Program of Studies

2022-2023



Wilmington Area High School

Foreword

Selecting a program of studies is one of the most important decisions a high school student must make. The broad curriculum and specific elective courses a student selects determine, to a large extent, the avenues of opportunity available during the immediate post-high school years.

This Program of Studies has been prepared by a group of teachers, the counselor, and administration. Its purpose is to provide a comprehensive presentation of the programs of study available to Wilmington Area students at the high school level. An overall understanding of the curricula enables the students, together with the parents, school counselor, and teachers to set goals and objectives which can be met through the thoughtful selection of courses.

The Wilmington Area High School Counseling Department focuses on the academic, career and personal/social developmental needs of our students. Every student is valuable and their differences are important and embraced. Each student has unique needs and goals, thus programs and activities are varied. Parental involvement is always encouraged and appreciated!

Non-Discrimination Policy

In accordance with applicable federal statutes and regulations, it is the policy of the Wilmington Area School District not to discriminate on the basis of race, color, national or ethnic origin, age, sex, or handicap in employment or in the administration of any of its educational programs and activities in accordance with applicable federal statutes and regulations. For information about your rights and grievance procedures or for information concerning the full range of opportunities available in Vocational Education, location of services, activities, and facilities that are accessible to and usable by handicapped persons, contact Dr. Jeffrey Matty, Title IX Coordinator or Dr. Michael O'Donovan section 504 Coordinator, Wilmington Area School District, 300 Wood Street, New Wilmington, PA 16142 (724) 656-8866, ext. 6101.

The Curriculum

The curriculum of the Wilmington Area High School has been designed to help students progress toward the achievement of high academic standards. Instructional services are both comprehensive and varied: comprehensive to meet the educational demands common to all youth and varied to provide for the wide range of interests and abilities found among students of a comprehensive high school. Because Wilmington Area students are looking forward to a variety of careers and post-secondary educational opportunities, the curriculum is organized to meet the needs of those who expect to enter an institution of higher learning as well as those who expect to enter directly into the world of work.

Each curriculum has been "blocked" for each year of the student's high school career. Each "block" is a model of the required courses that the Board of Education, teaching staff, and administration believe to be a necessary part of a student's academic background. Each "block" allows for a number of electives to be chosen by the student. Ideally, these curricula will provide students with a solid background in the basics, along with the flexibility to pursue special interests through electives. It is important that students take great care in selecting the curriculum that they believe will best suit both their present abilities and future plans. The "blocks" described are recommended models; they are not required. Students may design their own curriculum to fit their own needs. However, it must be understood that too many changes may detract from the continuity and completeness of the individual's education.

Students are encouraged to consider classes that prepare graduates for careers in STEAM (Science, Technology, Engineer, Arts, Math). STEAM classes are identified by an *

<u> 2022 – 2023 NCAA ELIGIBILITY</u>

The NCAA Eligibility Center will certify the academic and amateur credentials of all college-bound student-athletes who wish to compete in NCAA Division I or II athletics. The student-athlete is responsible for making sure they have taken the required approved core courses, the correct number of credits, has the minimum GPA and test scores to be NCAA eligible.

www.eligibilitycenter.org

CORE COURSES

- Check the approved courses from the program of studies to make certain that the courses you have taken are included on the list.
- 16 core courses are required for NCAA Division I eligibility. A GPA of 2.3 or above is required.
- 10 courses are required to be met before the beginning of the senior year for Division I.
- 16 core courses are required for NCAA Division II eligibility. A GPA of 2.2 or above is required.

DIVISION I (16 Core Courses)

- 4 years of English
- 3 years of Mathematics (Algebra I or higher)
- 2 years of Natural/Physical Science (1 year of lab preferred)
- 1 year of additional English, math or natural/physical science
- 2 years of Social Science
- 4 years of Electives (languages, areas listed above, or comparative courses that are approved)

DIVISION II (16 Core Courses)

- 3 years of English
- 2 years of Mathematics (Algebra I or higher)
- 2 years of Natural/Physical Science (1 year of lab preferred)
- 3 years of additional English, math or natural/physical science
- 2 years of Social Science
- 4 years of Electives (languages, areas listed above, or comparative courses that are approved)

GRADE-POINT AVERAGE

Refer to the NCAA Eligibility Center Quick Reference Guide to see all information about Grade Point Average, Test Scores, and Core Courses.

TEST SCORES

Please refer to the NCAA Eligibility Center Quick Reference Guide for test scores and GPA requirements for both Division I and Division II schools. Students are responsible for sending their scores directly to the NCAA from the respective testing agency.

Curricular Programs

The various programs of study offered at Wilmington Area High School may be grouped into five broad classifications: Accelerated Academic, Academic, General, Vocational, and Vocational-Technical.

The Accelerated Academic Curriculum (Grades 9-12)

This program provides opportunities for students who have demonstrated advanced academic achievement and who show interest in pursuing a course of study which will prepare them for college. Honors English, Social Studies, Math, and Science are suggested for each year in addition to other core requirements. It is recommended that AP English, AP Biology, AP and Honors Government, College Chemistry, Anatomy & Physiology and/or Physics, AP Calculus. Foreign Language is taken in this curriculum.

The Academic Curriculum (Grades 9-12)

This program also prepares the pupil for entrance into college, differing from the Accelerated Academic Program only in that Math and Science are not emphasized to the same levels. Core requirements are English, Social Studies, Math, and Science. Foreign Language classes are suggested each year in addition to other core requirements.

The General Curriculum (Grades 9-12)

This program is designed for those who intend to enter the world of work immediately after graduation. The curriculum offers a basic education to provide students with the fundamental skills and knowledge they need to become self-sufficient adults.

The Agricultural - Vocational Curriculum (Grades 9-12)

This program is designed to provide a basic education, as well as the skills necessary for a particular vocational competency. Starting in ninth grade, students will choose courses to prepare for a career in Agriculture.

The Vocational-Technical Curriculum (Grades 10-12)

The Lawrence County Career and Technical Center, located in New Castle, offers thirteen courses of study for students in grades 10, 11, and 12. All are three-year programs and are chosen by students when they are in ninth grade. If a Career and Technical Center student wishes to return to Wilmington Area High School, they may do so, but only after attending a minimum of one semester at the Career and Technical Center.

College and Career Readiness Pathways

The goal of Chapter 339 is to drive the academic curriculum, the social-emotional well-being, and the student's career goals based on the ASCA Model.

- Academic standards for career education and work
- Career awareness and preparation (Section 13.1)
- Career acquisition (Getting a job) (Section 13.2)
- Career retention and advancement (Section 13.3)
- Entrepreneurship (Section 13.4)
- The comprehensive program is reported under the career readiness indicator in the PA Future Ready Index

The students will be able to:

- by the end of grade 5 can demonstrate engagement in career exploration and preparation
- by the end of grade 8 can create an individualized career plan and participate in career preparation activities aligned to the standards
- by the end of grade 11 can implement their individualized career plan through ongoing development of a career portfolio and participation in career preparation activities aligned with the standards

Smart Futures will be used to implement these lessons. Students in each grade will be required to complete each of the lessons and required tasks in each grade as part of their graduation requirements.

9th grade requirements include:

- Complete the Smart Futures 9-Adult Activity Journal "Learning Style Survey"
 - Save interesting and helpful resources for future lessons
- Complete all 4 Smart Futures 9-Adult Activity Journal lessons:
 - New Thinking About Career Success
 - My Personality Type
 - Job Application
 - Preparation for Career
- Complete the Smart Futures 9-Adult Activity Journal "My Career and Technology Center"
 - Save interesting and helpful resources for future lessons
- Complete 3 Smart Futures 9-Adult Skill Badges
- Create a Career Plan in Smart Futures
 - Identify a goal and how it relates to your career plan
 - Choose at least 3 career clusters as your "top choices" save it, and rate the important factor as they relate to your career plan
- Complete six hours of community service
 - Add your volunteer experiences to your portfolio in Smart Futures
- Attend Lawrence County Career and Technical Center information session and tour
- PSAT / SAT / ACT / NOCTI / ASVAB review
 - Complete the reflection explaining which test a student would rather take and why

10th grade requirements include:

- Complete the Smart Futures 9-Adult Activity Journal "My Work Values"
 - Save interesting and helpful resources for future lessons
- Complete all 4 Smart Futures 9-Adult Activity Journal lessons:
 - Abilities and Aptitudes
 - Personal Interests
 - Career Clusters and Pathways
 - Experiencing Careers While Still in School
- Complete 2 Smart Futures 9-Adult Skill Badges
- Update Career Plan in Smart Futures
 - o Identify and update goals and how they relate to your career plan
 - Use "Advanced Career Search" to add at least 3 careers to your favorites
 - o Review saved careers, update list and further investigate preferred careers
 - Explore and save schools and majors, experiment with the filter to see how different factors affect major options
- Complete six hours of community service
 - o Add your volunteer experiences to your portfolio in Smart Futures
- Take the PSAT or ASVAB exams
- Attend 1 or 2 college or vocational tours
 - Add reflections of visits to your portfolio in Smart Futures
- Attend the business and industry career fair
 - o Add reflection of visit to your portfolio in Smart Futures

11th grade requirements include:

- Complete the Smart Futures 9-Adult Activity Journal "My Resume"
- Complete all 4 Smart Futures 9-Adult Activity Journal lessons:
 - Selecting Your Career Goals
 - My Programs or Majors
 - My School and College Survey
 - Job Interviews
- Attend 1 or 2 college or vocational tours
 - Add reflection of visits to your portfolio in Smart Futures
- Attend the Pittsburgh college fair / Westminster College Fair / Industrial Fair
 - Add reflection of visits to your portfolio in Smart Futures
- Attend the Fall or Spring college and career night
- Attend the Fall or Spring financial aid night
- Complete 1 three hour job shadow
 - Add reflection of shadow experience to your portfolio in Smart Futures
- Complete six hours of community service
 - Add your volunteer experiences to your portfolio in Smart Futures
- Take PSAT or ASVAB exam. To potentially qualify for NMSQT, the PSAT NMSQT must be taken fall
 of student junior year
- Take the SAT or ACT College bound students
- Discuss filling out 1 college application and scholarship application with school counselor

- Update Career Plan in Smart Futures
 - Add part-time and/or summer job experiences to your portfolio in Smart Futures
 - Explore and save updated schools and majors
 - Delete any plans that may no longer be relevant, add others that may have changed
 - Explore academic options by making sure admission requirements meet your career plan
- Attend junior meeting with school counselor to ensure career plan and future scheduling match

12th grade requirements include:

- Complete all 4 Smart Futures 9-Adult Activity Journal lessons:
 - Active Listening
 - o The Entrepreneur Within
 - Personal Budget
 - Multiple Intelligences
- Complete at least six hours of community service or mentoring experience
 - Add your volunteer experiences to your portfolio in Smart Futures
- Complete one of the following: Industry Based Labor Career and Technical Industry Experience
 - Achieve an industry recognized credential
 - AED
 - First aid
 - NOCTI
 - Industry Based Certification
- Complete 1 three hour work based job shadow in your field of interest
 - Add reflection of shadow experience to your portfolio in Smart Futures
- Attend the Fall or Spring financial aid night
- Attend the Fall or Spring college and career night
- Take the SAT or ACT -Complete by Fall of Senior year for college bound students
- Update and complete resume in Smart Futures
- Focus on scholarships and college applications
- Complete, edit, and finalize career plan within Smart Futures
- Attend a senior meeting with school counselor to finalize career plan and graduation plan
- By senior year, students must have completed 2 college/vocational tours and attended 1 college
 / vocational career fair

Career Pathways are below to help students map out their individualized course plan for graduation.

College and Career Pathways

Agriculture, Food, & Natural Resources	Architecture & Construction	Arts, A/V Technology, & Communication	Business, Management, & Administration	Education and Training
Forestry / Wildlife	Building Trades	Concert Choir / Women's Chorus	Accounting Accounting 2	English 9 English 10 AP Language AP Literature
Food Science	Electricity	2 D Media I, II	Computer Programming	Algebra I Geometry Algebra II Pre Calc / Stats AP Calc AB / BC PAM
Landscaping	Intro to Engineering	World Art I, II	Intro to Computer Science	Biology / AP Biology Chemistry / College Chem Physics Forensic Science
Animal Science	Ag Welding	Ceramics I, II	Advanced Computer Science	Grammar
Vet Science	Materials Processing I, II	Art Foundations I, II	Sports and Entertainment Marketing	Civics American History World History Government / Poly Sci ECON
Small Animal Care	Advanced CNC Manufacturing	Band	Entrepreneurship	Spanish I, II, III, IV
Intro to Ag / Leadership	Architectural Design	Web Site Design I	Economics	Conversation & Culture
Equine Management	Engineering Design	Web Site Design II		French I, II, III, Intermediate College French I
Agricultural Business	Introduction to Agricultural Construction	Music Theory		

College and Career Pathways Continued

Finance	Government & Public Administration	Health Science	Human Services	Information Technology
	Civics / Honors Civics	Anatomy	Family Consumer Science	SWAT SWAT 9
	American History	Physiology	Psychology	Intro to Computer Science
	AP US History	Organic Chemistry		Intro to Computer Programming
	World History	Applied Chemistry		Web Site Design and Development I
	AP World History			Website Design and Development II
	Political Science	Psychology		Advanced Computer Science
	AP Government	Health		Photoshop
	Practical Law			

College and Career Pathways Continued

Law, Public Safety & Security	Manufacturing	Marketing, Sales & Service	Science, Technology, Engineering & Mathematics	Transportation, Distribution & Logistics
Practical Law	Small Gas Engines	Sports and Entertainment Marketing	Intro to Engineering	
	Electricity		Architectural Design	
	Welding		Engineering Design	
	Building Trades		Advanced CNC Design	
	Introduction to Agricultural Mechanization		Intro to Computer Science	
			Intro to Computer Programming	
			SWAT	
			All Science Courses	
			All Math Courses	

Procedure for Course Selection

At an appropriate time, each year, secondary students, after discussions with parents, the counselor, and teachers, will make course selections appropriate to their educational and vocational goals. In making course selections, students must meet the minimum standards for each grade level, including required subjects and number of credits.

- 1. Students should review the entire Program of Studies booklet with their parents before choosing a particular curriculum model.
- 2. Students must schedule all course and career standards necessary to meet graduation requirements.
- 3. A minimum of 35 class periods of instruction per week must be scheduled and maintained by each student.
- 4. Where "elective" is designated in each "block", a course must be chosen from the provided list of electives. In order to schedule an elective, prerequisites must be met.
- 5. Any deviation or change in the program curriculum must have the approval of the counselor and administration. These will be based on the needs of the student as identified by the staff.
- 6. In repeating courses, the following guidelines must be met:
 - a. A student must repeat a required core course that he/she fails. This student must attend summer school or repeat the course the following school year. If the student fails an elective course that credit must be recovered by either repeating the elective course or taking another course in its place.
 - b. It is not educationally sound to schedule a required sequential course before the preceding course is passed. Therefore, when there is a failure, the course should be repeated and passed before the next course in the sequence may be scheduled. An exception is for students with senior standing. They may take two courses in the same subject area as long as passing grades are maintained in both.
- 7. The course selection form must be signed by the student and the parent or guardian.
- 8. Students who do not meet the prerequisite/grade requirements for a course as stated in the program of studies, may still schedule the courses, but will need the following:
 - Complete the waiver procedure, additionally a parent conference may be requested and scheduled by an administrator to discuss successful course completion.
 - Please see a counselor for a waiver application.

Schedule Change Rules and Information

*Students may request schedule changes up to and including the first 7 days of school.

WE CAN NOT CHANGE SCHEDULES FOR THE FOLLOWING REASONS:

- The course has already met for 7 days.
- Seating is limited in classes.
- A student wants a different teacher.
- A student wants the class during a different period.
- A student wants a different lunch.
- A student is not getting along with other students in the class. (Talk to the teacher and school counselor immediately)

WE CAN MAKE SCHEDULE CHANGES FOR THE FOLLOWING REASONS:

- Students may make Drop/Add changes to their schedules up through the first seven days of classes without administrative approval.
- If a student requests to drop a class from their schedule after the drop/add period is over, the student will need administrative approval from the principal.
- Students who need the credit in order to graduate, will not be permitted to drop an elective class after the drop/add period has ended.
- Students taking honors or AP level courses may change to a regular level course of the same content up through the end of the first nine weeks based on <u>administrative/teacher</u> recommendation. Students may drop honors or AP courses for a study hall up through the end of the first nine weeks ONLY if the course is taken as an elective and is not needed to graduate.

Incomplete Grades

A student who receives a quarter grade of "I" has a maximum of two (2) weeks after the date of report card distribution to fulfill the requirements:

- If the student does satisfy the requirements, the teacher will change the quarter grade to the earned value.
- If the student does not satisfy the requirements, the teacher will change all incomplete assignments to a "0".
- In all instances, the "I" must be removed by the teacher and replaced by a regular letter grade.

Monitoring Students' Academic Success

The Wilmington Area SD offers an online program for parents to view students' grades, attendance, and assignments. This can be accessed by logging onto https://wahs.getalma.com/
The counseling department strongly encourages parents to take an active role in their child's education to achieve success.

For information on how to access your child's Alma SIS account please contact the technology department at 724-656-8866 or Ken Jewell at jewell@wasd.school or 724-656-8866

Graduation Requirements

The standards for graduation from Wilmington Area High School are set by the Pennsylvania Department of Education and the local Board of School Directors.

Credits Required for Graduation

Guidelines represent minimum requirements

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CLASS OF 2023	CLASS OF 2024	CLASS OF 2025	CLASS OF 2026	
27 Required Credits	27 Required Credits	27 Required Credits	27 Required Credits	
English – 4 Credits				
Social Studies 4 Credits	Social Studies 4 Credits	Social Studies 4 Credits	Social Studies 4 Credits	
Math – 3 Credits (at the HS level)	Math – 3 Credits (at the HS level)	Math – 3 Credits (at the HS level)	Math – 3 Credits (at the HS level)	
Science – 3.5 Credits (One course must be Chemistry or General Science)	Science – 3.5 Credits (One course must be Chemistry or General Science)	Science – 3.5 Credits (One course must be Chemistry or General Science)	Science – 3.5 Credits (One course must be Chemistry or General Science)	
Physical Education 1.5 Credits	Physical Education 1.5 Credits	Physical Education 1.5 Credits	Physical Education 1.5 Credits	
Health5 Credits	Health5 Credits	Health5 Credits	Health5 Credits	
Technology5 Credits	Technology5 Credits	Technology5 Credits	Technology5 Credits	
College/Career Readiness Project	College/Career Readiness Project	College/Career Readiness Project	College/Career Readiness Project	
Electives – 10 Credits				

^{*}Technology courses include: Introduction to Computer Science, Web Site Design & Development,
Introduction to Computer Programming, Introduction to Engineering

Credits Required To Advance Grade Levels

CLASS OF 2023	CLASS OF 2024	Class of 2025	Class of 2026
Sophomore – 7 credits	Sophomore – 7 credits	Sophomore – 7 credits	Sophomore - 7 credits
Junior – 14 credits			
Senior – 20.5 credits			

Work Release Guidelines

- 1. The work release program is limited to seniors. Work release students must have the number of scheduled classes required to meet the graduation requirements.
- 2. Students must fill out the work release form and have it approved by the administration prior to the start of work release.
- 3. The work release program is limited to those seniors who can fit it into their schedule.
- 4. Work release is a privilege which may be revoked at any time. Educational requirements always take precedence over employment.
- 5. If a student on work release receives a failing grade in any subject, he or she must return to a full day school schedule and give up the privileges of work release.
- 6. The principal or other school official will contact the place of employment periodically to ensure that the employment arrangements are being carried out as agreed.
- 7. Reasonable schedule changes to accommodate work release will be considered

Vocational Technical Curriculum (Grades 10-12)

Students wishing to obtain training for a specific vocation may apply to attend the Lawrence County Career and Technical Center. A representative from the Career and Technical Center visits each year to inform ninth grade students of the opportunities available at the Career and Technical Center. Students who are interested apply through our school's guidance office. Admittance to the Career and Technical Center is based on interest, attitude, academic record, discipline, attendance, and citizenship. Parent/Guardian permission is required for admission.

Students who wish to return from the Career and Technical Center may only do so after completing at least one semester at the Career Center.

Students attend the Career and Technical Center full time in grades 10, 11, and 12. Career and Technical Center students are eligible to take part in our school's athletic and related programs. The Career and Technical Center issues the student a high school diploma, and in addition, students will receive a certificate of satisfactory completion of the vocational shop course taken.

The 2022 – 2023 Vocational Courses offered by the Lawrence County Career and Technical Center are:

Auto Technology
Collision Repair
Welding
Gas & Oil
Construction Trades
Electrical Occupations
Machine Tool Technology

Health Assistant
Cosmetology
Computer and Office Technology
Veterinary Assistant
Commercial and Advertising Art
Restaurant Trades

Course Descriptions

Language Arts

English 9 (EN09)

(NCAA Approved Course)

Grade Level: Nine Credit: One

Materials: <u>Elements of Literature, Third Course</u> Holt, Rinehart, Winston, Inc., 1997, various novels

In English nine, emphasis is placed on reading literature in various genres, accompanied by complementary writing. Grammar lessons are given throughout the year. Reading selections include Romeo and Juliet, Lord of the Flies, Call of the Wild, Hound of the Baskervilles, Animal Farm, and The Road.

Honors English 9 (EH09)

(weighted 5 percentage points)
(NCAA Approved Course)

Grade Level: Nine Credit: One

Prerequisite: Score at least Proficient on the 8th grade ELA PSSA Exam or 90% on the locally

developed assessment.

Student interest and completed application including recommendation of prior year's English teacher, well-developed writing and discussion skills, and completion of

summer reading assignments.

Materials: <u>Elements of Literature, Third Course</u>, Holt, Rinehart, Winston, 1997, various novels

This Honors level course is for students who have demonstrated outstanding ability in English and are interested in pursuing a more rigorous curriculum. Literature will be studied in depth, and advance critical thinking, composition, reading comprehension and discussion skills will be required of students. Self-motivation and independent effort are necessary to be successful in this course. Summer reading prior to the start of class is required. Student research will follow MLA format. Reading selections include Lord of the Flies, Call of the Wild, Romeo and Juliet, Animal Farm, The Scarlet Letter, And Then There Were None, Hound of the Baskervilles, Across Five Aprils, and Fahrenheit 451

English 10 (EN10)

(NCAA Approved Course)

Grade Level: Ten Credit: One

Materials: <u>Elements of Literature</u>. Harcourt Brace & Company, 1997, various novels

In addition to continuing the study of literature, grammar, and written and oral communications, sophomore English emphasizes writing a research paper using MLA format. Students develop creative writing projects such as the short story and poetry. Major works of world literature are chosen from the following: John Knowles' <u>A Separate Peace</u>, Shakespearian dramas, Harper Lee's <u>To Kill a Mockingbird</u>, Elie Wiesel's <u>Night</u>, Anderson's <u>Speak</u>, Charles Dickens' <u>A Tale of Two Cities</u>, Mark Twain's <u>The Adventures of Huckleberry Finn</u>, <u>The Book Thief</u>, and Ernest Hemingway's <u>Old Man and the Sea</u>. Students will participate in the Keystone Literature Exam at the end of this course.

Honors English 10 (EH10)

(weighted 5 percentage points) (NCAA Approved Course)

Grade Level: Ten
Credit: One

Pre-requisites: "A" in EN09 or EH09 student interest and completed application including

recommendation of prior year's English teacher, well-developed writing and discussion

skills, and completion of summer reading assignments

Materials: Elements of Literatures, Fourth Course, Holt, Rinehart, Winston, Inc., 1997

<u>Warriner's English Grammar and Composition</u>, Harcourt, Brace and Jovanovich, 1986, <u>The Elements of Style</u>, William Strunk Jr. and E.B. White, Fourth

Filtre Western Colonial New Jones of Black

Edition, Various Selected Novels, and Plays

This Honors level course is for students who have proven a seriousness of purpose in previous English courses. Study will include extensive research using MLA format and critical analysis of all genres of literature. Technology will be utilized for various projects. Self-motivation and independent effort are required. Students will participate in the Keystone Literature Exam at the end of this course. Reading selections include *Old Man and the Sea, Julius Caesar, A Tale of Two Cities, Huckleberry Finn, To Kill a Mockingbird,* and *Fences*.

English 11 (EN11)

(NCAA Approved Course)

Grade Level: Eleven Credit: One

Materials: Elements of Literature, Fifth Course, Holt, Rinehart, Winston, Inc., 1997

Vocabulary for the College Bound, Amsco, 1986, Representative American novels & plays

This course is a comprehensive study of American literature, which attempts to instill an appreciation of America's heritage. Students discuss and write about the personal, social, psychological, and critical implications of major American literary works. Writing assignments, class discussions, and projects are based on the selected literature. Continuing vocabulary and grammar study will incorporate techniques valuable in preparation for taking the PSAT's and SAT's. Student research will follow MLA format.

English 12 (EN12)

(NCAA Approved Course)

Grade Level: Twelve Credit: One

Materials: Elements of Literature, Sixth Course, Holt, Rinehart, Winston, Inc., 1997

Representative British or world novels or plays

This course is a study of British literature from the Anglo-Saxon period through the 20th century. With the processes of research, composition, and presentation of senior papers, students explore subjects using MLA format.

AP English Language (EAP11)

(weighted 10 percentage points) (NCAA Approved Course)

Grade Level: Eleven and Twelve

Credit: One

Prerequisites: A in Eng 11 or A in EH10, teacher recommendation, Score at least Proficient on the Keystone ELA Exam or 90% on the locally developed assessment.

Materials: Selections drawn from primarily from non-fiction texts with an emphasis on American

Literature

This rigorous, college-level course is designed to challenge highly motivated students who are interested in becoming strong communicators with the skills to write and reason effectively and confidently in an academic setting. Students will develop reading skills in a variety of rhetorical contexts, create compositions about a variety of subjects and for a variety of purposes, and expand their literacy skills beyond the written word through the examination of graphics and visual images. Through the reading and writing of many different kinds of essays, articles, short stories, etc. (primarily focusing on American Literature), students will also develop an appreciation for the way in which conventions and language resources contribute to effective communication. Students are expected (although not required) to take the course Advanced Placement English Language and Composition Exam. Taking the AP exam for this course is optional, but highly encouraged. Students who opt NOT to take the AP exam for this course will be required to take an alternative assessment in lieu of taking the AP exam. The alternative assessment will count towards the overall course grade.

AP English Literature (EAP12)

(weighted 10 percentage points) (NCAA Approved Course)

Grade Level: Twelve Credit: One

Prerequisites: A in EN11 or B in AP Language, or A in EH10, Teacher recommendation, Score at least Proficient on the Keystone ELA Exam or 90% on the locally developed assessment.

Materials: Representative British or world novels and plays

This rigorous, college-level course is designed to engage highly motivated and academically talented students in close reading and critical analysis of literature. This course will build upon previous knowledge and literary experience while increasing students' exposure to, and understanding of, various works of literature. This course will expose students to various texts drawn from multiple genres, periods, and cultures (primarily focusing on British Literature). Students will develop their close reading skills at three levels: experience, interpretation, and evaluation. Students are expected (although not required) to take the course Advanced Placement English Literature and Composition Exam. Taking the AP exam for this course is optional, but highly encouraged. Students who opt NOT to take the AP exam for this course will be required to take an alternative assessment in lieu of taking the AP exam. The alternative assessment will count towards the overall course grade.

Complete Grammar, Usage, and Mechanics (ENGR)

Grade Level: Ten, Eleven or Twelve

Credit: .5

Prerequisites: Recommended for interested students who are college bound.

This course is designed to provide college bound students with the tools and the terminology needed to dissect and understand the structure of the English language. Covered will be: parts of speech, parts of a sentence, phrases, clauses, agreement, pronoun usage, and verb usage, correct use of modifiers, common usage problems and mechanics.

Creative Writing (ENCW)

Grade Level: Ten through Twelve

Credit: .5
Materials: TBA

Students are given the opportunity to explore a variety of genres (poetry, autobiographical, elements of fiction, creative nonfiction, children's literature, and storytelling.) Each unit ends with a submission of original work and a reflection piece. The culminating unit is student-selected.

Mathematics

Pre Algebra (MAPA)

Grade Level: Nine Credit: One

Materials: Glencoe Pre-Algebra, McGraw Hill, 2012

In this course, students will attain the foundational skills necessary for algebra; decimal, fraction, and integer operations as well as coordinate plane point plotting are practiced and accompanying vocabulary is reinforced. Students will apply the distributive property to expand expressions and combine like terms to prepare skills to be able to efficiently and effectively solve multi-step equations and inequalities. An emphasis on functions, relations, domain, range, slope, rate of change, and linear functions will assist students in having a firm basis for future math courses.

Algebra I with Lab (MAI1)

(NCAA Approved Course - Algebra I only)

Grade Level: Nine, Ten

Credit: 1.5

Materials: Glencoe Algebra I, McGraw-Hill, 2014

In this course, the concepts of algebra are taught first at the rudimentary skill level and then practiced with real-life, application based problems. This course is built on the idea that students develop a better conceptual understanding of mathematics when solving real-life problems. Throughout this course, students will be challenged to develop 21st century skills such as critical thinking and creative problem solving while engaging with exciting careers within Science, Technology, Engineering, and Mathematics (STEM) related fields. Teaching fundamental algebraic methods and properties is a focal point of this course. Graphing of equations and inequalities, as well as teaching properties and relationships of linear equations is the most heavily covered material in this course. The TI-84 graphics calculator will be introduced in this course and used to aid students in problem solving.

There will be a focus on strengthening skills required for success on the Keystone Algebra 1 exam. Diagnostic testing is administered throughout the course. Keystone Algebra 1 eligible content is covered in this course. Using a systematic approach, eligible content are covered separately in some cases and covered jointly in others. Students will participate in the Algebra I Keystone Exam at the end of this course.

Geometry (MAGEO)

(NCAA Approved Course)

Grade Level: Nine through twelve

Credit: One

Materials: Glencoe Geometry, McGraw-Hill, 2014
Prerequisite: Successful completion of Algebra I

Geometry is the study of shapes and lines in a plane and in space. It builds on the mathematical topics from Algebra I with an emphasis on critical thinking and problem solving and skill development. Topics will include the study of lines, triangles, polygons, circles and space figures. Students will be required to write, explain, justify, prove and analyze throughout the course in order to hone critical thinking skills.

Algebra 2 (MAA2)

(NCAA Approved Course)

Grade Level: Nine through twelve

Credit: One

Materials: Glenco Algebra 2, McGraw Hill c. 2014
Prerequisite: Successful completion of Geometry

Students will solve and graph linear equations and inequalities. An emphasis on relations and functions, including classifying the domain and range will be a focus of each unit. Students will solve systems of equations and inequalities, using a variety of techniques. An extensive study of quadratic functions will take place- including graphing, solving, analyzing, and comparing different quadratic functions. A further study of polynomials and polynomial functions, including end behavior will take place. Students will identify inverse functions, including exponential and logarithmic functions. Students will simplify rational expressions and solve rational and radical equations. Graphing calculators will be used extensively as students incorporate technology to discover generalizations of concepts and apply these concepts to realistic situations. Students may learn several methods for solving a problem and will be asked to choose the most efficient method to complete the task.

Pre-Calculus (MAPC)

(weighted 5 percentage points) (NCAA Approved Course)

Grade Level: Nine through Twelve

Credit: One

Prerequisites: Successful completion of Algebra I, Geometry, and Algebra II

Materials: Functions, Statistics, and Trigonometry, Scott Foresman, 1992

TI-84 + Graphics Calculators and Computer Base Labs

This course stresses the role of functions and graphs in developing mathematical understanding. Functions are studied from a calculus perspective. Specific functions studied are: power, polynomial, rational, exponential, logarithmic, and trigonometric. Applications of real-life problems are vital aspects of this course. Trigonometry is approximately one-half of the course, with an emphasis on solving triangles, properties of trigonometric functions, trigonometric identities and applications. Graphic calculators will be used on a regular basis.

Basic Applied Statistics (MAST)

(weighted 5 percentage points)

(NCAA Approved Course)

University of Pittsburgh College in the Classroom)

Grade Level: Junior or Senior

Credit: One Pitt Credit: 4

Prerequisites: Pre-Calculus or AP Calculus

Materials: The Practice of Statistics 6th Edition, W.H. Freeman and Company, 2014

TI-84+ Graphics Calculators (optional)

Khan Academy

This course teaches methods of descriptive and inferential statistics. Topics include data collection and description, hypothesis testing, correlation and regression, the analysis of variance, and contingency tables (chi square). Students who take this course have the opportunity to earn college credit through the University of Pittsburgh. Students must register through the course teacher for Pitt credit at the beginning of the school year the course is taken.

Course Topics:

- · Descriptive Statistics
- Association and Regression
- Causation and Evidence
- Probability
- · Distribution of sample proportion and mean from random samples
- Confidence Intervals
- · Tests of Hypotheses
- T-tests

AP Calculus AB (MACA)

(weighted 10 percentage points) (NCAA Approved Course)

Grade Level: Eleven or Twelve

Credit: One

Prerequisites: Pre-Calculus and teacher recommendation

Materials: Calculus Graphical, Numerical, Algebraic, Prentice Hall, 2003,

TI-84+ Graphics Calculators

Calculus is a branch of mathematics which provides methods for finding the rate at which a variable is changing (differential calculus) and finding a function when its rate of change is given (integral calculus). In this course, students will learn the theories and applications of these methods. Students will be expected to incorporate a combination of approaches including algebraic, numerical, graphical, both with and without a graphics calculator in order to solve these problems. The course will address all topics covered on the Advanced Placement Exam. Taking the AP exam for this course is optional, but highly encouraged. Students who opt NOT to take the AP exam for this course will be required to take an alternative assessment in lieu of taking the AP exam. The alternative assessment will count towards the overall course grade.

AP Calculus BC (MAAPBC)

(weighted 10 percentage points) (NCAA Approved Course)

Grade Level: Eleven or Twelve

Credit: One

Prerequisites: AP Calculus AB and teacher recommendation

Materials: Calculus Graphical, Numerical, Algebraic, Prentice Hall, 2003,

TI-84+ Graphics Calculators

This is a college-level calculus course designed to meet the Advanced Placement curricular requirements for Calculus BC. The main topics we will be covering are limits, derivatives, integrals, the Fundamental Theorem of Calculus, L'Hopital's Rule, partial fractions, infinite series, parametric functions, vector functions and polar functions. Throughout these key ideas students are expected to use the mathematical practices for AP Calculus: reasoning with definitions and theorems, connecting concepts, implementing algebraic/computational processes, connecting multiple representations, building notational fluency, and communicating mathematics orally and in well-written sentences. Taking the AP exam for this course is optional, but highly encouraged. Students who opt NOT to take the AP exam for this course will be required to take an alternative assessment in lieu of taking the AP exam. The alternative assessment will count towards the overall course grade.

Practical Applications of Math and Personal Finance (MAPAMPF)

Grade Level: Twelve Credit: One

Prerequisites: Geometry or Algebra 2 Concepts

Materials: Managing Your Personal Finances 6th Edition, Cengage Learning, 2010.

Mathematics for the Trades-A Guided Approach, Carman and Saunders, 2011

General concepts covered: probability, applications to algebra, geometry, trigonometry, fractions, decimals, percentages, and math skills without using calculators.

Preparing students to make life-changing financial decisions is the main goal for this course. The economic climate that we live in continues to evolve and change without regard to current knowledge about issues that affect money. Graduating without some basic strategies for correct monetary use, Wilmington Area students will have a great disadvantage in a highly competitive and technical marketplace. Topics include: Career Development ePortfolio, Work Laws and Responsibilities, Money Management, Financial Security, Credit Management, Resource Management, Consumer Rights and Responsibilities, and Risk Management.

Algebra 2 Concepts (MAA2C)

Grade Level: Nine through twelve

Credit: One

Materials: Glenco Algebra 1, McGraw Hill c. 2014 Glencoe Algebra 2, McGraw Hill c. 2014

Prerequisite: Recommendation by Administration

A focus on solving multi-step linear equations and linear inequalities will take place; students will also spend time working with relations and functions while identifying domain and range for both discrete and continuous relations and functions. An emphasis on solving 2x2 and 3x3 systems of linear equations including word problem settings using graphing, substitution, elimination, and matrices on the graphing calculator; solving systems of linear inequalities and being able to justify solutions, students will analyze quadratic functions including graphing to identify key features and solving quadratic equations including word problem scenarios using a variety of methods including algebra, factoring, and the quadratic formula. An emphasis on choosing efficient methods will also be encouraged. Students will solve radical equations as well as analyze statistics and calculate probability. Graphing calculators will be used throughout the course to reinforce learning as a visual tool and aid.

Science

General Requirements for Graduation:

Credits: 3.5 (Which Must Include Successful Completion of the Following)

Biology or Advanced Biology	(Grade 9)	(1.5)
General Science or Chemistry I	(Grade 10/11)	(1.0/1.5)
One or More Science Electives	(Grade 11 and 12)	

Science Electives: (Please refer to individual course descriptions and prerequisites)

Conceptual Science (Required Keystone Remediation)	(1.0)
Forensic Science	(0.5)
Environmental Science	(1.0)
College Chemistry* (5%)	(1.5)
Anatomy & Physiology	(1.0)
AP Biology* (10%)	(1.5)
Physics* (5%)	(1.5)
Organic Chemistry	(0.5)
Advanced Chemistry Applications	(0.5)

^{*}Denotes Weighting

Biology 9 with Lab (SCB1)

(NCAA Approved Course)

Grade Level: Nine Credit: 1.5

Materials: Biology, The Dynamics of Life, Glencoe McGraw Hill, 2004

Biology 9 is a course designed to provide essential preparation for the Pennsylvania Biology Keystone Exam. The course includes inquiry-based instruction, direct instruction, and the use of laboratory technology. It fosters learning that encourages students to ask valid scientific questions, while engaging in investigations to understand and explain the behavior of living things in a variety of scenarios that incorporate scientific reasoning, analysis, communication skills, and real-world applications. This course investigates the composition, diversity, complexity, and interconnectedness of life on Earth. Fundamental concepts of cells, biochemistry, bioenergetics, homeostasis and transport, cell growth and reproduction, genetics, evolution, and ecology provide a framework, through inquiry-based instruction, to explore the living world, the physical environment, and the symbiotic interactions within and between them. Students will participate in the Keystone Biology Exam at the end of this course.

Eligible Content: (Pennsylvania Biology Keystone Exam)

Module A- Cells and Cell Processes

- 1. Basic Biological Principles
- 2. Chemical Basis of Life
- 3. Bioenergetics
- 4. Homeostasis and Transport

Module B- Continuity and Unity of Life

- 1. Cell Growth and Reproduction
- 2. Genetics
- 3. Evolution
- 4. Ecology

Honors Biology 9 with Lab (SCAB1)

(weighted 5 percentage points)
(NCAA Approved Course)

Grade Level: Nine Credit: 1.5

Materials: Biology, The Dynamics of Life, Glencoe McGraw Hill, 2004

Prerequisite: Score at least Proficient on the 8th grade Science PSSA Exam or 90% on the locally

developed assessment."A" in 8th Grade Science

Honors Biology 9 is a course designed to provide preparation for the Pennsylvania Biology Keystone Exam. This course will provide both a rigorous review and an in-depth exploration of major biological topics (please see below). The course includes inquiry-based instruction and laboratory experience, enriched with direct instruction and technology. It fosters learning that encourages students to ask valid scientific questions, while engaging in investigations to understand and explain the behavior of living things in a variety of scenarios that incorporate scientific reasoning, analysis, communication skills, and real-world applications. This course investigates the composition, diversity, complexity, and interconnectedness of life on Earth. Fundamental concepts of cells, biochemistry, heredity, evolution, and ecology provide a framework through inquiry-based instruction to explore the living world, the physical environment, and the symbiotic interactions within and between them. Students will participate in the Keystone Biology Exam at the end of this course.

Eligible Content: (Pennsylvania Biology Keystone Exam)

Module A: Cells and Cell Processes

Basic Biological Principles The Chemical Basis for Life

Bioenergetics

Homeostasis and Transport

Module B: Continuity and Unity of Life

Cell Growth and Reproduction

Genetics

Theory of Evolution

Ecology

General Science (SCGS)

(NCAA Approved Course)

Grade Level: Ten or Eleven

Credit: 1.0

Materials: Physical Science- Concepts in Action. Wysession, Frank, and Yancopoulos. 2009.

The General Science curriculum is designed to continue the investigation of the physical sciences begun in earlier grades. The General Science course will provide an extensive knowledge base and a foundation for continued study of science, particularly tailored to meet the needs of students not interested in pursuing further in-depth science curriculum. The investigations will be approached in a qualitative and quantitative manner in keeping with the developing mathematical skills of the students. The curriculum will integrate topics from the chemistry, physics, and earth science curriculum.

Chemistry 1 with Lab (SCC1)

(NCAA Approved Course)

Grade Level: Ten, Eleven or Twelve

Credit: 1.5 (Labs)

Prerequisites: Completion of Algebra I with a minimum grade of a "C"

Materials: Chemistry: Connections to Our Changing World, Lemay, Beall, Robblee, Brower, 2000

In this course, students are introduced to the concepts of atomic structure, chemical bonding, writing equations, the solution process, radioactivity, and basic organic compounds. Students learn these through classroom discussions, showing mathematical relationships, and laboratory discovery methods.

College Chemistry with Lab: (CHEM 0110)

(University of Pittsburgh College in the Classroom) (weighted 5 percentage points) (NCAA Approved Course)

Grade Level: Ten through twelve

WAHS Credit: 1.5 (Labs)
Pitt Credit: Four (Labs)

Prerequisites: Successful completion of Chemistry I of 75% or higher, and Geometry/Algebra 2

Materials: The recommended text for this course is General Chemistry - 9th ed. or later, by Ebbing

and Gammon; Houghton/Mifflin Publishing, now Cengage.

This course is a "College in the High School" course. Students may take the course for college credit through the University of Pittsburgh or without the college credit. There is a tuition fee required to take the course for college credit. It may also be taken at no cost but the student will not receive the college credits. This course may require laboratory sessions and exams on the University of Pittsburgh campus. This course covers typically the first semester content of a two-term introduction to general chemistry in college. Topics covered include atomic theory, chemical formulas, stoichiometry, quantum theory, atomic and molecular structure, gases, thermochemistry, and states of matter. Cognitive and algebraic problem solving along with laboratory experiences are an integral and developing part of this course. This course takes the content covered in Chemistry 1 and reapplies them at a college level, advancing some of the topics and creating deeper and clearer understanding of the materials while having the opportunity to receive college credits at a high school setting and pace.

Organic Chemistry (SCOC)

(NCAA Approved Course)

Grade Level: Ten through twelve

Credit: .5
Materials: TBA

Prerequisite: Successful completion of Chemistry I of a 75% or higher, College Chemistry is

recommended but not required.

The course is designed to provide an overview of organic chemistry to students interested in pursuing a career in the medical and science fields. This course also focuses on the real world application of organic compounds in medicine, environment, consumer products, and more. Organic chemistry is the study of compounds containing carbon. Students will explore the major classes of functional groups, including the relationship between structure and function of molecules, reaction mechanisms, synthesis of organic compounds, and how to determine structure via various spectroscopic techniques. Several themes are prevalent in each unit of study: nomenclature, chemical and physical properties, structures, mechanisms, and common molecules.

AP Biology with Lab (SCAP)

(weighted 10 percentage points) (NCAA Approved Course)

Grade Level: Eleven or Twelve

Credit: 1.5

Prerequisites: Successful completion of Biology and Chemistry 1.

Score at least Proficient on the Keystone Biology Exam or 90% on the locally

developed assessment.

Materials: Biology, 5th Edition, Solomon, Berg, Martin, 1999 Supplemental Text: Biology for AP

Courses (Openstax), Zedalis J. and Eggebrecht J. (Online Version) 2021.

The course is designed around the AP Biology Curriculum Framework that focuses on the major concepts in biology and their connections. Additionally, the Curriculum Framework provides a basis for students to develop a deep conceptual understanding as well as opportunities to integrate biological knowledge and the science practices through inquiry-based activities and laboratory investigations without having to teach a textbook from cover to cover.

--AP® Biology (CollegeBoard) Syllabus 3

AP Biology is a complex, laboratory-based course that builds upon field observation, analysis of scientific data, natural history, behavior, and identification, to provide an in-depth and cross-sectional study of living organisms (equivalent to an introductory-level collegiate biology course.) Throughout this course, students will explore a plethora of biological topics related to the four fundamental principles ("Big Ideas") governing all living organisms and biological systems. The goal of this course is to further examine the living world around us through the implementation of an inquiry-based curriculum, focused on enduring biological understandings and essential knowledge, while providing clear learning objectives. This course provides students with an opportunity to develop an enduring conceptual framework of modern biology, while encompassing the best scientific practices and cross-curriculum collaborations; it also emphasizes biological knowledge and critical thinking to address environmental and social concerns (see below for additional details). However, because this is an AP-level course, our study will take a very advanced and accelerated approach to the realm of biological science and will include a variety of research methods, assignments, and laboratory investigations designed to prepare students for the AP Biology Exam and subsequent collegiate courses. Students are encouraged to take the Advanced Placement Exam upon completion of the course. Taking the AP exam for this course is optional, but highly encouraged. Students who opt NOT to take the AP exam for this course will be required to take an alternative assessment in lieu of taking the AP exam. The alternative assessment will count towards the overall course grade.

Physics with Lab (SCPH)

(weighted 5 percentage points) (NCAA Approved Course)

Grade Level: Eleven or Twelve

Credit: 1.5

Prerequisites: Course May Be Taken Concurrent with Pre-calculus (Strong Algebra Foundation)

Materials: College Physics, Saunders College Publishing, 1995 Supplemental Text- College Physics

(Openstax), Dirks, K. and Sharma M. (Online Version) 2021.

The goal of this course is to use a plethora of scientific concepts, mathematical equations, and experimental assumptions to not only describe, but to make predictions about a broad range of physical phenomena. The course emphasis is equally divided between developing a conceptual understanding of the major topics of physics and developing problem solving skills in such topic areas. Algebra and trigonometry will be used extensively throughout. Emphasis will be put on understanding the theories at hand, while simultaneously, identifying them in everyday life through experimental design. Students will be expected to undertake and report on laboratory projects related to the topics in the class.

Forensic Science (SCFS)

(NCAA Approved Course)

Grade Level: Ten through Twelve

Credit: .5

Prerequisites: Biology and Chemistry 1 or General Science

This course is designed to expose students to the science behind forensic investigations, while simultaneously linking laboratory analysis to real world applications (forensic entomology, fingerprinting, DNA analysis, blood typing and spatter analysis, trajectories, forensic Anthropology, and chemical analysis of drugs, poisons, and trace evidence. Students will learn about forensic-related careers and will take part in mock exercises as experts in the field to solve crimes. Students will acquire the skills necessary to interpret data, as well as the specific techniques involved in the analysis of both chemical and biological evidence. The goal of the course is to prepare our students for citizenship and advance their knowledge of science and how it fits in to the world we live in. The course is designed to motivate students to continue to explore alternate fields of science, as well as to foster student interest in the learning process, especially as it relates to the field of forensic science.

As a result of this course, students will:

Become familiar with the forensic process from the crime scene to the courtroom

Obtain hands-on experience performing various forensic techniques

Understand the science behind significant forensic cases in history

Acquire a better scientific background in order to evaluate current criminal cases and forensic applications

Get real-world exposure to the field of forensic science

Environmental Science (SCPS)

(NCAA Approved Course)

Grade Level: Eleven or Twelve

Credit: One

Prerequisites: Successful completion of two Science credits, including Biology

Materials: Environment and Ecology for Pennsylvania, Meeting the Standards, Globe Pearson, 2003

Supplemental Text: Environment- The Science Behind the Stories- 6th Edition. Jay

Withgott and Matthew Laposata. 2018.

The curriculum is designed to educate students about the importance of the human role in the ecosystem. Students will monitor the chemical, physical, and biological parameters of a stream. Students will study curriculum units on watersheds and wetlands, renewable and nonrenewable resources, Environmental Health, Agriculture and Society, Integrated Pest Management, Ecosystems, and their interactions, threatened, endangered and extinct species, humans and the environment, and environmental laws and regulations.

Anatomy & Physiology (SCAN)

(NCAA Approved Course)

Grade Level: Ten through twelve

Credit: 1.0

Prerequisites: Biology and Chemistry 1

Materials: Essentials of Human Anatomy & Physiology. 8th edition, Pearson, 2006

In this course, the students will use both a system and regional approach to uncover the Anatomy (structure) and Physiology (function) of the heart, respiratory, lymphatic, endocrine, blood, appendicular and axial musculoskeletal systems, as well as the nervous system. The students will be able to recognize the individual structures within each system and have an understanding of why we are "put together" the way we are. They will also be able to obtain the basic information for each of these systems in regards to "how they work" and what their roles/jobs are within the human body.

Advanced Chemistry Applications (SCACA)

(NCAA Approved Course)

Grade Level: Eleven and Twelve

Credit: .5

Prerequisites: Successful completion of College Chemistry

Materials: Chemistry: Connections to Our Changing World, Lemay, Beall, Robblee, Brower, 2000

This course is designed to expose students to the topics covered in 2nd semester college chemistry 2 courses. It is a continuation of the student's knowledge of chemistry as well as building upon topics covered in Chemistry I and College Chemistry. As a third year continuation of the chemistry, students will attain a depth of understanding of fundamentals and a reasonable competence in dealing with chemical problems as well as relationships to their everyday life experiences. The course contributes to the development of the students' abilities to think clearly and to express their ideas, orally and in writing, with clarity and logic. Students will develop this through classroom discussion, mathematical relationships, and laboratory analysis. Problem-solving skills and higher order reasoning will be developed through topics of equilibrium, acid/base buffers, electrochemistry, kinetics, thermodynamics and free energy, and biochemistry.

Social Studies

Civics and Social Studies 9 (SS09)

(NCAA Approved Course)

Grade Level: Nine Credit: One

Materials: Building Citizenship/Civics and Economics, McGraw Hill 2014

United States/History and Geography, McGraw Hill 2014

The year begins with a survey of the organization of the United States government. This includes an overview of the historical significance and an emphasis on the provisions of the United States Constitution and citizenship. The organization and functioning of the legislative, executive, and judicial branches at the federal level are analyzed. The second part of the year will cover U.S. History from the 1840s-1870s. This portion of the course will focus on Manifest Destiny to Reconstruction. An emphasis will be on the Civil War and its historical significance. This course will present the major events, people, and battles related to this war. Pennsylvania's role during the Civil War will be emphasized. Additional Pennsylvania civics and history will also be covered during this part of the school year.

Honors Civics and Social Studies 9 (SS09)

(NCAA Approved Course)
(Weighted 5 percentage points)

Grade Level: Nine Credit: One

Materials: Building Citizenship/Civics and Economics, McGraw Hill 2014

United States/History and Geography, McGraw Hill 2014

Prerequisite: Score at least Proficient on the 8th grade ELA PSSA Exam or 90% on the locally developed assessment.

This Honors level course is for students who have demonstrated outstanding ability in Social Studies and are interested in pursuing a more rigorous curriculum. The organization of the United States government, including an overview of the historical significance and an emphasis on the provisions of the United States Constitution and citizenship, analysis of the organization and functioning of the legislative, executive, and judicial branches at the federal level are analyzed in depth. The second part of the year will cover U.S. History from the 1840s-1870s. This portion of the course will focus on Manifest Destiny to Reconstruction. An emphasis will be on the Civil War and its historical significance. This course will present the major events, people, and battles related to this war. Pennsylvania's role during the Civil War will be emphasized. Additional Pennsylvania civics and history will also be covered during this part of the school year. Advance critical thinking, composition, reading comprehension and discussion skills will be required of students. Self-motivation and independent effort are necessary to be successful in this course.

American History (SS10)

(NCAA Approved Course)

Grade Level: Ten
Credit: One

Materials: US History and Geography - Modern Times, McGraw Hill 2014

The year will begin with an evaluation of the domestic and foreign policies of the United States throughout our history and how these policies affect one another. The course will focus on the people who have impacted our nation's history, various political and economic policies practiced, and challenges that have faced our nation. Emphasis towards an appreciation of our heritage and what it means to be an American will be approached. Concept learning will be emphasized. A comparison of primary and secondary sources will be practiced, and completion of projects will be required.

Advanced Placement United States History

(weighted 10 percentage points)
(NCAA Approved Course)

Grade Level: Ten or Eleven

Credit: One Materials: TBD

Prerequisites: An "A" in Civics or a "B" in Honors Civics.

AP US History focuses on developing students' understanding of American History from 1491 to the present. Students will investigate key events, individuals, developments, and processes in the historical time periods. Students will use the same methods employed by historians when they study the past. As an elective, this course allows students the opportunity to earn three college credits if they are able to pass the AP US History exam in May. Taking the AP exam for this course is optional, but highly encouraged. Students who opt NOT to take the AP exam for this course will be required to take an alternative assessment in lieu of taking the AP exam. The alternative assessment will count towards the overall course grade.

World History 1450 - Present (SS11)

(NCAA Approved Course)

Grade Level: Eleven Credit: One

Material: World History and Geography - Modern Times, McGraw Hill 2014

Description: This course is thematically organized to cover the institutions of religion, economy, and government throughout the known world. By examining various cultures, students will garner an understanding of the impact of these civilizations. There will be an added emphasis on linking the past with the present to make essential connections to the modern world.

Advanced Placement Modern World History (SSAPWH)

(weighted 10 percentage points) (NCAA Approved Course)

Grade Level: Ten or Eleven

Credit: One Material: TBD

Modern is an introductory college-level modern world history course. Students cultivate their understanding of world history from c. 1200 CE to the present through analyzing historical sources and learning to make connections and craft historical arguments as they explore concepts like humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation. Taking the AP exam for this course is optional, but highly encouraged. Students who opt NOT to take the AP exam for this course will be required to take an alternative assessment in lieu of taking the AP exam. The alternative assessment will count towards the overall course grade.

United States Political Science (SS12)

(NCAA Approved Course)

Grade Level: Twelve Credit: One

Materials: American Government, Holt, Rinehart and Winston 2003

This course provides a survey of the organization of American government, which includes an overview of the historical significance and an emphasis on the provisions of the United States Constitution. The organization and functioning of the legislative, executive, and judicial branches at the federal level are analyzed. Additionally, economic principles and theory will be examined. The objective of the course is for students to arrive at a more comprehensive understanding of American government, politics, and economics in order to lay the proper foundation for informed citizenship.

Advanced Placement American Government (SSAP12)

(weighted 10 percentage points) (NCAA Approved Course)

Grade Level: Twelve Credit: One

Materials: American Government, Institutions & Policies, Wilson, Dilulio, and Bose 2015

Prerequisites: An "A" in World History or a "B" in AP World History.

AP Government offers students the opportunity to read and analyze materials in a college-level text and various primary and secondary sources as they study the relationship between politics and government. This course includes a comprehensive study of the art of politics and the workings of contemporary American political behavior as a primary social force. Students with a special interest in political science, law, or citizen political involvement will participate in a variety of activities which will allow them to apply theory into practice. Attention will also be given to comparative government, political frameworks, and political change. The grade for this course is weighted. Students are expected (although not required) to take the Advanced Placement Government Exam. Taking the AP exam for this course is optional, but highly encouraged. Students who opt NOT to take the AP exam for this course will be required to take an alternative assessment in lieu of taking the AP exam. The alternative assessment will count towards the overall course grade.

Introduction to Psychology (SSPSY)

(NCAA Approved Course)

Grade Level: Ten through twelve

WAHS Credit: .5

Materials: Psychology-An Exploration (Pearson, Ciccarelli, and White, 2015).

<u>Psychology-Principles in Practice</u> (Holt, Rhinehart, and Winston, 2003).

Students will be provided with an overview of the diverse field of psychology, and an appreciation of the way behavior and mental processes can be studied scientifically. The following topics are covered: History of Psychology, Research Methods, Biology and Behavior, Sensation and Perception, Consciousness, Learning, Cognition (Memory and Language), Intelligence (Testing), Developmental Psychology, Emotion and Motivation, Social Psychology, Personality Theories and Assessment, Stress and Health, Psychological Disorders, and Therapies. Contributions of outstanding past and contemporary psychologists are considered. The specialized vocabulary of the discipline is developed. Students take part in and develop experiments dealing with psychological disorders and mysteries of the human mind. Current events and essays pertaining to the field of psychology will also be covered.

Practical Law (SSPL)

(NCAA Approved Course)

Grade Level: Ten through twelve

Credit: .5

Materials: Street Law, 1999

Practical Law offers a practical approach in providing information and problem-solving opportunities that develop into student knowledge and skills that promote understanding various aspects of law in our modern society. Units studied in this class include: Introduction to Law and the Legal System, What is law? Lawmaking and Constitutional Law, Citizen Advocacy, Settling Disputes, The Court System, Lawyers, Criminal and Juvenile Justice, Crime in America, Introduction to Criminal Law, Crimes Against the Person, Crimes Against Property, Defenses, and The Criminal Justice Process.

Economics (SSECON)

Grade Level: Ten through Twelve

Credit: .5
Materials: TBD

This course explains how and why people and societies make economic choices. Students will examine macroeconomic and microeconomic principles in order to understand the fundamentals of the American and global economic systems. Real world application and examples of economic concepts such as supply and demand, forms of business, labor unions, government finances and influence on the economy, money and prices, inflation and deflation cycles.

Foreign Language

French 1 (LAF1)

(NCAA Approved Course)

Grade Level: Eight through Twelve

Credit: One

Materials: C'est a toi, level 1 EMC Paradigm publishing

In French 1, students learn the basics of reading, writing, and speaking in French. Focus is on elementary vocabulary and essential verb conjugations in the present tense as well as correct pronunciation. Students will also study French customs and traditions and various regions and cities in France as well as communicating with French speakers in France and other countries. Classes are often taught in French, even early in the year so that students gain more exposure to the language through stories, videos, and conversations in French.

French 2 (LAF2)

(NCAA Approved Course)

Grade Level: Nine through Twelve

Credit: One

Materials: C' est a toi, level 2 EMC Paradigm publishing

In French 2, students will build on the vocabulary and grammar points learned in French 1 and will acquire new verb tenses, including two past tenses and the future and conditional tenses. French 2 includes units on French cuisine, Paris, and Quebec. Stories are once again used extensively to help students to extend their vocabulary and to understand the language in context.

French 3 (LAF3)

(weighted 5 percentage points) (NCAA Approved Course)

Grade Level: Ten through Twelve

Credit: One

Materials: C' est a toi, level 3 EMC Paradigm publishing or Controversies, Thomson

Prerequisites: A 75% in French 2 and teacher recommendation

French 3 marks a transition from a more elementary grammar and vocabulary driven by the topics covered in class. Students learn about housing styles and house hunting, about immigration and social issues, and about how to write a resume and apply for a job as well as reading an adapted version of Alexandre Dumas' *The Count of Monte Cristo*. Grammar elements such as the future tense, several past tenses and direct and indirect object pronouns will be covered within this context.

Intermediate College French I (LAF4)

(Pitt College in the High School Course) (weighted 5 percentage points) (NCAA Approved Course)

Grade Level: Eleven or Twelve

Credit: Three

Prerequisites: A 75% in French 3 and teacher recommendation

Materials: Controverses, Thomson & Heinle

Intermediate College French 1 is a College in High School (CHS) class. High School students will take this course instead of a regular French 4 class and will have the opportunity to earn three college credits for the course in addition to the regular high school credit. The University of Pittsburgh College in High School class focuses on spoken and written French and on making and defending arguments. Each chapter focuses on a different controversial issue and asks students to examine both sides of the argument before choosing a side and arguing for it through writing, speaking, and projects. Units focus on cultural differences between countries including how friendship varies between cultures, the role of school in society, how much control the government should have over individual freedoms, and gender inequalities. Grammar elements such as the conditional tense, the passé simple, and the subjunctive will be covered within this context. This course will also focus on natural, spontaneous oral and written communication in French.

Spanish 1 (LAS1)

(NCAA Approved Course)

Grade Level: Eight through Twelve

Credit: One

Materials: Paso a Paso 1, Scott Foresman, 2000

Spanish 1 introduces students to basic vocabulary and grammar structure which helps develop reading, writing, speaking, and understanding of simple phrases and sentences. Aural activities with tapes and videos are incorporated into the course. Culture is also explored. Conversations are used to help the student become more confident in the oral use of the language. Students also use Spanish in projects, such as creating greeting cards, clothing catalogs, house plans, family trees, and picture games.

Spanish 2 (LAS2)

(NCAA Approved Course)

Grade Level: Nine through Twelve

Credit: One

Materials: Paso a Paso 2, Prentice-Hall, 2000

Spanish 2 is an intense grammar course with a concentration on four verb tenses-preterit, imperfect, present, and past progressive. In addition, more complicated grammar structures will be addressed, such as comparatives, superlatives, reflexive verbs, negative constructions and the use of direct and indirect object pronouns. Students will have the opportunity to use this grammar, along with new vocabulary in developing their speaking, reading, writing and listening skills.

Spanish 3 (LAS3)

(weighted 5 percentage points) (NCAA Approved Course)

Grade Level: Ten through Twelve

Credit: One

Materials: Teacher researched and produced materials

Prerequisites: A 75% in Spanish 2 and teacher recommendation

Spanish 3 concentrates on the development of the student's writing and speaking skills through the study of advanced grammar concepts. This course covers nine verb tenses in the indicative mood, along with the study of pronouns, prepositions, adverbs, adjectives and comparisons. Thematic vocabulary units are utilized as a guide for the speaking and writing assignments.

Spanish 4 (LAS4)

(weighted 5 percentage points) (NCAA Approved Course)

Grade Level: Eleven or Twelve

Credit: One

Prerequisites: A 75% in Spanish 3 and teacher recommendation

Materials: Teacher researched and produced materials

In Spanish 4, students will continue to develop their language skills in reading, writing, speaking, and listening. There is a specific emphasis on three tenses of the subjunctive mood along with the imperative mood. Students will have short story reading and writing opportunities, along with speaking projects to advance their language skills.

Spanish Conversation and Culture Class

(weighted 5 percentage points)

Grade Level: Eleven or Twelve

Credit: One

Prerequisite: Spanish 3 or 4 – Minimum of 75% and teacher recommendation

During this course, students will further develop their oral and written communication skills. By the end of this course, students will be able to apply the mechanics of the language to engage in meaningful conversations regarding every day activities, travel, shopping, dining, education, and family. In addition, learners will further expand their knowledge of the art, literature and history of the Spanish-speaking world

Business Education

Accounting I (BTA1)

Grade Level: Ten through Twelve

Credit: One

Materials: Century 21 Accounting 8E, Thomson South-Western, 2006. Zenith Global Imports,

merchandising corporation simulation, Internet Research and Spreadsheets

Through Accounting 1, students acquire an understanding of the basic accounting cycle using double-entry accounting. Both manual and computerized skills learned can be applied in personal financial affairs, small business management, post-secondary studies, and seeking employment immediately following graduation. This course incorporates spreadsheets as an industry leader in organizing financial records. Students are required to create and maintain spreadsheets utilizing formulas and functions learned from the computer applications class. Students who complete the first year accounting course will feel a great sense of pride and accomplishment.

Accounting 2 (BTA2)

Grade Level: Eleven or Twelve Credit: One Elective

Prerequisite: Accounting I (Grade of 70% or higher) or with the instructor's permission

Materials: Century 21 Accounting 8E, Thomson South-Western, 2006.

Tronics, Inc., merchandising corporation simulation

Internet Research and Spreadsheets

In this course, students refine the skills learned in Accounting I. Additionally, they develop advanced skills useful in becoming entry-level accounting clerks or assistants and/or attending courses in a post-secondary setting. Topics include: Uncollectible Accounts, Plant Assets and Depreciation, Inventory, Notes and Interest, Accrued Revenues and Expenses, and International and Internet Sales.

Sports and Entertainment Marketing(BTSEM)

Not Offered 2022 - 2023

Grade Level: Nine through Twelve

Credit: .5

Materials: Sports and Entertainment Textbook and Online Simulation

Sports and Entertainment Marketing is a course that is designed for students interested in sports, entertainment, and event marketing. Emphasis is placed on the following principles as they apply to the industry: branding, licensing and naming rights; business foundations; concessions and on-site merchandising; economic foundations; promotion; safety and security; and human relations. Students will also learn marketing strategies including sponsorship, marketing research, pricing, endorsements, and promotions.

Photoshop I (BPS1)

Grade Level: Nine through Twelve

Credit: .5

Materials: Adobe Photoshop

Adobe Photoshop is a graphic design program that focuses on picture editing. Adobe InDesign is a desktop publishing program. The program can be used to create posters, flyers, brochures, magazines, newspapers and books. Along with teacher demonstration, students will work collaboratively and independently on several in-class assignments and projects.

Photoshop II

Not Offered 2022 - 2023

Grade Level: Nine through Twelve

Credit: .5

Prerequisite: Photoshop I

Materials: Adobe Photoshop and Adobe Illustrator

This advanced class builds on your existing knowledge of Photoshop and expands your list of creative techniques. The course really drills design related techniques but also explores the real-world realities that apply to the everyday use of Photoshop. Projects will focus on ones that are designed to be printed. Students will also be introduced to Adobe Illustrator.

Web Site Design & Development

(Pitt College in the High School) (weighted 5 percentage points)

Grade Level: Ten through Twelve

WAHS Credit: .5
Pitt Credit: Three
Prerequisite: None

Materials: Murach's HTML5 and CSS3, Zak Ruvalcaba and Anne Boehm; Murach

The purpose of this course is to provide a basic understanding of the methods and techniques of developing a simple to moderately complex Web site using the standard Web page language XHTML, Dreamweaver or comparable, and JavaScript. Students also will learn Web site design and layout techniques as well as basic search engine analysis.

Intermediate Web Site Design & Development

(Pitt College in the High School) (weighted 5 percentage points)

Grade Level: Ten through Twelve

WAHS Credit: .5
Pitt Credit: Three

Prerequisite: Web Page Design & Development

Materials: Murach's HTML5 and CSS3, Zak Ruvalcaba and Anne Boehm; Murach

The purpose of this course is to provide a basic understanding of the methods and techniques of developing a simple to moderately complex Web site using the standard Web page language XHTML, Dreamweaver or comparable, and JavaScript. Students also will learn Web site design and layout techniques as well as basic search engine analysis.

Introduction to Computer Programming (CS 0007)

(Pitt College in the High School) (weighted 5 percentage points)

Grade Level: Ten through Twelve

WAHS Credit: One Pitt Credit: Three

Prerequisite: Familiarity of computers and programs is assumed for this course

Materials: Starting Out with Java 5: From Control Structures Through Objects, 6th ed., by Tony

Gaddis

This is a first course in computer science programming. It is recommended for students intending to major in computer science who do not have the required background for CS 0401. The focus of the course is on problem analysis and the development of algorithms and computer programs in modern high – level language.

SWAT – Students Working Advanced Technology

Grade Level: Ten through Twelve

Credit: One

Materials: Real World Technical Applications

SWAT is a real world technical application course for students. This course is for 10th through 12th grade students in small numbers. Students MUST apply to take this course. An application will be distributed to any interested student. Students can expect to work hands on in a variety of different technical areas such as managing the school website, managing social media, technology maintenance and several new technology adventures. Furthermore, students will also learn the ethics behind some of the technological aspects of the school such as posting on social media or the school web site. Additionally, students will also learn many social skills such as organization, public speaking, interviewing, teamwork and leadership. Students must have taken and/or taking concurrently the Pitt Introduction to Computer Programming course to be eligible for the SWAT course.

SWAT (9) - Students Working Advanced Technology

Grade Level: Nine

Credit: .5 or One (depending on availability)

Materials: Real World Applications

SWAT is a real world technical application course for students. This is for 9th grade students in small numbers. Students MUST apply to take this course. An application will be distributed to any interested student. Students can expect to work hands on in a variety of different technical areas such as device repair, basic troubleshooting, and a HEAVY emphasis on cloud services such as gSuite by Google (which may include but is not limited to Docs, Sheets, Slides, Forms, Sites), Office 365 (Word, Excel, Powerpoint, and OneNote) and will be introduced to filming and video production. Additionally, students will also learn many social skills such as organization, public speaking, interviewing, teamwork, and leadership.

Entrepreneurship (BTEP)

Not Offered 2022 - 2023

Grade Level: Ten through Twelve

Credit: .5

Materials: Entrepreneurship and Small Business Management, Glencoe, 2000.

This course is designed to prepare students to own and/or operate a business. Students will learn the skills necessary to develop a business plan, analyze cost and economic issues, advertise and market a business, and manage personnel. Much of the in-class work is complete as company partners and the use of the Internet is an intricate part of researching up-to-date business concepts.

Introduction to Computer Science

Grade Level: Nine through Twelve

Credit: .5

Materials: CMU Website (CS1a)

This CS1 curriculum is designed for students in 9th through 12th grade with no prior programming experience required. It is inspired by 15-112, Fundamentals of Programming and Computer Science, a highly successful course taught at Carnegie Mellon University for the past 10+ years. It is predicated on the notion that learning about programming and computer science should be fun and engaging. This requires interesting problems to solve, as computational problem-solving is the core of computer science. It is why we utilize graphical problems in CS1—they are visually engaging, allow for multiple correct solutions, and provide visual cues when a solution goes awry, making debugging a cinch.

Advanced Computer Science (BTACS)

Grade Level: Nine through Twelve

Credit: .5

Materials: CMU Website (CS1b)

Prerequisite: Introduction to Computer Science

This course picks up where students left off in Introduction to Computer Science starting with unit 7. Students must take Introduction to Computer Science prior to taking this course. Students will learn more about conditions, motion events, new shapes, math functions, nested loops, methods and return values.

Fine Arts

DEPARTMENT MISSION: The mission of the Wilmington Area School District fine arts department is to educate students to be critical thinkers and aesthetic appreciators of the arts. The visual and performing arts offer unique opportunities to teach to students' various learning styles. We offer a holistic education centered on understanding theory and pedagogy that extends to personal creativity, the highest form of thinking. Students in the fine arts program will not only become more knowledgeable musicians and artists in the classroom, but will also be able to transfer that knowledge to our community and society at large. It is through this comprehensive K-12 program that students not only achieve excellence in Concert Choir, band, drama, music and art, but that they also know how to collaborate as a team and present themselves well in public settings.

Music Theory and Composition

Grade Level: Ten through Twelve

Credit: One

Prerequisites: 1 year of Band or Concert Choir, as well as current enrollment in a Band or Concert Choir

class.

Music Theory and Composition is an advanced course in the study of music theory. Students will learn the theoretical concepts necessary to enter a collegiate music program and use these concepts to develop basic composition skills. Topics covered include scales, modes, chord structure, harmonic progressions, and four-part writing. This is not an introductory course and requires a prerequisite of Band or Concert Choir as it builds upon the concepts taught in those ensembles. Special exceptions to the prerequisites must be approved by the teacher of this course.

Concert Choir

(CH01 – 1 credit) (CH02 - .5 credits)

Grade Level: Nine through Twelve

Credit: One or .5

Prerequisites: Must complete simple vocal audition at the end of the previous school year or at the beginning of the current school year. Students should possess an ability to sing, willingness to work hard, and attitude necessary to be in an outstanding musical group.

Concert Choir seeks to further develop those musical skills begun in elementary and middle school Concert Choir. Students will develop sight-reading skills, aural skills, and proper vocal technique while preparing for performances. Musicianship, discipline, and attitudes needed for outstanding performance are stressed. Opportunities for performing include school productions, evening concerts, and programs for local organizations. Students are required to attend all performances as part of the nine-weeks grade.

Women's Chorus

Grade Level: Ten through Twelve

Credit: One

Prerequisites: One year of High School Concert Choir. Must complete and pass advanced vocal audition at the end of the previous school year. To take this class, you MUST have approval by the

Choir Director.

Women's Chorus is designed for female students who possess an advanced knowledge of music, strong sight-reading abilities, strong aural abilities, and good vocal technique. Students in this auditioned group will learn and perform all of the music from regular Concert Choir while preparing their own pieces for performance. Opportunities for performing include school productions, evening concerts, and programs for local organizations. Students may only sign up for Women's Chorus after completing the advanced vocal audition with the choir director and receiving approval. Students are required to attend all performances as part of the nine-weeks grade.

Band (BAND)

(Concert Band & Marching Band)

Grade Level: Nine through Twelve

Credit: One

Prerequisites: Mastery of fundamentals of instrument and Band Camp

In this full year course, students develop the fundamental skills necessary to perform with their instrument in a group and individually. Subject matter that will be taught can include music theory, rhythm, music history, instrumental techniques and skills, music appreciation, and music technology. Students in the high school band program will be required to participate in both marching band, concert band, and pep band throughout the year and will perform at various music festivals, sporting events, and school assemblies as scheduled by the director. Summer rehearsals and attendance at Band Camp during the last week of July each summer will emphasize developing the marching skills needed to perform in parades and at football games. Proper attitudes toward teamwork, care of equipment, discipline, and respect for one another will be fostered through group participation. Enrollment in high school band will also allow students to participate in extracurricular instrumental activities such as Jazz Ensemble, PMEA festivals, and County Band Festivals each year through auditions. Students may be required to purchase various materials used each year. Fundraisers will be made available to assist in the purchase and funding of any band student's expenses.

Art Courses

Students must have a strong interest in art, good time management skills, and a willingness to work hard to be successful in art classes. Course offerings must be taken in successive order. All students are required to purchase a sketchbook. Basic materials will be provided; however, students may be responsible for purchasing various materials throughout the school year if needed for individualized projects. Teacher recommendation will be considered in student's placement in course. The curriculum and the projects will differ from semester to semester during the course of one school year to reflect an introductory course and an advanced course. These courses are only able to be taken twice over the course of a four-year period.

Art Foundations

Focus: The introduction to and exploration of 2D & 3D art

Grade: Nine through Twelve

Credit: .5

Prerequisites: none

This course introduces the student to the creation of a variety of art forms. The elements of art and principles of design, plus the individual's creativity, will be the catalyst for students to complete two-dimensional and three-dimensional art work. Students will be introduced to basic visual communication, presentation and critique. Areas of study will include drawing, painting, printmaking, ceramics, fiber arts and mixed media. Research and writing are requirements of all art courses. Students will occasionally be required to purchase materials. All art courses address Pa art standards. Art history is a component of all art courses and subject matter may include studies of the human form, religious references and political viewpoints that differ from our own.

2D Media

Focus: Drawing and painting Grade: Nine through Twelve

Credit: .5

Prerequisites: none

This class will involve aspects of drawing and painting. Two dimensional mixed media work may be introduced. Students will obtain a strong foundation in both drawing and painting. Students will become confident in drawing from observation. Realistic drawing skills will develop as well as techniques in shading, composition and expanding overall creativity. Once students are comfortable with drawing skills, they will be introduced to painting. Acrylic and watercolor materials, their care and techniques will be covered. The elements of art and the principles of design, as well as the individual's creativity, will be the catalyst from which students complete 2D work. Research and writing are requirements of all art courses. Students will occasionally be required to purchase materials. All art courses address PA art standards. Art history is a component of all art courses and subject matter may include studies of the human form, religious references and political viewpoints that differ from our own.

World Art

Focus: Cultural forms and methods

Grade: Nine through Twelve

Credit: .5

Prerequisites: Art Foundations or 2D Media required

In this course, students will explore art forms from around the world. Through the ages, art has remained a viable means of communication and inspiration throughout the world. Students will study the history, geography and art of various cultures and complete studio projects in the styles of indigenous cultures. Areas of study may include drawing, painting, printmaking, ceramics, fiber arts and mixed media. The elements of art and the principles of design, plus the individual's creativity, will be the catalyst for students to complete artwork. Research and writing are requirements of all art courses. Students will occasionally be required to purchase materials. All art courses address PA art standards. Let it be noted that art history is a component of all art courses and subject matter may include studies of the human form, religious references and political viewpoints that differ from our own.

Ceramics

Focus: Clay hand building techniques and sculpture

Grade: Ten through Twelve

Credit: .5

Prerequisites: Art Foundations or 2D Media + teacher recommendation

This course will introduce students to three dimensional art constructed from clay. The students will study about and create both functional and decorative forms using various hand building methods and sculpting techniques. A variety of surface decoration and glazing techniques will be explored. Independent planning and work will be expected of students. The elements of art and the principles of design, plus the individual's creativity, will be the catalyst for students to complete aesthetic 3D forms. Research and writing are requirements of all art courses. Students will occasionally be required to purchase materials. Art history is a component of all art courses and subject matter may include studies of the human form, religious references and political viewpoints that differ from our own.

Practical Arts

Introduction to Engineering

Formerly (EDD1)

Grade Level: Nine through Twelve

Credit: .5

Materials: AutoCAD Software 2016

Introduction to Engineering serves to introduce students to technical drawing, computer aided drafting, and engineering concepts. The use of math concepts is required to assist the process of design, measurement, and computer modeling. The student will acquire an understanding of mechanical drawing tools, sketching, orthographic projections, isometric drawings, 2D and 3D computer drawings. Students will use the computer aided drafting software AutoCAD 2016. Students are responsible for and graded on participation, quizzes, projects, and final exams. Students must receive a 70% or higher in this course to move on to the other engineering courses offered.

Engineering Design

Formerly (EDD2)

Grade Level: Ten through Twelve

Credit: One

Prerequisite: 70% or better in Introduction to Engineering

Materials: Autodesk Software

Engineering Design is intended for students who enjoy math, science, design, or technology. It is for intermediate level students who are interested in furthering their knowledge of mechanical drawing and/or Autodesk software. Students will apply the software and mechanical drawing to various engineering design challenges throughout the class. This class is the foundation for those interested architecture, engineering, carpentry, blue print reading and other trades. Students will demonstrate proper labeling, dimensioning, sectioning of orthographic and isometric drawings, along with 3D modeling. This class requires students to attend on a regular basis as the tools and commands are continually built upon thorough the year. Students are responsible for and graded on participation, quizzes, projects, and final exam.

Architectural Design

Formerly (EDD3)

Grade Level: Ten through Twelve

Credit: One

Prerequisite: 70% or better in Introduction to Engineering

Materials: Autodesk 2016

Architectural Design is intended for the student who wishes to build on his/her mechanical drawing skills. Students will need to use problem solving skills and work in a team environment. This class is designed as a preparation for entry-level drafting positions. Students will use drafting and design software from the Autodesk 2016 package. Students will research, learn, and use floor plans, site development, and blue print reading to explain the solution to a given architectural problem. This class requires students to attend on a regular basis as the tools and commands are continually built upon thorough the year. Students are responsible for and graded on participation, quizzes, projects, and final exam.

Introduction to Welding

Not Offered 2022 - 2023

Grade Level: Nine through Twelve

Credit: .5
Materials: TBA

Students will be introduced to careers in metal fabrication, how each one of the major welding processes work, and the history of welding. Students will learn the basics of soldering, brazing, oxy acetylene welding/cutting, plasma cutting, SMAW (Shielded Metal Arc Welding), MIG (Metal Inert Gas) Welding, TIG (Tungsten Inert Gas) Welding, as well as safety in working in such an environment. This class requires students to attend on a regular basis as the tools and equipment are only available in the classroom. Students are responsible for and graded on participation, quizzes, projects, and final exam.

Materials Processing I (IND1)

(Formerly Industrial Arts 1)

Grade Level: Nine through Twelve

Credit: One

Materials: Various materials and Safety Guide

Materials Processing I consists of demonstrations and hands-on activities pertaining to basic woodworking techniques. Throughout this course, a variety of hand, portable power, and stationary machines will be used, with a strong emphasis on safety. Each student will receive demonstrations for each individual tool and machine to be used in the class. Additionally, each student will demonstrate machine understanding and proficiency by operating each machine while being closely supervised by the instructor. Each student will be required to pass individual safety tests with a score of 80% or higher in order to operate any machinery. Demonstrations and safety tests will be re-taught until each student can demonstrate machine operation to a high degree of efficiency.

There will be a number of projects that will be worked on throughout the school year. The first several projects will be decided on by the instructor for the entire class to individually construct. The projects that are selected will range from a beginner level project and gradually become more difficult and more detailed as each projected becomes completed. Upon completion and grading of required projects, students will have the opportunity to apply their knowledge and skills learned to construct a project of his/her choosing.

Materials Processing II (IND2)

(Formerly Industrial Arts 2)

Grade Level: Ten through Twelve

Credit: One

Pre-requisites: Materials Processing I

Materials: Various materials and Safety Guide

In Materials Processing II students will practice and refine basic skills developed in Materials Processing I to produce more advanced projects that are built to closer tolerances. Advanced machines will be demonstrated and used along with a strong emphasis on safety. As in Materials Processing I, each student will receive demonstrations for each individual tool and machine to be used in class. Additionally, each student will demonstrate machine understanding and proficiency by operating each machine while being closely supervised by the instructor. Each student will be required to pass individual safety tests with a score of 80% or higher in order to operate any machinery. Demonstrations and safety tests will be re-taught until each student can demonstrate proper machine operation with a high degree of efficiency.

There will be a number of projects that will be worked on throughout the school year. The first few projects will be decided on by the instructor for the entire class to individually construct. The projects that are selected will start at an intermediate level and gradually become more difficult as each project becomes completed. Upon completion and grading of required projects, students will have the opportunity to apply their knowledge and skills learned to construct a project of his/her choosing with at least one working feature (example: door, drawer, etc.)

Advanced CNC Design and Manufacturing

Formerly (EDD4 / IND 3 & 4)

Grade Level: Eleven and Twelve

Credit: One

Prerequisite: 70% or better in Engineering Design or Architecture Design and a 70% or better in

Materials Processing I

Materials: See Below

Advanced Computer Numerical Control (CNC) Design and Manufacturing is intended for students who demonstrate advanced technical skills and are highly motivated. This class will further develop knowledge in the areas of engineering as it relates to manufacturing and prototyping. Determination of an area of individual focus will be decided with the guidance of the instructor. Students will use the Autodesk software to develop parts and 3D print the prototypes, create 2D tool paths for parts using the CNC router, plasma cutter, or other similar equipment, as well as work with their hands to solve complex problems. This class requires students to attend on a regular basis as the lessons are continually built upon throughout the year. Students are responsible for and graded on participation, quizzes and projects.

Family and Consumer Science

Family and Consumer Science (FCS1)

Grade Level: Nine through Twelve

Credit: .5
Materials: TBA

The class is one semester long. Topics covered include: relationship skills, nutrition & wellness, organizational skills needed for success, and career explorations. Students have the opportunity to demonstrate skills learned through various projects, quizzes and tests and cooking labs. Students are exposed to various speakers from the community and surrounding areas as well.

Agriculture

A student who wishes to be considered a "Completer" of the Agriculture Program upon graduation must take two agriculture credits a year for each of his/her four years in high school. Students considered "completers" are also required to take the NOCTI exam. In addition, he/she must sign up for the Supervised Agriculture Experience (SAE) each year. Students planning a future in Agriculture education should plan to take additional Math, Industrial Arts and technical electives. Students planning to study agriculture in college should make sure that they meet the math and language requirements of the college.

All students enrolled in Agriculture courses are encouraged to join and experience the FFA program and take advantage of the leadership opportunities it has to offer.

Forestry (AGFW)

Not Offered 2022 - 2023

Grade: Nine through Twelve

Credit: .5

Materials: Introduction to Forestry Science, Delmar Publishing, 2008

Students will learn and have a basic understanding of forestry. During this course we will study career opportunism in the above areas, as well as forestry practices, forestry regions, importance of natural resources and individual species of wildlife and trees.

Wildlife (AGW)

Grade: Nine through Twelve

Credit: .5

Materials: Wildlife and Natural Resources Management, Delmar Publishing, 2003

Students will learn and have a basic understanding of wildlife and natural resources. During this course, we will study career opportunism in the above areas, as well as identification of species, care and habitat management, importance of natural resources and individual species of wildlife and trees.

Food Science (AGFS)

Grade Level: Eleven and Twelve

Credit: One

Materials: Introduction to Food Science, Delmar Publishing, 2003

This class is an excellent overview for anyone interested in attaining a basic understanding of food science. Students learn about different types of foods, food composition, food processing, food preservation and other aspects of the food industry. Also included is information about the different categories of foods, environmental concerns, food safety regulations, labeling and careers in food science.

Landscaping (AGLA)

Not Offered 2022 - 2023

Grade Level: Nine through Twelve

Credit: One

Materials: Landscaping Principles and Practices-6th Edition, Delmar Publishing, 2004

This class is an introduction to basic landscaping principles and design. Success as a landscape professional requires not only mastery of horticultural skills, but also the business aspects of the industry. Landscaping Principles and Practices thoroughly examines both the horticultural and business aspect of the industry. The class includes such skills as graphic design, installation, maintenance, pricing, human resource management, contract development, and the use of industry-specific technology. Computer technology will be used to design landscapes.

Animal Science (AGAS)

Grade Level: Nine through Twelve

Credit: One

Materials: Modern Livestock and Poultry Production, Delmar Publishing, 2008

Students will learn and have a basic understanding about the breeds, reproduction, health, care and management of large animals in the agricultural industry as well as career opportunities available in the animal industry. These will include dairy, sheep, pigs, beef, and poultry.

Small Gas Engines (AGSG)

Grade Level: Ten through Twelve

Credit: .5

Students will learn and gain a basic understanding of how small engines work and operate. Students will learn operation and theory as well as assemble small engines. They will also have a basic understanding of troubleshooting engines.

Equine Management (AGEM)

Not Offered 2022 - 2023

Grade Level: Eleven and Twelve

Credit: One

Materials: Equine Science, Delmar Publishing, 2003.

This course will familiarize students with all aspects of the equine industry. This will include history, feeding, care, equine health management, judging and selecting horses, diseases, laws, career opportunities and more.

Veterinary Science (AGVS)

Not Offered 2022 - 2023

Grade Level: Ten through Twelve

Credit: One Prerequisite: Biology

Materials: Introduction to Veterinary Science, Delmar Publishing, 2005.

Students will learn about the different aspects of being a veterinarian. This will include studies of all of the various animal systems including circulatory, respiratory, renal, digestive, reproductive and nervous. Studies will also include nutrition and how different species compare. Diseases, classifications, diagnosis, and disease prevention will be studied. The daily lives of veterinarians will be explored, including basic principles of surgery.

Small Animal Care (AGSA)

Not Offered 2022 - 2023

Grade Level: Nine through Twelve

Credit: One

Materials: Small Animal Care and Management, Delmar Publishing, 2002.

Students will learn about small animal care, safety, animal rights and animal welfare, careers in small animal care, nutrition and digestive systems of small animals. Animals studied will include: dogs, cats, rabbits, reptiles, amphibians, ferrets, hamsters, guinea pigs, birds and fish.

Introduction to Agriculture Education

Grade Level: Nine Credit: .5

Students will be introduced to the opportunities in Agricultural Education and learn about animals, plants, soils, forestry, wildlife, natural resources, landscaping, and the career areas available in the above mentioned. They will also be introduced to leadership opportunities and personal development.

Leadership / Personal Development (AGLP)

Grade Level: Nine Credit: .5

Students will learn about communication, personal development, public speaking, personality types and styles, goal setting, time management, employability, and parliamentary procedures. They will be encouraged to use skills in real life and expand on their knowledge to pursue a career path based on personal characteristics.

Electricity (AGEL)

Grade Level: Nine through Twelve

Credit: .5

Material: Agricultural Mechanics: Fundamentals and Applications, Delmar Publishing, 1997.

Students will study how electricity works and learn how to wire circuits. They will learn about the various tools and materials that are used, as well as applications and career opportunities.

Building Trades

Not Offered 2022 - 2023

Grade Level: Eleven and Twelve

Credit: .5

Students will explore a variety of aspects in the building and construction careers. Students will explore masonry, concrete, electricity, framing, plumbing, building design and other aspects that are included in the business. They will learn about career options in these areas through research and industry representatives.

Ag Business

Grade Level: Eleven and Twelve

Credit: .5

Material: Agribusiness: Decisions and Dollars

Students that are going to be completing the Agriculture program and take the NOCTI will need to schedule this class.

Students interested in agriculture business will benefit from this class. The class will focus on how financial management is vital in organizing and managing personal resources in agriculture. This class attempts to bring the record keeping and financial management commonalities together to introduce new concepts designed to keep agriculture current with today's financial practices.

Agriculture Welding

Grade Level: Nine through Twelve

Credit: .5

Students will learn about careers in metal fabrication, how each one of the major welding processes and the history of welding. Students will learn the basics of shielded metal arc welding, MIG welding as well as torch cutting. Students will also be able to work with the Plasma cam in designing and cutting metal.

Greenhouse/Floral Design

Grade Level: Ten through Twelve

Credit: .5

This course is designed for students who have an interest in owning or working in a floral shop and/or making floral designs. The course will cover the basic elements of floral design, history of floral design, traditional and modern day arrangement styles, how to select cut flowers, pricing strategies, and floral flower and tools identification. Students will learn how to interact with customers and record book keeping when managing a business. Topics also touched on in this course will be plant reproduction, plant nutrition, managing agricultural soils, environmental factors, plant identification, integrated pest management, crop production, fruit and vegetable production, greenhouse management, and nursery management and production.

Introduction to Agricultural Mechanization

Grade Level: Nine-Twelve

Credit: .5

This course serves as the prerequisite course for all agricultural mechanics courses. Instruction includes power transformation (power transmissions, hydraulics, Power Take Off systems), CNC cutting, and GPS and GIS systems related to precision agriculture. Drafting and design of construction projects used today with the agricultural industry will be addressed. Students will also have the opportunity to complete the OSHA CareerSafe Certification and National Safe Tractor and Machinery Operation License.

Introduction to Agricultural Construction

Grade Level: Nine - Twelve

Credit: 1

Introduction to Agricultural Construction offered an introductory set of skills needed for basic construction in the field. Students will gain experience in surveying, concrete and masonry, plumbing, basic electricity and wiring, and carpentry. Students will have the opportunity to fabricate small projects that build on these skills. Students will learn about career options in these areas through research and industry representatives.

Supervised Agriculture Experience (SAE1), (SAE2), (SAE3), (SAE4)

Grade Level: Nine through twelve

Credit: One

Supervised Agricultural Experience Programs are experience-based business and work ventures which help students enhance their decision making and record keeping skills. Ag Science completers are required to have an SAE project to accompany their regular class work during each school year. Usually this project extends into the summers after grades 9, 10 and 11. Projects require teacher supervision for credit.

Physical Education

DEPARTMENT MISSION: The mission of the Wilmington Area School District's Physical Education Department is to educate minds, develop healthy bodies, and promote positive attitudes towards lifetime physical activity, fitness, and sports skills. With a quality physical education program in place, each student will be empowered with the knowledge and skills necessary to make responsible lifestyle choices that directly impact his/her health and wellbeing.

Health (PEHE)

Grade Level: Ten through Twelve

Credit: .5

Materials: Glenco Health

This course is designed to keep students up-to-date on current health standards. Units of study will include but are not limited to, the following: alcohol, tobacco, and other drugs, human sexuality, reproduction and STDs, physical fitness, nutrition, and safety. First aid certification is provided within the course.

Physical Education (PE 9 - 12)

Grade Level: Nine through Twelve

Credit: .5

Materials: School gym uniform, athletic shoes, and a notebook

This course is designed to promote an active lifestyle, help build the foundation for determining what activities best suit each student's needs, teach the basic principles of conditioning, nutrition, and the body's systems and their reaction to activity and their relationship to exercise. Evaluation will be subjective and objective, based on participation, sportsmanship, skill testing, written tests and projects. Students are required to wear appropriate attire during PE classes. The activities include, but are not limited to: weight training, flexibility, cardiovascular activities, and determining nutritional needs.

Physical activity is critical to the development and maintenance of good health and overall well-being. The goal of Physical Education class is to develop physically educated individuals who have the knowledge, skills, and confidence to enjoy a lifetime of healthful physical activity. The class includes instruction and participation in various physical fitness activities, individual lifetime activities, sports, and team sports. Included in this but not limited to the following: flag football, ultimate football, ultimate Frisbee, soccer, team handball, mat ball, wiffleball, basketball, volleyball, crazy cricket, hockey, pickle ball, table tennis, bocce, corn hole, badminton, cardio-respiratory, muscular strength, muscular endurance, and flexibility workouts. Students will be challenged in a variety of different methods to foster one's overall physical, mental, social, and emotional well-being. Students will be challenged in a variety of different methods to foster one's overall physical, mental, social, and emotional well-being.

Independent Physical Education

Grade Level: Nine through Twelve

Credit: .5

Materials: Workout clothing, school issued heart rate monitor and charger, personal phone or

chromebook/computer. A STRONG INTERNET/WIFI connection is essential!

Class size is limited to 30

Time Frame: Three hours a day for ten days/fifteen hours each nine weeks

You must sign a waiver/contract taking responsibility for the heart rate monitor and charger while in your possession. It is not recommended to wear the monitors in contract sports events or practices due to the chance of damage. They are not able to be used in water activities such as swimming.

This course is designed to offer students of Wilmington Area High School the opportunity to meet or recover Physical Educational credits toward graduation during the school calendar year outside of normal school hours on an independent basis.

This class includes instruction and participation in a variety of physical activities of the students choice and assignments through Google classroom. This will consist of a minimum of 30 minutes of physical activity at the moderate to vigorous level on at least three separate days of the week running from Saturday through Sunday for a total of 1.5 hours per week. It is designed to encourage the adoption of a physically active lifestyle through activities they enjoy while fostering responsibility and time management with the hopes of improving one's overall fitness level and self image.

This course will utilize the IHT heart rate monitors and software program. Students will wear the monitors to log minutes in the moderate to vigorous physical activity zones in an activity of their choice outside normal school hours on their own. They will sync the monitors with the IHT app on a personal smartphone device upon completion of activity. At the end of each week they will submit a brief summary of the week's activity and their plan for the upcoming week where they will be encouraged to apply the FITT formula to progress their fitness/activity plan. The course may also include short assignments/evaluations on the fundamentals of nutritional and physical activity/workout principles.

^{*}There is a non-refundable course fee of \$50 to enroll and participate in this course.

GPA and Class Rank Description

Wilmington Area High School computes GPA and class rank on a 4 point scale. The class rank formula will give weight to both the difficulty of courses selected and the total number of credits a student has earned. This formula is based on the premise that it is to a student's benefit to schedule more courses in place of study halls, and to select courses with higher levels of difficulty.

AP Courses

When calculating class rank, AP Courses will be weighted by adding ten (.10) percentage points to the earned grade. A minimum of 75% must be earned in order to receive the weighting of ten (10) percentage points.

AP Courses include:

AP English Literature AP Calculus BC

AP English Language AP Government and Economics

AP Biology AP US History
AP Calculus AB AP World History

Accelerated & Honors:

When calculating class rank, accelerated and honors courses will be weighted to calculate class rank by adding five (.5) percentage points to the earned grade. A minimum 75% must be earned in order to receive the weighting of five (5) percentage points.

Accelerated / Honors Courses include:

Pre-Calculus Spanish Conversation and Culture

Basic Applied Statistics Physics

French 3 Pitt Chemistry Course

Spanish 3, 4 Pitt Web Page Design Course

Honors English 9, 10 Pitt Intro to Computer Programming

Honors Biology 9 Pitt Intermediate Web Site Design & Development

Honors Civics and Social Studies 9 Intermediate College French I

The <u>EARNED</u> grade will be reported on the student's report card. The <u>WEIGHTED</u> grade will be used in calculating class rank and GPA. The weighted grade will not show on the report card. Class rank is calculated during the course of the student's four years in high school, and throughout the senior year until the end of the third nine weeks. The graduating Top Ten students are determined by the cumulative QPA calculated up until the end of the third nine weeks of the senior year.

Grade Forgiveness: this is appropriate when a student chooses to repeat a course during the next school year. Only the higher grade will be the grade used to calculate the Quality Point Average and Grade Point Average. Only the higher grade will be displayed on the transcript.

Credits earned through credit recovery (summer school) do not take the place of the grade earned during the school year. Both the failing grade and grade earned through credit recovery will be displayed on the student's transcript. The credit recovery grades are <u>not</u> calculated into the student's GPA or class rank.