from the 90's to present.

Suggested Academics:

Algebra; Applied Mathematics
Applied Communications; Principles of Technology

Occupational Requirements: Good math skills with knowledge of metric system essential, good oral and written communication skills, and ability to read and comprehend technical manuals. Prospective students should have mechanical aptitude, manual dexterity, skills with tools, physical stamina, good hand-eye coordination, physical strength, willingness to work in an uncomfortable environment and the ability to think logically.

Continuing education is essential to keep up-to-date with technology changes.

Work Environment: Variable, often indoors.

Career Opportunities:

- Auto Mechanic
- Auto Parts Counter Person
- Service Station Technician
- Tune-up Specialist

Related Occupations:

- Service Writer
- Heavy Equipment Repair Technician
- Diesel Mechanic

With Further Education:

- Service Manager
- Shop Foreman
- Automotive Engineer
- ASE Certified Master Technician
- Garage Manager
- Aircraft Technician
- PA State Inspector
- Vocational Instructor

Employers: Garages, Service Stations, New Car Dealerships, Used Car Dealerships, Automotive Manufacturing Plants, Pennsylvania Department of Transportation, Trucking Companies, Rental Agencies.

Post-Secondary Training Opportunities: Pennsylvania College of Technology, Johnson College, Luzerne County Community College, WyoTech, and Nashville Auto/Diesel College.



Building Construction

Program Length: Two years (900 Hours)

Program Objectives: Construction and remodeling of buildings including carpentry, masonry, painting, drywall, cabinetry, stairs, and finishes. Students study and practice all phases of building construction, from layout of site, foundation and wall construction, to roof framing and interior trim. Techniques include building partitions, subfloors, millwork (construction and installation of doors, molding and cabinetry), and application of finishing hardware.

Program Competencies:

| | |
|----------------------|-------------------------|
| Forms | Basic Electrical Wiring |
| Estimating | Basic Plumbing |
| Foundations | |
| Power Tools - Safety | |
| Hand Tools - Safety | |
| Floor Frames | |
| Wall Frames | |
| Roof Frames | |
| Exterior Finish | |
| Interior Finish | |
| Stair Building | |
| Basic Masonry | |
| Blueprint Reading | |
| Trade Mathematics | |

Equipment Used:

| | |
|---------------|-----------------|
| Table Saw | Saber Saw |
| Circular Saw | Band Saw |
| Jointer | Planer |
| Drill Press | Power Miter Box |
| Drills | Power Miter Saw |
| Finish Sander | Router |
| Bench Grinder | Belt Sander |

Suggested Academics:

Applied Mathematics
Applied Communications
Principles of Technology
Algebra I, Geometry

Occupational Requirements: Must be able to work at heights up to 50 feet, good manual dexterity, good eye-hand coordination, mechanical aptitude, mathematics problem solving skills.

Work environment: Strenuous work, often outdoors, in all weather conditions.

Career Opportunities:

Carpenters Apprentice
Mill Worker
Lumberyard Technician
Salesperson
Estimator

Related Occupations:

Drywall Installer
Block Mason
Roofer
Siding Installer
Painter
Cabinet Installer

With Further Education:

Foreman
Construction Superintendent
Building Contractor
Building Codes Inspector
Vocational Instructor

Employers: Carpenters, Building Contractors, Lumberyards, Lumber and Wood Processing Mills, Patio and Deck Contractors, Custom Home Builders, General Contractors, Cabinet Makers.

Post-Secondary Training: Pennsylvania College of Technology, Johnson College, and Luzerne County Community College.

Cosmetology



Program Length: Two years and two summers (1250 hours)

Program Objectives: This is a state licensed course designed to provide the student with the fundamentals needed to prepare for the state board examination. Instruction is provided in cutting, conditioning, tinting, bleaching, and individualized styling of the hair. Make-up analysis, superfluous hair removal, styling eyebrows, and various kinds of manicures are also part of the course. Practical experience is gained by providing services through the operation of a clinic whereby students work on each other's hair or volunteer "customers" from the community.

Program Competencies:

| | |
|----------------------|--------------------------|
| Hair Analysis | Shampooing/Rinses |
| Haircutting | Manicures |
| Pedicures | Skin Care/Facials |
| Styling/Fingerwaving | Permanent Waving |
| Hair Coloring | Scalp Treatments |
| First Aid/Safety | Sanitation/Sterilization |
| Bacteriology | Anatomy |
| Salon Management | Customer Relations |
| Hygiene | |
| State Board Review | |

Equipment Used:

Infrared Current
Dryers
Crimpers
Curling Irons/Brushes
Hydraulic Chairs
Accelerating Machine
Scissors
Razor
Facial Chairs
Computer
Perm Rods/Rollers
Color Wheels/Charts

Suggested Academics:

Applied Mathematics
Applied Communications
Applied Biology and Chemistry

Occupational Requirements: A pleasant personality is important. Must be able to stand for long periods of time and have good manual dexterity and eye-hand coordination. Good attendance is imperative.

Work Environment: Indoor work - standing for long periods of time.

Career Opportunities:

Cosmetologist
Hair Stylist
Salon Owner
Nail Technician
Color Technician

Related Occupations:

Receptionist
Cosmetic Sales
Cosmetic Buyer
Beauty Product Demonstrator

With Further Education:

State Board Inspector
Shop Manager
Esthetician
Research Assistant
Make-up Artist
Vocational Instructor

Employers: Beauty Salons, Cosmetic Firms, Department Stores, Television, Movie Studios, Cruise Ships, and Hotels.

Post-Secondary Training Opportunities: Empire Beauty School, Academy of Hair Design, Pittsburgh Beauty Academy, Penn State University, and Indiana University of Pennsylvania.

Computer Service Technology



Program Length: Two years (900 Hours)

Program Objectives: Problem solving, technical training, and industry certifications are the cornerstones of this program. Students are prepared to take computer technology certifications tests and have the opportunity to study other interest areas in the I.T. profession.

Program Competencies:

- Safety
- Microprocessors
- Operating Systems/Software
- Personal Computer Systems
- Computer Hardware
- Computer Application Software

Equipment Used:

- Digital and Analog Multimeter
- Personal Computer
- Laptops
- Hand Tools

Suggested Academics:

- Algebra I, Trigonometry
- Principles of Technology
- Physics
- English

Occupational Requirements: Good mathematical skills, capacity for sustained concentration, color differentiation, manual dexterity, deductive reasoning skills, eye-hand coordination, and critical/logical thinking skills.

Work environment: Indoors, bench work or assembly work.

Career Opportunities:

- Computer Repair Technician
- Desktop Support Technician
- PC Assembler

Related Occupations:

- Field Service Technician
- Audio/Visual Repair Technician
- Bench Technician
- Data Process Equipment Installer

With Further Education:

- Network Administrator
- Technology Coordinator
- Vocational Instructor

Employers: Service Departments, Radio Stations, Telephone Companies, Electronics Manufacturers, Computer and Electronics Repair Shops, Assembly Plants, Armed Services, Hospitals, Office Complexes, Industrial Plant Maintenance.

Post-Secondary Training Opportunities: Pennsylvania College of Technology, Johnson College, Luzerne County Community College, Wilkes University

Diesel Mechanics



Program Length: Two years (900 hours)

Program Objectives: Fundamentals of diesel engines with emphasis on light duty diesel equipment (tractors, light duty pick-up trucks, diesel automobiles). Students will be able to transfer and apply this learning to heavy duty diesels engines and equipment. Students study and practice all phases of diesel technology including diagnosis of malfunctions, disassembly of engines and examination of parts, reconditioning and replacement of parts, fuel injection systems, auxiliary power units, governors and transmissions.

Program Competencies:

- Hand Tools-Safety
- Power Tools-Safety
- Power Trains
- Brakes
- Engine Performance
- Suspension & Steering Systems
- Hydraulics
- Oil Pumps
- Cooling Systems
- Fuel Injection
- Electrical Systems and Schematics

Equipment Used:

- Multimeters
- Engine Analyzers
- Precision Measuring Tools
- Micrometers
- Dial Indicators
- Calipers
- Welders

Suggested Academics:

- Algebra I
- Applied Mathematics
- Applied Communications
- Principles of Technology

Occupational Requirements:

Good math skills with knowledge of metric system essential, good oral and written communication skills, ability to read and comprehend technical manuals, physical and manual dexterity, good hand-eye coordination.

Work environment:

Variable, often indoors.

Career Opportunities:

| | |
|-----------------------------------|-------------------|
| Bus Technician | Diesel Technician |
| Diesel Parts Counter Person | Truck Repair |
| Farm Machinery Technician | |
| Lawn and Garden Tractor Repair | |
| Heavy Equipment Repair Technician | |

Related Occupations:

- Fuel Injection Shops
- Service Writer
- Automotive Mechanic

With Further Education:

- Service Manager
- Shop Foreman
- Field Service Representative

Employers: Truck Dealers, Farm Equipment Dealers, Garages, Service Stations, Pennsylvania Department of Transportation, Trucking Companies, Busing Companies, Rental Agencies.

Post-Secondary Training Opportunities: Pennsylvania College of Technology, Johnson College, Luzerne County Community College, WyoTech, Nashville Auto/Diesel College, and Central Pennsylvania Diesel Institute.

Diversified Occupations



Program Length: One year (720 Hours)

Program Objectives: Diversified Occupations is a ONE YEAR - SENIOR YEAR ONLY instructional program that operates as an integral part of career and technical education to provide a cooperative arrangement between the Northern Tier Career Center and local employers whereby the student receives career related theory instruction in the school and on-the-job training through part-time employment in business/industry. The area of training may be in any career area where there are needs for trained persons and must relate to the student's career objective. This program is designed to provide training for those career areas not presently being offered at the Northern Tier Career Center (i.e. HVAC) or to serve students who are unable to gain admission to a NTCC program due to enrollment limitations.

Program Competencies:

Career Related Theory – 50 hours in class

- Orientation to Diversified Occupations
- Career development and Planning
- Employment Acquisition
- Human Relations
- Health and Safety
- Employment Retention
- Communications Development
- Legal Awareness
- Professional Organizations
- Consumer Skills
- Economics
- Future Planning
- Technical Related Instruction

On-the-job training – minimum 670 hours paid employment

- Career specific technical training, including safety, communications, and opportunities for career advancement.

Equipment Used:

Varies by career objective and job placement

Suggested Academics:

Algebra
Geometry
Biology
Chemistry
English

Occupational Requirements: Varies by career objective and job placement

Work Environment: Varies by career objective and job placement

Career Opportunities:
Varies by career objective

Employers: Retail stores, restaurants, grocery stores, government offices, heavy equipment dealers, and dairy farms

Post-Secondary Training Opportunities: Lackawanna College, Luzerne County Community College, Pennsylvania College of Technology, Mansfield University, and Broome County Community College

Job Outlook: Varies by career objective

Electrical Occupations



Program Length: Two years (900 Hours)

Program Objectives: Electrical systems including power, heat, light, motor controls, air conditioning, refrigeration, generators, and transformers. Students study and practice all phases of residential, commercial and industrial electricity including layout, assembly, installation, testing and maintenance of electrical systems.

Program Competencies:

- Hand Tools-Safety
- Power Tools-Safety
- Reading Blueprints
- Signaling Circuits
- Wiring Methods
- Power Circuits
- Lighting Circuits
- Motor Control Circuits
- Low Voltage Circuits
- Conduit Bending and Installation
- Service Installation
- Wiring Diagrams
- Transformers
- Generators and Motors
- Wiremold
- Troubleshooting

Equipment Used:

- Drill Press
- Electric Drill
- Bench Grinder
- Conduit Bender
- Pipe Threader
- Industrial Control Trainers
- PLC Trainer

Suggested Academics:

- Algebra I; Applied Mathematics
- Applied Communications
- Principles of Technology:

Occupational Requirements: Good mathematics skills ability to read and interpret blueprints, schematics, color differentiation, manual dexterity, good eye-hand coordination, ability to work at heights up to 50 feet.

Work Environment: Ability to work in all weather conditions. Variable from clean to dirty.

Career Opportunities:

- Electrical Apprentice
- Electrician's Helper
- Maintenance
- Electric Motor Installer

Related Occupations:

- Appliance Repair
- Motor Rewinder
- Industrial Plant Maintenance
- Electrical Equipment Sales
- Estimator

With Further Education:

- Electrician
- Electrical Draftperson
- Electrical Engineer
- Electrical Inspector
- Vocational Instructor

Employers: Electrical Contractors, Electrical Supply Houses, Maintenance Departments in Industry.

Post-Secondary Training Opportunities: Pennsylvania College of Technology, Johnson College, Penn State University, Wilkes University, and Baran Institute.

Food Production, Management and Service



Program Length: Two years (900 Hours)

Program Objectives: This course is designed to provide the student with the skills, knowledge, and attitudes necessary in quantity foods related careers. Specialized learning units include theory and work experience in the major areas of cooking, baking, dessert preparation and salad preparation. The restaurant kitchen serves as the preparation laboratory, while the 45-seat restaurant provides experience in proper and efficient serving.

Program Competencies:

| | |
|-------------------------------|---------------------------|
| Kitchen Techniques | Safety |
| Safety and Sanitation | Sanitation |
| Vegetable Preparation | Small tools and Equipment |
| Slicing | Use & care of Equipment |
| Dishware Cleaning | Receiving and Storage |
| Table Service | Standard Recipe Use |
| Management | Desserts |
| Menu Planning | Salads |
| Recipe Analysis | Bakery |
| Baking | Vegetable Cooking |
| Meat Cutting | Meat Cookery |
| Equipment Use and Maintenance | |
| Sandwiches and Garnishes | |

Equipment Used:

| | |
|------------------|----------------|
| Broiler | Grill |
| Cash register | Knives |
| Coffee Maker | Mixers |
| Convection Ovens | Proof Box |
| Dishwasher | Slicer |
| Disposals | Steamer |
| Electric Range | Steam Jacketed |
| Kettle Fryer | Oven |
| Gas Ranges | |

Suggested Academics:

Applied Mathematics
Applied Communications
Applied Science

Occupational Requirements: Neatness and cleanliness are a must. Must be able to work quickly while under pressure and be able to follow strict food service guidelines.

Work Environment: Indoor work - often in hot kitchen areas.

Career Opportunities:

Cook
Short order Cook
Baker
Server
Cake decorator

Related Occupations:

Host/Hostess
Bus Person
Dishwasher

With Further Education:

Chef
Dietitian
Food Service director
Restaurant Manager
Vocational Instructor

Employers: Restaurants, Fast Food Chains, Cafeterias, Hospitals, Bakeries, Grocery Stores, Hotels, Nursing Homes, Schools, Caterers, Resorts.

Post-Secondary Training Opportunities: Pennsylvania Culinary, Pennsylvania College of Technology, Penn State University, Johnson and Wales College, Keystone College, Luzerne County Community College.

Health Assistant

Program Length: Two years (900 Hours)

Program Objectives: This course allows the student to advance at their own rate, and allows for their individuality in the choice of a specific career objective. This course provides skills for Nursing Assistant, Dental Assistant, Medical Assistant and Physical Therapy Aide careers. After successful completion of the nursing assistant curriculum, students are eligible to take the state exams (written and skill) for placement on the registry for long term nursing assistants. Clinical experiences may accompany all portions of this course.

Program Competencies

Theory Competencies

Dental Terminology
 Medical Terminology
 Anatomy/Physiology
 Patient Rights
 Confidentiality
 Mental/Social Needs
 Nutrition/Special Diets
 Job Seeking Skills
 Health Career
 Exploration
 Abuse Prevention

Skill Competencies

Vital Signs
 Transporting Patients
 First Aid/CPR/Safety
 Direct Patient Care
 Eye Exams
 Care of Geriatric Patient
 Care of Obstetrical Patient
 Care of Pediatric Patient
 Care of Acute Care Patient
 Care of Dying Patient
 Universal Precautions
 Office Procedures
 Range of Motion

Equipment Used:

| | |
|--------------------|---------------------|
| Autoclave | Sphygmomanometer |
| Amalgameter | Microscope |
| Wheelchair | Stretcher |
| Upright Scale | Hydraulic Lift |
| Hospital Bed | Dry Heat Sterilizer |
| Ultrasonic Cleaner | Chemical Sterilizer |
| Dental Operatory | Model Grinder |
| Computer/Printer | |

Suggested Academics:

Applied Communications; Applied Mathematics
 Applied Biology and Chemistry

Occupational Requirements: Must have good physical health and manual dexterity, cleanliness and good grooming.

Work Environment: Indoor work in a medical setting. Few hazards exist if proper handling of materials is followed.

Career Opportunities:

| | |
|-----------------------|-------------------|
| Nurse Assistant | Orderly |
| Home Health Care Aide | Dental Assistant |
| Physical Therapy Aide | Medical Assistant |

Related Occupations:

Child Care Aide
 Dietary Aide
 Ward Clerk

With Further Education:

| | |
|----------------------------|-----------------------|
| LPN | |
| RN | Vocational Instructor |
| Veterinary Assistant | Phlebotomist |
| X-Ray Technician | Surgical Technician |
| Dental Lab Technician | Dental Hygienist |
| EKG Technician | Respiratory Therapist |
| Physical Therapy Assistant | Physical Therapist |

Employers: Hospitals, Clinics, Nursing Homes, Rehabilitation Centers, Day Care Centers, Dentist's Office, Physician's Office, Home Health Care, Personal Care.

Post-Secondary Training Opportunities: Northern Tier Career Center LPN Program, Geisinger Medical Center, Danville School of Practical Nursing, Arnot School of Nursing, Pennsylvania College of Technology, Penn State University, Keystone College, Luzerne County Community College, Bloomsburg University, Robert Packer Hospital/Mansfield University Nursing Program.

Medical Office Technology



Program Length: Two years (900 Hours)

Program Objectives: Preparation to assist physicians and other medical personnel by performing functions related to administrative and clerical duties in a medical office. Students study and practice medical terminology, computer operations, applicable laws and regulations (including HIPAA), insurance forms, statistical reporting, medical records, medical transcription and word processing.

Program Competencies:

- Receptionist Procedures
- Office Procedures
- Insurance Forms
- Machine Transcription
- Medical Terminology
- Word Processing
- Computer Operations
- Ethics
- Communication Skills
- Medical Records Management
- Filing

Equipment Used:

- Computer/Network
- Electronic Dictating/Transcribing System
- Office Machines
- Copier

Suggested Academics:

- Mathematics
- Communications
- Biology
- Anatomy and Physiology
- Microsoft Office

Occupational Requirements: Must have good hygiene and grooming. Superior communication skills and an understanding of basic medical terminology, anatomy, and physiology.

Work Environment: Indoor work in a medical setting.

Career Opportunities:

- Medical Transcriptionist
- Medical Secretary
- Medical Records Clerk
- Hospital Ward Clerk

Related Occupations:

- Receptionist
- File Clerk
- Billing Clerk
- Secretary

With Further Education:

- Medical Office Manager
- Registered Health Information Technician (RHIT)
- Registered Health Information Administrator (RHIA)
- Vocational Instructor

Employers: Hospitals, Health related Clinics, Nursing Homes, Physician's Office, Rehabilitation Centers, Veterinary office

Post-Secondary Training Opportunities: Pennsylvania College of Technology, Broome Community College, Luzerne County Community College, Keystone College, Elmira Business Institute, Allied Medical Careers.

Welding Technology



Program Length: Two years (900 hours)

Program Objectives: Instruction is provided in the basic principles and skills required in the welding field. Students will be introduced to both welding and cutting.

Program Competencies:

Safety
Basic Metallurgy
Oxyacetylene Welding and Cutting
Arc Welding
MIG Welding
TIG Welding
Blueprint Reading

Equipment Used:

Arc Welders
MIG Welders
TIG Welders
Oxy Fuel System
Grinders

Suggested Academics:

Algebra 1
Geometry
Trigonometry
Principles of Technology
Physics

Occupational Requirements:

Students entering the welding program should be in good physical condition and have good physical strength. Importance should be placed on good eyesight, manual dexterity, and good hand and eye coordination. They should be able to concentrate on detailed work for long periods of time. They should be free of any physical disabilities that would prevent them from bending, stooping and working in awkward positions.

Work environment:

Variable, conditions based on the type of industry.

Career Opportunities:

Tack Welder
Welder
Welding machine operator
Welder assembler
Welder fitter
Construction welder
Maintenance welder

Related Occupations:

Business owner
Sales and service representative

With Further Education:

Welding supervisor
Welding technician
Educator
Inspector
Engineer

Employers: Manufacturing Plants, Repair Shops, Construction Companies, Natural Gas Industry, Armed Services

Post-Secondary Training Opportunities: Alfred State College, Harrisburg Area Community College and Pennsylvania College of Technology

Job Outlook: The welding industry today presents a continually growing and changing series of opportunities for welders. Despite economic fluctuations, there is a positive job outlook in welding. Most everything we use or depend upon today requires welding and joining technology. The U.S. Department of Labor lists more than 140 occupations related to welding and joining.

Precision Machining



Program Length: Two years (900 hours)

Program Objectives: Machining fundamentals including layout, sawing, drilling, milling, grinding operations, and inspecting. Students study and practice basic machine tool operations including; milling machines to cut parallel and perpendicular surfaces, slots pockets, and arcs.

Program Competencies:

Print Reading
Layout
Sawing
Operations
Inspection Techniques
Lathe operations
Safety

Equipment Used:

Hand tools
Multi-spindle drill press
Personal computers
Sawing operations
Safety
Surface plate

Suggested Academics:

Algebra 1
Geometry
Trigonometry
Principles of Technology
Physics

Occupational Requirements:

Good math skills
Hand-eye coordination
Ability to stand for an entire shift

Work environment:

Indoors, conditions vary on the type of manufacturing done.

Career Opportunities:

Machine operator
Machinist apprentice
Machinist

Related Occupations:

Automotive machinist
Millwright
Tool Sales
Machine Designer

With Further Education:

CNC Machinist
Tool and Die Maker
Mechanical Or Manufacturing Engineer
CNC Programmer

Employers: Manufacturing Plants, Contract Machine Shops, Automotive Machine Shops, Armed Services and Cutting Tool Suppliers.

Post-Secondary Training Opportunities: Luzerne County Community College, Corning Community College, and Pennsylvania College of Technology

Job Outlook: Changes in the technology combined with a large number of retirements has resulted in a strong local demand for people with these skills.

CAREER DEVELOPMENT COUNCIL SERVICES
AVAILABLE THROUGH THE GUIDANCE OFFICE OF THE SAYRE HIGH SCHOOL

Job Shadowing – Juniors and seniors are encouraged to get first-hand career information with an area professional in their work environment. Students gain knowledge of the job responsibilities, what a typical day is like, and education and training requirements. Job shadows range from an hour to a full day depending on the occupation being shadowed and the variety of job duties.

Career Panels – A panel of professionals speak on various career topics in a group setting. Panel's topics often include: medical careers, psychology and social work, law enforcement, forensic science, sports careers, and fashion design.

Work Site Visits – Tours of local employers can be arranged to help students learn about the range of employment opportunities, and the skills needed to be employed along with hiring practices.

Resume Preparation and Review – Assistance with resume preparation and cover letters.

Employment Assistance – Information is provided on local employers and registration for employment at the Pennsylvania Career Link.

Mock Interviews – A practice employment interview is conducted with local employers to help students receive input on their interviewing strengths and areas of improvement needed.

Internet Career Research Assistance

Mrs. Horton – rhorton@sayresd.org or rhorton@gstbooces.org