TULPEHOCKEN

-Junior Senior High School-

2023-2024

Course Catalog

-Expect-Believe-Achieve-

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Graduation Requirements

Subject	Credit Requirements
English	**4.00**
STEM (Science, Technology, Engineering & Mathematics) ● Science (3 credits) ○ Biology is required ○ Two additional Science credits ● Math (3 credits) ○ Keystone Algebra ○ Two additional Math classes* *Students who took Keystone Algebra in 8th grade and passed the course will need three math credits during their high school career. ● Two Additional STEM credits ○ Agriculture ○ Computer Science ○ Math ○ Tech Ed ○ Science ○ BCTC	**8.00**
Social Studies	**4.00**
Wellness Credits ● Physical Education class (1.5 credits) ● Health class (0.5 credits)	**2.00**
Drivers Education & First Aid/CPR	**0.5**
Computer Science	**0.5**
Contemporary Living	**0.5**
Electives	**5.5**
Graduation Project	**1**
TOTAL CREDITS REQUIRED	**26.00**

BCTC Graduation Requirements

Subject	Credit Requirements
English	**4.00**

STEM Credits
● Required Courses
  ○ Biology (1.00 credit)
  ○ One additional Science (1.00 credit)
  ○ Algebra I or II (1.00 credit)
  ○ Geometry or another Math Class (1.00 credit)
	6.00

Social Studies	**3.00**
Berks Career and Technology Credits	**9.00**
Wellness Credits ● Physical Education class (1.0 credits) ● Health class (0.5 credits)	**1.50**
Driver Education and First Aid/CPR	**0.50**
Contemporary Living	**0.50**
Computer Science	**0.50**
Graduation Project	**1.00**
TOTAL MINIMUM CREDITS REQUIRED FOR GRADUATION	**26.00**

Recommended Sequence of Courses by Grade Level

All students are required to carry 6.5 credits

Grade 9	Grade 10	Grade 11	Grade 12
English 9	English 10	English 11	English 12
Mathematics	Mathematics	Mathematics	Mathematics
Environmental Science Biological Honors	Biological Concepts Chemistry	Chemistry, Chemistry II, Physics or Integrated Science	Science, Math, or Bus. Math elective 1.0 cr.
US History II	World Cultures	Government	Soc. Stud elect. & Economics or AP Gov't & Politics or AP Economics
Health/Physical Education	Physical Education	Physical Education	
	Driver Education First Aid/CPR	Contemporary Living	Electives 5.5
Intro to Computer Science		Adv Computer Apps	Adv Computer Apps
Electives 1.0 World Language recommended for Academic students Related Arts electives 1.0 cr.	Electives 2.0 World Language recommended for Academic students	Electives 2.0 World Language recommended for Academic students	World Language Recommended for Academic students

- Honors classes are available in all core courses.
- Students cannot have more than 9 study halls within a six-day cycle.
- All academic students should take at least two credits of the same World Language and four credits each of Math and Science (including Physics)

Drop/Add Period

The drop/add period occurs the first two weeks of school. After the first two weeks, no changes will be made except by permission of the Principal, with parental signature. Courses dropped after the add/drop period will result in a W/F (withdrawal/failure) on the student's transcript.

Optional Credit Programs

School Board Policy 241 allows students to test out of a class and receive a credit. Students interested in this option should speak to their counselor in order to see if they met the criteria for this option. Students must apply for this option no later than May 15 in order to test out of a class for the upcoming year. Students must achieve at least an 85% on the assessment administered in order to receive credit. Any assessment must be completed prior to the start of the first day of the upcoming year. Students can download a copy of the course curriculum to prepare themselves for the assessment.

Grading System

The following numerical grading system is used on report cards and transcripts:

90 to 100 - **A** 80 to 89 – **B** 70 to 79 – **C** 65 to 69 – **D** 0 to 64 – F

Guidelines to be promoted and to graduate on time		
To be promoted from:	Credits Required	Core Courses (English, Social Studies, Math & Science) Requirement
Grade 9 to Grade 10	6	Must pass 3 of 4 core courses
Grade 10 to Grade 11	12.5	Must pass 7 of 8 core courses
Grade 11 to Grade 12	19.0	Must pass 11 of 12 core courses

Grade Point Average Scale

Should a student's numerical or letter grade need to be converted to a 4.0 grade point system, the following chart demonstrates the conversion:

GPA	PERCENTILE	LETTER GRADE	GPA	PERCENTILE	LETTER GRADE
4.0	95-100	A	2.4	79	C
3.9	94	A	2.3	78	C
3.8	93	A	2.2	77	C
3.7	92	A	2.1	76	C
3.6	91	A	2.0	75	C
3.5	90	A	1.9	74	C
3.4	89	B	1.8	73	C
3.3	88	B	1.7	72	C
3.2	87	B	1.6	71	C
3.1	86	B	1.5	70	C
3.0	85	B	1.4	69	D
2.9	84	B	1.3	68	D
2.8	83	B	1.2	67	D
2.7	82	B	1.1	66	D
2.6	81	B	1.0	65	D
2.5	80	B			

Class Rank and Weighted Courses

Class rank is determined by computing a student's total grade point average. Considering the increased demand and acceleration expected of students in Honors, Advanced Placement and college courses, additional grade value weight is assigned for the purpose of determining a student's GPA (grade point average). Weighted grading applies only to the grade point average used in determining class rank. The weighted GPA has no impact on quarterly grades issued for honor roll computation. **Class rank and GPA are also used to determine the valedictorian and salutatorian honors. These honors will be determined once all senior grades have been finalized for the year.**

The following weighted value will be used to determine class rank:

1.00 - Core Academic courses, BCTC programs

1.05 – Honors courses, Spanish IV, German IV, MHP Program

1.10 – Advanced placement and college courses – both on and off campus

Academic Extension Classes

Students in need of academic support will be automatically placed in a subject specific academic extension class. These classes are geared at providing additional support for students in the core areas of English Language Arts, Mathematics, and Science. Students will be granted elective credit and the class will be on a pass/fail basis.

World Languages

While students are not required to take a World Language, it is STRONGLY recommended and encouraged that academic students planning on continuing their education after high school take at least two years of the same World Language. It should be noted that many colleges and universities recommend three years of study, preferably four, of the same language prior to college admission.

Articulation Agreements

Students and parents are encouraged to explore the post-high school institutions for dual credit or waiver of a course at the college level. The BCTC and technical training in Agriculture or Business Technology may articulate to college credit. Sample colleges and institutes that may articulate our high school offerings are as follows: Berks Technical Institute, Delaware Valley University, Harrisburg Area Community College, Schuylkill Institute of Business and Technology, Lehigh Carbon Community College, Northampton Community College, Northwestern College, Ohio Technical Institute, Pennsylvania College of Technology, Pennsylvania School of Art & Design, Reading Area Community College, Thaddeus Stevens College of Technology, Thompson Institute, and Vale Technical Institute.

Advanced Placement

The College Board Advanced Placement Program (AP) is an opportunity for students to pursue college-level studies while still in high school. Through this program students may earn credit, advanced placement, or both for college. AP courses are taught using a standardized curriculum recognized by the majority of post-secondary institutions. **After students complete an AP course, they will be required to take the AP exam offered in the spring of the academic year that assesses their mastery of the course competencies unless they are also taking the course for college credit through Alvernia and Albright.** Students can then submit their score to the colleges of their choice for advanced standing or credit consideration. Final decisions are made solely by the post-secondary institution. It is the responsibility of the student to pay the fee for the AP exam. Financial aid will be available for students with free and reduced lunch. AP courses are offered in the following areas: AP US Government and Politics; AP Calculus; AP Statistics, AP Language and Composition, and AP Precalculus. Additional AP classes may be available through TVA and or VHS online providers.

Dual Enrollment College Program

Tulpehocken High School/Alvernia University/Albright College

Two options exist for the Dual Enrollment College Program. First, qualified Tulpehocken High School students (while currently enrolled in high school), may simultaneously earn college credits through Alvernia University and Albright College. Students are encouraged to meet with the Tulpehocken Guidance Department for the course offerings.

Student Eligibility

Students who meet all the following criteria are qualified to participate in the program:

A. Achieved class standing as a junior or senior at Tulpehocken High School.
B. Is making satisfactory academic progress towards fulfilling applicable secondary school graduation requirements as determined by Tulpehocken High School. Tulpehocken High School will determine satisfactory progress based on the students having accrued the expected number of credits for their grade level.
C. Should typically have a secondary school cumulative grade point average of 3.0 on a 4.0 scale and/or a grade point average of 3.0 in the applicable subject area of the Albright course of study.
D. Completes and submits the Dual Enrollment Program Application Form to the Albright College Admissions Office and has a transcript submitted from Tulpehocken High School. This can be completed through the Albright College website.
E. Students must be able to provide their own transportation.

All college courses will be noted on the high school transcript with the course title and grade. College level (not remedial) courses will be weighted according to the guidelines listed in the Program of Studies and Course Description Booklet, and will be included in the student's high school GPA and class rank. It is the student's responsibility to provide an official transcript of grades and credits earned for college courses at the end of each semester.

Tulpehocken Virtual Academy (TVA)

TVA is Tulpehocken Area School District's cyber school that was established in the 2009-2010 school year. We offer full-time, part-time, and hybrid online programs for students in grades K-12. Full-time TVA students are offered a laptop, printer/scanner, and monthly internet stipend. Courses are available from several online providers and students can also opt to take some of their classes in our buildings to maximize their learning choices. Students are considered Tulpehocken students and can participate in any activities that are offered to students within the building, such as sports, assemblies, dances and field trips. Not all classes offered within the building are available online through TVA.

TVA students are expected to log in and complete work on all TASD school days and to meet the same graduation requirements as students in the building. Upon completion of all required credits, students earn a Tulpehocken diploma and are welcome to participate in all senior activities like prom, class trips and graduation ceremonies. Please see your guidance counselor and Mrs. Erika Kindoll, TVA coordinator at ekindoll@tulpehocken.org for more information. Additional information can be found on the TVA website at www.tulpehocken.org/domain/98.

VHS Learning (Formerly known as Virtual High School)

Students with an 80% GPA or higher have the option of taking elective courses online via VHS Learning. Please see www.vhslearning.org for a full list of courses. Options include full year, fall only, and spring only courses. Courses not currently offered at Tulpehocken are available for students to take. Course offerings include many unique electives that are not offered in the building, including Latin, American Sign Language, and Forensic Science as well as many AP courses. Students must complete a registration packet and meet all requirements before being accepted as a VHS student. Spaces are limited. Please refer to the high school website www.tulpehocken.org/page/1262 for further information. Students may also contact their school counselor or Mrs. Nicole Carley/Mrs. Erika Kindoll, VHS Site Coordinators. Students taking an Advanced Placement course through VHS Learning are required to take the AP exam offered in the spring of the academic year that assesses their mastery of the course competencies. Please refer to the section on Advanced Placement for additional information.

Graduation Project

The Tulpehocken Graduation Project is a one-credit course required of all Tulpehocken Area Senior High School students. Each student will identify an area of interest based on the student's career plan as developed through Tulpehocken's Chapter 339 Career Work and Education standards. The Project is a minimum of 35 hours which includes 1) the completion of CEW standards during grades 9-11 including a Career Plan and 2) refinement of their Career Plan through one of the following experiences:

Community service
Personal development
Career exploration
Research

The Graduation Project is evaluated using a pass/fail system. A student that fails has the opportunity to continue improving the Project in order to receive a passing grade.

Parts of the Project

All Projects have four parts; each part must be completed successfully to receive a passing grade.

1) Career Plan & Portfolio—the student completes at least eight assigned career activities representing each CEW standard, including a Career Plan, by the end of the junior year. Artifacts from these activities are maintained in the student portfolio.
2) The Project (Work/Experience) - the student a) decides on a project, b) completes a proposal contract form, c) obtains mentor clearances, if required, d) obtains Coordinator approval for the project e) complete all the activities of the approved Project and f) submits timesheet and mentor letter by mutually agreed upon date on the contract. Hours must be completed by the end of the 1st semester senior year. Career Plan plus The Project must total 35 hours.
3) Written Paper-the student creates a title page and writes a two-page paper. The first draft is assessed by a staff member and returned to the student for corrections/modifications. The student submits a final paper by the mutually agreed upon date on the contract. The teacher assesses the final paper based on the rubric. The written component must be passed before the following month's presentation date.
4) Oral Presentation-the student will speak for ten to twenty minutes describing the completed Project. The student must include visuals to enhance the presentation. A committee of teachers and/or administrators will evaluate the student's oral presentation using a rubric. Projects that do not pass will be rescheduled for the following month's presentation date. A second failure may necessitate a new project

Timeline

The Project, Written Paper and Oral Presentation must be completed within one calendar year unless stated otherwise on the contract. Both the written component and oral presentation must be completed during the semester after the work portion of the project is completed.

Considerations

Arrangements have been made with the Berks Career and Technology Center, Special Education Department, and Agriculture classes to coordinate projects. Two students may work on a project together, but each must do the proposal, written paper, and presentation individually. Failure to meet guidelines may jeopardize participation in the SPA, driving privileges, attendance at the prom and graduation activities. The Coordinator of Graduation Projects is the faculty in charge of all Projects. Designated faculty meets with and directs each student's Project.

NCAA clearinghouse Information for Student-Athletes

If students are planning to enroll in a Division I or Division II college and wish to participate in athletics, they must be certified by the NCAAS Initial-Eligibility Clearinghouse. Student-Athletes should inform their school counselors of their college athletic plans and should be aware of NCAA requirements starting with eighth grade courses. The NCAA strongly suggests that prospective collegiate student-athletes use the online registration material by visiting the website listed below.

The NCAA provides a "Guide for the College-Bound Student-Athlete" at the website below. This publication provides all specific eligibility requirements regarding Division I, II, or III sports. Additional resources may also be found at the website or call the customer service number at 877-262-1492 for additional information.

Please visit www.eligibilitycenter.org for additional information

NCAA CORE COURSES		
English	• Academic English 9 • Academic English 10 • Academic English 11 • Academic English 12 • English 9 Honors • English 10 Honors	• English 11 Honors • English 12 Honors • Public Speaking • Short Story/Poetry • Shakespeare
Social Studies	• AP Economics • AP US Government & Politics • Current World Affairs • Civics • Honors Civics • Comparative Religions • Economics • Economics Honors • Modern US History	• Problems of Democracy • Problems of Democracy Honors • Psychology • Sociology • US Government • US History II • US History II Honors • World Cultures • World Cultures Honors
Mathematics	• Academic Algebra II • Academic Geometry • Algebra 1A (0.5 max credits • Algebra 1B (0.5 max credits) • Algebra II Honors • AP Calculus AB • AP Calculus BC • AP Statistics	• Calculus Honors • College Bound Statistics • Financial Algebra • Geometry • Geometry Honors • Keystone Algebra I • Pre-Calculus • Pre-Calculus Honors
Science	• Astrophysics • Biological Concepts • Academic Chemistry • AP Chemistry • Honors Chemistry • Academic Earth Science • Honors Earth Science • Environmental Science • Human Anatomy 1 • Human Anatomy 2	• Integrated Science • Intro to Environmental Science • Physics • Academic Physics • Honors Physics • PLTW Introduction to Engineering and Design • PLTW Principles of Engineering • Robotics
World Language	• German 1 • German 2 • German 3 • German 4 Honors	• Spanish 1 • Spanish 2 • Spanish 3 • Spanish 4 Honors

BERKS CAREER & TECHNOLOGY CENTER

The Berks Career and Technology Center (BCTC) offers over thirty programs in different career areas to students from 16 area school districts. Two campuses serve students in Berks County. The East campus is located in Oley and the West campus is located in Leesport. Travel time and instruction at BCTC comprise four periods plus the Advisory period per day in the Tulpehocken schedule. Students will take required academic courses at their high school while attending the BCTC for their technical program. Programs are designed for three years in length beginning in the 10th grade; however, 11th and 12th grade students may also begin a program. All programs are available to students regardless of district location.

Laboratories equipped with computers, industrial machinery, and other state-of-the-art equipment provide hands-on training for students in addition to the academic component of each course of study. All curriculum is competency based, allowing students to proceed at a rate that is best for them and tailored to meet their own career objectives.

Tuition-free public education is provided to high school students through the tax support of the citizens and businesses from each of the sixteen Berks County school districts. Adults are required to pay tuition based on an annually approved tuition rate. Students are required to pay for books/workbooks, tools and personal protective equipment. Also, students must pay for certification testing fees.

There are many opportunities available for students enrolled in a BCTC program. All programs prepare students for immediate employment or higher education. Senior students who demonstrate a high level of competency in their program can participate in a supervised work-based learning experience. In addition, articulation agreements with the following post-secondary schools provide advanced credits or advanced placement: Berks Technical Institute, Lehigh Carbon Community College, Lincoln Technical Institute, Northampton Community College, Northwestern College, Ohio Technical Institute, PA College of Technology, PA School of Art & Design, Reading Area Community College, Schuylkill Institute of Business & Technology, Thaddeus Stevens College of Technology, Thompson Institute, and Universal Technical Institute. Currently, over thirty BCTC programs have articulation agreements to offer students advanced credit at the post-secondary level to pursue a certificate, associate, or baccalaureate degree.

BCTC students who plan to pursue post-secondary education (certificate, associate, or baccalaureate degree) should take a rigorous high school academic program in the areas of Math, Science, and English.

A program in the area of health care exists for seniors only. BCTC, Penn State-Berks, and The Reading Hospital & Medical Center (TRHMC) are collaborating to offer an exciting Medical Health Professions Program for high school seniors. The program combines high level academics with the opportunity to shadow health care professionals and earn college credits. Students will be enrolled in both Penn State-Berks and BCTC for one year, taking Chemistry and Physiology courses at Penn State-Berks two days per week and attending health classes and shadowing healthcare providers at TRHMC three days per week. Admission to the program is competitive and students must meet strict admission guidelines.

The Technical Academy also provides college-bound students with the opportunity to develop advanced technical skills and earn college credit toward an associate and/or bachelor's degree while still in high school. Programs in the Technical Academy include: IT Networking, Technology Based Entrepreneurship, IT Programming, Mechatronics Engineering Technology and Healthcare Information Technology. Students must begin these programs in either grade 10 or 11. Please visit www.berkscareer.com or your school counselor for more information.

BCTC Programs of Study

Engineering and Manufacturing Technology Drafting Design Technology (W) Precision/Comp Machining Tech (W) Engineering Technologies (W) Welding Technology (W) **Business & Information Technology** Computer Systems Networking & Security (E) IT Programming (W) Business Management & Entrepreneurship (W) **Communications** Advertising Art & Design Technology (W) Video & Media Content Production (W) **Healthcare** Dental Occupations (E) Health Occupations (W) Sports Medicine & Rehabilitative Therapy(E) Medical Health Professions (W) **Services** Cosmetology (B) Early Childhood Education (B) Culinary Arts (B) Service Occupations (E) Protective Services – Homeland Security or Law Enforcement (E)	**Construction** Building Construction Occupations (E) Cabinetry & Wood Technology (E) Carpentry (E) Electrical Occupations (B) Heating, Ventilation, Air Cond. & Refrigeration (E) Heavy Equipment Operator (E) Horticulture (E) Masonry (E) Painting & Decorating (E) Plumbing & Heating (E) **Transportation** Automotive Collision Repair Technology (B) Automotive Technology (B) Diesel Technology (E) Heavy Equipment Technology (E) Recreational & Power Equipment Technology (W) **Technical Academy** IT Programming (W) Business Management & Entrepreneurship (W) Computer Systems Networking & Security (E)

W – West Campus in Leesport, E – East Campus in Oley, B – Both Campuses

- **Application Process** – Students apply for enrollment at BCTC through their school counselor. All student applications are sent to the BCTC where candidates from throughout the county are chosen. Each student application is reviewed according to the following criteria:
    - **Student Interest** – The thoroughness of the application is viewed as a measure of the interest of the student applicant. Special attention is paid to what research was done to find information about the career area to which a student is applying.
    - **Teacher Evaluations** – Students may request evaluations from two junior or senior high school teachers of their choice.
    - **Counselor Recommendation**
    - **School Citizenship** – Student behavior and attitudes are noted.
    - **Attendance** – Students should have strong patterns of school attendance. Absences and tardies are reviewed.
    - **Academic Scholarship** – Rigor of courses taken, grades, and PSSA Math and Reading scores are reviewed.

It is the policy of the BCTC not to discriminate on the basis of sex, handicap, race, color, or national origin in its educational vocational programs, activities or employment, as required by Title IX, Section 504 and Title VI. Inquiries regarding compliance with Title IX, Section 504 or Title VI should be directed to the office of the Administrative Director at 1057 County Road, Leesport, PA 19533, 610-378-4844.

Tulpehocken Junior-Senior High School
2022-23 Course Descriptions

Indicator	Pathway
1	Arts and Communication
2	Business Finance and Information Technology
3	Engineering & Industry Technology
4	Human Services
5	Science and Health

Agricultural Science

FFA membership is available through these courses. Leadership credit will be given to all officers on a pass/fail basis.

Students taking Agricultural Science courses can earn credits from Delaware Valley University or SUNY Cobleskill. Students interested in earning credits should discuss this option with their school counselors.

758 Supervised Agricultural Experiences SAE I, II, III, IV

1 credit
Grade 9, 10, 11, 12

The Supervised Agricultural Experience program (SAE) is an experiential learning independent study record keeping class for all students who are enrolled in an agriculture elective course. Example SAE projects are listed on the National FFA website. Students are required to review their SAE record books with their Agricultural Education Instructor at the conclusion of each marking period and school year, with weekly checks conducted by the instructor. Grading for this SAE course will be Pass/Fail.

Students can earn up to four SAE credits over four years of enrollment in Agricultural Education courses.

990 FFA Leadership (Advisory)

.75 credit
Grade 10, 11, 12

This course is rich in personal and team building skills as students learn the principles of leadership week by week by building the FFA Program of Activities. Students are then put to the test by designing their own recruitment, career development event, fundraising, and community service activities. You can expect to grow and mature rapidly from the start to the finish of this opportunity and gain a much wider perspective on how you can more effectively work with other people through personal improvement and development. This course is limited to FFA Officers on the leadership team.

768 Agriculture, Food and Natural Resources (CASE AFNR)

This course is the prerequisite course for all other Ag elective courses.
1 credit
Grade 9, 10, 11, 12
Career Pathways

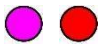
AFNR is an introductory course designed to teach students about the world of agriculture, the pathways of study they may pursue, and the science, mathematics, reading, and writing components they will use throughout the CASE™ curriculum. Woven throughout the course are activities to develop and improve employability skills of students through practical applications. Students will explore career and post-secondary opportunities in each area

of the course. Students' experiences will involve the study of communication, the science of agriculture, plants, animals, and natural resources. While surveying the opportunities available in agriculture and natural resources, students will learn to solve problems, conduct research, analyze data, work in teams, and take responsibility for their work, actions, and learning.

The Introduction to Agriculture, Food, and Natural Resources course includes:

- Agricultural Education – Agriculture, FFA, and SAE
- Communication Methods
- Science Processes
- Natural Resources
- Plants and Animals
- Agricultural Mechanics

747 Agricultural Animal Science (CASE AAS)

OFFERED (2023-2024) On Three Year Rotation
1 credit
Grade 10, 11, 12
Prerequisite: AFNR
Career Pathways 

Principles of Agricultural Science—Animal is a foundation-level course engaging students in hands-on laboratories and activities to explore the world of animal agriculture. During the course, students develop a comprehensive Producer's Management Guide for an animal of their choice. Student experiences will involve the study of animal anatomy, physiology, behavior, nutrition, reproduction, health, selection, and marketing. For example, students will acquire skills in meeting the nutritional needs of animals while developing balanced, economical rations. Throughout the course, students will consider the perceptions and preferences of individuals within local, regional, and world markets.

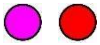
Students will explore hands-on projects and activities to learn the characteristics of animal science and work on major projects and problems similar to those that animal science specialists, such as veterinarians, zoologists, livestock producers, and industry personnel, face in their respective careers. Students will investigate, experiment, and learn about documenting a project, solving problems, and communicating their solutions to their peers and members of the professional community

.

Principles of Agricultural Science—Animal areas of study include:

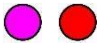
- History and Use of Animals
- Animal Handling and Safety
- Cells and Tissues
- Animal Nutrition
- Animal Reproduction
- Genetics
- Animal Health
- Animal Products, Selection, and Marketing

765 Veterinary Science

OFFERED (2022-2023) On Three Year Rotation
1 credit
Grade 10, 11, 12
Prerequisite: AFNR, ASA, Biology and Algebra I
Career Pathways 

Molded after the Cornell University Veterinary Science Program, this course is designed to introduce students to a demanding career in Veterinary Medicine. Students will learn animal breeds and species, veterinary terminology, anatomy and physiology, animal hospital procedures, clinical exams, leadership skills, animal ownership and ethics, animal handling and grooming. Students will be dissecting specimens, maintaining a laboratory notebook, and creating lab reports based on course activities and experiments. Leadership development, including FFA, and supervised agricultural experience programs will be taught also.

750 Agricultural Plant Science (CASE APS)

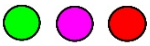
OFFERED (2024-2025) On Three Year Rotation
1 credit
Grade 10, 11, 12
Prerequisite: AFNR
Career Pathways 

Principles of Agricultural Science—Plant is a foundation-level course teaching students the form and function of plant systems. Students experience various plant science concepts through inquiry-based exercises filled with activities, projects, and problems utilizing laboratory and practical experiences. Student experiences will include the study of plant anatomy and physiology, classification, and the fundamentals of production and harvesting. Students will learn how to apply scientific knowledge and skills to use plants effectively for agricultural and horticultural production. Students will discover the value of plant production and its impact on the individual, the local, and the global economy. Lessons throughout the course will provide an overview of the field of agricultural science with a foundation in plant science. These lessons include working in teams and exploring hands-on projects. Students will work on major projects and problems similar to those that plant science specialists, such as horticulturalists, agronomists, greenhouse and nursery managers, and plant research specialists, face in their respective careers.

Principles of Agricultural Science—Plant areas of study include:

- Soils
- Anatomy and Physiology
- Taxonomy
- Growing Environment
- Reproduction
- Pest and Disease Management
- Crop Production and Marketing

744 Landscape Design & Hardscapes (LDH)

OFFERED (2022-2023) - every other year
0.5 credit
Grade 11, 12
Prerequisite: AFNR and APS
Paired with Turf Science and Management
Career Pathways 

Students will learn skills in creating blueprints, estimates, and landscaping designs. Topics include basic principles of design, engineering, drawing and drafting techniques including the use of technology such as computer-aided design. Students will incorporate principles of hardscapes and examine the use of artificial lighting, water systems, and creative features in their designs. Throughout the course, business management practices, employability skills, and safety procedures will also be emphasized.

Students will also learn skills in constructing and installing hardscape features in a landscape. Topics include basic principles of building and implementing designs drawn and drafted from computer-aided designs and blueprints. Students will install artificial lighting, water systems, deck and creative concrete features on job sites. Throughout the course, business management practices, employability skills, and safety procedures will also be emphasized. Lastly, students will have the opportunity to become ICPI certified installers - a nationally recognized industry certification.

752 Turf Science & Management (TSM)

OFFERED (2022-2023) - every other year
0.5 credit
Grade 11, 12
Prerequisite: AFNR and APS
Paired with Landscape Design & Hardscapes
Career Pathways 

Students will apply principles of science, engineering, and business to support the establishment and maintenance of residential, athletic, and recreational turf. Students will learn techniques for the establishment, care, production, and marketing of turf grass, along with safe operation and maintenance of specialized equipment. Throughout the course, environmental awareness and conservation practices will be emphasized along with communication, business, and management strategies appropriate for the industry. Students enrolled in this course will have the opportunity to earn their pesticide applicators license - a nationally recognized certification.

749 Natural Resources and Ecology (CASE NRE)

OFFERED (2024-2025) – On a three-year rotation
1 credit
Grade 10, 11, 12
Prerequisite: AFNR
Career Pathways 

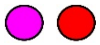
The NRE course is a foundation course within the CASE sequence of courses. The course provides students a variety of experiences in the fields of natural resources and ecology. Students will explore hands-on projects and activities while studying topics such as land use, water quality, stewardship, and environmental agencies. Study of

the natural world including biomes, land, air, water, energy, use and care as well as a focus on issues surrounding man's interaction with the Earth will be addressed in this course.
Students will select an ecosystem to study throughout the course and apply principles of natural resources and ecology from each unit of study to that ecosystem.

The lessons in Natural Resources and Ecology include the following.

- Conservation, Preservation, Exploitation
- Mother Earth
- Water Works
- Lighter than Air
- Earth's Energy
- Flora and Fauna
- Farming, Forestry, and Ferrous
- We the People
- Past, Present, Future

743 Animal and Plant Biotechnology (CASE APB)

OFFERED (2023-2024) – On a three-year rotation
1 credit
Grade 11, 12
Prerequisite: AFNR, APS or AAS, Food Products and Processing, or Chemistry
Career Pathways 

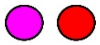
A specialization course in the CASE Program of Study, provides students with experiences in industry appropriate applications of biotechnology related to plant and animal agriculture. Students will complete hands-on activities, projects, and problems designed to build content knowledge and technical skills in the field of biotechnology. Students are expected to become proficient at biotechnological skills involving micro-pipetting, bacterial cultures and transformations, electrophoresis, and polymerase chain reaction.
Students will maintain a research level Laboratory Notebook throughout the course documenting their experiences in the laboratory. Research and experimental design will be highlighted as students develop and conduct industry appropriate investigations.

Students will develop and conduct a research project following the National FFA Agriscience Fair guidelines. From background research through data collection and analysis, students will investigate a problem of their choice and conclude the project by reporting their results in the forms of a research paper and a research poster.

Animal and Plant Biotechnology areas of study include:

- Laboratory Protocols & Safety
- Cells
- DNA & Protein
- Genetically Modified Organisms
- Micropropagation
- Polymerase Chain Reaction
- Research in Biotechnology

753 Food Products and Processing

1 credit
Grade 11, 12
Prerequisite: AFNR, and either AAS, ASP, or APB
Career Pathways 

In this lab heavy, inquiry-based course, students will explore the chemistry, microbiology, and engineering that impact our food. Students will cook, analyze, and design food samples and packaging. Lab techniques such as chromatography, electrophoresis, and plating, will be used to learn about the past, present, and future of food production and cooking. Students will be required to keep a lab notebook and complete a book study throughout the course. Research and experimental design will be highlighted as students develop and conduct industry appropriate investigations. Students will investigate, experiment, and learn about documenting a project, solving problems, and communicating solutions to their peers and members of the professional community.

Food Science and Microbiology includes the following units of study:

- Introduction to Food Science
- Chemistry of Food
- Safety of Our Food
- Food Processing Preservation and Packaging
- Food Health and Security
- Preference and Product Availability
- Food Product Development

745 Agricultural Business Foundations (CASE ABF)

OFFERED (2022-2023) – On a three-year rotation
1 credit
Grade 10, 11, 12
Prerequisite: Agriculture, Food, and Natural Resources (AFNR)
Career Pathways 

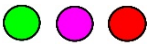
Agricultural Business Foundations introduces students to business management in agriculture. Mathematics, reading, and writing components are woven in the context of agriculture and students will use the introductory skills and knowledge developed in this course throughout subsequent CASE courses. Throughout the course are practical and engaging activities, projects, and problems to develop and improve business and employability skills. Additionally, students investigate and develop viable business plans in order to solve local problems. The business plan ideas are communicated to student peers and members of the professional community. The Agricultural

Business Foundations course includes:

- Starting a business
- Financial documents
- Risk management
- Writing a business plan

The Agricultural Business Foundations course is an elective course from the CASE course menu. The course is structured for all students to experience agricultural business management practices in order to continue through a sequence of courses during high school. The knowledge and skills students develop can be used within multiple pathways of study.

754 International Agriculture

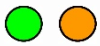
OFFERED (2023-2024) – Every other year
0.5 credit
Grade 10, 11, 12
Prerequisite: AAS, APS, ABF, APB, or Food Science & Microbiology
Paired with Ag Communications and Leadership
Career Pathways 

This class focuses on agriculture in countries around the world and frames this focus with a discussion of crucial issues facing agriculture on a global scale, emphasizing global hunger and food security. The primary goal of the course is to inform students about international agriculture, challenging them to think critically and independently about agricultural issues, and develop global citizens who are more aware of important challenges in the global agriculture, food, and natural resource systems.

The specific objectives of this course are for students to:

- Articulate major challenges related to agriculture food systems across economic, social, & environmental sectors.
- Assess the benefits and risks of different approaches to addressing global challenges in agricultural food systems.
- Understand and apply current conceptual and theoretical frameworks in agricultural development; and
- Empower students to make more informed decisions as consumers and global citizens.

746 Agricultural Leadership and Communications

OFFERED (2023-2024) – Every other year
0.5 credit
Grade 10, 11, 12
Prerequisite: Agriculture, Food, and Natural Resources (AFNR)
Paired with International Agriculture
Career Pathways 

This class is designed to discuss leadership and careers by looking at the skills necessary to be a leader, how to work as a team and manage people. Topics will include team building exercises, personality profiles, career interest profiling, parliamentary procedures, and specific leadership qualities. This class will be highly project-oriented and will include writing assignments, team and individual projects, and journals. All information will be presented in terms of how it affects you as a student, an individual, and as a future leader in society. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education. The Agricultural Communications portion of this course will expose students to a wide variety of agricultural communications career options. Students will have experiences in various communications concepts through exciting “hands-on” activities, projects, and problems, all through the lens of the agricultural industry. Students will discover the value of the agricultural industry and its impact on the individual, the local, and the global economy.

Agricultural Mechanics

741 Agricultural Power and Technology (CASE APT)

1 credit
Grade 9, 10, 11, 12
Prerequisite: Agriculture, Food, and Natural Resources (AFNR)
Career Pathways

Agricultural Power and Technology is a foundation level course designed to prepare students for the wide array of career opportunities in agricultural engineering. Students are immersed in inquiry-based exercises that tie in the math and science of agricultural mechanics and engineering. Throughout the course, students apply technical skill while becoming competent in the process used to operate, repair, engineer, and design agricultural tools and equipment.

Agricultural Power and Technology areas of study include:

- Shop Safety
- Tool Operation
- Materials Selection & Use
- Fabrication
- Energy & Power
- Machines
- Machinery Management
- Engineering
- Technology Applications

742 Mechanical Systems in Agriculture (CASE MSA)

OFFERED (2022-2023) – Every other year
0.5 credit
Grade 10, 11, 12
Prerequisite: Agricultural Power and Technology (APT)
Paired with Ag Construction
Career Pathways

Mechanical Systems in Agriculture is the specialization-level course designed to provide rigorous applications in the agricultural engineering field. Throughout the course, students apply technical skill while becoming competent in the process used to operate, repair, engineer, and design agricultural tools and equipment. Mechanical Systems in

Agriculture areas of study include:

- Electrical Systems
- Structural Systems
- Energy Systems
- Machine Service and Maintenance
- Geographic Information & Global Position Systems
- Mechanical Design & Management

755 Agricultural Construction

OFFERED (2022-2023) – Every other year
0.5 credit
Grade 10, 11, 12
Prerequisite: AFNR, APT
Paired with MSA
Career Pathways 

The profession of agricultural and heavy civil construction focuses primarily on building infrastructure that improves the communities where people live and work, whether directly in the Agricultural Industry or not. This includes construction for agricultural buildings and facilities, commercial/retail Agribusiness centers, packing and distribution warehouses, water/wastewater systems, highways and other transportation systems.

The core competencies of agricultural and heavy civil construction are generally centered around activities not normally performed on buildings, such as earthwork, underground utilities, curb, stone and paving. Technicians work with civil engineers and project managers to build projects by following engineered plans and specifications, and with designated contractors who specialize in scopes of work such as land clearing, blasting, landscaping, electrical, precast concrete, retaining walls, etc. This profession uses heavy equipment and up-to-date technology to complete construction more efficiently and profitably. The instruction in this course provides students with the career readiness skills that qualify them to enter the heavy civil workforce and/or continue into a trade school/college certification program.

Areas of Study:

- Fundamentals of Construction
- Basics of Construction Industry Safety
- Heavy Civil Mathematics (Algebra, Geometry, and Basic Blueprint Reading)
- Fundamentals of Production Costs
- Surveying and Layout - Calculate pipe slopes/inverts
- Equipment and Tools
- Geotechnical Engineering
- Types of system (sanitary, storm, water)
- Laser/Survey/GPS procedures and equipment
- Materials of Construction (Aggregates, Asphalt, Concrete)

748 Small Gas Engines

OFFERED (2023-2024) – Every other year
0.5 credit
Grade 10, 11, 12
Prerequisite: Agricultural Power and Technology
Paired with Advanced Welding
Career Pathways 

The purpose of this Agriculture Mechanics course is to aid in practical, working knowledge of Small Gas Engines. This course will include total disassembly and reassembly of an engine, trouble-shooting and repair, and the operation and maintenance of two-and four-cycle engines. Laboratory exercises will cover compression, ignition, carburetion, fuels, lubrication, maintenance and sales. Students will develop engine trouble-shooting skills to determine what is wrong with an engine. Students are required to bring in their own engine to rebuild. They will

be expected to pay for the parts needed to make the engine run properly. If students cannot locate an engine of their own, they may use a donated engine.

740 Advanced Welding

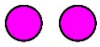
OFFERED (2023-2024) – Every other year

0.5 credit

Grade 10, 11, 12

Prerequisite: Agricultural Power and Technology (APT), and taken with Small Gas Engines

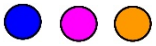
Paired with gas engines

Career Pathways 

Advanced Welding provides students with opportunities to effectively perform cutting and welding applications of increasing complexity used in the advanced manufacturing industry. Proficient students will build on the knowledge and skills of the Welding Technology course while learning additional welding techniques not covered in previous courses. Specifically, students will be proficient in fundamental safety practices in welding, gas metal arc welding (GMAW), gas tungsten arc welding (GTAW), shielded metal arc welding (SMAW), and quality control methods.

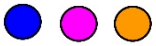
Art

520 Art & Design 1

0.5 credit
Grade 9, 10, 11, 12
Prerequisite for all other art courses except ceramics
Career Pathways 

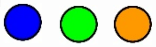
This class is designed to encourage all students to participate in a variety of art activities. Students will learn how the elements of art and principles of design are a basis for composition as they apply to a wide variety of media. Students will learn about color theory, develop individual creativity, as well as gain basic art-making skills that are fundamentally required for upper level courses. This course will explore a variety of artists, art processes, and materials such as drawing, painting, printmaking, and sculpting in 2D and 3D design. Effort and willingness to get involved in the creative process is a more important requirement than the student's talent or previous experience.

523 Art & Design 2

0.5 credit
Grade 9, 10, 11, 12
Prerequisite: Art & Design 1
Career Pathways 

This second-level studio art class will allow students to further develop knowledge and art skills learned from Art & Design 1 while using a wide variety of media to build 2D & 3D artwork. Students will continue to develop creativity while taking their skills in drawing, painting, sculpting, and handcrafting to a higher level using various art materials such as acrylic and watercolor paint, chalk and oil pastels, clay, scratchboard, cardboard, recycled materials, and other craft materials. Some projects may be geared towards an "art for art's sake" ideology while building knowledge and skill in art making processes, and other projects may travel down a creative "life design" avenue. Examples of life design may include toy design, tattoo art, car design, interior design, fashion design, architectural design, etc.

521 High School Photojournalism* (full year)

1 credit
Grade 9, 10, 11, 12
Prerequisite: Art & Design 1; max 10 students
Career Pathways 

This is a year-long course that will explore the multiple avenues required in developing a real high school book publication — the annual edition of the Tulpehocken Dardanian Yearbook! Students will be introduced to advanced camera operations using an SLR digital camera, compositional strategies, and photo editing using Adobe Photoshop. Developing a yearbook theme will have students using their creative brains from cover to cover while collaborating as a team to collect data, conduct interviews, write articles, shoot live-event photos, and design eye-catching page layouts and typography using an online software program. Students will also help promote book sales in school and learn the importance of meeting deadlines just like a professional journalist or graphic designer would need to do in the real world. **NOTE: Students are required to attend two home games or school events per season (fall, winter, and spring) that**

are after school and/or on weekends to shoot photography for the yearbook. The schedules are posted well in advance for students to plan and choose which dates/times work best with his/her schedule. This extracurricular participation is part of the student's grade each marking period. Transportation to/from events is the responsibility of the student. If a student is unable to fulfill this course requirement, this course may not be not fitting for you.

522 Ceramics

0.5 credit
Grade 9, 10, 11, 12
Career Pathways 

All methods of clay hand-building are explored. Each project focuses on a different theme. Developmental skills include idea generation, drawing thumbnails, wedging and sculpting clay, proper use of tools and equipment, application of glazes, and various decorating techniques. Advanced students may further develop skills using a pottery wheel and how to manage the ceramics studio.

527 Independent Study

0.5 credit
Grade 12
Prerequisites: Art & Design 1, Art & Design 2, + 1 more art course, & an average grade of "B" or better in art classes and recommendation of the high school art teacher.
Career Pathways 

This course may be taken your senior year after you have taken two or more art classes and MUST have a prior written recommendation from the HS art teacher. It is designed for the higher skilled artist who may pursue an interest in one of the many art fields after high school or for the highly skilled hobbyist. The student is required to be able to communicate well with the teacher about ideas, work responsibly and independently of other students in the classroom, and have good time management skills. For each project, the student will work with the teacher to decide on a theme, and then he/she is expected to develop and explore artistic pieces in their own personal style. Students will have full range in choice of media for each project that would best allow him/herself to express his/her idea including (but not limited to) pencils, pastels, ink, paint, watercolor, clay, or digital graphics. Students will mat their own work for display, and (optionally) learn how to photograph their work and create a digital portfolio that can be shared with prospective employers or college admissions counselors (if he/she should choose to pursue art after high school). Completion of a minimum of three major projects is required during this course and/or continuous work on smaller projects throughout the semester. This higher level of artwork is expected to be entered into various art shows during the school year.

524 Graphic Design 1 (Fall Semester only)

0.5 credit
Grade 10, 11, 12
Prerequisites: Art & Design 1, Graphic Design 1; max 20 students
Career Pathways 

In this introduction to graphic design class, students will learn the principles of design and typography from a design industry professional while also learning how to use professional-grade design software on a Mac

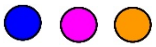
computer. Students will be introduced to the fundamentals of Adobe Illustrator and Photoshop software to create digital assignments including digital illustration, typography, photo editing, retouching images, and graphic layouts.

525 Graphic Design 2 (Spring Semester only)

0.5 credit

Grade 10, 11, 12

Prerequisites: Art & Design 1, Graphic Design 1; max 20 students

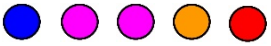
Career Pathways 

In this second-level graphic design course, students will further develop Adobe design software knowledge on a Mac computer. Students will apply learned fundamentals from level one to create more advanced digital assignments including digital illustrations, typography design, manipulating images in Photoshop, creating eye-catching layouts, packaging design, advertisements, and other real-life design projects.

Business and Computer Technology

0.5 credit in Computer Science required

601A Computer Applications

0.5 credit
Grade 9, 10, 11, 12
Career Pathways 

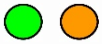
Students use the computer and Microsoft Office to introduce Word, Excel, PowerPoint, and Publisher. Word includes: basics, edition, formatting, controlling text, helpful features, desktop publishing, documents, and increasing efficiency. Excel includes: basics, changing the appearance of a worksheet, organizing the worksheet, formulas, function formulas, usefulness, other software tools, and charts. PowerPoint includes: basics, enhancing the presentation, visual elements and expanding the basics. These applications are introduced with emphasis on terminology and hands-on projects. This course should NOT be taken by students who have successfully completed junior high Computer Applications.

Introduction to Computer Science:

0.5 Credits
Grade 9,10,11,12
Career Pathways 

Technology continues to change and provides opportunities for students. This interactive course takes a wide lens on computer science. Students will learn 21st century skills like problem solving, critical thinking, collaboration, communication and technology skills. Focusing on user centered design and applications, students will create apps, look at artificial intelligence and physical computing to apply the skills. Topics from the course we provide building blocks for future computer science and provide skills needed for other courses. This course will meet the computer science requirement needed for graduation.

609 Accounting

1 credit
Grade 10, 11, 12
Career Pathways 

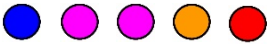
Students thrive in this course as they experience hands-on, interactive instruction. Business is everywhere, money is everywhere, and accounting is the language of business. The purpose of the course is for students to become familiar with accounting concepts as they relate to business and personal financial situations. In addition to journalizing, preparing financial statements, and analyzing business information, several other areas are introduced—checking accounts, payroll, and depreciation. Because of its analytical nature, this course is sure to give you the edge you need whether your intended major is business or another field! This course will satisfy the one additional credit for STEM.

613 Business Law

0.5 credit
Grade 9, 10, 11, 12
Career Pathways 

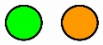
You will soon find Business Law to be one of your most valuable subjects. Study true situations that show how business and personal law impacts not only business, but the lives of young people and adults as well. Explore the fascinating analysis of legal situations. Criminal justice, crimes and crime prevention as well as personal injury law and juvenile justice are explored along with due process, our U.S. court system, consumer laws and everyday contract law. A hot debate section promotes thoughtful discussion of important legal issues. Analyze the effects of the media, including TV and the press, on legal issues, discuss the emerging area of the legal aspects of the Internet, and apply the law to real-life business situations. This course is a good match with Accounting I or HACC Accounting.

615 Advanced Computer Applications

0.5 credit
Grade 11, 12
Prerequisite: Successful completion of JH computer classes.
Career Pathways 

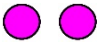
Aspects of Introductory Computer Applications are enhanced, reviewed, and built upon in more detail. Word includes: sorting & calculating, customizing tables and creating charts, merging form documents, mailing labels, and envelopes, formatting columns and sections, formatting graphics and text boxes, working with long documents, creating forms and customizing features. Excel includes: applying advanced formats to worksheets & charts, printing workbooks, using data lists, filtering & extracting data, working with analysis tools, importing, exporting & integrating data, using templates, working with multiple worksheets & workbooks, creating shared workbooks, creating outlines and subtotals, and working with graphics & embedded objects. Access includes: modifying table design, relationships in tables & queries, advanced form features, analyzing data, advanced queries, advanced report features, importing & exporting data, working with web features, and using advanced tools. Projects will be emphasized in this course although advanced terminology will be taught and used throughout. College-bound students should consider taking this course. (satisfies high school computer requirement)

619 Accounting II

1 credit
Grade 11, 12 (Weighted)
Prerequisite: High School Accounting I with a minimum grade of 85% or teacher recommendation.
Career Pathways 

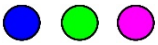
This class is for students who have successfully completed the Accounting I course. This course focuses on accounting for a merchandising business organized as a corporation. We will cover more advanced accounting principles such as: cash receipt/payment transactions, petty cash, subsidiary ledgers, depreciation of plant assets, uncollectible accounts, inventories, payroll, notes payable and receivable, partnerships, corporate accounting, and ethics in accounting. Simulation projects will be completed in addition to completion of various workbook problems covering these advanced accounting principles.

621 Computer Programming I

0.5 credit
Grade 9, 10, 11, 12
Career Pathways 

This is a beginner course on computer programming utilizing the Python programming language. Students will concentrate upon fundamental programming concepts such as user input, printing, user interfaces, and logic flow with an emphasis upon the development of logical thinking and fundamental problem-solving concepts. Student evaluation will be based upon leveled programming projects designed to measure the student's problem-solving ability and command of language syntax.

623 Web Page Design

0.5 credit
Grade 9, 10, 11, 12
Prerequisite: Minimum of 75 % in 7th & 8th grade computer classes.
Career Pathways 

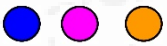
This course seeks to acquaint the student with the concepts involved in Internet research and web page design. Students will learn to create web pages utilizing Adobe Dreamweaver to create sites using HTML code. Students will be introduced to JavaScript to allow for more functionality in websites. They will also learn how to add CSS code to allow for more flexibility to add different styles and looks to a site. Students will also learn how to enhance pictures and create projects in Adobe Photoshop to add to their websites.

624 AP Computer Science A

1 credit
Grade 11, 12 (Weighted)
Prerequisite: 1) Successful completion of either Computer Programming I or Computer Science Essentials or both; 2) Approval of both the computer science teacher and school counselor. Students will be required to take the AP exam.
Career Pathways 

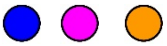
This course is a college level course that familiarizes students with object-oriented computer programming using the JAVA programming language. Students will learn how to create programs that interface with the user utilizing both the command prompt and the Microsoft Windows style graphical user interface. Topics include the history of computer and programming languages, software development, JAVA program structures, data types and graphics.

630 Sports and Entertainment Marketing

0.5 credit
Grade 9, 10, 11, 12
Career Pathways 

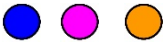
This course will take you on a step-by-step journey through the exciting world of sports and entertainment marketing. Students will learn about the key functions of marketing and how those functions are applied to the sports and entertainment industry. Some topics covered are: College and Amateur Sports, Professional Sports, Marketing Services and Products through Sports, Public Images, Marketing Entertainment, and Recreation Marketing.

631 International Business

0.5 credit
Grade 9, 10, 11, 12
Career Pathways 

To speak the language of others, to appreciate cultural diversity, to understand the economic dynamics of global trade, and to follow shifting political lines are all indispensable tools for living, working and contributing to our world. Learn the basic foundations of how businesses operate within the complex global economy. Explore things like McDonald's endeavors across the globe, gain exposure to Disney in Paris, or delve into the intricacies of the mounting U.S. trade deficit with China. Coverage includes cultural influences on business, trade relations and agreements, foreign exchange, global marketing, laws in other countries, and other aspects of doing business around the world. International Business is an interdisciplinary course which aims to provide students with tools for living in a world of possibilities and challenges.

634 Introduction to Business

0.5 credit
Grade 9, 10, 11, 12
Career Pathways 

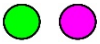
Business is everywhere, whether you want to major in business in college, own your own business, or become a doctor, lawyer, teacher, or work at home. Everything you do involves budgeting, managing money, and making informed decisions in order to spend your money wisely. Explore the courses Tulpehocken has to offer to introduce you to the world of accounting, law, business math, international business, marketing, and careers, all utilizing computers.

635 Entrepreneurship

.5 Credit
Grade 11, 12
Prerequisite: Intro to Business
Career Pathways 

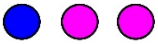
This project-based learning course offers students the opportunity for real-world entrepreneurial projects, such as developing a business plan, creating marketing strategies and making financial decisions. This course will foster students' creative vision and their ability to recognize opportunities for creating a business. Through study and field experiences, students will build a base of knowledge of various business ventures to help them develop an entrepreneurial mindset. Students will combine interpersonal skills with critical thinking, problem solving, hard work and dedication to bring their vision to life. Students will study and apply their knowledge of business principles to starting, operating and maintaining a business.

710 Computer Science Essentials

1 credit
Grade 9, 10, 11, 12
Career Pathways 

Computer Science Essentials exposes students to a diverse set of computational thinking concepts, fundamentals, and tools, allowing them to gain understanding and build confidence. Students use visual, block-based programming and seamlessly transition to text-based programming with languages such as Python® to create apps and develop websites, and learn how to make computers work together to put their design into practice. They apply computational thinking practices, build their vocabulary, and collaborate just as computing professionals do to create products that address topics and problems important to them.

139 TTV TTV Production

1 credit
Grade 10, 11, 12
Prerequisite required: Successful completion of Video Production I. Interested students MUST see TTV teacher prior to selecting this class.
Career Pathways 

This class will be responsible for planning, organizing, and producing the daily announcements for broadcast and the semi-weekly entertainment show *Turtle Soup*. The class will also gather footage throughout the year for the production of the Senior Video Yearbook.

139 Video Production I

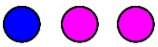
0.5 credit
Grade 9, 10, 11, 12
Career Pathways 

This hands-on class is designed to give students an introduction into the exciting world of video technology. Areas of study will include the history of filmmaking, camera techniques and composition, screenwriting, storyboarding, and editing. Participants will design and create a commercial, a public service announcement, a documentary, a music video, and a short feature film. The software programs utilized include iMovie, iTunes, Final Cut Pro X, GarageBand, Photoshop, and IDVD.

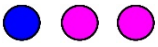
143 Video Production II

0.5 credit
Grade 10, 11, 12
Career Pathways 

144 Video Production III

0.5 credit
Grade 10, 11, 12
Career Pathways 

145 Video Production IV

0.5 credit
Grade 10, 11, 12
Prerequisites: Video Production I and II.
Career Pathways 

These classes will build on the skill sets and software knowledge acquired by students in Video Production I and II. Students will access on-line training in Final Cut Pro X, AfterEffects, Motion and Color, and apply their knowledge to a variety of individual and group projects in class.

Driver's Education

Course is a graduation requirement for all students

805 Driver's Education

0.25 credit
Grade 10 or age appropriate

Driver Education classroom provides a solid base of instruction in general vehicle knowledge and steps involved in obtaining a driver's permit as well as instruction in attitudes and safe driving practices. Students will study the effects of alcohol and drugs and the laws restricting use of these drugs and consequences of use while operating a vehicle.

Automobile insurance and motorcycle safety are some other topics that are included in this course. Decision-making skills and reducing risk while operating a vehicle will be the key focus. After completing the Driver Education classroom and roadwork, students may receive a PA Driver's License by applying for the Tulpehocken Driver Licensing program.

Driver Education Roadwork

No credit
Students may receive a PA driver's license by applying for the Tulpehocken Driver licensing program.

After being enrolled in the Driver Education classroom, students 16 years of age who have a current PA learner's permit may sign up for the minimum six hour behind-the-wheel driver training course. Students may receive a PA Driver's License and Certificate of Driver Training after successfully completing the course. There is a $50 lab training fee for this course.

English Language Arts

4 Credits Required

191 English 9 Honors

1 credit

Grade 9 (Weighted)

Prerequisite: 90% in 8th grade Language Arts and teacher recommendation.

This course is designed for the highly motivated student. A selection of short stories, poems, novels, and non-fiction will be read and discussed using a program called Studysync. The literature will include selections that are pertinent to the student seeking to further his/her education on the college level. Additionally, novel studies of Shakespeare's *Romeo & Juliet* and Homer's epic poem, *The Odyssey*, will be read, discussed, and evaluated. Other areas of study will include, but are not limited to grammar, composition, public speaking, and vocabulary building. Students will write a short expository research paper. Assessment will be based on a variety of written assignments, tests, projects, and presentations. A high level of student involvement and participation is expected. This course will also include preparation for the state assessment.

192 Academic English 9

1 credit

Grade 9

Academic English 9 covers a broad range of language arts and communication skills. Writing, research skills, reading, and public speaking will be emphasized in this hands-on, interactive course. The literature studied will encompass drama (Romeo and Juliet), poetry, epic poetry (The Odyssey), short stories, and non-fiction while utilizing a program called Studysync. Students will be engaged in discussion, journaling, and research throughout this course. Multimedia projects and presentations utilizing some of the latest technology will be assigned to demonstrate learning and understanding. This course will also include preparation for the state assessment.

193 English 9

1 credit

Grade 9

In addition to exposure to literature, the goal of this course is to enhance students' basic skills in reading, grammar, comprehension, vocabulary, and writing while using a program called Studysync. This course will also include preparation for the state assessment.

101 English 10 Honors

1 credit
Grade 10 (Weighted)
Prerequisite: 90% Academic English 9 or English 9 Honors and teacher recommendation

This advanced study course is designed to help prepare students for pre-college testing and collegiate level English courses. Students will intensely analyze and discuss various forms of literature, poetry, and prose presented through a program called Studysync. Students will participate in large and small group discussions, based on a diverse selection of classic and contemporary fiction and non-fiction that may include, Antigone, Farewell to Manzanar and Holocaust related non-fiction. Out-of-class reading will be required to prepare for in-class discussions and analysis of literature. Independent reading and novel interpretation are strongly emphasized, as well as a large research writing unit. Students will also develop their writing abilities within various domains including: creative, persuasive, informative, expository, and personal. Students in this class will be expected to master story-related vocabulary, grammar and editing within the context of individual writing assignments, and various literary elements. Students will be evaluated on multiple levels including exams, quizzes, papers, projects, journals, cooperative learning group work, public speaking (formal and informal), and class participation. This course will also include preparation for the state assessment.

102 Academic English 10

1 credit
Grade 10

Students will explore the various literary genres—fiction, poetry, non-fiction, and drama through selected readings in each area in a program called Studysync. Selected literature will include socially relevant classical, modern, and multicultural works. Students will develop their writing skills by responding to reading selections through dramatizations, speeches, and writing personal, expository, persuasive, descriptive, and process explanation essays. The course will focus on grammar, vocabulary, speaking, listening and writing skills. Assessment of learning will be on multiple levels, including but not exclusive to exams, quizzes, essays, projects, journals, presentations and class participation. This course will also include preparation for the state assessment.

103 English 10

1 credit
Grade 10

In addition to exposure to literature presented in Studysync, the goal of this course is to enhance students' basic skills in reading, grammar, comprehension, spelling, vocabulary, and writing. This course will also include preparation for the state assessment.

111 English 11 Honors

1 credit
Grade 11 (Weighted)
Prerequisite: 90% in Academic English 10 or English 10 Honors, and teacher recommendation.

This course is designed for highly motivated students willing to work toward improving all facets of their communication skills and preparing for postgraduate education. There will be preparation for the SAT that will include rigorous vocabulary study. The history of American literature will be studied the first semester and students will be asked to write in various modes. Students will be given a wide variety of classic and contemporary novels to choose from during the second semester. Students will engage in literature circles, where they will do research, journaling, discussions, and develop multimedia projects.

112 Academic English 11

1 credit
Grade 11

Academic English 11 covers the following areas: a survey of American literature; grammar; creative and discursive writing projects; SAT-type vocabulary development and a career search paper.

113 English 11

1 credit
Grade 11

In addition to exposure to literature, the goal of this course is to enhance students' basic skills in reading, grammar, comprehension, spelling, vocabulary, and writing.

120 English 12 Honors

1 credit
Grade 12 (Weighted)
Prerequisite: 90% in English 11 Honors and teacher recommendation

English 12 Honors is a weighted course specifically designed for those preparing for a postgraduate education, especially if one is planning on a liberal arts field of study. The focus is on the history of the English language and British Literature – from the Middle ages to Modern. There will be advanced SAT vocabulary preparation and studies of word origins. Students can expect to complete a fully cited research paper and several essays. Multimedia projects will be assigned and creative writing units explored. Students should bring into the class above average reading and writing skills, and a desire to be challenged.

122 Academic English 12

1 credit
Grade 12

Study of literature will include the genres of short stories, poetry and dramas. The selections will encompass British literature in various formats – individual novels, anthologies, and teacher handouts. The nonfiction

novel Tuesdays with Morrie will be read and discussed. Grading will occur on tests, written reports, oral presentations, and projects.

Vocabulary study will include terms found in literature as well as Greek and Latin roots, affixes and terms. Students will be expected to find definitions and be able to use the terms in sentences. Vocabulary tests will be a culminating activity of each assignment. Students will write various essays and reports, including a research paper (term paper). Emphasis will be on correct set-up, spelling, grammar and syntax. Successful completion of a research paper (term paper) is required to pass this class.

123 English 12

1 credit
Grade 12

In addition to exposure to literature, the goal of this course is to enhance students' basic skills in reading, grammar, comprehension, spelling, vocabulary, and writing. School to Work topics will also include but are not limited to learning how to find a career, how to write a resume, fill out applications, business forms, and how to handle business travel and expenses.

124 AP Language

1 Credit
Grade 11, 12

The AP English Language and Composition course focuses on the development and revision of evidence-based analytic and argumentative writing, the rhetorical analysis of nonfiction texts, and the decisions writers make as they compose and revise. Students evaluate, synthesize, and cite research to support their arguments. Additionally, they read and analyze rhetorical elements and their effects in nonfiction texts—including images as forms of text from a range of disciplines and historical periods.
-College Course Equivalent
The AP English Language and Composition course aligns to an introductory college-level rhetoric and writing curriculum.

English Electives

128 SAT Critical Reading Preparation

0.5 credit
Grade 10, 11, 12

This course is designed for students preparing to take the SAT for admission to college. Throughout this course, students will learn many strategies that will help them succeed when they take the test. Students will prepare for two sections of the SAT exam – critical reading and writing. We will cover many concepts including: sentence completion, critical reading, reading comprehension, grammar, writing process, and essay. As a class we will focus on applying these concepts to the SAT test. This is an intensive exam-preparation course and students are required to do regular homework assignments. A fee will be charged for materials.

129 Drama I

0.5 credit
Grade 9, 10, 11, 12
Career Pathways 

This is an interactive class that explores both behind the scenes and the stage areas of theater. Be prepared to be the center of attention, write a script, create a set, and put it all in motion. There will be quizzes and assessments with projects to demonstrate your understanding of the theatrical arts.

129B Drama II

0.5 credit
Grade 9, 10, 11, 12
Prerequisite: Drama I
Career Pathways 

This is an interactive class that explores both behind the scenes and the stage areas of theatre. Students will read plays, act out scenes/monologues, write scenes, design a set and also learn about stage make up and costuming. There will be tests, quizzes, and projects to demonstrate understanding of the theatrical arts.

132 Short Story Writing/Poetry

0.5 credit
Grade 9, 10, 11, 12
Career Pathways 

During the first half of the semester, students will read and discuss various genres of short stories with emphasis on the writer's styles and techniques. Each student will be expected to write his or her own creative short stories using the literary techniques studied in class. During the second half of the semester, students will study a wide range of poets and create a portfolio of original poetry. Each week members of the class will gather to share their work in an open forum that fosters supportive comments and analysis. Opportunities to submit works for publications and competitions will be explored and encouraged.

133 Shakespeare

0.5 credit
Grade 10, 11, 12
Career Pathways 

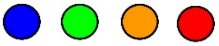
Explore the world of William Shakespeare and read his famous plays to see how they still work and relate to our lives today. Explore the question of authorship and view his works.

134 Contemporary Literature

0.5 credit
Grade 10, 11, 12
Career Pathways 

Do you love to read, but have difficulty relating to the authors studied in English class? Contemporary Literature is a class devoted to the books found on best seller lists – what the American public is buying and reading right now. Titles for this course will evolve to reflect current contemporary writing.

142 Public Speaking

0.5 credit
Grade 9, 10, 11, 12
Career Pathways 

This class is designed to help students hone public speaking skills. Topics to be covered include preparing a speech, understanding the audience, coping with stage fright, and perfecting pace, volume, intonation, and enunciation. The course focuses on the conventional speeches – informational, persuasive, oral interpretation, humorous, and demonstration. This is a self-improvement course that supports individuals who struggle with public speaking.

English as a Second Language

FOR IDENTIFIED STUDENTS ONLY

The Tulpehocken Area School District provides ESL tutorial assistance for all students identified as non-English speaking or Limited English Proficient. These students are identified through use of the following: student records, home language survey, parent information, teacher interview and observation, referral, informal assessment, and language proficiency tests. For further information, please contact the building principal or school counselor.

Family and Consumer Science

.5 credit required in Contemporary Living – 724

724 Contemporary Living

0.5 credit
Grade 10, 11, 12 (Required)

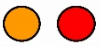
This course addresses the responsibilities of living on your own and being a parent. Basic life skills covered will include communication, decision making, money and resource management, and parenting skills needed for raising children at each stage of childhood.

725 Modern Cookery

0.5 credit
Grade 10, 11, 12
Career Pathways 

Efficient cooking procedures and time saving techniques will be emphasized in this course. Students will prepare foods utilizing convenience and scratch foods using large and small appliances. Class topics will include nutrition, meal planning, food preparation, and food presentation and meal service. Students will prepare and market a food item tracking cost, ingredients, and food label requirements.

726 Child Development

0.5 credit
Grade 10, 11, 12
Career Pathways 

The development of children from prenatal to five years of age will be emphasized in this course. Special units of study will include: developmental stages and growth of children, play and toy selection, television and children, health and safety, discipline and abuse, and early childhood careers.

727 So Sew

0.5 credit
Grade 10, 11, 12

Learn the disappearing art of sewing by constructing projects from start to finish and repairing/altering personal items. This course is ideal for students with fashion or interior design career interests, as well as those who would just like to develop the skills needed to stretch their clothing/accessories budget. Possible project ideas: team logo sweatshirts, pillows, and replace the broken zipper in your favorite pair of jeans.

730 Baking Basics

0.5 credit
Grade 10, 11, 12
Career Pathways 

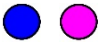
The emphasis of this course will be baking skills. Nutrition, food safety, budgeting, and food presentation will be learned in conjunction with food labs. Students will learn to decorate a cake, make breads and how to increase the nutritional content of recipes.

731 Food for Fitness

0.5 credit
Grade 10, 11, 12
Career Pathways 

The relationship of nutrition and exercise to fitness and good health will be discussed. Topics of this course will include nutrition, food choices, and weight control. Healthful foods and snacks will be prepared. Each student will develop a personal wellness program.

733 Interior Design

0.5 credit
Grade 10, 11, 12
Career Pathways 

In this course we study the elements and principles of design as they are applied to housing. We also study the furniture and housing styles commonly found in the United States. Students select projects of their choice to complete.

Health and Physical Education

1.5 credits required for Physical Education, 0.5 credit for Health, 0.25 credit for CPR & First Aid required

812 Physical Education II/III

0.5 credit
Grade 10, 11

The course is designed to answer the how and why of an activity. Attempts are made to design learning experiences that help the student to gain an understanding of mechanical principles and the effects of exercise on the body, understand concepts that deal with the role of sports and physical activity in society, make value judgments about their well-being, continue development of interpersonal skills through competitive activities and participate in a wide variety of lifetime skills.

815 Weightlifting 101

0.5 credit
Grade 11, ,12

This course is designed to give students the opportunity to learn new weightlifting concepts and techniques to improve their personal health and fitness. Students will benefit from comprehensive weight training and endurance activities. The course includes both lecture and activity sessions. Students will be empowered with the necessary knowledge to develop exercise plans that meet their personal fitness needs and goals.

890 Physical Education I

0.5 credit
Grade 9

895 Health

0.5 credit
Grade 9

Students will spend time in this course learning about wellness and how it helps people feel and perform at their very best. Based on health attitudes, the course will also help students learn how to make intelligent, objective, and positive decisions in all the physical, mental, emotional, and social areas of their daily lives. Also, as students acquire knowledge in the areas of physical fitness, cardiovascular disease, smoking, drugs & alcohol, first aid, mental health, human sexuality, steroids, and AIDS, the course will help them learn about decision-making skills that will enable them to take responsibility for their own daily health and well-being.

897 CPR & First Aid

0.25 credit
Grade 10

This course is designed to give students the knowledge and skills necessary to properly deal with breathing and cardiac emergencies consistent with American Red Cross guidelines. The students will also learn the basics of dealing with other emergency situations. At the end of the course the students will have the opportunity to test their knowledge and skills to earn the American Red Cross CPR/1st Aid certification.

Physical Education Electives

813 Advanced PE

0.5 credit
Grade 12 (PE instructor signature required)

This course will be designed as a Physical Education course in a highly competitive environment. Emphasis will be placed on team-oriented sports in the gymnasium or athletic field environment. Instructor Aid requirement to assist a regular PE class will be included. Maximum 20 students.

814 Recreational and Community Health

0.5 credit
Grade 10, 11, 12

Recreational Leadership is designed for students planning on entering the field of education, community health, or wanting to work with children in recreation and sports settings. Students should possess a willingness to learn and lead a variety of outdoor activities and sports. Students should also possess a willingness to evaluate current health trends. Activities will center on the idea of directing team and group activities. Students will learn to design activities, identify risks, and modify for special needs to ensure a safe successful experience. Students will also examine the world of youth sports. Students will work with the regular as well as the Adaptive Phys. Ed. classes or be expected to log volunteer hours within a recreational setting. This is an elective course and cannot replace required.

Units include:
Working with children, Current trends in health education and community health, Facility planning/Equipment design, directing adventure activities, Coaching/Officiating youth sports, understanding physical challenges, Employment opportunities, modifying activities, Legal requirements for working with children & CPR/First Aid.

Mathematics

Refer to the Graduation Requirements page for Math requirements

404 Geometry Honors

1 credit

Grade 9, 10 (Weighted)

Prerequisite: 90% in Algebra I and teacher recommendation

The course is intended for students with strong problem-solving skills. They will study relationships of perpendicular and parallel lines, congruent triangles, properties of triangles, quadrilaterals, similarity, transformations, right triangles, trigonometry, circles, area of polygons, area of circles, surface area and volume. The course is similar to academic geometry only at a much faster pace, and students are expected to learn through exploration as well as traditional didactic methods.

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405 Academic Geometry

1 credit

Grade 10, 11, 12

Prerequisite: Completion of Algebra I and teacher recommendation

The course is intended for the college bound student. Students will study relationships of perpendicular and parallel lines, congruent triangles, properties of triangles, quadrilaterals, similarity, right triangles, circles, area of polygons, area of circles and surface area and volume. An algebraic approach as well as the coordinate system will be utilized to explore geometric concepts.

406 Algebra II Honors

1 credit

Grade 9, 10, 11 (Weighted)

Prerequisite: 85% in Algebra I Honors and teacher recommendation

This course uses the skills learned in Algebra I to develop new problem-solving skills. Linear and quadratic functions are studied with an emphasis on critical thinking skills. The properties of real numbers are expanded to include irrational numbers with imaginary and complex numbers being introduced as possible domains. Systems of linear and quadratic open sentences are solved using different techniques with the emphasis on which technique is most appropriate for a given problem. Factoring will be reviewed and applied to solving polynomial equations, simplifying rational expressions, solving fractional equations and word problems. Solving quadratic and polynomial equations using factoring, completing the square, the quadratic formula, and depressed equations will be applied to word problems. Quadratic functions and conic sections are studied graphically as well as algebraically. Law of exponents will be expanded to include real number exponents, which will prepare students for the study of logarithms. Ratios and proportions are used to solve variation problems; synthetic division, determinants and algebraic theorems are used to solve polynomial equations. To enhance long term learning, cumulative exams will be given using an SAT format. This is a very challenging course that requires a strong foundation from Algebra I and Geometry Honors. Problem solving skills and analytical thinking skills are stressed throughout this course. Algebra II Honors prepares students for Pre-Calculus. A TI-84 Plus Calculator is recommended for use in this course.

407 Academic Algebra II

1 credit

Grade 9, 10, 11, 12

Prerequisite: Successful completion of Ac Algebra I or Keystone Algebra I, a Proficient Keystone Exam score and teacher recommendation

This course uses the skills learned in Algebra I to develop new problem-solving skills. The course starts with a review of simplifying numerical and variable expressions, solving linear equations and inequalities and solving word problems.

Open sentences are expanded to include combined inequalities and absolute values. Linear equations in 2 unknowns are solved graphically and algebraically, leading to the solving of systems of linear equations and inequalities. Since several techniques can be used to solve systems, the emphasis will be placed on which method is most appropriate to use. Factoring will be reviewed and applied to solving polynomial equations, simplifying rational expressions, solving fractional equations and word problems. The set of real numbers is expanded to include irrational numbers with imaginary and complex numbers being introduced. Completing the square and the quadratic formula are used to solve quadratic equations. Linear and quadratic functions will be developed and applied to word problems. This is a challenging course based on a solid foundation from Algebra I. To enhance long term learning, cumulative exams will be given using an SAT format. Problems solving skills and analytical thinking skills are stressed throughout this course.

408 Conceptual Algebra

1 credit

Grade 9, 10, 11, 12

Prerequisite: Completion of Algebra I or Keystone Algebra I and teacher recommendation

This course will begin with a review of the concepts of Algebra I and will expand on these concepts by focusing on their applications. Students will solve, graph, write and model linear equations. The main emphasis of the course will be on quadratic functions and their applications. The students will begin with a review of factoring techniques and will use these techniques to solve quadratic equations. The Quadratic Formula will also be used as an approach to solving these equations. Emphasis will be placed on the types of solutions and their applications to the graph of the function. The students will also use systems of equations to model problem solving applications. (Students planning on attending college should not schedule this course.)

409 College Bound Statistics

1 credit

Grade 11, 12

Prerequisite: 80% in Ac Algebra II, and teacher recommendation; OR may be taken concurrently with Pre-Calculus

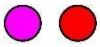
Topics covered will include the nature of probability and statistics, frequency distributions, and graphs, data description, probability and counting rules, discrete probability distributions, normal distributions, confidence intervals and sample size, hypothesis testing, testing the difference between two means, correlation and regression Chi-Square and Analysis of Variance. Students need a graphing calculator. A TI-84 Plus or TI-83 Plus Calculator is recommended for use in this course.

412 Pre-Calculus

1 credit
Grade 11, 12
Prerequisite: 80% in Ac Algebra II & 80% in AC Geometry

The course is designed so that students can understand advanced mathematical concepts. Students should have successfully completed Algebra I, Geometry, and Algebra II. Students should be comfortable working within the Coordinate System, linear equations and inequalities, lines in the coordinate plane, solving equations graphically, numerically, and algebraically. Students will acquire skills of functions by modeling and equation solving. Students will explore the following types of functions: polynomial, power, rational, exponential, logistic, logarithmic and trigonometric. Students will study analytic trigonometry as well as vectors, parametric equations and polar equations. Students should purchase a T183 Plus or TI 84 Plus graphing calculator.

413 Calculus Honors

1 credit
Grade 11, 12 (Weighted)
Prerequisites: 90% in Pre-Calculus and teacher recommendation.
Career Pathways 

Calculus is the study of limits, differentiation and integration involving functions. It incorporates the use of algebraic concepts, geometry, trigonometry, and functions to increase the student's mathematical maturity. Students will acquire the skills necessary to analyze graphs and slopes of curves, area under curves and the application and use of these topics. Graphing technology is applied in this class and a TI-84 Plus graphing calculator is required for this course.

414 Pre-Calculus Honors

1 credit
Grade 11, 12 (Weighted)
Prerequisite: 90% in Algebra II Honors and/or teacher recommendation.

The course is intended for the exceptional math student. The course is geared to prepare students for the rigors of advanced placement calculus. Students should have successfully completed Algebra I, Geometry Honors, and Algebra II Honors with a 90% or better. The course encourages graphical, numerical and algebraic modeling of functions as well as problem solving, conceptual understanding, and facility with technology. The course helps students to truly understand the fundamental concepts of algebra, trigonometry, and analytic geometry. It foreshadows important ideas of calculus and shows how algebra and trigonometry can be used to model real-life problems. Students should purchase a T183 Plus or TI 84 Plus graphing calculator.

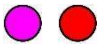
415 AP Pre-Calculus

1 credit
Grade 11, 12
Prerequisite: Algebra II & Geometry

In AP Precalculus, students explore everyday situations using mathematical tools and lenses. Through regular practice, students build deep mastery of modeling and functions, and they examine scenarios through multiple representations. They will learn how to observe, explore, and build mathematical meaning from dynamic systems, an important practice for thriving in an ever-changing world.

Precalculus can fulfill a math requirement at a diverse range of colleges and universities, including the majority of public institutions. The course also offers a valuable tool for guiding math and science placement for newly enrolling students. College Board is working with colleges and universities to expand credit policies and ensure that AP Precalculus sets a strong foundation for college success.

416 AP Calculus AB

1 credit
Grade 11, 12 (Weighted)
Prerequisite: 95% in Pre-Calculus or 90% in Pre-Calculus Honors and teacher recommendation. Students will be required to take the AP exam.
Career Pathways 

AP Calculus AB is the rigorous study of derivatives, rates of change and integration involving power, exponential, logarithmic, trigonometric, parametric and inverse functions. This class requires an extensive knowledge of algebraic concepts as well as geometry and trigonometry. Graphing calculators will be utilized to supplement learning. Practical applications of calculus and their uses are a vital part of this class and understanding the reasons why and how calculus works is essential.

417 Geometry

1 credit
Grade 10, 11, 12
Prerequisite: Successful completion of Keystone Algebra I or teacher recommendation.

This course requires students to apply their algebraic knowledge to the geometric concepts as outlined by the PA Academic Standards in Mathematics and will focus on the Pennsylvania Department of Education's Assessment Anchors. This study in mathematics will include parallel and perpendicular lines; congruent and similar triangles; area, perimeter, volume and surface area; right triangle relationships; polygons and circles. The course will also include a continuous review of Algebra I concepts.

418 AP Calculus BC

1 credit
Grade 12 (Weighted)
Career Pathways

This course is designed as a continuation of the AP Calculus AB course. AP Calculus BC includes a review of all Calculus AB topics. In addition, the course will include the following topics:

- Parametric, polar, and vector functions.
- Analysis of planar curves given in parametric, polar, and vector form.
- Geometric interpretation of differential equations via slope fields.
- Numerical solution of differential equations using Euler's method.
- Derivatives of parametric, polar, and vector functions.
- Antiderivatives by simple partial fractions.
- Polynomial Approximations and Taylor Series, Maclaurin Series, and Power Series.

419 Algebra IA

1 credit
Grade 9, 10, 11, 12
Prerequisite: Teacher recommendation.

This course is designed to provide Algebra instruction over a two-year time period. Students will learn to simplify expressions involving directed numbers and variables, to solve open sentences and reading problems, and to work with polynomials. In addition, multiplication and factoring techniques will be studied and applied to problem solving. Thinking skills and problem-solving skills are emphasized throughout this course. Students that successfully complete Algebra IA will be scheduled for Keystone Algebra I during the next school year. Students who received a Math grade below 70% for the previous school year should strongly consider taking this course.

420 Keystone Algebra I

1 credit
Grade 9, 10, 11, 12
Prerequisite: Teacher recommendation.

This is a course based directly on the rigorous Pennsylvania Common Core Standards. The key content involves operations with real numbers and expressions, patterns and functions, rate of change, polynomials, data analysis and probability, as well as solving, writing, and interpreting one variable equations, one variable inequalities, systems of equations, and systems of inequalities. Students taking Keystone Algebra will be assigned to an Algebra Extensions class to provide additional academic reinforcement/support.

490 Financial Algebra

1 credit

Grade 11, 12

Prerequisite: Students who passed Algebra II but may not want the rigors of Pre-Calculus but still want an Algebra-based course to help prepare for college.

Career Pathways 

Financial Algebra combines algebraic and graphical approaches with personal finance and practical business applications. Algebra I, Algebra II and Geometry topics are incorporated into learning about investing, banking, credit, automobile expenses, insurance, income tax and household budgeting. Students will get a strong review of basic algebra formulas with variables, equations, functions, systems of equations, graphs, statistics, etc. Advanced mathematics topics that will be covered include piecewise functions, regression limits, exponential functions, and linear and quadratic systems. Students will problem solve and discover how Algebra found in finance related topics are related to real-world situations. Students will use the TI-83 calculator.

491 Personal Finance

1 credit

Grade 11, 12

This course is not designed for the college bound student.

Career Pathways 

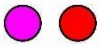
Students will learn basic money management skills. They will calculate gross and net income, which involves calculating deductions and paying taxes. Next, they will see how far their money will stretch by taking a look at budgeting and recordkeeping. They will also discuss checking and savings accounts and how to manage deposits, withdrawals and interest. Students will examine how stores set prices and offer coupons and rebates. They will learn how to comparison shop in order to find the best buys. They will discuss how to handle credit and investigate loans. Students will focus on costs associated with vehicle transportation and owning a home, such as making mortgage payments. Finally, students will focus on the cost of health insurance, life insurance premiums and investments. The class will determine how much material is covered and the order in which the topics are covered.

492 AP Statistics

1 credit

Grade 12 (Weighted)

Prerequisite: 85% in Pre-Calculus Honors or teacher recommendation. Students will be required to take the AP exam.

Career Pathways 

The course is geared for the motivated learner. Topics covered will include construction, interpreting, summarizing and comparing graphical displays of univariate and bivariate data, planning and conducting surveys and experiments, probability, random variable, the Normal Distribution, sampling distributions, and statistical inference through the use of confidence intervals and hypothesis tests.

494 SAT Math Preparation

0.5 credit
Grade 10, 11, 12

SAT Prep is a course designed to help prepare students for the SAT test. In addition to reviewing the basic verbal and mathematical skills assessed on the SAT test, students have access to test-taking strategies specific to the exam, real student work samples with explanations, grading rubrics for peer and self-assessment, practice tests with complete multiple-choice assessments, essays prompts, and study resources. Instruction, followed by collaborative, guided, and independent practice, provides the foundation for the course.

Music

541 Band

0.5 credit
Grade 9, 10, 11, 12

The senior high band and instrumental music program is designed to advance the playing and music reading ability of student instrumentalists in grades nine through twelve. Students receive the opportunity to perform music of varied styles at 2 to 3 public concerts each year. Attendance at all rehearsals, band sectionals, and concerts are a class requirement. Students may elect to participate in non-auditioned and auditioned county and district festival events.

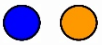
Students who elect to be part of the extracurricular Jr/Sr high marching band learn the skills of performing popular music in a visual field show at soccer games, marching band exhibition shows, and parades. All students that participate in marching band are required to participate in concert band. (counts towards elective requirement)

542 Chorus

0.5 credit
Grade 9, 10, 11, 12

Chorus is a performing ensemble for those students who enjoy singing. Good vocal technique will be learned as music of many styles is rehearsed and learned in preparation for 2-3 public concerts. Performance in these concerts is required for chorus members. Chorus members also have the opportunity to audition for and participate in show choir, the musical, and county and district choral ensembles. (counts towards elective requirement)

543 Music Theory

0.5 credit
Grade 9, 10, 11, 12
Career Pathways 

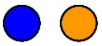
This course is designed for the average student to take the first steps in learning the basics of music theory. The class will start with pitch names and basic rhythms and progress to the various types of chords. There is also an ear training portion of this course in which students are taught to hear melody, chords, and intervals. There is no prerequisite to this class, although it is strongly recommended that students have some experience with the reading of music notation and/or a musical background of performance on an instrument or voice. (satisfies Related Arts requirement)

544 Beginning Guitar

0.5 credit
Grade 9, 10, 11, 12
Career Pathways 

This course will introduce you to the basics of acoustic or electric guitar playing. Students will learn the parts of the guitar, tuning, and how to play melodies and chords. Students will also learn how to read both traditional musical notation and TAB notation. The repertoire will be selected from folk, pop, and rock styles.

545 Music Appreciation

0.5 credit
Grade 9, 10, 11, 12
Career Pathways 

From Bach to Rock, and everything in between…and beyond, this fast-paced class is designed to give students the musical experience through the ages of time. This class will explore how music began, the influences music has had on society, and how the music from years past has become the iPod phenomena of the 21st century. This class will include looking at different composers, listening to musical styles, and involve the basic understanding of different musical instruments. There is no prerequisite for this class. (satisfies Related Arts requirement)

546 Show Choir

0.2 credit
Grade 9, 10, 11, 12
Prerequisite: Students must be a member of Chorus and be selected through the audition process.

Show choir is an auditioned, performing ensemble for those students who enjoy singing and dancing. Auditions will be held at the end of the current school year for next year's ensemble. Show choir rehearses one evening per week in addition to one period per cycle. Several evening and weekend performances and competitions are scheduled throughout the school year. Attendance at all rehearsals and performances is a class requirement. Good vocal and dance technique will be learned as music of many styles is rehearsed and learned for performance and competition.

547 Jazz Ensemble

0.2 credit
Grade 9, 10, 11, 12
Prerequisite: Students must play in the concert band or audition for the class.

This class is designed for any student wishing to play in the jazz style. The group plays jazz songs from the Swing Era to Modern Jazz. There are many performance opportunities available at many local venues as well as performing for the Winter and Spring concerts. Students may also participate in clinics with local professional musicians and university jazz ensembles. Several evening and weekend performances and competitions are scheduled throughout the school year. Jazz Ensemble rehearses one evening per week in addition to one period per cycle.

549 Advanced Music I

0.5 credit (Independent Study)
Grade 10, 11, 12
Prerequisite: Band and/or Chorus plus at least one or more of the following courses: Keyboard I, Music Theory, Jazz Ensemble or Show Choir.
Career Pathways 

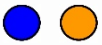
Do you have an audition coming up soon? Maybe it's a college audition, maybe a county or district audition or maybe you just want to learn a new skill. Advanced Music is for serious music students who have met the prerequisites and who wish to develop their musical skills. Students will be expected to work in a self-directed style which will include independent work and practice time. Sight-reading and auditioning will be emphasized. Other topics will include music theory, keyboard, jazz improvisation, composition, and MIDI. This class is suggested for students who are thinking about furthering their study of music at the college level. Students are expected to audition for either County Band or County Chorus. (satisfies the Related Arts requirement) (offered as Independent Study – see instructor)

550 Keyboard Class I

0.5 credit
Grade 9, 10, 11, 12
Career Pathways 

Have you always wondered what it would be like to actually play that keyboard that's lying around your house? This class is for you! Learn the basics of playing the piano/keyboard. No knowledge of music reading is necessary – just a desire to learn and a willingness to try. Some practice time outside of class will be expected. (satisfies Related Arts requirement)

551 Keyboard Class II

0.5 credit
Grade 9, 10, 11, 12
Prerequisite: A final grade of "C" or better in Keyboard Class I or a minimum of 1 year of private piano lessons.
Career Pathways 

This course will develop more advanced keyboard skills. Students will focus on more advanced concepts such as expression and style. Piano technique and music reading skills will be refined and improved as different styles of music are learned. Class activities will include playing the keyboard, recording to the keyboard, and using GarageBand software. This class is for students with some piano experience. (satisfies the Related Arts requirement)

553 Jazz Improvisation

0.5 credit (Independent Study)
Grade 9, 10, 11, 12
Prerequisite: Concert Band, or permission from the course instructor

This class is for the instrumental musician who is interested in becoming proficient in jazz. Students will memorize scales, chords, and various "standards" – old Broadway or movie songs that are usually played on jazz performances. Transposition (listening to a solo and writing it down) and composition are also involved in this class. (satisfies Related Arts requirement) (offered as Independent Study – see Instructor)

554 Advanced Music II

0.5 credit (Independent Study)
Grade 10, 11, 12
Career Pathways 

Prerequisite: Band and/or Chorus plus at least one or more of the following courses: Keyboard I, Music Theory, Jazz Ensemble or Show Choir. Students are NOT required to take Advanced Music I before this class.

Do you have an audition coming up soon? Maybe it's a college audition, maybe a county or district audition or maybe you just want to learn a new skill. Advanced Music II is for serious music students who have met the prerequisites and who wish to continue to develop their musical skills. This class will continue to develop the skills and concepts that were explored in Advanced Music I. Students will be expected to work in a self-directed style which will include independent work and practice time. Sight-reading and auditioning will be emphasized. Other topics will include music theory, keyboard, jazz improvisation, composition, and MIDI. This class is suggested for students who are thinking about furthering their studies of music at the college level. This class will involve individually created projects. Students are expected to audition for either County Band or County Chorus. (satisfies Related Arts requirement) (offered as Independent Study – see instructor)

556 Independent Keyboard

0.5 credit
Grade 10, 11, 12
Prerequisite: Keyboard 2 or permission of the teacher.

This course will develop advanced keyboard skills. Students will work independently on music of various styles with assistance from the instructor as needed. Piano technique and music reading skills will be further refined. This class is for students with self-discipline and self-motivation. (satisfies Related Arts requirement)

Science

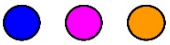
Refer to the Graduation Requirements page for Science requirements

304 Environmental Science

1 credit
Grade 9
Career Pathways 

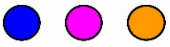
Environmental Science is designed to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. The curriculum includes topics such as an introduction to earth processes, ecology, populations, land, air and water quality and pollution, climate change, biodiversity and endangered species, mineral and energy resources, and our health and our future. This curriculum will address the needs of all learners through an interesting, problem-based approach to learning about human impact on the environment.

306 Honors Environmental Science

1 credit
Grade 9
Prerequisite: 85% in 8th grade science and teacher recommendation
Career Pathways 

This is a more in-depth course in environmental science, recommended for those students who may wish to pursue a science-related field of study or are college bound. Environmental Science is designed to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. The curriculum includes topics such as an introduction to earth processes, ecology, populations, land, air and water quality and pollution, climate change, biodiversity and endangered species, mineral and energy resources, and our health and our future. This curriculum will address the needs of all learners through an interesting, inquiry and problem-based approach to learning about human impact on the environment.

307 Applied Environmental Science

1 credit
Grade 11, 12
Career Pathways 

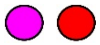
This is a more in-depth project based environmental science course, recommended for upper-level students who may wish to pursue an environmental science-related field of study. Environmental Science is designed to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. The curriculum includes topics such as an introduction to earth processes, ecology, populations, land, air and water quality and pollution, climate change, biodiversity and endangered species, mineral and energy resources, and our health and our future. This curriculum will address the needs of all learners through an interesting, problem-based approach to learning about human impact on the environment.

311 Academic Chemistry

1.2 credits

Grade 10, 11, 12

Prerequisite: Algebra I & Biological Concepts/ Co-requisite: Algebra II. Recommended for college bound students.

Career Pathways 

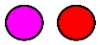
Academic Chemistry is a laboratory-oriented course designed to acquaint students with chemistry concepts such as: atoms, the periodic table, ionic and covalent compounds, chemical reactions, stoichiometry, and more. It is designed to develop critical thinking and analytical approaches to problem solving. Small research assignments will be completed to investigate applications of concepts. Cumulative exams will be administered. This course meets 7 periods per cycle, allowing one double period for lab, and will include weekly lab reports.

312 Chemistry Honors

1.2 credits

Grade 10, 11 (Weighted)

Prerequisite: Algebra II Honors, 85% Biological Concepts Honors or 90% Biological Concepts. Co-requisites of Algebra II Honors or Pre-Calculus Honors also recommended. Students completing Academic Chemistry may not register for this course.

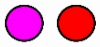
Career Pathways 

Honors Chemistry is a laboratory-oriented course designed to acquaint students with chemistry concepts such as: atoms, the periodic table, ionic and covalent compounds, chemical reactions, stoichiometry, intermolecular forces, thermochemistry, and more. It is designed to develop critical thinking and analytical approaches to problem solving. Research assignments will be completed as well as a mandatory year-long portfolio project. Cumulative exams will be administered. This course meets 7 periods per cycle, allowing one double period for the lab, and will include weekly lab reports.

313 Chemistry II Honors

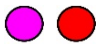
1.2 credits

Grade 10, 11 (Weighted)

Career Pathways 

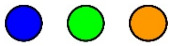
Chemistry II Honors is an upper level second-year chemistry course that will stress independent and group learning. It is a college-bound course recommended for students interested in pursuing a major/career in science. Students will be expected to apply topics from their first year in Honors Chemistry/Academic Chemistry to more challenging topics. Additional topics and applications in chemistry will be discussed to further increase students' breadth and depth of knowledge. There will be an emphasis on developing problem solving and study skills. The class meets 7 periods per cycle, allowing for one double lab period.

322 Physics Honors

1.2 credits
Grade 11, 12 (Weighted)
Prerequisite: 90% in Academic Chemistry or 85% Chemistry Honors and 85% in Algebra II and Pre-Calculus. (Honors Pre-Calculus may be taken as a co-requisite.)
Career Pathways 

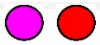
This course prepares a student to take a college level physics course. Students will learn about the major physics concepts that they would see in a first-year college physics course, including forces and motion, work, energy, power, systems of particles and linear momentum, rotation, oscillations, and gravitation. Other physics topics that may be covered as time allows include electricity and magnetism, waves and sound, light and optics, and modern physics. Laboratory work that fosters inquiry and analytical skills is essential to this course.

323 Integrated Science

1 credit
Grade 11, 12
Career Pathways 

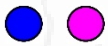
This course is designed for students who do not plan on pursuing college. Students will be provided with practical and relevant knowledge of chemical and physical sciences with excursions into biological connections. This course may not be taken if credit for Honors or Academic Chemistry/ Physics already has been earned.

325 Academics Physics

1 credit
Grade 11, 12
Prerequisite: 80% in Algebra II. Corequisite of Pre-Calculus recommended. Recommended for college bound students.
Career Pathways 

This course is designed for college bound students looking to prepare themselves for a college level science class. Academic Physics will require critical thinking and logic to solve real world problems. Students require a strong foundation of Algebra I, Algebra II, and basic Geometry and Trigonometry. This course will closely look at the concepts of mechanics and will also examine some of the laws that govern sound, electricity, magnetism, optics, and relativity. Laboratory work that fosters inquiry and analytical skills is essential to this course.

326 Applied Physics

1 credit
Grade 11, 12
Prerequisite: Algebra I. Recommended for students considering college for a non-science major.
Career Pathways 

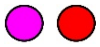
This is a course designed for students desiring a basic knowledge of the physical world and the laws that govern it. More concept-oriented and less math intensive, this course prepares students with critical thinking and logic skills needed for entry level college science courses.

390 Biology II

1 credit

Grade 11, 12 (Weighted)

Prerequisite: Honors Bio OR 90% in Biological Concepts with teacher recommendation. Students should be taking chemistry or have completed Chemistry or another advanced science course.

Career Pathways 

This course is designed to be the equivalent of a college introductory biology course. Bio II is highly recommended for any student wishing to pursue a degree in a science related field. There is a strong laboratory component. Labs performed in this course will be the equivalent of those completed by college students and will exemplify experimental and quantitative, rather than descriptive laboratory exercises. Formal written lab reports, lab practical exams, and a cumulative midterm and final exam will be required.

Topics to be explored include a brief overview of 9th grade concepts followed by an in-depth exploration of the **Diversity of organisms and Classification Systems** including traditional and phylogenetic models.

391 Biological Concept Honors

1.2 credits

Grade 9 (Weighted)

Prerequisite: 90% in 8th grade science, 85% in 9th grade science and teacher recommendation.

Biology Honors is designed for students with exceptional abilities and high achievement levels. Students will acquire an understanding of the curriculum covered and tested on the Keystone Biology Exam along with a more in-depth study of topics via laboratory activities and inquiry-based techniques. This class meets 7 periods per cycle, allowing for a double lab period. Requirements include formal written lab reports and a yearlong portfolio project which will count as 10% of their grade for the year. Students will also be required to take a cumulative Mid-Term and Final Exam.

392 Biological Concepts

1 credit

Grade 10

This science course is a requirement for all students. Students will acquire an understanding of the curriculum covered on the Keystone Biology Exam. This course is aligned with the state standards and students will be prepared to take the test at the end of this course. This includes: Basic Biological Principles, The Chemical Basis for Life, Bioenergetics, Homeostasis and Transport, Cell Growth and Reproduction, Genetics, Theory of Evolution, and Ecology. Grading will include tests, quizzes, homework, projects and on-line activities.

Science Electives

896 Human Anatomy and Physiology

0.5 credit (Weighted)
Grade 11, 12
Prerequisite: Health and Academic Biology with a minimum grade of 90%. Co-requisites: Chemistry 85%.
Career Pathways

This honors-level course is designed for the student with an interest in pursuing a career in a health-related field. The course will concentrate on the anatomy and physiology of body systems, including their orientation and organization; support and movement; regulation and maintenance; and integration of systems. Students will apply the principle of physiology to human health and wellness and evaluate the applications and career implications of physiology and anatomy principles. Students will be expected to take responsibility for reading and learning textbook material as it is assigned. Independent in-class research/study is also an integral part of the course (i.e. The careful study and memorization of labeled anatomical diagrams).

899 Human Anatomy and Physiology II

0.5 credit (Weighted)
Grade 11, 12
Prerequisite: 85% in 896 Human Anatomy and Physiology I.
Career Pathways


This honors-level course will focus on the anatomy and physiology of the cardiovascular, respiratory, digestive, and nervous systems with possible exposure to the endocrine, lymphatic, urinary, and reproductive systems. A survey of each organ system is presented with initial emphasis upon its anatomy, followed by an in-depth study of its physiology. Students will be expected to take responsibility for reading and learning textbook material as it is assigned. Independent in-class research/study is also an integral part of the course (i.e. The careful study and memorization of labeled anatomical diagrams).

757 Food Science and Microbiology

1 credit
Grade 11, 12
Career Pathways


In this lab heavy, inquiry-based course, students will explore the chemistry, microbiology, and engineering that impact our food. Students will cook, analyze, and design food samples and packaging. Lab techniques such as chromatography, electrophoresis, and plating, will be used to learn about the past, present, and future of food production and cooking. Students will be required to keep a lab notebook and complete a book study throughout the course. Research and experimental design will be highlighted as students develop and conduct industry appropriate investigations. Students will investigate, experiment, and learn about documenting a project, solving problems, and communicating solutions to their peers and members of the professional community.

Food Science and Microbiology includes the following units of study:

- Introduction to Food Science
- Chemistry of Food
- Safety of Our Food
- Food Processing Preservation and Packaging - Food Health and Security
- Preference and Product Availability - Food Product Development

Social Studies

4.0 credits are required for graduation

201 World Cultures Honors

1 credit
Grade 10 (Weighted)

World Cultures is a study of the cultural aspects from peoples in different regions of the world (Asia, Africa, Europe, and Latin America). The course will emphasize and relate current events to these different regions. Historical research presented through individual and group work will emphasize the level of connections with the United States in each region as well. This course has an added focus on analyzing and interpreting historical events through independent reading and advanced writing assignments.

203 World Cultures

1 credit
Grade 10

World Cultures is a study of the cultural aspects from peoples in different regions of the world (Asia, Africa, Europe and Latin America). The course will emphasize and relate current events to these different regions. Historical research presented through individual student and group work will emphasize the level of connections with the United States in each region as well.

211 United States History II

1 credit
Grade 9
Prerequisite: Students will have successfully completed US History I in 8th grade.

Students will be expected to complete readings, class discussions, and hands-on projects on various historical topics. The emphasis of this course is a study of the history of the United States from the late 1800's to the present. Main topics will include the Industrial Revolution, Immigration, the Progressive Era, the two World Wars, the Great Depression, the New Deal, the Civil Rights Era, the Cold War, the Vietnam Era, and the new challenges of contemporary times. Varied approaches are utilized to establish links between past and present America, creating a framework for students to make good choices as citizens and future leaders of our nation.

211H United States History II Honors

1 credit
Grade 9 (Weighted)
Prerequisite: Students will have successfully completed US History I in 8th grade with at least an 93% average for the year, or a 90% or higher in US History I Honors. Students will also need to receive a teacher recommendation to enter the course.

Students will be expected to complete readings, class discussions, and various written and oral reports on different historical topics. The emphasis of this course is a study of the history of the United States from the late 1800's to contemporary times. Main topics will include the Industrial Revolution, Immigration, the Progressive Era, the two World Wars, the Great Depression, the New Deal, the Civil Rights Era, the Cold War,

the Vietnam Era, and the new challenges of contemporary times. Varied approaches are utilized to establish links between past and present America, creating a framework for students to make good choices as citizens and future leaders of our nation.

215 AP US Government and Politics

1 credit
Grade 11 (Weighted)
Prerequisite: 90% in World Cultures Honors; and teacher recommendation

This course is a full year advanced placement course. AP U.S. Government and Politics is an intensive study of the formal and informal structures of government, and the processes of the American Political system with an emphasis on policy making and implementation. The course is a "college level" course that is designed to prepare students to take the AP exam in May. All students in the AP course are required to take the AP exam. The course content will follow the outline prepared by the College Board. Topics to be covered will include: Constitutional Underpinnings, Political Beliefs and Behaviors, Political Parties, Interest Groups and Mass Media, Institutions of National Government, Public Policy, and Civil Rights and Civil Liberties. The pace and depth of the course will model an introductory college course. In order for a student to be successful in a "college-level" course, it is essential that students take responsibility for reading and learning textbook material as it is assigned. Students are expected to complete reading prior to class discussions.

Knowledge of contemporary political events and political science "language" is essential for the analytical focus that must be exhibited when discussing and writing about politics. It is recommended that students expose themselves to as many political types of media as possible. Some examples include: local and national newspapers and magazines, national news internet sites, and television news shows that discuss and explore politics.

216 US Government

1 credit
Grade 11
Prerequisite: Students will have successfully completed 10th grade World Cultures

Students will study the operations, structures, and procedures of government at the local, state, and national levels. Students will also build on the knowledge, skills and attitudes developed in previous social studies courses. Students will examine the rights, privileges and responsibilities of citizenship in our representative democracy. Throughout the course, current events will be discussed as related to themes of study.

216H US Government Honors

1 credit
Grade 11 (Weighted)
Prerequisite: 90% in World Cultures Honors; and teacher recommendation

Students will study the operations, structures, and procedures of government at the local, state, and national levels. Students will also build on the knowledge, skills and attitudes developed in previous social studies courses. Students will examine the rights, privileges and responsibilities of citizenship in our representative democracy. Students are expected to complete reading prior to class discussions. Students will be regularly asked to complete written opinion papers and summative papers related to discussion topics. Students will be exposed to many political types of media. Throughout the course, current events will be discussed as related

to themes of study.

223 Economics

0.5 credit
Grade 12

This program develops an awareness of basic economic principles and theories in modern America. In addition to studying the free enterprise system, this course will introduce the student to world problems directly related to economics. Concepts such as supply and demand, inflation, employment, monetary and fiscal policy, and investments will be covered. This is a required course for all seniors. Major projects include an Entrepreneur analysis and a stock market project. All students will be expected to prove an understanding of key course concepts.

224 Economic Honors

0.5 credit
Grade 12 (Weighted)
Prerequisite: 90% in U.S. Government and teacher recommendation

This course develops an awareness of basic economic principles and theories in modern America. Fundamentals will be covered and explored in depth. Our free enterprise system will be explored as well as concepts such as supply and demand, inflation, employment, monetary and fiscal policy, investments, and corporate welfare. Major projects include an entrepreneur analysis and a stock market project, as well as other projects. Concepts will be explored with an emphasis on analysis and evaluation.

224AP AP Macro Economics

1 credit
Grade 12 (Weighted)
Prerequisite: 90% or better in their preceding AP Government or US Government Honors and teacher recommendation.
Career Pathways 

This course is a full year Advanced Placement course. AP Micro/Macroeconomics is an intensive study of the formal and informal structures of the economic systems of the US and throughout the world, and the processes of the American economic system with an emphasis on policy making and implementation. The course will also look at world markets and how economies compare, interact, and are interconnected with the US economy. The course is a "college level" course that is designed to prepare students to take the AP exam in May. All students in the AP course are required to take the AP MACROECONOMICS exam. The course content will follow the outline prepared by the College Board. Topics to be covered will include: Basic Economic Concepts, the Nature and Function of Product Markets, Market Failure and the Role of Government, Measurement of Economic Performance, National Income and Price Determination, and the Financial Sector. The pace and depth of the course will model an introductory college course. In order for a student to be successful in a "college-level" course, it is essential that students take responsibility for reading and learning textbook material as it is assigned. Students are expected to complete reading prior to class discussions. Knowledge of contemporary economic issues and economic vocabulary is essential for the analytical focus that must be exhibited when discussing and writing about Macroeconomics. It is recommended that students expose themselves to as many economic types of news media as possible. Some examples include: local and national newspapers and magazines, national news internet sites, and television news shows that discuss and explore economics. *All students in the AP course are*

required to take the AP exam.

Social Studies Electives

200 Current World Affairs

0.5 credit
Grade 10, 11, 12
Career Pathways 

Students will analyze contemporary issues and their effects on everyday life in order to teach students to think critically and be well informed members of a constantly changing society. Major topics will include world political situations, social issues, education, crime and punishment, moral issues, minority issues, equal rights, and geography.

210 Berks County Local History

0.5 credit
Grade 10, 11, 12

This elective allows students to study the unique local history of Berks County Pennsylvania starting with the founding of the county in 1752. Students will use various resources to understand how the early settlers and local Native American tribes coexisted. The course will then progress chronologically to look at how Berks County and its people influenced historical events like the American Revolution, the Civil War, the Industrial Revolution, and the county's role in the 20th century. Students will also learn about various other events and places in Berks County history that no longer exist like local amusement parks, resorts, movie theaters, radio and television stations. They will also learn about the creation of Blue Marsh Lake and the demise of some local communities as a result of the lake. Students will enhance their historical research skills in this course by conducting in-depth research on a well-known Berks County resident, event, or place in our local history. Students will learn more about how Berks County's history influenced our nation's history.

225 Problems of Democracy

0.5 credit
Grade 10, 11, 12

The Problems of Democracy course seeks to develop an awareness of the problems and issues prevalent in our society. The problem-solving approach is used in reference to American legal history, domestic and consumer problems, and the personal, social, economic and political forces that influence American life. Social issues such as family violence, stress, sexual harassment, racism, alcohol abuse, aging, poverty, and many others are examined in detail. Major projects include an elderly person interview and reaction papers. All students will be expected to prove an understanding of major course concepts.

226 Problems of Democracy Honors

0.5 credit
Grade 10, 11, 12 (Weighted)
Prerequisite: 85% in social studies class and teacher recommendation

The Problems of Democracy Honors course seeks to develop an awareness of key problems and issues prevalent in our society today. Our American Justice System and relevant legal issues will be examined as well as social issues such as family violence, sexual harassment, racism, alcohol abuse, poverty, minorities, discrimination, and ageism. Major projects include an elderly person interview and reaction papers. Concepts will be explored with an emphasis on analysis and evaluation.

228 Modern US History-Present

0.5 credit
Grade 10, 11, 12

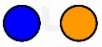
This course will begin with the 1960's and progress through contemporary times. The Vietnam era, Watergate, Desert Storm, 9/11, and political implications through various presidencies will be highlighted. The course will focus on US culture and foreign affairs of the day.

230 Comparative Religions

0.5 credit
Grade 10, 11, 12
Career Pathways 

This course will explore five main world religions: Hinduism, Buddhism, Judaism, Christianity and Islam. Other religions will be briefly explored as well. Students will look at the history, belief systems, religious practices, music and art of each of the major religions. They will look at the role these religions have played and still play in history and government.

241 Sociology

0.5 credit
Grade 10, 11, 12
Career Pathways 

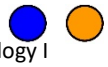
The sociology course investigates social problems that are prevalent in our society. It further deals with the concept of culture (present and past), cultural diversity, and our own cultural heritage. The subjects of roles, status, relationships, deviance, family life, divorce, values, social stratification, norms, and sexism are integral parts of this course. Major projects include a critical experience analysis and counseling projects. All students will be expected to demonstrate an understanding of major course concepts.

242 Psychology

0.5 credit
Grade 10, 11, 12
Career Pathways 

Psychology is an introduction to human behavior designed to offer an awareness of introductory psychological terminology and concepts. Major psychological theories and human development are explored. Demonstrations, presentations, and projects are used to emphasize key topics studied in class. This course is beneficial for any college- bound student who is considering a social science major.

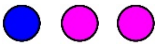
244 Psychology II

0.5 credit
Grade 11, 12
Career Pathways 
Prerequisite - Psychology I

Psychology II is the second installment course to human behavior designed to offer a more in-depth look into behavioral psychology. Major psychological theories research is explored focusing on behavioral and cognitive theories and human growth and development. This course also will delve into abnormal behavior and psychological treatments and research. Demonstrations, presentations, and projects are used to emphasize key topics studied in class. This course is beneficial for any college- bound student who is considering a social science major- especially a Psychology Degree.

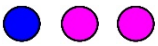
Technology & Engineering

701 Computer Aided Design/Drafting (CADD)

0.5 credit
Grade 10, 11, 12
Career Pathways 

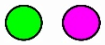
Through both individual and collaborative team activities, projects, and problems, students will solve problems as they practice common engineering design and development protocols such as project management and peer review. Students will develop skill in technical representation and documentation of design solutions according to accepted technical standards, and they will use current 3D design and modeling software (Autodesk Inventor) to represent and communicate solutions.

702 3D Printing and Laser Cutting

0.5 credit
Grade 9, 10, 11, 12
Prerequisite: Must take CADD or Previously IED
Career Pathways 

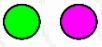
Students will be using the engineering design process to solve real world problems using both the 3D printer and the Laser cutter. Students will be working individually and in teams to achieve results. They will document the engineering design process and communicate solutions. Students will use prior knowledge from CADD (Autodesk Inventor) to complete their projects.

703 Electrical

0.5 credit
Grade 9, 10, 11, 12
Career Pathways 

Students will learn about energy systems which will consist of renewable and non-renewable energy sources including solar, wind, water, and nuclear and their economical, social, and environmental impacts. Students will develop, produce, use, manage, and assess mechanical, and electrical, systems while studying the technical subsystems of simple machines and electronics. Students will also get experience with real life house wiring.

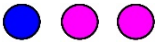
704 Robotics

0.5 credit
Grade 9, 10, 11, 12
Prerequisite: Must take Electrical
Career Pathways 

Students will have opportunities to research, design, build, test and evaluate solutions to electronics and programming that are needed for simple to complex robotics and industrial control. This course consists of a series

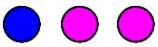
of hands-on experiments and project challenges that will introduce students to robotic concepts using Vex Robotics and Robot-C Software.

705 Woodworking/Machines

0.5 credit
Grade 9, 10, 11, 12
Career Pathways 

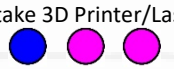
The course is designed to provide students with a basic understanding of hand tools and machine woodworking techniques and processes in order to fabricate wood technology products. Students will start by learning the safety of all machines. They will use the engineering design process and the use of machines to make projects.

706 Construction Technology

0.5 credit
Grade 9, 10, 11, 12
Prerequisite: Must take Woodworking/machines
Career Pathways 

This course will develop a student's basic understanding of constructed products and structures. Students will develop, produce, use, manage, and assess construction systems while studying architectural design, structural engineering and carpentry. Students will also learn about bridge design. Students will be working individually and in groups to make scaled houses and bridges.

707 Capstone

1 credit
Grade 10, 11, 12
Prerequisite: Must take 3D Printer/Laser Cutter or Robotics or Construction Technology
Career Pathways 

Students will be competing in the Governor's State Stem Competition. The Governor's STEM Competition challenges student teams from across the state to research, design, and present a device or project that can make the quality of life better for Pennsylvanians by accomplishing a series of practical tasks that can fulfill real-world needs. Teams are required to partner with members of their local community or business to develop a solution to a real problem rooted in the community – this helps create an authentic experience for the students and provides opportunities for them to learn more about career pathways and employment opportunities based in STEM.

World Language

A minimum of 2 credits of the same World Language is highly recommended for all college preparatory students.

501 German I

1 credit
Grade 9, 10, 11, 12
Career Pathways 

German I introduces students to the culture and language of Germany and German-speaking countries. This course is designed to provide each student the opportunity to achieve an introductory level of proficiency in the four skills of listening, speaking, reading and writing. Students will be able to introduce themselves and others, and discuss topics such as school, sports and family. Listening, speaking, reading and writing skills are emphasized through the use of digital media and extensive classroom participation. Students are evaluated on oral and aural comprehension, as well as written projects and assessments. Active participation is required to demonstrate grade level proficiency.

502 German II

1 credit
Grade 10, 11, 12
Prerequisite: 75% in German I with teacher recommendation
Career Pathways 

The study of the language and culture of Germany is continued in German II. Some topics covered in this level include vacations, holidays, past activities, grocery shopping, expressing preferences, giving directions, and making invitations. Digital media and student participation are used to emphasize the listening, speaking, reading and writing skills. Students are evaluated on oral and aural comprehension and writing skills.

503/504 German III/IV Honors

1 credit each level (Level IV weighted)
Grade 11, 12
Prerequisite: 75% in German II and German III with teacher recommendation
Career Pathways 

In this course, level III students work alongside those in level IV. Students in level III continue to improve upon their German reading, writing, speaking, and listening skills, as well as expand their knowledge of the culture of German- speaking countries. Students continue to work with the Deutsch Aktuell textbook series, as in levels I and II. German level IV students continue to improve their German knowledge and skills as they move through a series of themed units. Each unit contains reading passages in the German language, cultural articles, detailed vocabulary lists, and a variety of oral and written assignments. Level IV also involves a certain amount of independent work. Throughout the year, level III and IV students have helpful opportunities to work together.

505 Spanish I

1 credit
Grade 9, 10, 11, 12
Career Pathways 

Spanish I provides an introduction to the language and culture of the Spanish-speaking world. This course is designed to provide each student the opportunity to achieve an introductory level of proficiency in the four skills of listening, speaking, reading and writing. The language is presented in the context of the contemporary Spanish-speaking world and its culture through the aid of visual media. Some of the topics that will be presented are: the family, sports, vacations, writing letters, and holidays. Assessments will be based on oral and aural comprehension, as well as written projects and assessment. Active participation will be required to demonstrate grade level proficiency.

506 Spanish II

1 credit
Grade 10, 11, 12
Prerequisite: 75% in Spanish I
Career Pathways 

Spanish II expands the study of the language and culture of the Spanish-speaking world previously studied in Spanish I. This course emphasizes the reading and writing phases of learning, Mastery of pronunciation, and the quality of material presented to be organized in some form for permanent reference. There is also a higher expectation in the manner of free response. Students will be assessed on their oral, aural, reading, and writing abilities.

507 Spanish III

1 credit
Grade 11, 12
Prerequisite: 75% in Spanish II with teacher recommendation
Career Pathways 

By the conclusion of Spanish III the student will have been introduced to all the major features of the structure of the Spanish language. The successful student will have mastered the essential grammatical and lexical items so that it is possible to communicate effectively with others in the target language. The student will be introduced to Hispanic literature containing new lexical terms. The student will be expected to discuss the readings, written or orally in Spanish to a degree corresponding to the abilities of a third level course. Assessments may occur in any of the following forms: oral, aural, reading and written.

508 Spanish IV Honors

1 credit
Grade 12 (Weighted)
Prerequisite: 80% in Spanish I, II & III with teacher recommendation

The fourth level work continues to maintain the four language skills with a greater emphasis on the literary and composition aspects. The students will be introduced to literary works by both Spanish and Spanish-American writers and various Hispanic artists. Students will be assessed on their oral, aural, reading and

written abilities in accordance to a level four program.

509 Spanish for Heritage Learners

1 credit
Grade 9-12
Career Pathways 

This course is designed to meet the particular needs of heritage learners. We will respect the knowledge of their linguistic and trans-cultural experiences they bring. Our goal is to build upon that knowledge by expanding their oral and written talents, improving their reading skills, and exploring issues related to their identity and their culture. Every heritage speaker needs to acquire the ability to distinguish between what is colloquial and what is considered vernacular. This course is intended to only enhance vocabulary and grammar in order to better communicate in more formal situations.

Work Based Learning: Internship

Requires pre-approval, placement not guaranteed

WORK-APP Work-Based Learning

Offered every year
.5 credit + (based on Work-Based Learning hours)
Grades 11, 12

Work-Based Learning is an elective career preparation program in which students are placed in a work setting to gain both a deeper understanding of a career and employability skills through hands-on experience. Work-Based Learning experiences are individualized and tailored to the needs and interests of each student. Students must be able to provide their own transportation to and from their work experience. Experiences could be paid or unpaid. Students apply for the program and must be approved for placement. Placement is contingent upon an acceptable work site, availability, and interview process. This is a pass/fail program.

School to Work Field Experience

Prerequisite: Interview with School Counselor and Transition Coordinator is required prior to selecting this class.

On-site work experience in an area of interest of talent monitored by school district Transition Coordinator. May be a paid or unpaid work experience.

Special Education

The Tulpehocken Area School District provides Learning Support, Emotional Support, Life Skills Support and Gifted Support for identified students who qualify for and are in need of specially designed instruction. Referral, testing and placement in support services occur through an evaluation by a team of educational professionals. Any member of a student's educational team may request an evaluation to determine the need for special education services.

Students with identified disabilities are provided a continuum of special education service options addressing their Learning Support, Life Skills Support and Emotional Support needs. Instruction for exceptional students is modified to address their unique strengths and needs; providing for the development of basic academic skills and presenting content material in an adapted format. The student's program is reviewed or revised annually by an Individualized Education Program (IEP) Team, and students are recommended for direct instruction in a special education program when their learning needs cannot be adequately accommodated within the regular education program with supplementary aids and services. (often referred to as inclusion) Please contact the building principal or counselor with specific questions related to special education services. Questions may also be directed to the Special Education office located in the Sara Kurr Zock Building of Tulpehocken Area School District, District Administration Offices at 27 Rehrersburg Road, Bethel, PA. Telephone number is 717-933- 4611, ext. 1021.

Berks County