

Program of Study

2024-2025



Wilmington Area High School

Grades 9 - 12

Foreword

Selecting a program of study 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 Study has been prepared by the faculty, the school counselor, and the WASD 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 that 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 Mr. Brandon Phillian, 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.

2024 – 2025 NCAA ELIGIBILITY

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 that 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, and AP Calculus be taken as part of this curriculum. 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 programs 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

To help ensure that all students in Pennsylvania are on track for meaningful postsecondary engagement and success, the Pennsylvania Department of Education (PDE) has included a measure of students' career exploration, preparation, and readiness as part of Pennsylvania's state and federal accountability system through the Future Ready PA Index. The Career Readiness Indicator recognizes efforts to ensure that all students have career exploration and preparation activities that are standards-aligned and evidence-based, including the development of career plans and portfolios that help students identify pathways and opportunities for postsecondary success aligned to the career education and work standards.

Academic standards for career education and work

- Career awareness and preparation
- Career acquisition (Getting a job)
- Career retention and advancement
- Entrepreneurship

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, demonstrate engagement in career exploration and preparation
- by the end of grade 8, create an individualized career plan and participate in career preparation activities aligned to the standards
- by the end of grade 11, implement their individualized career plan through the 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 all Smart Futures 9-Adult Activity Journal lessons as assigned.
- Complete three 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 three career clusters as your "top choices," save them, and rate the important factors as they relate to your career plan
- Complete six hours of community service
 - Add your volunteer experiences to your portfolio in Smart Futures
- Attend the Lawrence County Career and Technical Center information session and tour
- PSAT / SAT / ACT / NOCTI / ASVAB overview

10th grade requirements include:

- Complete all Smart Futures 9-Adult Activity Journal lessons as assigned
- Complete three Smart Futures 9-Adult Skill Badges if not already completed
- Update Career Plan in Smart Futures
 - Identify and update goals and how they relate to your career plan
 - Use “Advanced Career Search” to add at least three careers to your favorites
 - Review saved careers, update the 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
 - Add your volunteer experiences to your portfolio in Smart Futures
- Take the PSAT and/or ASVAB exams
- Attend one or two college or vocational tours
 - Add reflections of visits to your portfolio in Smart Futures
- Attend the business and industry career fair
 - Add reflection of visit to your portfolio in Smart Futures

11th grade requirements include:

- Complete all Smart Futures 9-Adult Activity Journal lessons as assigned
- Attend one or two 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 one 3-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 and/or ASVAB exam. To potentially qualify for NMSQT, the PSAT NMSQT must be taken Fall of the student's junior year
- Take the SAT or ACT - College-bound students
- Discuss filling out one college application and scholarship application with the 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 and 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 Smart Futures 9-Adult Activity Journal lessons as assigned.
- 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 one 3-hour work-based job shadow in your field of interest
 - Add reflection of shadow experience to your portfolio in Smart Futures
 - Students are required to complete two job shadows (one junior year, one senior year)
- Attend the Fall or Spring financial aid night
- Take the SAT or ACT - Complete by the 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 the school counselor to finalize career plan and graduation plan
- By the end of senior year, students must have completed two college/vocational tours and attended one college/vocational career fair. A meeting with a military recruiter can fulfill one of these requirements.
- Interview and resume project with community, faculty, and administration

Pennsylvania Graduation Requirements -- Act 158

Students who will graduate from high school in 2023 and beyond now have additional options to meet the statewide graduation requirement.

Act 158 of 2018 (Act 158), which was signed into law by Governor Tom Wolf on October 24, 2018, expands upon the options that students have for meeting Pennsylvania's graduation requirements. While Act 158 maintains that students will still be required to take the Keystone Exams for federal accountability purposes, students may not be required to achieve proficiency on the Keystone Exams in order to graduate as long as they meet the requirements set forth by one of the following defined options.

These options, which are outlined below, apply to students who will graduate in 2023 and beyond.

Option 1: Keystone Proficiency Pathway

Students must earn a proficient or advanced score on all three Keystone Exams: Algebra I, Literature, and Biology.

Option 2: Keystone Composite Pathway

Students must earn a composite score of 4452 on the Algebra I, Literature, and Biology Keystone Exams.

Students must also earn a proficient or advanced score on at least one of the three exams. The student may not earn a Below Basic score on either of the other two exams.

Option 3: Alternate Assessment Pathway

Students must earn a passing grade in the course(s) associated with each Keystone Exam on which the student did not earn a proficient or advanced score. These courses include Algebra I, 10th-grade English Language Arts, and Biology. Students must also achieve one of the following:

- Attainment of an established score on an approved alternate assessment (SAT, PSAT, ACT, ASVAB);
 - SAT: 1010
 - PSAT: 970
 - ACT: 21
 - ASVAB: 31
- Gold Level on the ACT WorkKeys Assessment;
- Attainment of at least a '3' score on an Advanced Placement Program exam in an academic content area associated with each Keystone Exam on which the student did not achieve a proficient or advanced score;
- Successful completion of a concurrent enrollment course (ex. college in high school course) in an academic content area associated with each Keystone Exam in which the student did not achieve at least a proficient score;
- Successful completion of a pre-apprenticeship program or
- Acceptance in an accredited 4-year nonprofit institution of higher education and evidence of the ability to enroll in college-level coursework.

Option 4: Evidence-Based Pathway

Students must earn a passing grade in the course(s) associated with each Keystone Exam that a proficient or advanced score was not earned. These courses include Algebra I, 10th-grade English Language Arts, and Biology. Students must also demonstrate three pieces of evidence consistent with the student's goals and career plans, including:

- One of the following:
 - Attainment of an established score on the ACT WorkKeys assessment (Silver Level), an SAT subject test (score of 630), an Advanced Placement Program Exam (score of 3);
 - Acceptance to an accredited nonprofit institution of higher education other than a 4-year institution and evidence of the ability to enroll in college-level coursework;
 - Attainment of an industry-recognized credential or
 - Successful completion of a concurrent enrollment or postsecondary course; and
- Two additional pieces of evidence, including one or more of the options listed above, or: satisfactory completion of a service learning project; attainment of a score of proficient or advanced on a Keystone Exam; a letter guaranteeing full-time employment; a certificate of successful completion of an internship or cooperative education program; or satisfactory compliance with the NCAA's core courses for college-bound student-athletes with a minimum grade point average (GPA) of 2.0.

Option 5: CTE Pathway

Students who are Career and Technical Education (CTE) Concentrators must earn a passing grade in the course(s) associated with each Keystone Exam on which a proficient or advanced score was not earned. These courses include Algebra I, 10th-grade English Language Arts, and Biology. Students must also attain an industry-based competency certification related to the CTE Concentrator's program of study or demonstrate a high likelihood of success on an approved industry-based competency assessment or readiness for continued meaningful engagement in the CTE Concentrator's program of study. For further explanation of the CTE Pathway, please see PDE's Act 6 guidance.

Procedure for Course Selection

At an appropriate time each year, secondary students, after discussions with parents, teachers, the counselor, and the administration, 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 the number of credits.

1. Students should review the entire Program of Studies booklet with their parents/guardians 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. A minimum of 25 class periods of instruction per week must be scheduled and maintained by each senior student who is approved for work release. Students who take dual enrollment classes will have the number of classes approved by the counselor and building principal. Dual enrollment students must have a full schedule in a semester if they are not enrolled in a college semester course.
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.
 - High School students enrolled in Pre-Algebra, Algebra 1, or Algebra 2 Concepts must take the failed course during the next school year.
**Summer school will be considered by the administration for students entering their senior year with credit concerns.
 - 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.

Schedule Change Guidelines

All requests for course changes must be initiated in writing using the proper form through the School Counseling Office. Students are responsible for completing the required form and must include all necessary teacher and parent signatures. Approval of any requests will be made based on the advice of teachers, counselor, and principal. No schedule change requests will be considered after May 30, 2024.

The student may be placed in the requested course for the entire school year with the expectation and understanding that the student will complete the course, regardless of the obtained grade.

Incomplete Grades

A student who receives a quarter grade of “I” has a maximum of ten(10) school days after the date of the end of the quarter to fulfill the requirements.

- If the student does not satisfy the requirements, the teacher will change all incomplete assignments to a zero.
- If the student does satisfy the requirements, the teacher will change the quarter grade to the earned value and replace the “I” with a percentage grade.

Monitoring Students’ Academic Success

Parents/guardians are strongly encouraged to take an active role in their child’s education. The Wilmington Area School District utilizes the ALMA student information system for parents/guardians to view their child’s grades and attendance. This can be accessed by logging onto **<https://wahs.getalma.com/>**. Parents can view weekly agendas and monitor assignments through their child’s Google Classroom.

For information on how to access your child’s Alma SIS account, please contact Director of Educational Services Brandon Phillan at phillian@wasd.school or 724-656-8866 x6600 or the Technology Department at 724-656-8866 x6542.

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

CLASS OF 2025	CLASS OF 2026	CLASS OF 2027	CLASS OF 2028
27 Required Credits	27 Required Credits	27 Required Credits	27 Required Credits
English – 4 Credits	English – 4 Credits	English – 4 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
Health - .5 Credits	Health - .5 Credits	Health - .5 Credits	Health - .5 Credits
Technology - .5 Credits	Technology - .5 Credits	Technology - .5 Credits	Technology - .5 Credits
	Personal Finance - .5 Credits	Personal Finance - .5 Credits	Personal Finance - .5 Credits
College/Career Readiness Project	College/Career Readiness Project	College/Career Readiness Project	College/Career Readiness Project
Electives – 10 Credits over 4 years	Electives – 9.5 Credits over 4 years	Electives – 9.5 Credits over 4 years	Electives – 9.5 Credits over 4 years

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

Note: Only one study hall per day, per student, unless otherwise noted within a student's IEP.

Credits Required To Advance Grade Levels

CLASS OF 2025	CLASS OF 2026	Class of 2027	Class of 2028
Sophomore – 7 credits	Sophomore – 7 credits	Sophomore – 7 credits	Sophomore – 7 credits
Junior – 14 credits	Junior – 14 credits	Junior – 14 credits	Junior – 14 credits
Senior – 20.5 credits	Senior – 20.5 credits	Senior – 20.5 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 the 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 that 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 releases 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. In addition to this visit, all ninth-grade students attend a tour of the Lawrence County 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.

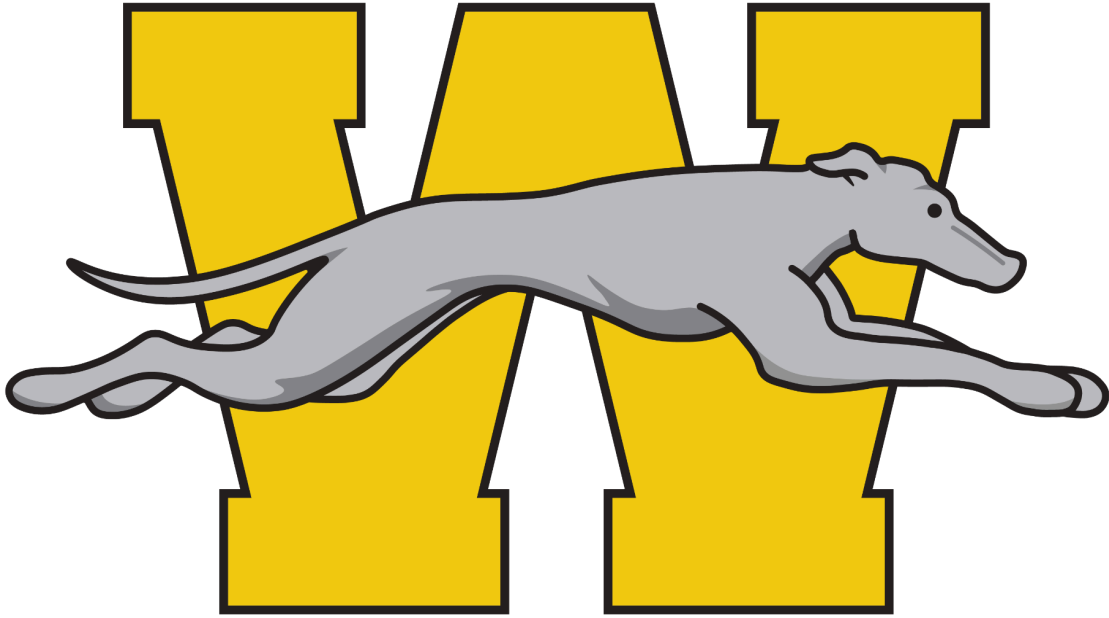
Students attend the Career and Technical Center full-time in grades 10, 11, and 12. Career and Technical Center students are eligible to take part in our school's athletic and related programs. The Career and Technical Center issues the student a high school diploma, and in addition, students will receive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

The 2024 – 2025 Vocational Courses offered by the Lawrence County Career and Technical Center are:

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

Health Assistant
Cosmetology
Computer, Office, and Technology
Veterinary Assistant
Commercial Art
Restaurant Trades
Service Occupations

Course Descriptions



Language Arts

Courses

- English 9
- Honors English 9
- English 10
- Honors English 10
- English 11
- English 12
- AP English Language
- AP English Literature
- Complete Grammar, Usage, and Mechanics
- Creative Writing



English 9 (EN09)*(NCAA Approved Course)**Grade Level:* Nine*Credit:* One*Materials:* *Elements of Literature, Third Course* 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*Prerequisites:* **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: *Elements of Literature, Third Course*, 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 advanced 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:** *Elements of Literature*. 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' *A Separate Peace*, Shakespearian dramas, Harper Lee's *To Kill a Mockingbird*, Elie Wiesel's *Night*, Anderson's *Speak*, Charles Dickens' *A Tale of Two Cities*, Mark Twain's *The Adventures of Huckleberry Finn*, *The Book Thief*, and Ernest Hemingway's *Old Man and the Sea*. 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**Prerequisites:** "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 Literature*, Fourth Course, Holt, Rinehart, Winston, Inc., 1997
Warriner's English Grammar and Composition, Harcourt, Brace and Jovanovich, 1986,
The Elements of Style, William Strunk Jr. and E.B. White, Fourth 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 PSATs and SATs. 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 from primarily 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 through Twelve*Credit:* .5

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. The material covered will include parts of speech, parts of a sentence, phrases, clauses, agreement, pronoun usage, verb usage, correct use of modifiers, common usage problems, and mechanics.

Creative Writing (ENCW)*Grade Level:* Ten through Twelve*Credit:* .5

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

Courses



- Pre-Algebra
- Algebra I with Lab
- Geometry
- Algebra 2
- Pre-Calculus
- AP Pre-Calculus
- CHS Basic Applied Statistics
- Statistics
- AP Calculus AB
- AP Calculus BC
- Practical Applications of Math
- Algebra 2 Concepts

Pre-Algebra (MAPA)

Grade Level: Nine

Credit: One

Materials: ATA Pre-Algebra Curriculum 2016 with yearly updates

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

Prerequisites: Successful completion of Pre-Algebra

Materials: Glencoe Algebra I, McGraw-Hill, 2014; ATA Algebra 1 Curriculum, TI 84+ graphing calculators

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 is 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.

Students enrolled in the course will receive one credit while receiving an additional half credit for the lab portion. Students will be enrolled in both the course and the lab unless extenuating circumstances occur and will be approved by the administration during scheduling.

Geometry (MAGEO)*(NCAA Approved Course)***Grade Level:** Nine through Twelve**Credit:** One**Prerequisites:** Successful completion of Algebra I **and** a score of at least Proficient on the Algebra 1 Keystone Exam **or** concurrent enrollment/successful completion of Algebra 2 Concepts**Materials:** *Glencoe Geometry*, McGraw-Hill, c. 2014

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, 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**Prerequisites:** Successful completion of Geometry**Materials:** *Glencoe Algebra 2*, McGraw-Hill c. 2014; ATA Algebra 2 Curriculum, TI 84+ graphing calculators

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.

*Note: Students may double up in Geometry and Algebra 2 with teacher recommendations, a minimum grade of 90% in Algebra 1, and a minimum score of *proficient* on the Algebra 1 Keystone Exam.

Pre-Calculus (MAAPPC)

(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:* *Glencoe Pre-Calculus*, McGraw-Hill c. 2014; ATA Pre-Calculus Curriculum, TI 84+ graphing calculators

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.

AP Pre-Calculus (MAAPPC)

(weighted 10 percentage points)

*(NCAA Approved Course)**Grade Level:* Nine through Twelve*Credit:* One*Prerequisites:* Successful completion of Algebra II with a minimum grade of 90%.*Materials:* *Glencoe Pre-Calculus*, McGraw-Hill c. 2014; TI 84+ graphing calculators

During this course, students acquire and apply mathematical tools in real-world modeling situations. Students develop and hone symbolic manipulation skills, solve equations, and manipulate expressions for the many function types throughout the course. Students also learn that functions and their compositions, inverses, and transformations are understood through graphical, numerical, verbal, and analytical representations, which reveal different attributes of the functions and are useful for solving problems in mathematical and applied contexts. In turn, the skills learned in this course are widely applicable in a variety of future courses that involve quantitative reasoning.

CHS Basic Applied Statistics (MABAST)

(University of Pittsburgh College in the High School)

(weighted 10 percentage points)

(NCAA Approved Course)

Grade Level: Eleven or Twelve

Credit: One

Pitt Credit: 4

Prerequisites: Successful completion of Pre-Calculus

Materials: *The Practice of Statistics 6th Edition*, W.H. Freeman and Company, 2014
TI-84+ Graphics Calculators (optional), Khan Academy

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. Students selecting college credits will register for the college credits through the high school teacher at the beginning of the school year the course is taken. At which time a tuition fee will be required. This course teaches methods of descriptive and inferential statistics. Topics include data collection and description, correlation and regression, hypothesis testing, the analysis of variance, and contingency tables (chi-square). Students will be expected to apply and explain their statistical understanding through real life scenarios.

Statistics (MAST)

(weighted 5 percentage points)

(NCAA Approved Course)

Grade Level: Eleven or Twelve

Credit: One

Prerequisites: Successful completion of Algebra II

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, correlation and regression, hypothesis testing, the analysis of variance, and contingency tables (chi-square). Students will be expected to apply and explain their statistical understanding through real life scenarios.

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 that 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, and 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 (MAPAM)*Grade Level:* Twelve*Credit:* 1

Prerequisites: Geometry or Algebra 2 Concepts

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

General concepts covered include probability, applications to algebra, geometry, trigonometry, fractions, decimals, percentages, and math skills without using calculators. Preparing students to use math in the workforce is the main goal of this course. This course will prepare Wilmington Area students for a highly competitive and technical marketplace.

Algebra 2 Concepts (MAA2C)

Grade Level: Nine through twelve

Credit: One

Prerequisites: Successful completion of Algebra 1

Materials: *Glencoe Algebra 1*, McGraw-Hill c. 2014, *Glencoe Algebra 2*, McGraw Hill c. 2014, ATA Algebra 1 Curriculum, ATA Algebra 2 Curriculum

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

Courses



- Biology 9 with Lab
- Honors Biology 9 with Lab
- Chemistry 1 with Lab
- CHS Chemistry with Lab
- AP Biology with Lab
- Physics with Lab
- Forensic Science
- Environmental Science
- Anatomy & Physiology
- Organic Chemistry
- Advanced Chemistry Applications
- Advanced Scientific Research

Recommended Science Course Sequence

Academic (Biology/ Chemistry/ Pre-Med Major) Track	
Grade 9	Biology/ Honors Biology* (Biology Keystone Exam)
Grade 10	Chemistry I*
Grade 11	Anatomy/Physiology*, College (Pitt) Chemistry* Organic Chemistry* (all recommended)
Grade 12	AP Biology*, Applied Chemistry* / Organic Chemistry*, Physics* (all recommended)
Optional Electives	Environmental Science*, Forensic Science*
Academic (Physics/ Engineering Major) Track	
Grade 9	Biology/ Honors Biology* (Biology Keystone Exam)
Grade 10	Chemistry I*
Grade 11	College (Pitt) Chemistry* Physics* (both recommended)
Grade 12	Applied Chemistry*, Physics* (both recommended)
Optional Electives	Anatomy/ Physiology*, AP Biology*, Environmental Science*, Forensic Science*, General Science, Organic Chemistry*
Academic (Non-Science Major) Track	
Grade 9	Biology/ Honors Biology* (Biology Keystone Exam)
Grade 10	General Science, Chemistry I*
Grade 11	Anatomy and Physiology*, College (Pitt) Chemistry*, Optional Elective
Grade 12	AP Biology*, Physics*, Optional Elective
Optional Electives	Anatomy/ Physiology*, Applied Chemistry*, Forensic Science*, General Science, Environmental*, Organic Chemistry*
Practical Science Track	
Grade 9	Biology (Biology Keystone Exam)
Grade 10	General Science
Grade 11	Anatomy/ Physiology* or Chemistry I* or Environmental* or Forensic Science*
Grade 12	Anatomy/ Physiology* or Chemistry I* or Environmental* or Forensic Science*
Optional Electives	AP Biology*, Anatomy/ Physiology*, College Chemistry*, Environmental*, Forensic Science*, Organic Chemistry*
Notes	
* Denotes Course with Prerequisites (Please refer to the Program of Studies for a complete list of prerequisites for each course)	
Grade 9 students may double up in "Honors Biology" and Chemistry I with teacher recommendation -AND- Proficient/Advanced score on 8th Grade Science PSSA -AND- Meets ALL other Prerequisites for Honors Biology and Chemistry I	

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.

Honors Biology 9 with Lab (SCAB1)*(weighted 5 percentage points)**(NCAA Approved Course)**Grade Level:* Nine (*Grade 9 students may double up in "Honors Biology" and Chemistry I with teacher recommendation -AND- Proficient/Advanced score on 8th Grade Science PSSA -AND- Meets ALL other Prerequisites for Honors Biology and Chemistry I)*Credit:* 1.5*Prerequisites:* **Score at least Proficient on the 8th grade Science PSSA Exam or 90% on the locally developed assessment** and an "A" in 8th Grade Science*Materials:* *Biology, The Dynamics of Life*, Glencoe McGraw-Hill, 2004

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.

General Science (SCGS)*(NCAA Approved Course)***Grade Level:** Ten or Eleven**Credit:** One**Materials:** *Physical Science-Concepts in Action*, Wyssession, 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 curricula. 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 (*Grade 9 students may double up in "Honors Biology" and Chemistry I with teacher recommendation -AND- Proficient/Advanced score on 8th Grade Science PSSA -AND- Meets ALL other Prerequisites for Honors Biology and Chemistry I)**Credit:** 1.5**Prerequisites:** Completion of Algebra I with a minimum grade of 75%**Materials:** *Chemistry: Connections to Our Changing World*, Lemay, Beall, Robblee, Brower, 2000

Chemistry I is an introductory course preparing students for further studies in chemistry in college. It includes a lab credit. The course focuses on the concepts of atomic structure, chemical bonding, chemical equations, stoichiometric calculations, radioactivity, gas & heat laws, and basic organic compounds. This course requires conceptual thinking skills as well as algebraic problem-solving skills. Students learn these topics through classroom discussions, hands-on activities, mathematical relationships, and laboratory discovery methods. The course provides intrigue into how matter interacts and behaves on the macroscopic level due to the interactions on the atomic level.

CHS Chemistry with Lab: (CHEM 0110)

(University of Pittsburgh College in the Classroom)

(weighted 10 percentage points)

(NCAA Approved Course)

Grade Level: Eleven or twelve (*Grade 10 students, if all prerequisites have been met)*WAHS Credit:* 1.5*Pitt Credit:* Four*Prerequisites:* Completion of Chemistry I with a minimum grade of 80%, and at least concurrent enrollment in either Geometry or Algebra 2*Materials:* *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 typically covers 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 it at a college level, advancing some of the topics and creating a deeper and clearer understanding of the materials while having the opportunity to receive college credits at a high school setting and pace.

AP Biology with Lab (SCAP)

(weighted 10 percentage points)

*(NCAA Approved Course)***Grade Level:** Eleven or Twelve (*Grade 10 students may take AP Biology if all prerequisites have been met)**Credit:** 1.5**Prerequisites:** 80% or Higher in **BOTH** Biology and Chemistry I **AND** Proficient or Advanced on the Keystone Biology Exam.**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 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. 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 (*Grade 10 students may take Physics if all prerequisites have been met)**Credit:** 1.5**Prerequisites:** 80% in General Science or Chemistry I; 80% in Algebra I; **AND** at least concurrent with Pre-calc enrollment. Students **MUST HAVE** a fundamental understanding of basic right-angle trigonometry.**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 not only to 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: Eleven or Twelve (*Grade 10 students may take Forensic Science if all prerequisites have been met)**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, 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 into 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.

Environmental Science (SCPS)*(NCAA Approved Course)*

Grade Level: Eleven or Twelve (*Grade 10 students if all prerequisites have been met)

Credit: One

Prerequisites: Biology and Chemistry 1 or General Science

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: Eleven or Twelve (*Grade 10 students, if all prerequisites have been met)

Credit: One

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. This introductory course will enable the students 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.

Organic Chemistry (SCOC)*(NCAA Approved Course)*

Grade Level: Eleven or twelve (*Grade 10 students, if all prerequisites have been met)
Credit: .5
Prerequisite: Completion of Chemistry I with a minimum grade of 75%; 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, the 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.

Advanced Chemistry Applications (SCACA)*(NCAA Approved Course)*

Grade Level: Twelve (*Grade 11 students if all prerequisites have been met)
Credit: .5
Prerequisites: 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 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.

Advanced Scientific Research (SCASR)

Grade Level: Eleven or Twelve

Credit: One (Non-Science Elective)

Prerequisites: Honors Biology and Chemistry 1

Corequisite: One or More of the following: AP Biology, Physics, College Chemistry, Organic/ Advanced Chemistry, Anatomy and Physiology, or Environmental Science

Materials: Supplies and materials throughout the year to coincide with student research

Advanced Scientific Research is an academically challenging elective course designed to provide a unique opportunity for students to experience the rigor and rewards of authentic scientific research while still in high school. This program is directed towards students who have a keen interest in science and are seeking to pursue excellence and progress into areas of original, independent research opportunities. The year-long course is designed to provide students with a fundamental understanding of both the bibliographic and experimental methods utilized to conduct real scientific research.

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. This course will cover U.S. History from the 1840s-1920's. The course will focus on Manifest Destiny to the aftermath of World War I. The focus is on the political, social, and economic development of the United States, including Pennsylvania's role.

Honors Civics and Social Studies 9 (SS09)*(NCAA Approved Course)*

(Weighted 5 percentage points)

Grade Level: Nine**Credit:** One**Prerequisites:** **Score at least Proficient on the 8th grade ELA PSSA Exam or 90% on the locally developed assessment.****Materials:** *Building Citizenship/Civics and Economics*, McGraw-Hill 2014
United States/History and Geography, McGraw-Hill 2014

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. This course will cover U.S. History from the 1840s-1920's. This course will focus on Manifest Destiny to the aftermath of World War I. The focus is on the political, social and economic development of the United States, including Pennsylvania's role. Advanced 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.

AP United States History (SSAPUSH)*(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*Materials:* *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*Materials:* 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 the 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) psychology

(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 that 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).
Psychology-Principles in Practice (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 to providing information and problem-solving opportunities that develop into student knowledge and skills that promote understanding of 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.

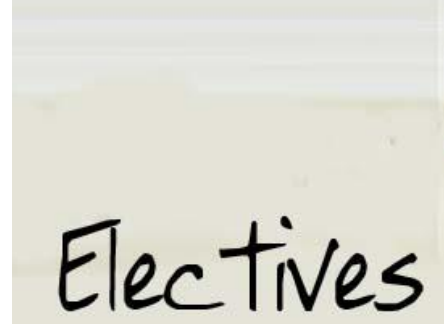
Economics (SSECON)*Grade Level:* Ten through Twelve*Credit:* .5*Materials:* TBD

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.

General Electives

Courses

- Teacher Assistant
- Executive Functioning Skills/Study Skills



Teacher Assistant (GETA)

Grade Level: Twelve
Credit: One
Materials: TBD

This supervised course is for seniors interested in the learning process and who are considering education as a career goal. Teacher Assistants must be willing to spend one assigned period per day helping students who may require extra assistance in their learning as well as assisting teachers at Wilmington in their classrooms with daily activities and projects.

Included in the consideration for acceptance into the class is the attendance and discipline record of the student. As a general rule, students with more than 10 days of absence per year will not be accepted unless the absences were for an extended illness or accident. Students with more than one discipline write-up may also not be considered. Daily participation in this course will be mandatory, and the majority of the student's grade is based on this criteria. The elementary, middle, and high school students, as well as the teachers, count on the Teacher Assistants to be in attendance each day.

This course will require students to complete at least one bulletin board project. Teacher Assistants must complete a Teacher Assistant application and contract prior to being assigned to a classroom or faculty member (teacher). *If attendance issues arise during the school year, the teacher assistant may be reassigned to a study hall.

Criteria for Selection: Minimum cumulative GPA, grades 9- 11, must be 3.0, and you must complete a Teacher Assistant application. *You may pick up the application from Mrs. Gray.

Executive Functioning Skills/Study Skills Course (SEEF)

Grade Level: Nine through Twelve
Credit: One
Materials: TBD
Prerequisite: Administrative recommendation required

This course is designed for students who desire to develop study skills and test-taking strategies. This course will ultimately help students to set and achieve both educational and life goals. Students will leave this class with a better understanding of their individual strengths and weaknesses and the information and skills to improve their own understanding, learning, and retention across disciplines. This course not only teaches students how to go about becoming better students but also arms them with the tools to become high achievers in all aspects of their lives.

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. The focus is on elementary vocabulary and essential verb conjugations in the present and near future tense, as well as correct pronunciation. Students are assessed through listening, speaking, and written means. Additionally, students gain insight into French customs.

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 the past tense and imperfect, houses, clothes, and food.

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 will begin to read stories that challenge their knowledge of French and task them with using context clues. Additionally, they will learn the conditional and subjunctive tenses.

Intermediate College French I (LAF4)

(Pitt College in the High School Course)

(weighted 10 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*Prerequisites:* A 75% in Spanish 1 and teacher recommendation

Spanish 2 is an intense grammar course with a concentration on three verb tenses: present, preterite, and imperfect. 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*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

In Spanish 4, students will continue to develop their language skills in reading, writing, speaking, and listening. There is a specific emphasis on the 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 (LASCC)

(weighted 5 percentage points)

Grade Level: Eleven or Twelve*Credit:* One*Prerequisites:* 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 everyday 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.

Spanish in the Workplace (LASW)

Grade Level: Ten through Twelve

Credit: .5

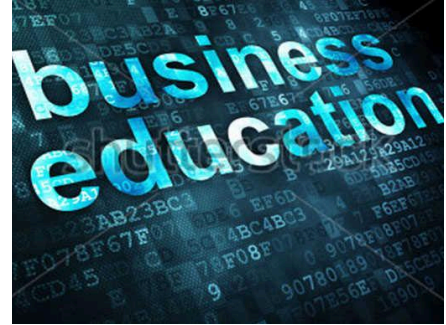
Prerequisites: Spanish 1, Spanish 2, and Teacher Recommendation

This course is designed for students who may want to use Spanish in order to work with native Spanish speakers. Students will build upon the process they started in Spanish 1 & 2 and will focus on workplace vocabulary and etiquette. This course will expand communication skills with scenario-based projects and lessons focused on specific workplace environments.

Business, Computer, and Information Technology

Courses

- Accounting I
- Account II
- Advanced Computer Science
- Business Communications
- Entrepreneurship
- Introduction to Business
- Introduction to Computer Science
- Personal Finance
- Photoshop I
- Photoshop II
- Sports and Entertainment Marketing
- SWAT - Students Working to Advance Technology
- CHS Web Site Design & Development
- CHS Introduction to Computer Programming



Accounting I (BTA1)

Grade Level: Ten through Twelve

Credit: One

Materials: *Century 21 Accounting 8E, Thomson South-Western, 2006.* 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. Students who complete the first-year accounting course will feel a great sense of pride and accomplishment.

Accounting II (BTA2)

Grade Level: Eleven or Twelve

Credit: One

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

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

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.

Business Communications (BTBC)

Grade Level: Ten through Twelve

Credit: .5

Business Communications is a course to help students develop strong written and verbal communication skills to help them with job readiness and/ or higher education. This course highlights best practices and strategies to strengthen your professionalism, expert writing techniques, workplace digital savvy, and resume-building skills. Learn how writing is central to business success, regardless of the communication channel. We will learn best practices for social media and mobile technology while refining your communication skills for a workplace setting.

Entrepreneurship (BTEP)

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 select a type of business ownership, develop a business plan, analyze cost and economic issues, advertise and market a business, and manage personnel. Much of the in-class work is completed as company partners, and the use of the Internet is an intricate part of researching up-to-date business concepts.

Introduction to Business (BTIB)

Grade Level: Nine and Ten

Credit: .5

Intro to business introduces students to business concepts and skills students need in today's competitive environment. This course offers extensive coverage of major business concepts in areas of finance, management, and operating and management. Students will gain valuable information and skills for the workplace and higher education. This course will contain real-world applications through the use of a simulation, small business speakers, and Interviews.

Introduction to Computer Science (BTICS)

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.

Personal Finance (BTPF)

Grade Level: Eleven or Twelve

Credit: .5

Materials: *Managing Your Personal Finances 6e*, Cengage Learning 2010.
Keys to Financial Success, Everfi Financial Education Modules, and Checking Account Simulation

Preparing students to make life-changing financial decisions is the main goal of 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 Portfolio, Work Laws and Responsibilities, Money Management, Financial Security, Investment Strategies, Credit Management, Resource Management, Consumer Rights and Responsibilities, and Risk Management.

Photoshop I (BTPS1)

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 (BTPS2)

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.

Sports and Entertainment Marketing (BTSEM)

Grade Level: Eleven or Twelve
Credit: .5
Materials: *Sports and Entertainment Marketing 3e, 2008*, and Knowledge Matters Virtual 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.

SWAT – Students Working to Advance Technology (CSSWAT)

Grade Level: Nine through Twelve
Credit: One
Prerequisite: Technology Department signature
Materials: Real World Technical Applications

SWAT is a real-world technical application course for students. Students must get a technology department signature for approval into this course. 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 website. Additionally, students will also learn many social skills such as organization, public speaking, interviewing, teamwork, and leadership.

CHS Web Site Design & Development (BTWDD)

(Pitt College in the High School)

(weighted 10 percentage points)

Grade Level: Ten through Twelve*Credit:* 1*Pitt Credit:* Six*Prerequisites:* 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.

CHS Introduction to Computer Programming (BTICP)

(Pitt College in the High School)

(weighted 10 percentage points)

Grade Level: Ten through Twelve*Credit:* One*Pitt Credit:* Three*Prerequisites:* Familiarity with 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.

Fine Arts

Courses



- Music Theory and Composition
- Concert Choir
- Women's Choir
- Band

Music Theory and Composition (MUMTC)

Grade Level: Ten through Twelve

Credit: One

Prerequisites: 1 year of Band or Concert Choir, as well as concurrent 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 (MUCH)

Grade Level: Nine through Twelve

Credit: One or .5

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

Concert Choir seeks to develop further 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-week grade.

Women's Chorus (MUWC)

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 from 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 the 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 the 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-week 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 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



- Art Foundations
- 2D Media
- World Art
- Ceramics

Art Foundations (ARF)

Grade: Nine through Twelve

Credit: .5

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

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 artwork. 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 (AR2DM)

Grade: Nine through Twelve

Credit: .5

Focus: Drawing and painting

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 (ARWA)

Grade: Nine through Twelve
Credit: .5
Focus: Cultural forms and methods
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, various crafts, 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 (ARC)

Grade: Ten through Twelve
Credit: .5
Focus: *Clay hand-building techniques and sculpture*
Prerequisites: Art Foundations or 2D Media + teacher recommendation

This course will introduce students to three-dimensional art constructed from clay. The students will study 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.

Industrial Technology

Courses

- Introduction to Engineering
- Engineering Design
- Architectural Design
- Materials Processing 1
- Materials Processing 2
- Materials Processing 3/4
- Advanced CNC Design and Manufacturing



Introduction to Engineering (CAD1)

Grade Level: Nine through Twelve
Credit: .5
Materials: AutoCAD Software 2022

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, and 2D and 3D computer drawings. Students will use the computer-aided drafting software AutoCAD 2022. 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 (CAD2)

Grade Level: Ten through Twelve
Credit: One
Prerequisites: 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 in architecture, engineering, carpentry, blueprint reading, and other trades. Students will demonstrate proper labeling, dimensioning, and 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 throughout the year. Students are responsible for and graded on participation, quizzes, projects, and final exams.

Architectural Design (CAD3)

Grade Level: Ten through Twelve
Credit: One
Prerequisites: 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 blueprint 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 throughout the year. Students are responsible for and graded on participation, quizzes, projects, and final exams.

Materials Processing 1 (IND1)

Grade Level: Nine through Twelve
Credit: One
Materials: Various materials and Safety Guide

Materials Processing 1 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 construct individually. The projects that are selected will range from beginner-level projects 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 2 (IND2)

Grade Level: Ten through Twelve
Credit: One
Prerequisites: Materials Processing I
Materials: Various materials and Safety Guide

In Materials Processing 2, 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 construct individually. 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 (ex. door, drawer, etc.)

Materials Processing 3/4 (IND3/4)

Grade Level: Eleven through Twelve

Credit: One

Prerequisites: Materials Processing 1, 2

Materials: Various materials and Safety Guide

Students will practice and refine basic skills developed in Materials Processing 1 and 2 to produce even more advanced projects that will be built to closer tolerances. Advanced machines will be demonstrated and used, along with a strong emphasis on safety. As in Materials Processing 1 and 2, 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.

The students will carefully select their individual projects with approval by the instructor. Projects may range (for example) from furniture of different types to projects that will require more complicated designs and joinery knowledge with creativity in mind. The advanced knowledge gained in Mat. Proc. 1 and 2 will be on display with the completion of the projects constructed.

Advanced CNC Design and Manufacturing (INDCNC)

Grade Level: Eleven and Twelve

Credit: One

Prerequisites: 70% or better in Engineering Design or Architecture Design and 70% or better in Materials Processing I

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

Courses

- Family and Consumer Science*
 - International Foods*
- * Not Offered 2024-25 SY*



Family and Consumer Science (FCS1)*Not Offered 2024-25**Grade Level:* Nine through Twelve*Credit:* .5

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, tests, and cooking labs. Students are exposed to various speakers from the community and surrounding areas as well.

International Foods (FCSIF)*Not Offered 2024-25**Grade Level:* Nine through Twelve*Credit:* .5*Materials:* Nenes, Michael F. *International Cuisine*. Wiley, 2009.*Prerequisite:* Successful completion of FCS1

This course will build upon skills learned in middle school FCS and high school FCS. International cooking is important as individuals will encounter various cultures throughout their lifetime. The information gained in the course is able to be tied in with other courses the District offers (i.e., Health, History etc.). In each unit, we will explore the land, history, food, cooking methods, and kitchen tools of the country. This will provide students the opportunity to learn new vocabulary and learn about the influences the country has had on the United States.

Agriculture

Courses



PDE CIP Code 01.0301 Agricultural Productions Operations, General

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.

- Senior Agriculture Leadership
- Forestry*
- Wildlife
- Food Science
- Plant Science
- Greenhouse Management/Floral Design
- Large Animal Science
- Veterinary Science*
- Small Animal Management
- Introduction to Agriscience/Leadership
- Introduction to Agricultural Mechanics
- Introduction to Agricultural Welding
- Introduction to Small Gas Engines
- Introduction to Agricultural Construction
- Advanced Agricultural Welding
- Advanced Agricultural Engines
- Advanced Agricultural Construction
- Agricultural Mechanics Capstone Project
- Supervised Agricultural Experience

**Not Offered 2024-25*

Senior Agricultural Leadership (AGSL)

Grade: Twelve

Credit: .5

Prerequisites: Students must have taken a minimum of three agricultural credits prior and have maintained a Supervised Agricultural Experience Program outside of class for at least two years. Teacher recommendation required.

Senior Agriculture Leadership is a senior course designed as a cumulative experience in the general agriculture/agriculture mechanic program, making this a mandatory course. All students will maintain a high-quality SAE program and complete the Keystone FFA Degree and Proficiency Award application. Students will be able to develop capstone projects related to their interest in the agriculture programs. Students will complete assignments involving FFA activities, such as Career Development event preparation, leadership development, and various projects. Students will work with industry professionals to enhance leadership skills and increase their ability to become successful leaders. FFA membership is included in the enrollment of this course.

Forestry (AGFW)

Not Offered 2024-25

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 opportunities in the above areas, as well as forestry practices, forestry regions, the importance of natural resources, and individual species of wildlife and trees. FFA membership is included in the course enrollment, and participation is required during class time. A Supervised Agriculture Experience project and record book must be maintained as required by the Department of Education, Bureau of Career and Technical Education for Agriculture Education.

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 opportunities in the above areas, as well as the identification of species, care and habitat management, the importance of natural resources, and individual species of wildlife and trees. FFA membership is included in the course enrollment, and participation is required during class time. A Supervised Agriculture Experience project and record book must be maintained as required by the Department of Education, Bureau of Career and Technical Education for Agriculture Education.

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. FFA membership is included in the course enrollment, and participation is required during class time. A Supervised Agriculture Experience project and record book must be maintained as required by the Department of Education, Bureau of Career and Technical Education for Agriculture Education.

Plant Science (AGPS)

Grade Level: Nine through Twelve

Credit: .5

This course is a basic course in plant and soil science. Topics covered will include basic botany, soil biology, plant growth requirements, plant propagation, trends in the horticulture industry, and careers. Students will be introduced to greenhouse production, floriculture, and landscape design. FFA membership is included in the course enrollment, and participation is required during class time. A Supervised Agriculture Experience project and record book must be maintained as required by the Department of Education, Bureau of Career and Technical Education for Agriculture Education.

Greenhouse Management/Floral Design (AGGMFD)

Grade Level: Ten through Twelve

Credit: .5

Prerequisite: Plant Science, teacher recommendation required

This course is designed for students who have an interest in owning or working in a floral shop and/or a greenhouse. The course will cover the basic elements of floral design, the history of floral design, traditional and modern-day arrangement styles, how to select cut flowers, pricing strategies, and floral flower and tools identification. 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. FFA membership is included in the course enrollment, and participation is required during class time. A Supervised Agriculture Experience project and record book must be maintained as required by the Department of Education, Bureau of Career and Technical Education for Agriculture Education.

Large Animal Science (AGAS)

Grade Level: Nine through Twelve

Credit: One

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

This course is for students with an interest in animal agriculture. Topics covered will include career opportunities in animal science, safety in animal production, feeding and nutrition, genetic and animal reproduction, animal health, animal selection, and animal management practices. Species studied will include beef cattle, dairy cattle, sheep, goats, poultry, horses, and swine. Some alternative animals will be discussed. FFA membership is included in the course enrollment, and participation is required during class time. A Supervised Agriculture Experience project and record book must be maintained as required by the Department of Education, Bureau of Career and Technical Education for Agriculture Education.

Veterinary Science (AGVS)

Not Offered 2024-25

Grade Level: Ten through Twelve

Credit: One

Prerequisites: 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 Management (AGSA)

Grade Level: Nine through Twelve

Credit: One

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

This course is for students interested in a career path in animal science - especially in the companion industries. Small animal topics covered will include career opportunities in small animals, breeds and classification, anatomy, and management of small animals. FFA membership is included in the course enrollment, and participation is required during class time. A Supervised Agriculture Experience project and record book must be maintained as required by the Department of Education, Bureau of Career and Technical Education for Agriculture Education.

Introduction to Agriscience/Leadership (AGAL)

Grade Level: Nine

Credit: One

This course is an overview of present-day agriculture and natural resources. It addresses the most basic levels of agriscience, leadership development, natural resources, plant science, and animal science. FFA membership is included in the course enrollment, and participation is required during class time. A Supervised Agriculture Experience project and record book must be maintained as required by the Department of Education, Bureau of Career and Technical Education for Agriculture Education.

Introduction to Agricultural Mechanics (AGIAM)

Grade Level: Nine through Twelve

Credit: One

This course serves as the **prerequisite for all agricultural mechanics courses**. Instruction includes both the safety and operation of equipment used in agricultural mechanics. The drafting and design of small construction projects with agricultural applications will be addressed. Small projects and introductory skills in the areas of Agricultural Mechanics will be included. Students will complete the OSHA 10-Hour Certification. FFA instruction and Supervised Agricultural Experience project development will be covered. National FFA Organization membership is included in every Ag class, and participation is required during class time. A Supervised Agricultural Experience (SAE) project record book must be maintained as required by the Pennsylvania Department of Education, Bureau of Career and Technical Education for Agricultural Education.

Introduction to Agricultural Welding (AGWLD)

Grade Level: Ten through Twelve

Credit: .5

Prerequisites: Introduction to Agricultural Mechanics

This course provides students with the introductory skills to work with a variety of metal processing equipment. Students will have the opportunity to use plasma cutters, oxy-acetylene torches, MIG, and Stick welders. Students will explore the differences between metal processes and perform different styles of welding. FFA instruction and Supervised Agricultural Experience project development will be covered. National FFA Organization membership is included in every Ag class, and participation is required during class time. A Supervised Agricultural Experience (SAE) project record book must be maintained as required by the Pennsylvania Department of Education, Bureau of Career and Technical Education for Agricultural Education.

Introduction to Small Gas Engines (AGSG)

Grade Level: Ten through Twelve

Credit: .5

Prerequisites: Introduction to Agricultural Mechanics

This course is designed for students who are planning on following a career path in which small engines are essential to daily operations. These careers may be in the areas of mechanics, forestry, landscaping, and production agriculture. This course includes basic cycle theory and operation, part and tool identification, safe operation, basic troubleshooting, and maintenance. The potential exists for the participation of the Small Gas Engines Career Development Event through the FFA Organization. FFA instruction and Supervised Agricultural Experience project development will be covered. National FFA Organization membership is included in every Ag class, and participation is required during class time. A Supervised Agricultural Experience (SAE) project record book must be maintained as required by the Pennsylvania Department of Education, Bureau of Career and Technical Education for Agricultural Education.

Introduction to Agricultural Construction (AGIAC)

Grade Level: Ten through Twelve

Credit: .5

Prerequisite: Introduction to Agricultural Mechanics

This course is designed to give students the skills for basic construction. Students will gain experience in surveying, framing, electricity, plumbing, and drywall. Students will have the opportunity to participate in hands-on class projects to apply the skills that are gained throughout the course. National FFA Organization membership is included in every Ag class, and participation is required during class time. A Supervised Agricultural Experience (SAE) project record book must be maintained as required by the Pennsylvania Department of Education, Bureau of Career and Technical Education for Agricultural Education.

Advanced Agricultural Welding (AGAW)

Grade Level: Eleven and Twelve

Credit: One

Prerequisite: Introduction to Agricultural Welding passing grade of 75%

This course provides students with the opportunity to work with a variety of metal processing equipment. **Students must have a genuine interest in a career that involves welding.** Students will have the opportunity to use plasma cutters, oxy-acetylene torches, MIG, TIG, and Stick welders. Students will explore the differences between metal processes and perform different styles of welding. Students will have the opportunity to earn certificates of completion through Miller Electric. FFA instruction and Supervised Agricultural Experience project development will be covered. National FFA Organization membership is included in every Ag class, and participation is required during class time. A Supervised Agricultural Experience (SAE) project record book must be maintained as required by the Pennsylvania Department of Education, Bureau of Career and Technical Education for Agricultural Education.

Advanced Agricultural Engines (AGAE)

Grade Level: Eleven and Twelve

Credit: .5

Prerequisite: Introduction to Small Gas Engines

This course is designed for students who are planning on following a career path in which daily engine operation is essential to success in that career field. These careers may be in the areas of mechanics, forestry, landscaping, and production agriculture. This course includes budgeting, customer service, parts identification, parts ordering, and multi-cylinder engine theory. The potential exists for the participation of the Small Gas Engines Career Development Event through the FFA Organization. Students will have the opportunity to use their skills for the benefit of the local community. FFA instruction and Supervised Agricultural Experience project development will be covered. National FFA Organization membership is included in every Ag class, and participation is required during class time. A Supervised Agricultural Experience (SAE) project record book must be maintained as required by the Pennsylvania Department of Education, Bureau of Career and Technical Education for Agricultural Education.

Advanced Agricultural Construction (AGAAC)

Grade Level: Eleven and Twelve

Credit: .5

Prerequisite: Introduction to Agricultural Construction

This course is designed to give students applications for construction skills to be built upon. Students will continue to evolve their experience in surveying, framing, concrete/masonry, electricity, plumbing, and drywall. Students will participate in hands-on large projects to apply the skills that are gained throughout the course and use their skills for the benefit of the community. National FFA Organization membership is included in every Ag class, and participation is required during class time. A Supervised Agricultural Experience (SAE) project record book must be maintained as required by the Pennsylvania Department of Education, Bureau of Career and Technical Education for Agricultural Education.

Agricultural Mechanics Capstone Project (AGMC)

Grade Level: 12

Credit: .5

Prerequisites: 3 Credits of Agricultural Mechanics Courses, at least two credits of Supervised Agricultural Experience, teacher recommendation required

This course is meant to enhance a student's career focus by applying the skills they have learned throughout the Agricultural Mechanics program. Students will choose their focus from welding, custom fabrication, construction, custom construction production, small engine application, and repair. Each student must create a business model based on their career focus area and expand it through real-life skilled projects that simulate entrepreneurship and enterprise. Projects must have variation between the two semesters. FFA instruction and Supervised Agricultural Experience project development will be covered. National FFA Organization membership is included in every Ag class, and participation is required during class time. A Supervised Agricultural Experience (SAE) project record book must be maintained as required by the Pennsylvania Department of Education, Bureau of Career and Technical Education for Agricultural Education.

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

Grade Level: Nine through twelve

Credit: One

Supervised Agriculture Experience (SAE) projects are designed to give students a chance to develop and apply agriculture knowledge and skills to real-world experiences. Students must select and complete the National FFA Proficiency-approved projects. Students are required to keep an accurate and updated Pennsylvania FFA Record Book. Throughout the SAE course, students must meet with the instructor once a week during homeroom and complete a minimum of 115 independent project hours. Students must be enrolled in another Agricultural Education Course. All projects must be approved by the instructor prior to scheduling.

Physical Education

Courses

- Health
- Physical Education
- Independent Physical Education



Health (PEHE)

Grade Level: Nine through Twelve

Credit: .5

Materials: *Glencoe Health* and additional resources

This course aims to ensure that students are familiar with the latest health guidelines. Topics covered include but are not limited to, the following: developing a growth mindset, goal setting, decision-making skills, alcohol, tobacco, and drug abuse, mental and emotional well-being, communicable and noncommunicable diseases, physical fitness, nutrition, sexually transmitted diseases, reproduction and pregnancy. Additionally, a CPR and first aid certification from the American Red Cross is included in the course.

Physical Education (PE)

Grade Level: Nine through Twelve

Credit: .5

Materials: Athletic Clothing and Athletic Shoes

This course is designed to promote an active lifestyle, help build the foundation for determining what activities best suit each student's needs, and 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 their overall physical, mental, social, and emotional well-being.

Independent Physical Education

Grade Level: Nine through Twelve

Credit: .5

Prerequisites: Can only be taken by students who have at least 7.5 periods of instruction (not counting Independent PE) scheduled. Of these periods of instruction, at least one class must be honors level, AP/CHS (College in High School), or dual enrollment.

Materials: Workout clothing

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

This class includes instruction and participation in a variety of physical activities of the student's 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 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.

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 and College in High School Courses

When calculating class rank, AP Courses will be weighted by adding ten (.10) percentage points to the earned grade.

AP Courses include:

AP English Literature	Pitt Chemistry
AP English Language	Pitt Web Page Design
AP Biology	Pitt Intro to Computer Programming
AP Calculus AB	Pitt Intermediate Web Site Design & Development
AP Calculus BC	Pitt Basic Applied Statistics
AP Pre-Calculus	AP US History
AP Government and Economics	AP World History
Intermediate College French I	

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.

Accelerated / Honors Courses include:

Pre-Calculus	Honors Civics and Social Studies 9
French 3	Spanish Conversation and Culture
Spanish 3, 4	Physics
Honors English 9, 10	Statistics
Honors Biology 9	

The **EARNED** grade will be reported on the student's report card. The **WEIGHTED** 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. Any institution may request in writing from the school counseling department the class rank of any student if class rank is required for admission to that school or needed for any scholarship program.

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 the grade earned through credit recovery will be displayed on the student's transcript. The credit recovery grades are not calculated into the student's GPA or class rank.