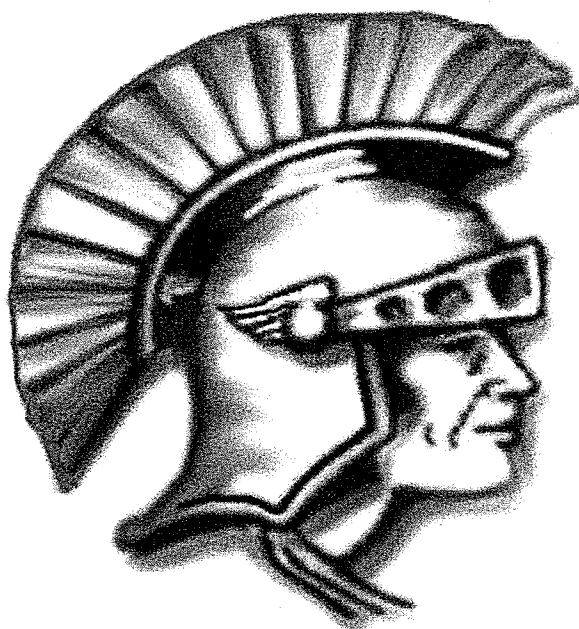


TROY HIGH SCHOOL



**EDUCATION
THE PATH OF OPPORTUNITY**

2020-2021

SCHEDULING HANDBOOK

NOTES:

ENGLISH -

SOCIAL STUDIES-

MATH-

SCIENCE -

ELECTIVES -

TABLE OF CONTENTS

GRADUATION REQUIREMENTS.....	1
DUAL ENROLLMENT.....	2
ACADEMIC/ GENERAL CURRICULUM DESCRIPTION.....	2
STUDY HALLS.....	3
DROP/ADD COURSES.....	3
CAREER CLUSTERS.....	4
ENGLISH DEPARTMENT.....	6
SOCIAL STUDIES DEPARTMENT.....	9
MATH DEPARTMENT.....	12
SCIENCE DEPARTMENT.....	15
BUSINESS DEPARTMENT.....	18
LANGUAGE DEPARTMENT.....	20
ART DEPARTMENT.....	20
FAMILY AND CONSUMER SCIENCE.....	21
MUSIC DEPARTMENT.....	22
PHYSICAL EDUCATION AND HEALTH	23
DRIVERS EDUCATION.....	23
SERVICE LEARNING.....	24
TECHNOLOGY EDUCATION DEPARTMENT.....	24
AGRICULTURE DEPARTMENT.....	26
NORTHERN TIER CAREER CENTER.....	30
ONLINE COURSES.....	35

TROY SENIOR HIGH SCHOOL GRADUATION REQUIREMENTS:

Students will need a minimum of 28 academic credits to graduate. Every student completing the following required courses will receive a diploma.

- 4 credits of English
- 4 credits of Social Studies
- 4 credits of Science **
- 4 credits of Math *
- 2 credits of Physical Education & Health (.5 credit each year)
- .5 credit of Lifetime Learning
- .25 credit of Driver Education
- 9.25 credits of Arts and Humanities

<i>TOTAL CREDITS IN REQUIRED SUBJECTS:</i>	<i>18.75</i>
<i>TOTAL CREDITS IN ARTS AND HUMANITIES</i>	<i>9.25</i>
TOTAL CREDITS TO GRADUATE	28.0

EACH STUDENT MUST SCHEDULE 8 CREDITS PER YEAR.

** Two credits must be Biology and one credit must be a Physical Science

** Students must pass Algebra 1A / Algebra 1B and Geometry to graduate

For placement in Honors level courses, it is strongly recommended that a student has earned 87% or higher in the prior core subject (i.e. 87% in English 9 or Honors English 9 to be placed in Honors English 10)

GRADE LEVEL CLASSIFICATION

The grade level that you begin the year with in September is the grade level you will remain for the whole academic year. It is in your best interest to engage in some type of credit recovery during the summer.

10th grade – Students must earn 7 credits their freshman year to be considered a sophomore. Students who have not earned 7 credits are **STRONGLY ENCOURAGED** to engage in some type of credit recovery during the summer following 9th grade at the student's expense. (on-line, summer school)

11th grade – Students must earn 14 credits by the end of their sophomore year to be considered a junior. Students who have not earned 14 credits are **STRONGLY ENCOURAGED** to engage in some type of credit recovery during the summer following 10th grade at the student's expense. (on-line, summer school)

12th grade – Students must earn 20 credits by the end of their junior year to be considered a senior. Students who have not earned 20 credits are **STRONGLY ENCOURAGED** to engage in some type of credit recovery, at student's expense, and be on target to complete their graduation requirements by the end of their senior year.

ATHLETIC ELIGIBILITY: In addition to other eligibility requirements established by the school district, a student must pass the equivalent of 2 credits in a marking period to be eligible for athletic participation during the next marking period. To be eligible for fall athletics a student must have passed 4 credits the previous year.

DUAL ENROLLMENT: Courses may be available to college-ready juniors or seniors interested in receiving both high school and college credit from colleges. In order to receive college credit, juniors or seniors must meet certain

academic requirements and complete an application process. Courses offered at Troy High School which can also be taken as college courses are: **Speech, Honors English 12, AP English, Anatomy and Physiology I, Anatomy and Physiology II, AP Chemistry, Physics II, AP Statistics, College Prep Math, AP Calculus, Accounting II, Spanish III, Spanish IV, Web Design, Sociology, and Psychology.** (*Subject to change*) Please call your child's School Counselor for more information. There are other opportunities to take college courses. Students should see their counselor in the Spring of their sophomore year to discuss these possibilities.

Additionally, we participate in **Mansfield University's ESP Program**. This program allows students to earn college credits at a reduced rate, with the option of also using these credits as high school credits, by taking online classes through Mansfield University. Throughout the year the Guidance Office will be made aware of the selected courses being offered for each term: Fall Semester, Spring Semester, and Summer Session I and II. Students will need to apply, get a letter of recommendation from a school counselor, and register. Course registration is on a space-available basis.

DIFFERENTIATED CURRICULUM

As early as possible, students should attempt to determine their general career goals and begin taking courses which will meet that selection. Listed below are the curricula offered and a brief description of each. Any student or parent with questions should see a School Counselor for assistance.

ACADEMIC CURRICULUM

This program is designed for students who plan to further their education at a college or university and are very focused on their career goals. This is a very rigorous and demanding curriculum, and students should feel they are capable of and interested in the courses which are required. In addition to all required courses the student must take the following:

Algebra I, Algebra II, Honors Geometry, Honors Keystone Biology I, Academic Chemistry I, 3 years of a language (same language) or 2 years of same language and one credit of the following courses: Chemistry II, Genetics, Anatomy & Physiology I, Anatomy & Physiology II, Microbiology, Physics I & II, Pre-Calculus/Pre- Calculus, Introduction to Statistics.

GENERAL CURRICULUM

Although students in this program are generally those who have changed from one curriculum to another, some students may find none of the other curricula meets their needs. This curriculum gives students wide discretion in course selection.

Through careful planning and use of electives students can achieve a strong focus in any of the following: Family & Consumer Science, Industrial Arts and/or Visual Arts.

Note from the Principal:

As you are selecting courses for next year, please be aware that we are offering the same courses that we have had recently. However, **courses must have a minimum of 10 students in order to "run" here on campus.** For courses that do not have enough requests and/or scheduled students, we will work with the students to find an online course that is as similar as possible.

If this course is not a credit recovery situation for a student, the online option will be at no cost to the student as long as the student still needs the course for credit to graduate. However, if the course is not needed for graduation credit, then the student will be required to pay a deposit of 50% of the course cost (varying based on course and online provider) prior to starting the course. If the student successfully

completes the course with a passing grade by the end of the quarter or semester, the student will be fully reimbursed the deposit. However, if a student does not successfully complete the course with a passing grade by the given deadline, the student will be required to pay the remaining balance of the course.

If the course is needed for credit recovery, the student/family will be responsible for covering the cost of the online course which will vary depending on the mode of delivery, course and possible online provider.

AP Courses: Students will have the option to take the AP exam at the end of the course. There is a fee associated with each AP exam.

Drop/Add: All requests for schedule changes must be done through the Guidance Office. Student, parent, School Counselor and administrative input will be considered. **ALL schedule change requests MUST be completed by June 30th.** Requests must be made via e-mail, a written request, by phone or in person. If you need to leave a voice mail, please call:

Mr. Brenner – 297-8703 (7-12 Principal)
Mrs. Keating – 297-8704 (7-12 Assistant Principal)
Mrs. Mattocks – 297-8705 (Guidance Secretary)
Mrs. Gible – 297-8706 (School Counselor)

Summer Hours: Offices are open 8 AM – Noon and 1 PM – 3 PM

Deadlines provided by the Guidance Department **MUST** be followed. Students not submitting course selection paperwork by stated deadlines run the risk of not getting courses they request, being assigned to courses and/or having a schedule created for them.

Exceptions will only be made for the following reasons:

1. Credit recovery
2. Credit acceleration
3. Computer error
4. Health and/or personal concerns beyond the academic scope

Study Halls: Students are only allowed to have ONE study hall for the entire school year. Students must replace a second study hall (if applicable) with one of the following:

1. An onsite class they have not previously passed (first option)
2. An online class (see page 35)

Career Cluster Guide

All students and their parents are encouraged to select courses that will guide the student toward a possible career choice. The next three pages include sixteen general career areas (clusters) and the courses offered at Troy High School which prepare students for those career areas. Please contact your child's School Counselor if you have questions.

Agriculture, Food & Natural Resources

Math
Bio Ag Science, Environmental Ecology, Chemistry
Intro to Business, Business Law, Accounting
All Ag Department classes
CAD
World of Food

Architecture & Construction

Algebra II, Geometry, Business Calculations
Science in Society, Environmental Ecology,
Chemistry, Physics
Intro to Business, Business Law, Accounting
Art classes
All Industrial Arts classes
*NTCC: Building Construction; Electrical
Occupations; Welding Technology; Heating,
Ventilation, Air

Arts, AV Technology, & Communications

Speech, Creative Writing, Mythology, Novel and
Drama, Publishing and Presentation
Foreign Language (Spanish)
All Art Department classes
All Music Department classes
Web Design
Concepts in Clothing

Business, Management & Administration

Business Calculations
Speech
College and Career Literacy
Publishing and Presentation
Foreign Language (Spanish)
All Business Department classes
Honors Economics
Psychology

Education & Training

College Prep Math
Biology, Science in Society, Chemistry
Speech, Creative Writing, Writing about Philosophy,
Novel and Drama, Mythology
Foreign Language (Spanish)
All Art Department classes especially if Art Ed
Parenting and Family Life

Finance

As many upper level Math courses as possible
(especially Statistics)
Speech
Honors Economics
All Business Department classes
Personal Finance/Lifetime Learning (required 9th
grade class)

Government and Public Administration

Algebra I & II, Statistics
Speech
Foreign Language (Spanish)
Data Application: Excel/ Spreadsheet, Dynamic
Presentation Applications
American History, US Civics and Government,
World Cultures, Honors Economics
AP US Government and Politics
Psychology, Sociology

Health Science

Algebra I & II
Pre-calculus, Statistics, Calculus (if seeking Bachelor
degree or professional degree)
Anatomy & Physiology, Chemistry
Genetics, Microbiology (if offered)
Data Application
*NTCC: Health Assistant/Pre-Nursing

Hospitality & Tourism

Speech
Intro to Business, Marketing/Sales
World Cultures
Foreign Language (Spanish)
World of Food
*NTCC: Food Production and Management

Human Services

Speech
Foreign Language (Spanish)
Parenting and Family Life
Psychology
Sociology
*NTCC: Cosmetology

Information Technology

As many upper level Math courses as possible
As many Science classes as possible
Publishing and Presentation
Web Design, Data Application
CAD, Technology and Society
Digital Art
Geographical Information Systems and Mapping

Law, Public Safety, and Security

Chemistry
Statistics
Speech
Business Law
US Civics and Government
US Government and Politics
Physical Education
Fitness/Health and Wellness
Psychology/Sociology
Criminal Justice related courses (on-line courses)

Manufacturing

Algebra I, II
Science and Society
Physics
College and Career Literacy
Foreign Language (Spanish)
Energy, Power, and Transportation
Power and Machinery; Electronics, Materials and Processes; Welding
*NTCC: Machine Tool Technology

Marketing and Sales

Algebra I & II, Statistics
Speech, Publishing and Presentation
Honors Economics
All Business classes

Science, Technology, Engineering, and Math

As many Math courses and as many upper level Math courses as possible
As many upper level Science courses as possible (definitely Physics I & II)
Speech, Publishing and Presentation, College and Career Literacy
CAD, Architecture, Engineering, Inventions and Innovations, Technology and Society, Electronics
Geographical Information Systems and Mapping

Transportation, Distribution, and Logistics

Business Calculations, Accounting
Environmental Ecology, Physics
College and Career Literacy
Foreign Language (Spanish)
Energy, Power, Transportation; Power and Machinery; Electronics
*NTCC: Auto Mechanics Technology, Collision Repair Technology, Diesel Engine Mechanic

COURSE DESCRIPTIONS

*Classes are weighted by 1.03

**Classes are weighted by 1.05

**For placement in Honors level courses, it is strongly recommended that a student have earned an 87% or higher in the prior core subject (i.e. 87% in English 9 or Honors English 9 to be placed in Honors English 10)*

ENGLISH DEPARTMENT KEYSTONE ENGLISH 9

PREREQUISITE-NONE
CREDIT-1.0

GRADES 9
#300

This course is a survey of literature examining multiple literary genres including short stories, poetry, novel, drama and non-fiction. This course is focused on the continued development of the foundational skills needed to advance into the Keystone Literature course. Analysis of literary elements and devices are the focus of formal writing. This course also emphasizes the integration of textual evidence within student writing. Formal writing skills are practiced through the completion of the writing of multiple constructed response paragraphs, literary analysis papers and a formal research paper.

HONORS KEYSTONE ENGLISH 9*

PREREQUISITE-NONE
CREDIT 1.0

GRADES 9
#350

In preparation for the Keystone Exam, this course is a survey of literature examining multiple literary genres including short stories, poetry, novel, drama and non-fiction. Analysis of literary elements and devices are the focus of reading and formal writing. This course also emphasizes the integration of textual evidence within student writing. Formal writing skills are practiced through writing multiple constructed response paragraphs, literary analysis papers, and a formal research paper. The Keystone Exam will be given at the conclusion of this course.

KEYSTONE ENGLISH 10

PREREQUISITE-ENGLISH 9
CREDIT 1.0

GRADES 10
#301

In preparation for the Keystone Exam, this course is a survey of literature examining multiple literary genres including short stories, poetry, novel, drama and non-fiction. Analysis of literary elements and devices are the focus of reading and formal writing. This course also emphasizes the integration of textual evidence within student writing. Formal writing skills are practiced through writing multiple constructed response paragraphs, literary analysis papers and formal research paper. The Keystone Exam will be given at the conclusion of this course.

HONORS KEYSTONE ENGLISH 10*

PREREQUISITE-ENGLISH 9
CREDIT 1.0

GRADES 10
#351

In tenth grade, students study both ancient and contemporary literature from around the world. The focus of the course is to examine the common themes found throughout world literature (fiction and non-fiction) regardless of the culture that produced them. The course units are organized around these universal themes. Each unit allows for close study of literary works, as well as consideration of historical and cultural context. Students come to grasp the relationship between local concerns and universal questions. Throughout the year, students will conduct background research, analyze literature, participate in class discussions, study vocabulary, learn about the writing process and write essays. In addition to shorter writing pieces, students will be mastering the "constructed response" paragraph, the "ten percent summary," and the literary analysis paper. Upon completion of this course, students are ready to advance to eleventh and twelfth grade English courses.

ENGLISH 11

PREREQUISITE-ENGLISH 9,10

CREDIT 1.0

GRADES 11

#302

Concentration is on American literature, speech, expository writing, and vocabulary. It will consist of an intensive survey of America's literature with the intention of enhancing the student's sense of cultural literacy. The organization, structure, research and delivery of an informative speech will be emphasized. Expository writing will be stressed with the prime intention of enhancing the development of logical and analytical thinking. Vocabulary development will concentrate on broadening the student's reading recognition vocabulary.

HONORS ENGLISH 11*

PREREQUISITE-ENGLISH 9,10

CREDIT 1.0

GRADES 11

#352

Concentration is on American Literature, speech, expository writing, and vocabulary. It will consist of an intensive survey of the development and progress of American Literature. Emphasis is on the major themes, which have occupied the writers of that literature. The organization, structure, research and delivery of the persuasive speech will also be stressed. Writing will deal with the structure of the expository essay, the use of concrete examples to effectively support opinions, and a study of the stylistic techniques, which would facilitate competency in that particular mode of expression. A concentrated study of vocabulary will also be emphasized.

ENGLISH 12

PREREQUISITE-ENGLISH 9,10,11

CREDIT 1.0

GRADES 12

#303

Focus will be on the literary backgrounds of British Literature from the days of the Anglo-Saxons to the 17th Century. Basic to the course is a study of the various literary genres. Considerable stress will be placed on development of communication skills in written form. Emphasis is placed on the student's written analysis of the works studied through class discussion of works read and tests, quizzes, thematic essays, and book reflections. The course also includes developmental skills in grammar and vocabulary and required research.

HONORS ENGLISH 12*

PREREQUISITE-ENGLISH 9,10,11

CREDIT 1.0

GRADES 12

#353

Focus will be on the literary backgrounds of British Literature from the days of the Anglo-Saxons to the 17th Century and will provide students with a comprehensive background for the study of contemporary literature. Emphasis is placed on the student's written analysis of the works studied through class discussion of works read and tests, quizzes, thematic essays, and book reflections. Critical thinking, listening and research skills are incorporated. Vocabulary development is pursued through the context of the works in progress along with the needed literary terms and concepts for the study of literature. **A research paper is required. (Possible Dual Enrollment Credit)**

AP ENGLISH LITERATURE AND COMPOSITION

PREREQUISITE-ENGLISH 9,10,11

CREDIT 1.0

GRADES 11,12

#395

This course prepares students to write for academic discourse. The course teaches students to think critically, write in a variety of genres for various audiences, analyze language, and evaluate the craft of writing both stylistically and rhetorically. An AP exam must be taken in May for the purpose of exempting from a college course at the student's expense. Students may earn up to 6 college credits. **A recommendation from the student's 11th grade English teacher is required. (Possible Dual Enrollment Credit)**

AP LANGUAGE AND COMPOSITION

PREREQUISITE – ENGLISH 9,10

GRADES 11,12

CREDIT 1.0

#396

The AP English Language and Composition course aligns to an introductory college- level rhetoric and writing curriculum, which requires students to develop evidence-based analytic and argumentative essays that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments. Throughout the course, students develop a personal style by making appropriate grammatical choices. Additionally, students read and analyze the rhetorical elements and their effects in non-fiction texts, including graphic images as forms of text, from many disciplines and historical places.

(A recommendation from an English teacher is required)

COLLEGE AND CAREER LITERACY

PREREQUISITE-ENGLISH 9,10

GRADES 11

CREDIT 1.0

#397

This course will allow students to have the opportunity to select a career or career-mission to demonstrate their understanding of the ELA and College and Career Readiness standards addressed in the course. Through the use of BIE PBL Gold standard diagram, students will sequence through the design steps of: Challenging Problem or Question, Sustained Inquire, Authenticity, Student Voice & Choice, Reflection, Critique & Revision and Public Product. The course will culminate with a website designed to showcase the learning and a potential on-site visitation component with a professional opportunity beyond the classroom. An underlining component of the visitation component is a professional opportunity beyond the classroom. An underlining component of the course will be the design of a student blog responding to self-selected texts from a course list of suggest readings.

CREATIVE WRITING

PREREQUISITE-NONE

GRADES 9, 10, 11, 12

CREDIT .5

#361

In this writing workshop course, students will develop creative writing skills by developing short stories, poetry, one-act plays, etc. Emphasis will be on the writing process, as well as the written product. Students who wish to become involved in a writing project will find this course useful and instructive.

MYTHOLOGY

PREREQUISITE-NONE

GRADES 9, 10, 11, 12

CREDIT .5

#390

This course is designed for both the general and the academic student. The course will offer reading in World Mythologies but will focus on the Mythologies of Greece and Rome.

SPEECH

PREREQUISITE-NONE

GRADE 11,12

CREDIT .5

#363

Speech is designed to improve students' speaking and listening skills through a study of basic formal and informal speech situations. It will, therefore, consist of a study of the communication process and its importance for success in all occupations. Speech games stressing that process will be used to give students a unique awareness of the various elements involved in speaking and listening and will also be used to overcome students' initial inhibitions typical of first speaking-listening encounters. Effective characteristics and techniques for the preparation and delivery of any type of speech will be studied. Instruction, research, preparation, delivery, and evaluation of impromptu speeches, informative speeches, demonstration speeches, and persuasive speeches will be a major focus of the course.
(Possible Dual Enrollment Credit)

COMPOSITION I

PREREQUISITE - NONE
CREDIT .5

GRADE 9
#365

This is a 9-week elective course designed for 9th grade students to establish a sound writing foundation upon entering high school. Students write for different purposes and audiences with a specific focus on informative/explanatory and argumentative texts. Students must organize ideas, concepts, and information to make important connections. The writing process is practiced including multiple drafts of essays while students work to develop tone and style. This course does not replace 9th or 10th grade English but is meant to refine skills needed to improve written communication for 10-12th grade courses.

WOMEN IN LITERATURE

PREREQUISITE- NONE
CREDIT .5

GRADES 11,12
#370

The focus in this quarter course will be a thematic study of female roles in literature. The course is not limited by time period, nor is it constrained by genre. We will read literature by and about fascinating women, from Emily Dickinson to Maya Angelou to Laurie Halse Anderson. Their power of words will be analyzed, as will their literary, cultural and social context. The magnitude of change in women's lives during the last two centuries will determine the range of subjects that we will investigate: coming of age, the feminist and leader, the wife, the mother, and the spiral into mental illness.

PUBLISHING & PRESENTATION

PREREQUISITE-NONE
CREDIT 1.0

GRADE 10,11,12
#226

This course focuses on learning the tools required to create professional publications. Students learn writing skills, photography, graphic design and page layouts as well as database organization, marketing tools and office skills. The course designs and publishes both the Troy Yearbook and school newspaper.

SOCIAL STUDIES DEPARTMENT

**For placement in Honors level courses, it is strongly recommended that a student have earned an 87% or higher in the prior core subject (i.e. 87% in American History III or Honors American History III to be placed in Honors American History IV)*

AMERICAN HISTORY III-PROGRESSIVE ERA

PREREQUISITE-NONE
CREDIT 1.0

GRADE 9
#501

This course will cover the period 1860 to 1930 chronologically. Assignments will be made from the text, The Americans, as well as supplements from other historical texts and documents. In addition, several books will be read to gain insight into a particular period of U.S. History. These are: All Quiet on the Western Front, and Freedom Road. Grades will be determined by tests, quizzes, reports and in-class performance, including current events.

HONORS AMERICAN HISTORY III-PROGRESSIVE ERA*

PREREQUISITE-TEACHER RECOMMENDATION
CREDIT 1.0

GRADE 9
#503

Curriculum design will be similar to that of American History III (#501). Students will be expected to work at a more accelerated pace. Topics will be covered in more detail and students will be expected to analyze information on a more abstract level of thinking. This course has an emphasis on writing and will require a final project for class presentation. The final project is equivalent to the final exam.

AMERICAN HISTORY IV-MODERN ERA

PREREQUISITE-AMERICAN HISTORY III

GRADE 10

CREDIT 1.0

#502

This course will cover the period from 1932 to the present chronologically. Assignments will be made from the textbooks as well as from various current articles. In addition, at least one of the following books will be read to gain insight into a particular period of U.S. History. These are: Grapes of Wrath, Hiroshima, Night, and Black Like Me. Grades will be determined by tests, quizzes, reports, class presentations, in-class performance, and a final exam that demonstrates the student's understanding of this particular period in American History.

HONORS AMERICAN HISTORY IV-MODERN ERA*

PREREQUISITE-HONORS AMERICAN HISTORY III

GRADE 10

CREDIT 1.0

#504

Curriculum design will be similar to that of American History IV. Students will be expected to work at a more accelerated pace. Topics will be covered in more detail and students will be expected to analyze information on a more abstract level of thinking. This course has an emphasis on reading historical novels, doing several writing projects and will require a final project for class presentation, as well as a final exam.

US CIVICS & GOVERNMENT

PREREQUISITE-NONE

GRADES 11, 12

CREDIT 1.0

#540

This course investigates the organization of American government and includes an overview of the historical significance and provisions of the Constitution; the Bill of Rights; Congress; the Supreme Court; the Presidency; political parties and interest groups. The objective of the course is to lay the proper foundation for informed citizenship and participation in the political process through debate, class presentations and in-depth classroom discussion.

HONORS US CIVICS & GOVERNMENT*

PREREQUISITE- HONORS AMERICAN HISTORY III, IV

GRADES 11, 12

CREDIT 1.0

#541

The purpose of this course is to introduce students to both the theory and practice of American government. Students will learn about the formation of governments as a solution to collective action problems, the history and evolution of American political processes, institutions and public policies from the founding period to the present, including the importance of federalism, culture, public opinion, parties, interest groups, elections and the media, the nature and quality of American democracy, political challenges, dilemmas, and reform. There will be frequent use of interactive classroom technologies, multimedia presentations, and political debates to encourage independent thinking, critical analysis and lively discussions. Active class participation and discussion is required. *(If you have not previously had two honor social studies classes, you must have an A average in two previous social studies classes and a teacher recommendation.)*

WORLD CULTURES

PREREQUISITE-NONE

GRADES 11, 12

CREDIT 1.0

#521

The purpose of this course is to study different areas of the world and focus upon historical and present-day culture and geography, family life and structure, social organizations, attitude on education, religious beliefs and institutions, economic life, political trends, and the intellectual and artistic accomplishments of men and women within the culture. The course will cover the Middle East, Africa, China (East Asia), Latin America and Canada. The study of each of the cultures will be supplemented by the development of reading, writing, research, geography, critical thinking, technological use and presentation skills. Upon completion of this course, students shall be able to: Have a working understanding of various political, economic, social and religious institutions; understand the five themes of geography and their impact on political, economic, social and cultural organizations; analyze social consequences of environmental, economic, political and cultural events.

HONORS WORLD CULTURES*

PREREQUISITE- HONORS AMERICAN HISTORY III, IV & US CIVICS & GOV'T
CREDIT 1.0

GRADES 11,12
#522

The purpose of this course is to analyze and discuss different areas of the world and focus upon historical and present-day culture and geography, family life and structure, social organizations, attitude on education, religious beliefs and institutions, economic life, political trends and the intellectual and artistic accomplishments of men and women within the culture. The course will cover the Middle East, Africa, China (Far East), Latin America and Canada. The study of each of the cultures will be supplemented by the development of reading, writing, research, geography, critical analysis, technological use and presentation skills. Upon completion of this course, students will have an understanding of the common elements of culture and appreciation of cultural diversity; understanding of political principles and systems to encourage competent civic participation in the democratic society; understanding of the impact of science and technology on individuals and societies; reflective attitudes toward personal values, the values of others and the cultural values evident in students' own and other societies; understanding and appreciation of the interdependence of peoples and nations in a global society; understanding of how human beings view themselves and others, individually and in groups.

HONORS ECONOMICS*

PREREQUISITE: RECOMMENDATION FROM CIVICS & GOVERNMENT TEACHER
CREDIT 1.0

GRADES 11,12
#542

This course examines both microeconomic and macroeconomic concepts and problems. This course includes learning the basic principles of microeconomics or the study of markets, externalities, government intervention, taxation, and individual markets such as agriculture, health care and labor. Students will also learn principles of macroeconomics or the study of national income and its fluctuations, economic role of government, role of commercial banks and the Federal Reserve System, monetary economics, and an introduction to international economics. Students will develop the analytical capability to determine how aggregate demand and supply are influenced by the public and private sectors as measured by changes in employment, inflation, national output, and international trade. Students will practice applications in agricultural economics, legal prices, labor market issues, advertising, technological change, pollution and the environment, public goods, international trade, and alternative economic systems. The course will also focus on the role played by federal, state, and local governments in improving market conditions and outcomes. Active class participation and discussion is required. **(Possible Dual Enrollment Credit)**

AP UNITED STATES GOVERNMENT AND POLITICS

PREREQUISITE: MUST HAVE A 94% OR HIGHER IN TWO PRIOR AMERICAN HISTORY COURSES

GRADES 11,12
#543

CREDIT 1.0

AP United States Government and Politics introduces students to key political ideas, institutions, policies, interactions, roles, and behaviors that characterize the political culture of the United States. The course examines politically significant concepts and themes, through which students learn to apply disciplinary reasoning, assess causes and consequences of political events, and interpret data to develop evidence-based arguments. Students should be able to read a college-level textbook and write grammatically correct and complete sentences.

PSYCHOLOGY

PREREQUISITE-NONE
CREDIT 1.0

GRADES 11,12
#561

This course is an introduction to the science of human behavior and mental processes. Students examine the relationship between the nervous system and behavior, learning, perception, language, personality, intelligence and psychopathology. **(Possible Dual Enrollment Credit)**

SOCIOLOGY

PREREQUISITE-NONE

GRADES 11,12

CREDIT 1.0

#526

Introduction to the theories, principles, concepts, and major research in sociology. Study includes society's impact on human behavior and consciousness as well as the ways in which individuals and groups affect cultures and their social structures. A comparison of different cultures and sub-cultures provides an understanding of the relativity and universality of social values, norms, and beliefs. 3 credits (lecture) **(Possible Dual Enrollment Credit)**

WORLD WAR II

PREREQUISITE-American History IV- Modern Era

GRADES 10,11,12

CREDIT .5

#511

This course will cover the causes, events during, and effects of World War II with a focus on military objectives in the European and Pacific theaters and the Holocaust. Assignments will include quizzes, written responses, mapwork, film review, and a final project for presentation.

MATHEMATICS

KEYSTONE ALGEBRA I MODULE 1

PREREQUISITE-NONE

GRADE 9

CREDIT 1.0

#867

This course will be scheduled for students who completed the Integrated Math 8 program in grade 8. This course will further develop the skills learned in Math 8 and extend these skills through the Module 1 Keystone Algebra I curriculum. The students must take Keystone Algebra I Module 2 the semester after they take this class.

KEYSTONE ALGEBRA I MODULE 2

PREREQUISITE-NONE

GRADE 9

CREDIT 1.0

#868

This course will be scheduled for students who completed Keystone Algebra I Module 1. This course will further develop the skills learned in Keystone Algebra I Module 1 and extend these skills through the Module 2 Keystone Algebra I curriculum. The students will take the Algebra I Keystone Exam at the end of this course.

KEYSTONE ALGEBRA I

PREREQUISITE-NONE

GRADE 9

CREDIT 1.0

#861

This course will be scheduled for those students who have not scored proficient on their Keystone Algebra 1 exam or enter the district without Algebra I credit. The topics in Algebra to be studied are: writing and solving equations, linear algebra, linear inequalities, exponent and radical properties, systems of equations and inequalities, polynomials, probability, and data. The topics learned are applied to real world problems to develop higher level thinking skills. The students will take the Algebra I Keystone Exam at the end of this course.

GEOMETRY

PREREQUISITE-ALGEBRA I
CREDIT 1.0

GRADES 9, 10, 11, 12
#870

This is a course of basic geometry in which students will deepen their understanding of two and three dimensional objects and their properties. The study of geometry develops logical thinking and problem solving skills. Topics which are covered include 1) points, lines, angles, and planes 2) polygons with emphasis on quadrilaterals, triangles and right triangles 3) circles and 4) basic introduction to trigonometry. Geometry is a required math course for graduation. Students must successfully complete Algebra I to take Geometry. This course is not geared for those students intending to continue with the study of higher-level math classes.

HONORS GEOMETRY

PREREQUISITE-ALGEBRA I
CREDIT 1.0

#871

This course is for students intending to continue their study of higher-level mathematics. (**Algebra Two and beyond**) It will cover the same material as outlined in the geometry course, but at a more rapid rate and more in-depth. Additional material to be presented would include coordinate geometry and the writing of two-column deductive proofs.

ALGEBRA II

PREREQUISITE-ALGEBRA I, HONORS GEOMETRY
CREDIT 1.0

#862

Algebra II is a sequential course that follows Algebra I and Academic Geometry and is designed for those students intending to continue with the study of higher-level math courses. Any student who intends to go to college to study a math or science related field needs to take Algebra II. The course builds upon the basic concepts of Algebra I, and then expands to include a careful study of the complex number system, non-linear expressions and equations, patterns, applications of functions and relations, and graphing.

PRE-CALCULUS

PREREQUISITE-ALGEBRA I, II, HONORS GEOMETRY
CREDIT 1.0

#880

Academic college-bound student should take this course, unless they are going into a field which is totally unrelated to math and science. The course begins with an in-depth review of concepts from Algebra II, then a detailed study of trigonometric functions with applications, trig graphs, and trig identities. Also included in this course is the study of conic sections and sequences and series.

INTRO TO STATISTICS & PROBABILITY*

PREREQUISITE-HONORS GEOMETRY, ALGEBRA II
CREDIT 1.0

#884

This is a basic course in statistics and probability that is suitable for a variety of students. All four of the major components of statistics will be studied. They include the collection, analysis, interpretation, and presentation of data. The course will culminate with examination of the methods of statistical inference. The course is appropriate for any student who plans to enter such fields as economics, business, education, psychology, sociology, biology, engineering or medicine. Successful completion of this course should prove to be adequate preparation for the usual college courses offered in the above fields.

AP STATISTICS**

PREREQUISITE-INTRO TO STATS

GRADE 11,12

CREDIT 1.0

#887

This course includes the study of all four major statistical concepts: collecting, analyzing, interpreting and presenting data. The methods of inferential statistics will be emphasized. The outline of content is dictated by the AP curriculum, and it will be altered when necessary. At this time, the AP exam requires the use of a TI-83 calculator so the content of this course will be facilitated accordingly. An AP exam, at the student's expense, must be taken in May for the purpose of exempting from a college course. **(Possible Dual Enrollment)**

CALCULUS*

PREREQUISITE-PRE-CALCULUS

CREDIT 1.0

#885

Every student who plans to attend college with a concentration in mathematics, science, or a related field should take Calculus I. The course consists of the study of functions, limits, differentiation and integration. Derivatives and their applications to maximum, minimum, and inflection points are studied in detail. All of these are applied to problems that exist in the real world. For example, derivatives will be used to calculate velocity, acceleration, and position.

AP CALCULUS AB**

PREREQUISITE-CALCULUS I

CREDIT 1.0

GRADE 11,12

#886

This course presents Calculus from the graphical, numerical and symbolic points of view. The course includes a review of derivatives and their applications. A detailed study of integrals and their applications will be presented. This course is specifically designed for placement of a student into a college curriculum. An AP exam, at the student's expense, must be taken in May for the purpose of exempting from a college course. **(Possible Dual Enrollment)**

BUSINESS CALCULATIONS

PREREQUISITES – NONE

CREDIT 1.0

#810

This course is for the student electing business in a community college, business school, or the world of work. In this course students will learn how math is used in common business problems as well as every day, personal situations. Students will study both math and important vocabulary that is commonly used in business today. This course is counted as a math credit toward graduation.

MATHEMATICAL REASONING AND APPLICATIONS

PREREQUISITE-ALGEBRA II

CREDIT 1.0

#841

This course is designed to cover the Pennsylvania standards including: mathematical reasoning, numbers and operations, algebra, measurement, data analysis and probability. It is a course that should prove valuable to the student who is planning to attend college in a **non-mathematical** field. **Students who have taken Calculus or received an 80% or higher in Pre-Calculus CANNOT take this course.** (Former College Prep Math course) **(Possible Dual Enrollment Credit)**

ACCOUNTING I

PREREQUISITE-ALGEBRA I, GEOMETRY

CREDIT 1.0

#211

Accounting I develops an understanding of the accounting cycle from the recording of opening entries, to the preparation of financial statements. Students will develop a sense of accuracy, neatness, and regular attendance. Many of the principles and practices of accounting are of value in the daily lives of everyone. *This may be used as a Math credit if a student has passed Algebra I and Geometry.*

SCIENCE DEPARTMENT

HONORS KEYSTONE BIOLOGY A/B

PREREQUISITE-NONE
CREDIT 2

GRADE 9
#951/#955

This course is to prepare students for the Keystone Biology Exam and prepare students that plan on pursuing a career in a STEM related field. The topics explored in this course are basic biological principal, chemical basis for life , biogenetics, homeostasis and transport , cell growth and reproduction, genetics, theory of evolution, and ecology. Numerous laboratory exercises will enhance the understanding of these biological concepts and how they apply to everyday life. (Life Science)

KEYSTONE BIOLOGY A/B

PREREQUISITE-NONE
CREDIT 2

GRADE 9
#950/#956

This course requires field work and class participation. Ecosystems, populations, succession, interactions among organisms and natural cycles are topics that will be explored. Laboratory assignments and projects may be conducted throughout the course. (Life Science)

SCIENCE IN SOCIETY

PREREQUISITE-NONE
CREDIT 1.0

GRADES 10,11,12
#900

This course is for students who need to have a credit in physical science. This is a course in applied science that relates the technology of our society to the scientific principles that underlie it. Concepts of force, work, rate, resistance, energy and power will form the core of this course. Each unit builds on the earlier ones and blends the accumulated knowledge into a continuous entity. (Physical Science)

***This is a low-level physics course. If you have already passed Physics I, you cannot register for this course.**

HONORS CHEMISTRY

PREREQUISITE-ALGEBRA (80% RECOMMENDED)
CREDIT 1.0

GRADES 10,11,12
#921

This course is geared to students who consistently maintain an "A" or "B" average in their science and math courses. Also, any student entering into science, math, nursing, medical fields, or college-level agriculture courses should seriously consider this course. There will be numerous laboratory exercises to be performed with written reports for each one. These lab reports will be used to enhance understanding of chemical concepts. For further information, contact your science teacher. **This course should not be taken if you have taken General Chemistry. (Physical Science)**

CHEMISTRY

PREREQUISITE-ALGEBRA I
CREDIT 1.0

GRADES 10,11,12
#920

This course is for students who need or have an interest in receiving a credit in physical science. This science-technology-society course studies the make-up and behavior of the major resource areas of water, metals and petroleum in terms of their use, both ecologically and geopolitically, in real time. The labs for this course involve everyday items and practical applications. This could include students planning on college in a non-science oriented field or general education majors. It does not qualify for the Chemistry II prerequisite. This course replaces Environmental Science #922. **This course should not be taken if you have taken Academic Chemistry. (Physical Science)**

BIO-AG SCIENCE

PREREQUISITE-NONE

CREDIT 1.0

GRADES 10,11,12

#700

Bio-Ag is a science-technology-society course which also includes the exploration of career potentials. This course incorporates the history, development, and ecological effects of agriculture, drawing upon all four major sciences with an emphasis on plant science. The activities for this course involve societal impact of agriculture and horticultural/landscaping projects for the school environment. It does not qualify for any science prerequisites. (Life Science)

ENVIRONMENTAL ECOLOGY AND ENTOMOLOGY

PREREQUISITE-PASS GENERAL/HONORS BIOLOGY

CREDIT 1.0

GRADES 10,11,12

#928

This course will allow students interested in pursuing a career in the ecology, environmental or entomology fields a practical, hands-on opportunity to work on site and in the lab deepening their knowledge. Students will have a first-hand look at what it is like to collect, analyze, present and determine long term implications of specific interaction in ecological settings. Informed consent must be turned in before starting the course. **Proficiency on the Biology Keystone Exam is strongly recommended prior to taking the course.** (Replaces Earth Science/Physical Science)

CHEMISTRY II*

PREREQUISITE-ACADEMIC CHEMISTRY, HONORS BIOLOGY

CREDIT 1.0

GRADES 11,12

#944

Chemistry II is designed to be a semester course, which will confirm, expand and deepen the student's knowledge of chemistry. It is our intention that each student will be able to successfully master a college chemistry course after completing this course. The course is written in behavioral terms so that the method of instruction may vary from large group instruction to individual instruction. **Algebra II is highly recommended.** (Physical Science)

AP CHEMISTRY **

PREREQUISITE-ACADEMIC CHEMISTRY I, CHEMISTRY II, ALGEBRA II

CREDIT 1.0

GRADES 11,12

#943

The AP chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first college year. This course differs from Chemistry II, in that it emphasizes chemical calculations, mathematical formulation of chemical principles, and extensive laboratory work. An AP exam, at the student's expense, must be taken in May for the purpose of exempting from a college course. Students can earn up to 6 college credits at participating institutions. (Physical Science) **(Possible Dual Enrollment Credit)**

ANATOMY & PHYSIOLOGY I *

PREREQUISITE – ACADEMIC BIOLOGY (80%), ACADEMIC CHEMISTRY I (80%)

CREDIT 1.0

GRADES 11,12

#940

It is the intent of this course to build an understanding and working knowledge of the structural and functional levels of the body, cellular physiology and anatomy, cellular metabolism, tissues, and the integument system. This course is designed for the science-oriented student who plans to enter college and major in one of the science-oriented occupations that require a strong background in sciences such as nursing, medical assistants, laboratory technologists, physician's assistants, dental hygienists, physical therapists, EMT, etc. There will be numerous laboratory exercises to be performed that are correlated to the material being studied. (Life Science) **(Possible Dual Enrollment Credit)**

ANATOMY & PHYSIOLOGY II*

PREREQUISITE-ACADEMIC BIOLOGY, ACADEMIC CHEMISTRY I, ANATOMY & PHYSIOLOGY I GRADES 11,12
CREDIT 1.0 #945

It is the intent of this course to provide an understanding of the skeletal system, the muscular system, the nervous system and how the body maintains itself on a day-to-day basis through the mechanisms of circulation, respiration, digestion, urinary functions and buffer systems. Anatomy and physiology of the reproductive systems and the development of a human will also be studied. This anatomy and physiology course is designed for the science-oriented student going into an occupation that requires a strong background in sciences such as nursing, medical assistants, laboratory technologists, physician's assistants, dental hygienists, physical therapists, EMT, etc. There will be numerous laboratory exercises to be performed that are correlated to the material being studied. (Life Science)
(Possible Dual Enrollment Credit)

GENETICS*

PREREQUISITE-HONORS BIOLOGY I, HONORS CHEMISTRY I GRADES 11,12
CREDIT 1.0 #947

Genetics is a field that has exploded over the last decade. This course is designed to introduce students to the foundations of genetics and the basic principles of heredity. Emphasis will be placed on chemistry of DNA, replication, transcription and translation. (Life Science)

MICROBIOLOGY*

PREREQUISITE-ACADEMIC BIOLOGY I, ACADEMIC CHEMISTRY I GRADES 11,12
CREDIT 1.0 #946

This is a course designed to introduce students to the basic concepts of microbiology and the spread of disease. Students will learn the structure and function of microscopic organisms. Adaptations of microorganisms will be discussed, as well as the current epidemic of resistant bacteria. Emphasis will be placed on laboratory work and students will be expected to master aseptic transfers and techniques. (Life Science)

PHYSICS I

PREREQUISITE-ALGEBRA I, GEOMETRY GRADES 10, 11,12
CREDIT 1.0 #970

Physics is the study of physical processes in nature, focusing on changes in systems and how physical concepts (variables) are related to cause these changes. These systems can range from the very small (atomic phenomena) to the very large (celestial bodies) and many things in between. The first semester course covers vector mathematics, kinematics (motion), static and dynamic forces, work and energy, linear momentum and impulse, circular motion, static and dynamic torques, angular momentum and simple and complex machines. Concepts will be presented through lecture, demonstration and lab practicum, with assessments for each. (Physical Science)

PHYSICS II*

PREREQUISITE-PHYSICS I GRADES 11,12
CREDIT 1.0 #971

Physics is the study of physical processes in nature, focusing on changes in systems and how physical concepts (variables) are related to cause these changes. These systems can range from the very small (atomic phenomena) to the very large (celestial bodies) and many things in between. The second semester course covers fluid mechanics, gas laws, thermodynamics, wave mechanics, sound, electromagnetic radiation, properties of EM radiation, optics, electricity (static and DC circuitry), electromagnetism (including AC circuitry), nuclear physics and modern physics. Concepts will be presented through lecture, demonstration and lab practicum, with assessments for each. (Physical Science) (Possible Dual Enrollment Credit)

PHYSICS III*

PREREQUISITE-PHYSICS I, PHYSICS II
CREDIT 1.0

GRADES 10,11,12
#975

Physics is the study of physical processes in nature, focusing on changes in systems and how physical concepts(variables) are related to cause these changes. These systems can range from the very small (atomic phenomena) to the very large (celestial bodies) and many things in between. The third semester course is designed to fill in any topics missed in Physics I or II and prepare students for the AP Physics I and Physics II tests. Concepts will be presented through lecture, demonstration and lab practicum, with assessments for each. (physical Science)

BUSINESS DEPARTMENT

INTRODUCTION TO BUSINESS

PREREQUISITE-NONE
CREDIT 1.0

GRADES 9,10,11,12
#203

This course will introduce the student to the world of business and help prepare them for the economic roles of consumer, worker and citizen. This course will also serve as a background for other business courses they may take in high school and in college. It will also assist them with consumer decision making, prepare students for future employment, and help them effectively perform responsibly as a citizen. Starting Your Own Business, Famous Entrepreneur projects and a checkbook simulation are some of the projects presented in this class.

DATA APPLICATIONS: EXCEL/SPREADSHEET

PREREQUISITE – NONE
CREDIT .5

GRADES 9,10,11,12
#227

In this nine-week elective course, students will develop skills in spreadsheet and database software applications. Using Microsoft Excel, students will have the opportunity to learn how to use software to create basic spreadsheets, use formulas and functions, and design graphs. Using Microsoft Access, students will learn the basics of designing a database for mailing contact lists and inventory lists. The emphasis of this course is on efficient and accurate production of documents.

DYNAMIC PRESENTATION APPLICATIONS

PREREQUISITE – NONE
CREDIT – 0.5

GRADES 9,10,11,12
#229

In this nine-week elective course, students will develop skills in electronic presentation applications. Using Microsoft PowerPoint, Prezi.com, Google Presentations, Picasa and other presentation-assisted software applications, students will learn how to design, animate, illustrate, and produce sophisticated electronic business, class, research, statistical and graphic presentations for large and small audiences. Emphasis in this class will be on quality and accurate student-produced electronic presentations.

SALES & MARKETING

PREREQUISITE-INTRO TO BUSINESS
CREDIT – 0.5

GRADES 10,11,12
#235

In this semester course, students will be instructed on the marketing cycle—involving product planning, research, development, pricing, distribution, advertising, and selling. Students will gain basic marketing principles and practices at the retail level. In addition, students will learn how to market a product using desktop publishing and presentation software. *Projects will be presented to the entire class.*

ACCOUNTING I

PREREQUISITE-ALGEBRA I, GEOMETRY
CREDIT 1.0

GRADES 10,11,12
#211

Accounting is used in both personal finances and the operation of a business. This course is designed to provide students with an introduction of the principles, practices and procedures of accounting. The accounting procedures presented will prepare students to manage their personal finances and gain accounting skills for both employment and college. All students, regardless of their career choice, can benefit from accounting instruction since it is an integral part of everyday life. *This may be used as a Math credit if a student has passed Algebra I and Geometry.*

ACCOUNTING II

PREREQUISITE-ACCOUNTING I
CREDIT 1.0

GRADES 11,12
#212

The advanced course in accounting continues with the principles and practices learned in Accounting I. Ownership forms such as sole-proprietorship, partnership, and corporation are explored. This class also emphasizes a departmentalized merchandising business and manufacturing business. College-bound students, regardless of their major, can benefit from accounting instruction since numerous majors such as Management, Marketing and Finance requires knowledge of Accounting. **(Possible Dual Enrollment Credit)**

BUSINESS CALCULATIONS

PREREQUISITES-ALGEBRA 1, GEOMETRY
CREDIT 1.0

GRADES 10,11,12
#810

This course is for the student electing business in a community college, business school, or the world of work. In this course students will learn how math is used in common business problems as well as every day, personal situations. Students will study both math and important vocabulary that is commonly used in business today.

BUSINESS LAW

PREREQUISITE-NONE
CREDIT 1.0

GRADES 10,11,12
#250

This course maintains a fundamental emphasis on business law, while introducing personal law topics that interest students. Students will be given the opportunity to learn about contracts, ethics, employment law, credit, banking, partnerships, bankruptcy, and more. This is a must have class for students' personal lives and those who wish to pursue a business-related college degree.

WEB DESIGN

PREREQUISITE -NONE
CREDIT - 1.0

GRADES 11,12
#894

This is a one-semester course in which students will develop IT skills in web design and production, using Macromedia Studio MX web tools. This is a project-based, tutorial course, requiring student independence, responsibility, and maturity. The key skills stressed will be design, communication, and project management. *(This course is an introductory coverage of the Internet and online Web Technologies. Skills learned include how to plan, create and maintain static Web pages)* **(Possible Dual Enrollment Credit)**

LANGUAGE DEPARTMENT

SPANISH I

PREREQUISITE-NONE

CREDIT 1.0

#421

Spanish I deals with intensive drills in pronunciation, oral comprehension and speaking the Spanish language. The course is to help students develop linguistic proficiency and cultural appreciation. Material will be in audio, video, and printed formats. Each student hopefully will attain an acceptable degree of proficiency in the four skills of listening, speaking, reading and writing within a minimum period of time. Total classroom participation is expected.

*** An 80% in prior year's English is recommended.**

SPANISH II

PREREQUISITE-SPANISH I **TEACHER'S PERMISSION REQUIRED**

CREDIT 1.0

#422

This will be a continuation of the Spanish I course procedures and methods. It will involve a more comprehensive study of the Spanish language with a great emphasis on understanding grammar, especially verbs. Spanish II involves a deeper study of the Spanish culture along with strong emphasis on speaking and listening comprehension. Total classroom participation is expected.

SPANISH III

PREREQUISITE-SPANISH I, II **TEACHER'S PERMISSION REQUIRED**

CREDIT 1.0

GRADES 11,12

#423

This course will involve the more complex structure of basic Spanish and expands the cultural themes of the introductory and Spanish II courses. Students at this level should acquire a command of the key vocabulary and structures necessary for personal communication as well as an appreciation of the Spanish-speaking world. More independent reading, grammar review, and further practice in oral communication and speaking will be expected. **(Possible Dual Enrollment Credit)**

SPANISH IV*

PREREQUISITE-SPANISH I, II, III **TEACHER'S SIGNATURE REQUIRED**

GRADES 11,12

CREDIT 1.0

#424

Spanish IV is an honors course that stresses vocabulary acquisition; grammar study; development of more advanced reading skills and gives the student an introduction to Spanish and Latin American art and literature. Conversation in Spanish is expected for the majority of the course. **(Possible Dual Enrollment Credit)**

ART DEPARTMENT

CERAMICS I

PREREQUISITE-NONE

CREDIT .5

GRADES 9,10,11,12

#141

This course offers the student an introduction to hand built pottery. Most of the course is devoted to the hand building techniques such as coil, pinch and slab. The remainder of the time will be spent glazing the projects. **A fee of \$10 will be required for the purchase of materials.**

CERAMICS II

PREREQUISITE-CERAMICS I

CREDIT .5

#142

This course offers further exploration in clay on an advanced level. **A fee of \$10 will be required for the purchase of materials.** A 90% in Ceramics I is recommended

DRAWING AND PAINTING

PREREQUISITE-NONE

CREDIT .5

#122

This course includes primarily pencil drawing and improving basic drawing skills, specifically in a realistic style. If time allows, watercolor painting will be introduced.

DIGITAL ART

PREREQUISITE-NONE

CREDIT .5

#131

This class will explore the process of creating works of art which are technology-dependent. The primary focus will be on photo-manipulation using Adobe Photoshop. Students will have the opportunity to utilize digital cameras and incorporate their own photographic images into their artwork. Throughout the course, students will be required to complete a variety of assignments ranging from self-portraits to surrealistic compositions.

FAMILY AND CONSUMER SCIENCE

LIFETIME LEARNING: HUMAN DEVELOPMENT, CAREER EXPLORATION & PERSONAL FINANCE

PREREQUISITE-NONE

GRADE 9

CREDIT .5

#605

This required course covers three areas of life-long learning skills: Human Development, Career Exploration and Financial Literacy. While examining development across the lifespan, special emphasis will be placed on understanding the adolescent stage. Students will be given the chance to explore career opportunities and learn strategies for career choice and preparation. An introduction to financial literacy will cover the concepts of earning, spending and borrowing, saving and giving. **GRADUATION REQUIREMENT**

PARENTING AND FAMILY LIFE

PREREQUISITE-NONE

GRADES 9,10,11,12

CREDIT .5

#602

This course will help you develop skills and attitudes needed as a parent and caregiver. It is also appropriate for anyone interested in careers that involve working with children, such as pediatrician, day care worker, foster parent, teacher or child psychologist. Topics covered include understanding family structure, formation, and function; pregnancy and birth; and the physical, mental, social and emotional development of children. If arrangements can be made, on-site observation and participation with children takes place at local day care and/or preschool facility.

THE WORLD OF FOOD

PREREQUISITE-NONE

GRADES 9,10,11,12

CREDIT .5

#611

This beginner's cooking class includes instruction on and application of basic cooking skills to assure proper interpretation of a recipe, proper use of kitchen equipment, accurate measuring techniques, and safety rules. This class also includes building an understanding of making nutritional food choices, understanding the principles of baking, and a study of United States regional foods and foods from other countries. **A \$25 fee is required.**

CONCEPTS IN CLOTHING

PREREQUISITE-NONE

CREDIT .5

GRADES 9,10,11,12

#612

Learn methods of creating garments for careers in fashion merchandising, advertising, fabric care service, or just for fun. A beginning sewer can learn basic sewing skills while the experienced sewer can enhance their skills. In addition to sewing skills, learn about fabric care, expand your creative world and learn to select color, lines and fabrics best suited for your body shape. The teacher purchases all materials needed. **A \$25 fee is required.**

MUSIC DEPARTMENT

MUSIC APPRECIATION

PREREQUISITE-NONE

CREDIT .5

GRADES 9,10,11,12

#11

This is one marking period course taking a cross-curricular approach to the appreciation and experience of all types of music, the different ways music appeals to people, and how music is present in our everyday lives. Students will experience how all subjects, including History, Literature, Visual Art, Mathematics, Science and Language are all present in music through a series of class, group, and individual projects and discussions. Students will create and perform music using composition techniques and instruments such as bucket drums, keyboards and guitars. Students will also have a unique opportunity to experience music through daily listening activities by responding and connecting to music and how it appeals to them.

CONCERT BAND

PREREQUISITE-INSTRUCTION ON A MUSICAL INSTRUMENT AND/OR MIDDLE SCHOOL BAND GRADES 9,10,11,12

CREDIT 1.0

#10

Students who play any standard band instrument are welcome to participate in Concert Band. The main purpose of band is to prepare students to advance their technical and musical skills on their instrument through a large ensemble through a wide variety of literature, with opportunities for individual performances. Pull-out lessons are a part of the required work for band; students must attend a given number for full credit each quarter. Both ensemble and solo literature will be studied in this setting. Attendance at 2-3 concerts is expected each year, with additional performance opportunities for smaller ensembles. Students will have the opportunity to apply/audition for County Band, District Band and Jazz Band. Students are also highly encouraged to participate in the Trojan Marching Band on either an instrument or in the band front (guard/majorettes) but participation is not required. Enrollment in Concert Band is required for instrumentalists' participation in Marching Band (unless a student is in Vo-Tech). Participation in this group requires commitment to all local parades and football games, as well as additional in-school activities as requested. Participation in the August Band Camp is **REQUIRED** for membership in the Trojan Marching Band.

CONCERT CHOIR

PREREQUISITE-NONE

CREDIT 1.0

GRADES 9,10,11,12

#20

Whether you are an experienced singer or have never sung a note in your life, Concert Choir is for you. Concert Choir is a non-auditioned ensemble designed to teach students how to sing. Within the context of a group, students will learn proper mechanics and music literacy skills that will prepare them for a lifetime of good singing. The Concert Choir sings music of all time periods as well as styles that range from Renaissance to Gospel to Pop. This ensemble performs 2-3 public performances per school year and attendance is expected. Members of this ensemble are also eligible to audition for a number of extra-curricular ensembles including: County and District Chorus as well as the Chamber Choir.

MUSIC THEORY

PREREQUISITE: MUST BE ABLE TO READ PITCHED AND RHYTHMIC MUSICAL NOTATION. SIGNATURE REQUIRED FROM MS. ERDMANN TO TAKE THIS COURSE. GRADES 9,10,11,12 CREDIT .5 #15/16

This course covers basic music theory as well as basic music writing, aural skills, harmonic analysis and composition. Students will gain a deeper understanding of the mechanics of written music and how it functions and be able to identify those mechanics in relation to their previous musical study. Course will be paced with some regard to student progress. This course will cover approximately the same material that would be taught in a first-semester Music Theory course in a collegiate music program and is strongly recommended for any student wishing to pursue a career in music, the performing arts or participation in post-graduate musical activities.

INTRODUCTION TO THEATER ARTS

PREREQUISITE-NONE GRADES 9,10,11,12 CREDITS - .5 #18

This course is an exploration of the various arts that make up the creation of a complete theater production: theater literature, scriptwriting, directing, acting, set design, lighting, make-up, costuming, and marketing. This is NOT an auditioned course and all students will be expected to be actively involved in all aspects of theater production. This will be a hands-on course and students will be asked to prepare material for class presentation and critique, attend a formal theater performance, and apply learned skills to assist with the production of the Drama Club's spring musical.

PHYSICAL EDUCATION AND HEALTH DEPARTMENT

HEALTH/PHYSICAL EDUCATION

PREREQUISITE-NONE GRADES 9,10,11,12 CREDIT .5 #77

Physical Education is mandatory for all students 7-12. Units of participation are designed to offer a wide range of activities from team sports, lifetime sports, outdoor adventure, team building, and fitness concepts. The goal of Physical Education at Troy High School is to create physically literate individuals that are knowledgeable, confident, and skilled enough to participate in regular physical activities long after high school days. Regular participation in a wide range of physical activities promotes a lifelong healthy lifestyle. Units of participation will be infused with career and health standards as they pertain to the physical education setting. All units provided in the curriculum are linked to both the Pennsylvania state Standards as well as the National association for Sport and Physical Education (NASPE).

DRIVERS EDUCATION

PREREQUISITE-NONE GRADE 10 CREDIT .25 #90

The classroom phase of **Driver Education** is required of all 10th grade students.

CAREER EDUCATION

SERVICE LEARNING

PREREQUISITE-APPROVAL FROM SERVICE LEARNING INSTRUCTOR REQUIRED
CREDIT .5/1.0

GRADE 11,12
#31

Students wishing to be of service to either the school or the community at large may elect this course. **Students should only elect to be enrolled in service learning if they already have a career interest or potential college major in mind.** The service learning site must relate to potential career goals for further exploration. The number of hours needed for course completion varies on the class period in which the student is assigned and the quarter in which the class is taken. The grade earned in class is mainly determined by the number of hours a student successfully completes compared against the total number of hours that were possible. Other grades will be assigned based on writing assignments /reflections, site supervisor evaluations, and other assigned work. **This course relies heavily on the attendance and any excessive absences will affect overall grade for the marking period.** Students may earn a maximum of one credit per school year unless there are special circumstances approved by the Service Learning Instructor in consultation with other staff. All students must see the Service Learning Instructor for pre- approval and initial paperwork before students are enrolled in the course. **Students who fail the course are not eligible to enroll again at a later time.**

TECHNOLOGY EDUCATION DEPARTMENT

CAD I (*introduction to Mechanical Drawing*)

PREREQUISITE-NONE
CREDIT .5

#760

This is an introductory course to CAD. In this course, students will learn how to start and set up new drawings, insert title blocks, plotting operations, create and save files, opening and closing toolbars in Auto CAD software. The students will also learn: basic commands for geometrical drawing and modifying, two-dimensional multi-view drawing, basic dimensioning techniques and setting up and applying layers. At the completion of the course, students will be proficient in completing professional two-dimensional drawings.

ADVANCED CAD AND ARCHITECTURE (CAD II)

PREREQUISITE- CAD I (recommended grade 80%)
CREDIT .5

#763

In this course students will review two dimensional drawings and move into three dimensional drawings. Students will setup 3D drawings by opening proper toolbars and pallets. They will also learn how to convert a 2D line drawing to a 2D shape that will allow the object to be extruded to a 3D shape, as well as creating 3D objects using Auto CAD commands. Next the students will learn the processes of manipulating the shapes to joining or subtracting of objects. The drawings will progressively require more problem-solving logic. The second portion of this class introduces students to Architecture. The students will learn basic CAD Architect commands such as: drawing walls, applying doors and windows, applying a roof and evaluating different elevations. The students will recreate basic floor plans and elevations for a one-story house.

ENGINEERING WITH CAD APPLICATIONS (CAD III)

PREREQUISITE- CAD I, II (recommended grade 80%)
CREDIT .5

GRADES 10,11,12
#764

In this course, students will review two-dimensional, multi-view drawings, learn new advanced CAD commands, and progress through drawings that require more advanced problem-solving logic. The second portion of this class introduces students to the measuring and drawing of physical objects and the drawing of basic architectural house plans. The last portion of this class introduces students to drawings in 3D and the learning of the Inventor CAD program.

CAD IV

PREREQUISITE-CAD I, II, III (recommended grade 80%)

GRADE 10,11,12

CREDIT .5

#765

This Course will emphasize the understanding of: multi-view drawings, pictorial drawings, working drawings, architectural drawings, and elevation views and composite home plans. Students will be provided with an opportunity to create individual/and or group projects of their own design.

MATERIALS AND PROCESSES I

PREREQUISITE – NONE

CREDIT .5

#776

This is an introductory course to modern manufacturing materials and techniques. Students will be engaged in real world manufacturing processes and issues. The students will learn general shop/machine safety, how to operate specific machines, and characteristics of materials. The students will then analyze how resources impact manufacturing and society. **\$15 FEE**

MATERIALS AND PROCESSES II

PREREQUISITE-MATERIALS AND PROCESSES I

CREDIT .5

#777

This course develops more advanced manufacturing processes and techniques. The students will learn more complex woodworking processes and construction. The students will also be introduced to metal working. The student will demonstrate their learning through hands on experiences and projects. **\$15 FEE**

ELECTRONICS

PREREQUISITE-NONE

CREDIT .5

#770

In this course, students will define the components of a circuit and different types of circuits. The students will understand and measure the different units of measure within electronics, understand the components of a circuit board, and learn how to solder the components. Students will create an electronic project by following directions and applying soldering skills. They will also apply trouble shooting techniques in lab work and projects. This course will be a mixture of lecture, lab work and experiments and projects. **\$15 FEE**

INVENTIONS AND INNOVATIONS

PEREQUISITE-MATERIALS AND PROCESSES I

GRADES 9,10,11,12

CREDIT .5

#771

In this course the students will use their knowledge of concepts from Materials and Processes I and apply them to solve real world problems. This course will be project based and will require problem solving skills. The students will apply the technological design process to make changes to existing concepts or systems and to invent new ideas to solve problems. **\$15 FEE**

MANUFACTURING PROCESSES

PREREQUISITE-MATERIALS AND PROCESSES I

GRADES 9,10,11,12

CREDIT .5

#773

In this course the students will experience a real-world manufacturing operation. The students will begin by forming a corporation. Next, the students will begin brainstorming possible products and create market surveys. Then the students will use the data to choose a product to mass produce and sell. The students will then create a prototype and advertise for their product. When the prototype is complete, they will create a production process flow chart. When all is ready, the production run will start, and the products will be marketed. At the completion of the production run and selling the corporation will be ended. The profits from the course will be used to pay the students lab fee and any surplus will be added to the shop fund. **\$15 FEE**

CONSTRUCTION

PREREQUISITE-MATERIALS AND PROCESS I

CREDIT .5

GRADES 10,11,12

#774

This course is designed to replicate a real-world construction project. The students will go through a construction project from start to finish. They will fill out appropriate applications, prep construction site and build a construction project while following local ordinances and building codes. The projects will vary and will be used for school and/or community needs. We will accept the individual's request for projects as long as the individual pays for materials and delivery if the project is constructed on TASD property. Projects could range from sheds, gazebos, picnic tables, park benches or small construction projects. **\$15 FEE**

ENERGY, POWER AND TRANSPORTATION

PREREQUISITE-NONE

CREDIT .5

GRADES 9,10,11,12

#775

In this course students will explore the energy, power and transportation systems. The course will be focused on current issues faced by society today. The students will study the different forms of energy, as well as how energy is transferred, stored and transported. They will also explore the resources used to generate energy. At the completion of the course, the students will understand the forms of power and have an understanding of different forms of transportation. The course will focus on creating efficient systems. **\$15 FEE**

INTRODUCTION TO GEOGRAPHICAL INFORMATION SYSTEMS AND MAP MAKING (GISM)

PREREQUISITE-NONE

CREDIT .5

GRADES 9,10,11,12

#781

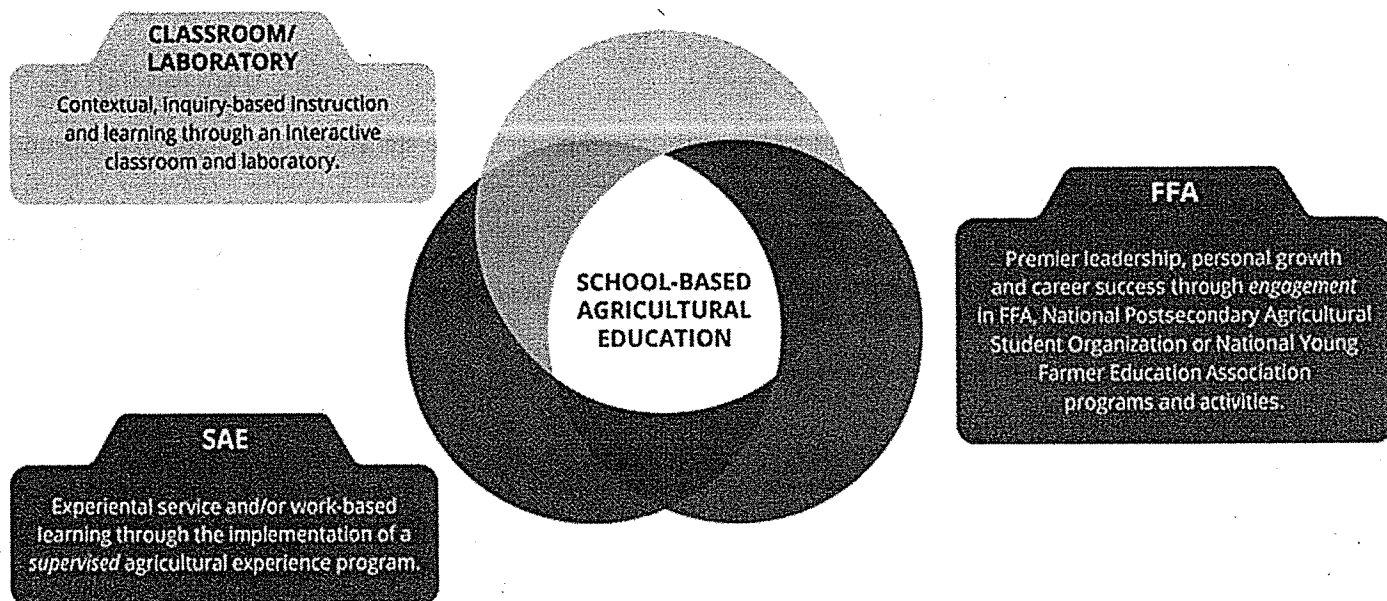
This course introduces the hardware and software components of a Geographic Information System and reviews useful ways to apply GIS to real-world problems. Topics include creation of interactive geographical maps, methods of retrieving data, sources of data, and the nature and characteristics of spatial data and objects. Upon completion, students should be able to identify basic GIS software components, demonstrate typical GIS and mapping operations, and perform map data analysis to make informed choices.

AGRICULTURE EDUCATION DEPARTMENT

The Agricultural Production Program is designed to prepare students for a career or post-secondary study in the field of production agriculture. Agricultural education consists of three key components: classroom instruction, FFA and a supervised agricultural experience. Students following the Agricultural Production Program will be required to complete 1320 hours of coursework which will include each component of agriculture education. Completers of the Agricultural Production Program will be given a certificate of completion and may be given special consideration and/or advanced placement to a post-secondary school as set by the Pennsylvania Department of Education. The program also allows students not completing the Agricultural Production Program, a chance to enroll in the elective quarter courses for personal enrichment.

Keep in mind this is a Career Preparatory Program. If you would like to graduate with the agriculture certification, you must complete at least ½ of the hours.

***FFA membership is affiliate in Pennsylvania. Anyone that takes an agriculture course is automatically an FFA member.**



For a student to be considered a completer of the Agricultural Production Program, they must complete the following sequence of courses and pass the NOCTI Exam during their senior year. Students must also earn at least an 80% in the following courses.

Course Name	Credits	Hours	Recommended Agriculture Program Progression	
<i>SAE I</i>	1	120	9th Grade	• SAE 1
<i>SAE II</i>	1	120		• Introduction to Agriculture
<i>SAE III</i>	1	120		• Wildlife and Resource Management
<i>SAE IV</i>	1	120		• Biology
<i>Introduction to Agriculture</i>	0.5	60	10th Grade	• SAE 2
<i>Animal Studies</i>	0.5	60		• Forestry
<i>Welding</i>	0.5	60		• Food Products and Processing
<i>Power and Machinery</i>	0.5	60	11th Grade	• SAE 3
<i>Wildlife and NRM</i>	0.5	60		• Power and Machinery
<i>Forestry</i>	0.5	60		• Plant and Soil Studies
<i>Plant and Soil</i>	0.5	60		• Business Law
<i>Biotechnology/Food Studies</i>	0.5	60	12th Grade	• SAE 4
<i>Business Law</i>	1	120		• Animal Studies
<i>Biology</i>	2	240		• Biotechnology
				• Welding

INTRODUCTION TO AGRICULTURE EDUCATION

PREREQUISITE-NONE

GRADES 9,10,11,12

CREDIT .5

#713

Introduction to Agricultural Education will cover the purpose, structure, and function of the FFA and agricultural education. Each student will be required to begin a supervised agricultural experience (SAE) project, which will be maintained and improved throughout high school.

FORESTRY

PREREQUISITE-NONE

GRADES 9,10,11,12

CREDIT .5

#705

This course will cover identification of trees, diseases, measurements, lumber uses, growth and insect control. Students will spend some time in wood lot doing measurement work, identification and disease research. Students will be required to have an SAE project in lieu of a final and homework.

FOOD PRODUCTS AND PROCESSING

PREREQUISITE-NONE

GRADES 9,10,11,12

CREDIT .5

#719

Food Products and Processing will cover food safety and how microorganisms play into food safety. We will also discover common food constituents and the process that agricultural products take from farm to table. In addition, we will focus on food marketing. Students will be required to have an SAE project in lieu of a final and homework.

WELDING

PREREQUISITE-NONE

GRADES 9,10,11,12

CREDIT .5

#706

The course will include classroom instruction in welding theory and practice as well as practical experience. Much of the time will be spent on assigned jobs designed to increase the students' skill level as he or she moves from one job to another. After students have completed the assigned jobs, they will have the option to complete a welding project. It is recommended that students wear quality leather boots or shoes with insulated soles and jeans without holes or frayed cuffs. Students will be required to have an SAE project in lieu of a final and homework.

WILDLIFE AND NATURAL RESOURCE MANAGEMENT

PREREQUISITE-NONE

GRADES 9,10,11,12

CREDIT .5

#707

Part of this class will be spent on the ecology of game and non-game wildlife in Pennsylvania. Other topics covered will include water pollution, water use planning, air pollution, soil management and freshwater fishery management. Students will spend some time doing outdoor work. Students will be required to have an SAE project in lieu of a final and homework.

POWER AND MACHINERY

PREREQUISITE-NONE

GRADES 9,10,11,12

CREDIT 0.5

#712

Outdoor power equipment technology is a study of internal combustion engines up to 25 horsepower. It includes theory and the disassembly and repair of both two and four stroke engines. Students work on school-owned engines. Some time will be allowed for repair of student-owned engines. The course will cover both classroom theory and hands-on experience on small gas and/or small diesel internal combustion engines. The course will include troubleshooting and repair of two and four stroke engines, from lawn mowers to chain saws. Students will be required to have an SAE project in lieu of a final and homework.

ANIMAL STUDIES

PREREQUISITE-NONE
CREDIT 0.5

GRADES 9,10,11,12
#714

Animal Science includes a study of genetics, feeding, housing and marketing of common domestic animals, as well as meat processing. Breed identification and animal judging will be studied during this course. Current advances in animal technology are also studied. Students will be required to have an SAE project in lieu of a final and homework.

PLANT AND SOIL STUDIES

PREREQUISITE-NONE
CREDIT 0.5

GRADES 9,10,11,12
#717

Plant and Soil Science will cover the relationship between agricultural crop production and soil management. Students will learn about land use, soil testing, erosion control, nutrient management, pest management and crop production. Students will learn how to effectively use the *Agronomy Guide* and *Soil Survey* to manage both agricultural and non-agricultural lands. Students will be required to have an SAE project in lieu of a final and homework.

BIOTECHNOLOGY

PREREQUISITE-NONE
CREDIT 0.5

GRADES 9,10,11,12
#718

Biotechnology is using modern technology to change or modify, with the goal of improving, the biological structure of living organisms or to create new organisms, for specific positive uses and/or to provide beneficial processes, products, or services to consumers/businesses/society. This class will focus on how biotechnology is used to improve production of plant and animal agricultural products. We will also explore how biotechnology is utilized in the food science industry. Students will be required to have an SAE project in lieu of a final and homework.

SUPERVISED AGRICULTURAL EXPERIENCE (SAE) I, II, III, IV

PREREQUISITE- (*PREAPPROVED BY TEACHER*)
CREDIT 1.0

GRADES 8,9,10,11,12
#708/709/710/711

Students will be required to spend at least 20 hours per quarter, independently, working on their SAE. One meeting each quarter will be scheduled to meet with the agricultural instructor to review student progress. A supervised agricultural experience project is required of all students as a part of his or her agricultural production program. Supervised Agricultural Experience programs (SAE), which increase in scope and in depth as student's progress through school, will aid in achieving successful employment and higher degrees in the FFA. The student will be required to maintain a record book of their SAE. Types of SAE are as follows:

- I. **AGRICULTURAL ENTREPRENEURSHIP**
 - A. Owning an agricultural business, mainly production-based
- II. **AGRICULTURAL PLACEMENT**
 - A. Job/internship either paid or unpaid for a business or person
- III. **AGRICULTURAL RESEARCH**
 - A. A research project based on solving a problem
- IV. **FOUNDATIONAL (ONLY 8TH/FRESHMAN)**
 - A. Career interest and exploration
 - B. Employability skills
 - C. Personal Finance Management
 - D. Agricultural Literacy
 - E. Workplace Safety
- V. **MISCELLANEOUS**
 - There are other options for projects, but they must be discussed with the teacher.

NORTHERN TIER CAREER CENTER BRADFORD COUNTY AREA VOCATIONAL TECHNICAL SCHOOL

AVAILABLE TO STUDENTS IN GRADES 11 AND 12 *who have successfully earned 14 credits by the end of their 10th grade year. During the school year, Seniors who have failed core courses may be held back from attending Vo-Tech.*

The need on the part of Troy High School students for training in vocational-technical areas is best seen in the number of students who apply each year for consideration for relatively few openings available to the vocational technical programs. Students who are interested in being considered for one of these programs should complete the Vocational Technical School application and return it to their counselor as early as possible after course selection begins. Students who have failed a required subject may not be able to graduate in four years unless the failed subject is made up in summer school.

Students attend the Northern Tier Career Center in Towanda on a half-day basis every day all year. This enables students to receive training in their vocational-technical subject while completing their academic work required for graduation. Free transportation from the high school to the Northern Tier Career Center is provided each day during the school year.

Some courses at the career center require a student to purchase special uniforms or clothing. This is at the student's expense.

Selection and assignment to the career center and/or any vocational program at the Troy High School are not made on the basis of race, creed, handicap, national origin nor any other reason which would be viewed as discriminatory.

For more complete program description of the course offerings, see the northern Tier Career Center Vocational Education Course Guide. (available in the guidance office)

The Students Occupationally & Academically Ready (SOAR) Program is a Pennsylvania Department of Education approved, Career & Technical Education Program of Study that credits skills and tasks learned at the secondary school (high school) level to a postsecondary (college) degree, diploma or certification program. SOAR programs prepare today's student for High Priority Occupations which are tomorrow's high demand and high wage careers.

For more information about specific SOAR Programs, use this link:

http://www.education.state.pa.us/portal/server.pt/community/programs_of_study/7686

PCNOW Enrollment offered through Pennsylvania College of Technology:

<https://k12.pct.edu/penncollegenow/school.htm?id=24>

The following programs are available at the Northern Tier Career Center:

BUILDING TRADES

BUILDING CONSTRUCTION

GRADE 11 #157

GRADE 12 #167

This program of study covers construction and remodeling of buildings including carpentry, masonry, painting, drywall, cabinetry, electrical, plumbing, 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.

Industry Credential Opportunities:

Service Provider – National Center for Construction Education and Research (NCCER)

Service Provider – OSHA: 10-hour course, Construction

PCNOW – Dual Enrollment Courses offered through Penn College of Technology: BCT 103, BCT 109 & MCT 115
(10 credits offered)

ELECTRICAL OCCUPATIONS

GRADE 11 #160

GRADE 12 #170

In this program of study students develop the skills and gain knowledge necessary for entry level work in the electrical field. Students will study and practice wiring all phases of residential electricity with an introduction to commercial and industrial electricity including motor controls. Emphasis is placed on electrical safety, electrical codes, and work ethics.

Industry Credential Opportunities:

Service Provider – OSHA: 10-hour course, Construction

MECHANICAL TRADES (HVAC-Plumbing-Electrical)

GRADE 11 #173

GRADE 12 #183

The Heating, Ventilation & Air Conditioning (HVAC) program is an instructional program that combines classroom and practical learning experiences. This program prepares individuals to apply technical knowledge and skills to install, repair, and maintain commercial and domestic heating, air conditioning, basic plumbing, electrical, and refrigeration systems. The program will be certified by the National Center for Construction Education and Research.

Industry Credential Opportunities:

Service Provider – OSHA: 10-hour course, Construction

Service Provider – Air Conditioning, Heating & Refrigeration Institute: EPA 608

AUTOMOTIVE TECHNOLOGY

AUTOMOTIVE MECHANICS TECHNOLOGY

GRADE 11 #156

GRADE 12 #166

This program prepares individuals to apply technical knowledge and skills to the specialized area of automotive technology including engine diagnosis, engine repairs, heating & cooling systems, power train, brake suspension, and steering systems, and computerized engine controls. Students study and practice all phases of engine repair and overhaul from diagnosis-problem solving to preventative maintenance.

Industry Credential Opportunities:

Service Provider – Pennsylvania Department of Transportation: Certified Safety Inspector Cat I, Cat II, Cat III.

Service Provider – S/P2: Safety Training

COLLISION REPAIR TECHNOLOGY

GRADE 11 #155

GRADE 12 #165

This program prepares individuals to apply technical knowledge and skills to the specialized areas of automotive reconstruction and restoration including panel replacement and repair, frame repair, plastic repair, refinishing, auto body related mechanics, automotive electricity, and 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, upholstery, weather stripping, sheet metal repair, filler work, and plastic repair. Purchase of a paint mask is required which costs approximately \$35.

Industry Credential Opportunities:

Service Provider – Pennsylvania Department of Transportation: Environmental Protection Agency 6H

Service Provider – S/P2: Safety Training

Service Provider – ICAR: Non-Structural

DIESEL MECHANICS TECHNOLOGY

GRADE 11 #153

GRADE 12 #163

This program prepares individuals to apply technical knowledge and skills to the specialized maintenance and repair of trucks, buses and other commercial and industrial vehicles. The program includes instruction in diesel engine mechanics, suspension and steering, brake systems, electrical electronic systems, preventative maintenance inspections, drive trains, HVAC systems, and auxiliary equipment installation and repair. Purchase of a basic tool set is required which costs approximately \$100 and can be purchased from the Northern Tier Career Center.

Industry Credential Opportunities:

Service Provider – Pennsylvania Department of Transportation: Certified Safety Inspector Cat I & Cat III

Service Provider – S/P2: Safety and pollution Prevention

PCNOW – Dual Enrollment Courses offered through Penn College of Technology: DSM 119 & DSM 141 (4 credits offered)

ALLIED HEALTH PROGRAMS

HEALTH ASSISTANT/PRE-NURSING

GRADE 11 #162

GRADE 12 #172

This course allows the student to advance at their own rate and allows for individuality in the choice of a specific career objective. This course provides skills for Medical Assistant, Nursing Assistant, and Dental Assistant. Introduction to EKG, Phlebotomy, Occupational and Physical Therapies are included. This course is for the student looking to further their education in health care as a Registered Nurse, LPN, OT, PT and other health care related fields. After completion of the nursing assistant curriculum, students are eligible to take the state exams (written & skill) for placement on the registry for long-term care nursing assistants. Clinical experiences may accompany portions of this course.

Industry Credential Opportunities:

Service Provider – Pennsylvania Department of Health: Nurse Aide Registry

Service Provider – American Red Cross: First Aid and CPR

Service Provider – DVM-Instructional Systems: Dean Vaughn Learning Systems in Medical Terminology

PCNOW – Dual Enrollment Courses offered through Penn College of Technology: HTH 100 & MTR 104 (5 credits offered)

PERSONAL SERVICES

COSMETOLOGY

GRADE 11 #159

GRADE 12 #169

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. **Students will be required to purchase a student cosmetology kit (\$90) and smock (\$20) ordered through the Northern Tier Career Center. Kits and smocks are required to receive PA State Board credit hours. 1250 hours is required by the Pennsylvania State Board of Cosmetology to take the State Board exam.**

Industry Credential Opportunities:

Service Provider – Pennsylvania State Board of Cosmetology: Cosmetologist *1250 hours is required by the Pennsylvania State Board of Cosmetology to take the State Board exam. In order to obtain proper hours, students will need to enroll their 10th grade year.

HOSPITALITY

FOOD PRODUCTION AND MANAGEMENT

GRADE 11 #161

GRADE 12 #171

This course is designed to provide the student with the skills, knowledge, and attitudes necessary in a variety of food related careers. Specialized learning units include theory and work experience in the major areas of cooking, baking, and menu planning. The restaurant kitchen serves as the preparation laboratory, while the 32-seat restaurant provides experience in proper and efficient serving.

Industry Credential Opportunities:

Service Provider - National Restaurant Association: ServSafe Manager's Certification offered in the second year.

PCNOW – Dual Enrollment Courses offered through Penn College of Technology: HTH 100 (1 credit offered)

INFORMATION TECHNOLOGY

INFORMATION TECHNOLOGY

GRADE 11 #193

GRADE 12 #194

New in 2018, this program prepares students to apply basic engineering principles and technical skills as they take the first step in pursuit of an IT career in cloud computing, network administration, programming, database management, and/or continuing education at a post-secondary institution. Taking a broad- spectrum approach, students will learn basic computer design and maintenance, security, networking, operating systems, IT operations, hardware and software problem diagnosis, trouble shooting, technical support, and web design. NTCC is pursuing opportunities for students to complete dual/concurrent enrollment college credits, as well as industry credentials, such as CompTIA IT Fundamentals and CompTIA A+ Certification.

MANUFACTURING

MACHINE TOOL TECHNOLOGY

GRADE 11 #177

GRADE 12 #178

The MTT program is designed to prepare students with the skills and experience necessary to obtain entry level employment in the metal products industry. Students will be trained in the conventional areas (lathe, mills, drills and grinders), as well as in Computer Numerical Control machines, with an emphasis on safety.

Industry Credential Opportunities:

Service Provider – National Institute for Metalworking Skills, Inc. (NIMS)

PCNOW-Dual Enrollment Courses offered through Penn College of Technology: MTT 118 & MTT 199 (4 credits offered)

WELDING TECHNOLOGY

GRADE 11 #179

GRADE 12 #181

The Welding program is taught in a simulate work environment to help develop the hands-on-experience, as well as theory and equipment and shop safety skills. The course is designed to equip students with skills and knowledge in shielded metal arc welding (SMAW), gas metal arc welding (GTAW), and flux core arc welding (FCAW), as well as blueprint reading and fabrication.

Industry Credential Opportunities:

Service Provider – American Welding Society: Level 1 Entry Welder Training

Service Provider – OSHA: 10-hour Safety Course, Construction

PCNOW – Dual Enrollment Course with Pennsylvania College of Technology: WEL 114, WEL 116, WEL 120, WEL 123, WEL 124 & WEL 129 (12 credits Offered)

ALL COURSES AT NORTHERN TIER CAREER CENTER TAKEN FOR ONE YEAR EQUAL 4 CREDITS.

OPPORTUNITIES FOR ONLINE COURSES

The Troy Virtual Academy is the online school for the Troy Area School District. Each year the course selection expands opportunities for students to earn credits via an online learning delivery. Student interest and learning habits, as well as scheduling needs, are what drive the selection of these courses in determining the best academic fit for each student. These decisions are made on a student-by-student basis as we strive to customize learning for all. All requests are reviewed by a school counselor and the Coordinator for Student Academic Programs.

Guidelines for online courses:

- Core courses will all be taken on campus unless there is a scheduling conflict.
- All credit recovery courses are paid by the student in full **PRIOR** to starting the course.
- All elective courses will require a deposit prior to the start of the course. Courses that are completed successfully **with a minimum of a 70% on time** will be reimbursed the deposit. Courses that are not completed successfully having not earned a minimum of a 70% and/or not on time will not be reimbursed. Price will be set by yearly rate and acknowledged in a signed contract by parent and student.
- All courses are reviewed and approved by a School Counselor and the Coordinator of TVA.
- Orientation for online courses will happen on an individual basis.
- School reserves the right to end the online option if student is not performing satisfactorily.

Course availability is subject to change based on the vendors. Possible courses can be found on the vendors' websites:

- Lincoln Learning Solutions: <http://catalog.lincolninteractive.org/>
- Odysseyware: <https://www.odysseyware.com/course-catalog>