UPPER PERKIOMEN HIGH SCHOOL

PROGRAM OF STUDIES

2019-2020

Mission Statement

The Upper Perkiomen School District empowers learners, fosters community partnerships, and inspires innovation to maximize personal growth.

Vision Statements

Upper Perkiomen School District…

- Encourages all students and staff to responsibly advocate for themselves and actively make choices in their own learning.
- Provides a safe and supportive school environment that values and is responsive to the uniqueness of each individual.
- Fosters and utilizes local and global connections to cultivate learning experiences within and beyond the classroom.
- Nurtures a student centered learning environment that enhances critical and creative thinking.
- Provides students access to a full continuum of learning experiences in order to actualize their personal growth.

Upper Perkiomen High School Mission Statement

Upper Perkiomen High School focuses on 21st Century Teaching and Learning, and College and Career Readiness, through collaboration and engagement in a personalized learning environment for authentic connections to fully prepare students for a global society.

Upper Perkiomen High School Vision Statement

Pursuing personal and academic excellence

FOREWORD TO HIGH SCHOOL STUDENTS AND PARENTS

SUPERINTENDENT'S MESSAGE *Alexis McGloin, Ed. D.*

The mission of the Upper Perkiomen School District is "To inspire and enable all learners to be successful in discovering, applying and maximizing their individual potentials*."* To insure that we fulfill our mission, the High School administration and staff have identified what students need to learn in order to succeed in the twenty-first century. They have developed challenging courses of study intended to prepare you to be global citizens. In addition to core subjects, you will need to master learning and innovation skills, information, media and technology skills, as well as life and career skills. Your courses will enable you to make connections and become adept problem solvers.

You are living in a rapidly changing world. However, one thing remains constant, the well-educated, responsible, caring individual will reach his/her goals and will feel most successful. Your teachers, counselors, and administrators are ready to provide you with many chances to acquire the information, skills and attributes to become that successful, productive individual. Success results from challenging yourself and then meeting those challenges.

My best wishes to all of you for a successful, engaging and productive 2019-2020 school year.

PRINCIPAL'S MESSAGE *Robert J. Carpenter Ed.D*

Careful planning is not the only requirement for achieving a goal. However, planning is a very vital and almost indispensable component in the life of those who are thought to be "successful". Planning for a career or other personal goals requires careful evaluation of alternatives and decision-making based on a sense of the present, knowledge of the past, and some anticipation of the future.

This planning guide and course selection booklet will help you in evaluating which of the many courses offered in the senior high school will best meet your needs. Careful selection of courses can contribute to the attainment of those goals, which you may set for yourself.

Your tentative plans must be reviewed and approved by your parent or guardian. If you desire assistance in making your selections or have questions, please contact your school counselor.

NON-DISCRIMINATION

It is the policy of the Board to promote good human relations by removing all vestiges of prejudice and discrimination in employment, assignment, and promotion of personnel in location and use of facilities; in curriculum development and instructional materials; and in the ability to participate in co-curricular programs for students. Inquiries regarding compliance with this policy may be directed to Dr. Alexis McGloin, Equal Opportunity Coordinator, Upper Perkiomen School District Education Center, 2229 East Buck Road, Pennsburg, Pennsylvania 18073.

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General Information

Planning Your Program

Planning a four-year program is a serious undertaking. Although some of your courses are required, you will have many choices to make during your years of school. The courses you request will be guided largely by your plans for the future**.**

Whatever your plans, you should be taking the most challenging courses you can within your academic abilities.
Some students are sure of their future plans; others are not. It is common for young people to change their minds about which career to choose. The important thing is to choose as rigorous a program as possible so you don't limit yourself if you change your mind about college or career plans. Sometimes it seems overwhelming to have so many choices to make. Although scheduling is primarily your responsibility, you will have plenty of help from your counselor, your teachers, and your parents.

Your school counselor can provide detailed information about academic programs, graduation requirements, college admissions, technical programs, and scheduling options. Your teachers can help you decide whether you have the ability for a particular course and will recommend students for specific programs. Your parents can provide guidance about your plans for the future, and they must approve your final course request.

The counseling team to support students through course planning are as follows:

Counselor for present Grade 8 students: (A-K)	Mrs. Tracy James	215-541-7412
Counselor for present Grade 8 students: (L-Z)	Mrs. Theresa Schlatterer	215-541-7480
Counselor for Grades 9-12 *(A-G)*	Mrs. Angela Traub	215-541-7120
Counselor for Grades 9-12 *(H-N)*	Mr. John Gunning	215-541-7121
Counselor for Grades 9-12 *(O-Z)*	Mrs. Leanne LeGendre	215-541-7122
Counselor for Grades 9-12 (A-Z)	Mrs. Kimberly Kelly	215-541-7127

Scheduling decisions are important. Counselors and administrators work during the summer to provide a schedule that tries to accommodate the needs of all students. If it is impossible to schedule all course requests, alternate course requests will be used. **Once the schedule has been established, it may be impossible to honor a change request because classes have been fixed and teachers have been assigned—so choose carefully.**

Remember, the primary purpose of the Counseling Department is to be of service to the student. Counselors are available for individual conferences with students, parents/guardians to discuss topics such as personal concerns, course selection, test interpretation, and college/career planning.

Many informational sources are available to investigate career and educational possibilities. You may wish to utilize the software programs, catalogues, books, CDs, pamphlets, career exploration and scholarship materials which are available in the Counseling Office and Library areas. Numerous resources are available on the Upper Perkiomen High School website under Guidance Resources.

Following the distribution and on-line instruction of the Program of Studies Booklet students should review, with their parents, the courses they plan to take. Parents are encouraged to call their child's counselor if they have questions. **Also, an 8th grade orientation program has been scheduled for parents and students for Wednesday evening, February 20, 2019, 7:00 P.M. in the High School Audion**.

Steps towards selecting courses……..

Student-Teacher Review:
Time will be set aside in individual classes during which teachers and students will discuss specific courses. At that time, students must obtain teacher approval for their choices in English, Social Studies, Mathematics, Career Education & Work *(Business)*, and World Language. The completed course selection sheets will then be reviewed by the counselors. Those students still needing help will be scheduled for individual student-counselor conferences.

Course Verification:
In the spring, a course verification list of selected subjects will be given to students with instructions to check for errors or changes. Students and parents are asked to review the verification list and report any errors or **final** changes they wish to make.

Factors for Course Planning

High School Block Scheduling……
The district's high school uses a block scheduling model. The year is divided into four nine-week terms or marking periods. The longer learning period each day gives students an opportunity to practice what they have just learned; a science lab, for example, can follow the lesson in the same period instead of being scheduled for another day. Because one can take the equivalent of eight full-year courses instead of the seven under the traditional system, students have opportunities to accelerate course sequence and take additional courses in the areas that are most important to them or other areas. It is important to map out a four-year plan. Please refer to the worksheets in the back of this booklet.

Course Changes……
Since a great deal of time and effort goes into program planning, selection of subjects should be considered final following the deadline announced with the course request verification in the spring of the school year. Extenuating circumstances do arise occasionally, and in such cases, the reasons for changes are reviewed with the parent or guardian at which time a decision is made. Any course listed in this catalog may be modified and/or eliminated.

Six-Day Cycle……...
This high school operates on a six-day cycle schedule. Each day is numbered from one to six rather than identified by the weekday name.

College Athletic Participation…….
Students planning to participate in an athletic program at the National Collegiate Athletic Association (NCAA) Division I or Division II level in college must meet the NCAA Freshman Eligibility Standards. Core Courses NCAA Division I and II each require 16 core courses. See the chart below for the breakdown of these 16 core course requirements. Be sure to look at Upper Perkiomen High School's list of NCAA approved core courses on the Eligibility Center's website to make certain that courses being taken have been approved as core courses. The website is www.eligibilitycenter.org.

Test Scores:

- ***Division I*** has a sliding scale for test score and grade-point average. The sliding scale for those requirements is available at the website: www.eligibilitycenter.org.
- ***Division II*** has a minimum SAT score requirement of 820 or an ACT sum score of 68.
- The SAT score used for NCAA purposes includes only the critical reading and math sections. The writing section of the SAT is not used.
- All SAT and ACT scores must be reported directly to the NCAA Eligibility Center by the testing agency. Test scores that appear on transcripts will not be used. When registering for the SAT or ACT, use the Eligibility Center code of 9999 to make sure the score is reported to the Eligibility Center.

Grade-Point Average for NCAA

- Only core courses are used in the calculation of the unweighted grade-point average.
- ***Division I*** unweighted grade point average requirements are listed on the web site: www.eligibilitycenter.org.
- ***The Division II unweighted*** grade point average requirement is a minimum of 2.00.

For more information on eligibility please visit the NCAA quick reference chart at, http://fs.ncaa.org/Docs/eligibility_center/Quick_Reference_Sheet.pdf

DIVISION I
Core-Course Requirement (16)

4	years of English
3	years of math (Algebra I or higher)
2	years of natural/physical science (1 year of lab if offered)
1	year of additional English, math or natural/physical science
2	years of social science
4	years of additional courses (any area above, foreign language or comparative religion/philosophy)

DIVISION I – 2016
Qualifier Requirements
**Athletics aid, practice, and competition*

- 16 core courses
  - Ten (10) core courses completed before the start of seventh semester. Seven (7) of the 10 must be in English, math or natural/physical science.
    - "Locked in" for core-course GPA calculation.
- Corresponding test score (ACT sum score or SAT combined score) and core-course GPA (minimum 2.300) on Sliding Scale B (see Page No. 2).
- Graduate from high school.

DIVISION I – 2016
Academic Redshirt Requirements
**Athletics aid and practice (no competition)*

- 16 core courses
  - No grades/credits "locked in" (repeated courses after the seventh semester begins may be used for initial eligibility).
- Corresponding test score (ACT sum score or SAT combined score) and core-course GPA (minimum 2.000) on Sliding Scale B (see Page No. 2).
- Graduate from high school.

Graduation Requirements

Subject	Standard Diploma	WMCTC/Standard Diploma
English	4	4
Social Studies	4	3
Science	4	3
Mathematics	4	3
Physical Education	2	2
Health (I & II)	1	1
Electives	7	7.5
Technology	2	1.5
Total Credits (Minimum)	**28**	**25**
Required Minimum Total Credits for Graduation - In addition to passing the required courses, a student must also accumulate a minimum of twenty-eight (28) credits for graduation. 25 credits are required for students attending Western Montgomery Career & Technology Center. In accordance with state regulations for high school graduation requirements, beginning with the Class of 2019, students must demonstrate proficiency on the Keystone Exams in Literature, Algebra 1, and Biology.		

Keystone Exams……...
The Upper Perkiomen School District requires that all students demonstrate proficiency in each of the Keystone content areas in order to graduate. Proficiency is demonstrated by earning a score of Proficient or Advanced on each of the Keystone Exams **(English Literature, Algebra I and Biology)**. Students who have no score recorded or who have not earned a score of Proficient or Advanced on each of the Keystone Exams will be required to demonstrate proficiency via alternative means in order to graduate. Any student who is currently enrolled in a course associated with a Keystone Exam must take the appropriate exam at the end of the course. The scores of students who complete a Keystone Exam in a grade other than 11th will be "banked" until those students are in 11th grade. At

that time, those scores will be counted in the annual School Performance Profile (SPP)/PA Future Ready Index calculation for the school in which the student attends 11th grade.

Supplemental Instruction: A student who does not demonstrate proficiency on a Keystone Exam will be required to participate in supplemental instructional support or online remediation in order to assist them in attaining proficiency in the Keystone academic standards. Students will have the opportunity to retest in the associated Keystone Exam. Supplemental instruction could include the following: 1. Keystone Support Courses: Please see the course listings in the English, Science, and Mathematics sections; 2. Intervention/Enrichment Period (IE): Students will be scheduled during their IE period to receive reinforcement of Keystone content and skills; 3. Online Remedial Program.

Entrance Criteria: students will be placed in supplemental instruction or remedial classes based on performance on state assessments, including the Keystone and PSSA.

***Exit Criteria*:** students will be exited from their supplemental instruction or remedial program when they have earned a proficient or above score on the state assessment.

Biology Keystone

All students who fail the Biology Course and the Biology Keystone Exam, must retake Biology as their next science course at UPHS.
All students who pass the Biology Course but fail the Biology Keystone Exam, must take Environmental Science as their next science course at UPHS as well as complete required supplemental instruction prior to retaking the Keystone Exam.

Algebra Keystone

All students who fail the Algebra I Course and the Algebra I Keystone Exam, must retake Algebra I as their next math course at UPHS.
All students who pass the Algebra I Course but fail the Algebra I Keystone Exam, must take Algebra II as their next math course at UPHS as well as complete required supplemental instruction prior to retaking the Keystone Exam.

Literature Keystone

All students who fail the English 10 Course and the Literature Keystone Exam, must retake English 10 as their next English course at UPHS.
All students who pass the English 10 Course but fail the Literature Keystone Exam, must take English 11 as their next English course at UPHS as well as complete required supplemental instruction prior to retaking the Keystone Exam.

Furthermore for all students:

Perform Study Island to prepare for the Keystone Exam during your Keystone Course.

Course Options/Opportunities

AP (Advanced Placement)……

An AP course follows the prescribed College-Board curriculum, challenges students with college level work in both rigor and expectations, and prepares all students for the AP exam. Students enrolled in an AP course undertake a rigorous workload that involves extensive reading, writing, problem-solving and critical thinking. Essential to success in this course is the ability to learn independently outside the classroom. Students receive a weighted grade (1.0) in an Advanced Placement course.

The Advanced Placement Program (AP) is a nationwide educational program administered by the College Entrance Examination Board for those high school students who have the ability to complete college level courses while they are still in high school. Students participating in AP courses are expected to take a nationally administered qualifying examination in May. This exam is prepared and scored under the supervision of College Entrance Examination Board. Exam scores are reported on a five point scale.

5 - Extremely well qualified 4 - Well qualified 3 – Qualified 2 - Possibly qualified 1 - No recommendation

Students who successfully complete AP exams may receive the following benefits:

1. Course exemption and/or college credit.
2. Permission to take higher level courses in certain fields.
3. Eligibility for honors and other special programs open to students who have earned AP recognition.
4. Earlier course registration status.

Students assume the responsibility to pay the test fee.

The AP courses offered at Upper Perkiomen High School are:

035	AP Language and Composition/American Literature	050	AP English Literature and Composition
123	AP World History	146	AP European History
149	AP Psychology	150	AP United States History
223	AP Statistics	241	AP Calculus
323	AP Chemistry	331	AP Physics I
340	AP Biology I	350	AP Environmental Science
595	AP Computer Science A	808	AP Studio Art

Honors/Gifted Humanities (Current 10th grade students only)……
The Gifted Humanities and all Honors course follows a challenging curriculum prescribed by each department and develops higher-level thinking skills using an accelerated pace and enriched content. These courses prepare students in their progress toward meeting the challenges of highly competitive college work. Students enrolled in these courses undertake a rigorous workload that involves extensive reading, writing, problem-solving and critical thinking. Essential to success in this course is the ability to learn independently outside the classroom. Students receive a weighted grade (.5) in the Gifted Humanities and Honors courses.

Academic……...
An Academic course follows a challenging curriculum prescribed by each department and develops higher level thinking skills using appropriate pace and content. Academic courses prepare students to meet Pennsylvania graduation requirements and future study. Students enrolled in an Academic course undertake an appropriate workload that involves reading, writing and problem-solving. Essential to success in this course is the ability to learn through guided instruction and complete work outside the classroom.

Special Education……
The Individual Education Plan (IEP) developed by parents and school personnel outlines the program for students in special education. The IEP describes both the regular education and special education courses in which students should enroll. A transition plan is also part of each student's IEP. The purpose of this plan is to outline the steps being taken to assist in student preparation for life after graduation.
Students involved in special education may also attend the Western Center. Students interested in a Western Center program should talk to their counselor and special education teachers. Special education students may also participate in a work-study program. Upon completion of the senior high special education program, students will be recommended for graduation with an Upper Perkiomen School District diploma.

English Language Development Program (formerly ESOL)……...
The English for Speakers of Other Languages (ESOL) Program provides a planned instructional course for students whose dominant language is not English. The purpose of the program is to increase the English language proficiency of eligible students so that they can join a mainstream Humanities class and achieve academic success. The program also provides a resource room for mainstreamed students who may need additional English language support. Students are identified for ESOL instruction through teacher recommendation and by their performance on language proficiency assessments.

Western Montgomery Career and Technical Center……
The Western Center provides students the opportunity to acquire workforce knowledge and skills in many technical subjects. The teachers are professionals with years of experience in their respective fields. Choose from a variety of in-depth courses such as...

Automotive Technology	Bio-Medical Sciences	Carpentry	Collision Repair
Commercial Art	Computer Information Systems	Cosmetology	Culinary Arts
Dental Occupations	Diesel Technology	Early Childhood Education	Electrical Occupations
Environmental Design	Graphic Design	Health Science Technology	
Heating, Ventilation, and Air Conditioning		Metal Technology	Protective Services

Students will attend WMCTC ½ day in their technical program and spend the other ½ day in academic classes at their High School. WMCTC currently offers 18 technical programs to give students a jump start on their careers, directly after high school or through post-secondary education. For more information on WMCTC, please visit their website at http://www.westerncenter.org/

Off Campus Program Opportunities…….

College Courses:
Students have the opportunity to complete coursework at a post-secondary institution during their high school careers. The following guidelines apply to students taking college/university courses:

1. The course is pre-approved by the student's Guidance Counselor and Principal. A college course is not intended to replace a required high school course.
2. The college course will satisfy a High School elective credit, under special circumstances pre-approved specifically by the Principal and Assistant Superintendent, the college course may replace a required High School course.
3. The student assumes the cost/payment for the course. The student should furnish a college transcript or grade report to his/her counselor shortly after completion of the college course.
4. The college course will not count for GPA, Honor Roll, or Academic Award calculations.

High School Honors Programs (DeSales University, Lehigh University, Moravian):
DeSales University, Moravian, and Lehigh University offer the opportunity for selected 12th grade students to apply into their High School Honors Program and enroll into a specific course within the University. Students will need to complete an application into the program and be selected to participate by the intended University. Preference to apply into the program is given to the highest ranking juniors at the completion of the Spring Semester. Participating students must be approved by administration as careful planning of course work may need to occur with your guidance counselor. Participating students will need to provide their own transportation.

Foreign Exchange Program: There are a number of opportunities (American Field Services, Rotary Exchange) for students to attend a foreign school for one year or one semester. Details as to credits and graduation requirements must be carefully worked out in advance with your guidance counselor.

Health Careers Academy: High School seniors who are interested in a health occupation career field have the opportunity to spend time at local hospitals, learning by first hand observation what this field involves.

Dual Enrollment/Dual Credit Program: Dual enrollment options are available to students through the Montgomery County Community College. Participation in a dual enrollment/dual credit program enables students to earn both high school and college credit simultaneously. Approved courses will take place at the high school during the scheduled school day. Students interested in hearing more about dual enrollment opportunities should discuss the options including existing agreements with their teacher and guidance counselors. Participation will require completion of a Montgomery County Community College application at www.mc3.edu. College placement testing may be necessary prior to enrollment in specific dual enrollment courses. For a listing of MCCC testing exemptions please visit http://www.mc3.edu/admissions/gettingStarted/placement/exempt.aspx. All financial obligations for application and enrollment will be the responsibility of the student and his/her family.

Montgomery County Community College Dual Enrollment Course Offerings 2018-2019

Upper Perkiomen Course	MCCC Course
English Honors 12 - 042 or AP English Literature & Composition - 050	ENG 101 - English Composition I (3 credits)
Programming & App Development – 590	CIS 111 – Computer Science 1: Programming and Concepts (3 credits)
AP Computer Science – 595	CIS 111B – Computer Science 1: Programming and Concepts (3 credits)
Database Spreadsheet I - 530 + Start Your Own Business (Entrepreneurship) - 529	CIS 110 - Information Systems for Management w/ Computer App (3 credits)
Personal Finance – 518	ECO – 111 Personal Finance (3 credits)
German I – 421 German II – 422	GER 101 - Elementary German I + GER 102 - Elementary German II (6 Credits- must register 2x for credit)
Web Page Design II – 556	CIS 114 Web Design and Development (3 Credits)

Upper Perkiomen Personalized Learning Program…….
The Upper Perkiomen Personalized Learning Program is an online learning solution that provides all students in the Upper Perkiomen community with flexible and equitable learning opportunities and environments tailored to their specific interests, passions, and needs.

Through this program, students will have the opportunity to engage in highly rigorous coursework in a supportive environment. Students will participate in asynchronous learning opportunities that promote flexible scheduling options and diversity in course work. The goal of these courses is to prepare students to learn anywhere and anytime. Students may choose a pure cyber program or a blended program which will include traditional school with some online courses. Online courses should be requested during the structured High School's course selection process. You can find more information about the program at www.upsd.org under academics. For any questions related to the Upper Perkiomen Personalized Learning Program, please contact Mrs. Allison Stephens, Curriculum, Technology and Innovation Specialist at astephens@upsd.org or 215-541-2449

Online Courses Offered 2019-2020:

Health & Physical Education Department: Health 2
Business: College & Career Preparation

Home Schooling ……...

We are under no obligation to award a diploma or otherwise acknowledge the completion of a homeschooled student's education. However, Home Schooled students that enroll at the Upper Perkiomen High School prior to the completion of their secondary educational career are entitled to a diploma as would any other transfer student. When a home educated student enrolls at Upper Perkiomen High School, earned credits should be determined by a review of the objectives listed on the home school affidavit and the end of year written evaluation. Every attempt to match an Upper Perk student's earned credits for that specific grade level should be made. For example, the total number of credits accepted should not exceed what an Upper Perk student could attempt within a school year. Also, four separate years of English are required for a high school student. The grade listed for course credit awarded to a student educated at home will be on a pass/fail basis. Students must be enrolled for two consecutive academic years at Upper Perkiomen High School to be included in our class rank and to establish a grade point average. If the home schooled student was enrolled in a PDE approved Home Ed Diploma granting organization, incoming grades will be included in UPHS class rank and grade point average will be established immediately. Correspondence courses by accredited institutions will also be included.

Planning for College

Please refer to our school guidance website for detailed information about the college admission process

Students often want to know how they can improve their chances of being accepted to the college of their choice and how they can prepare for college work. Although there is no guarantee that a student will be accepted by a particular college, the next few pages offer proven ways to find colleges which are the best fit for you, along with sound advice on how to give yourself the best possible preparation for the rigors of college work.

Go for the Challenge……

Selecting appropriate courses and a challenging academic program is the first step in planning for college. Consult the Recommended Course Sequences charts for appropriate English, Math, Science, Social Studies and World Language courses, and read the section on course selection under General Information. Plan as rigorous a program as you can!

Naviance

Naviance is a tool that is very helpful in post-secondary planning. Naviance, a web-based service designed especially for students and parents, contains a program called Family Connection that students use to help in making decisions about colleges and careers. Family Connection is linked with Counselor's Office, a service that school counselors use to track and analyze data about college and career plans. It provides information that is specific to our high school. This tool will enable students to get involved in the planning and advising process, build a resume, complete online surveys, manage timelines and deadlines for making decisions about colleges and careers, and register for college visits. Each student will be issued registration information for Naviance for a personal Naviance account.

Academics Should Come First……

Give your studies your maximum effort. Although all phases of your high school record are considered for college admission, scholastic achievement in challenging courses is the single most important criterion. College admission officers have learned that a student's quality of work in high school is the best predictor of success in college. Maximum effort means more than doing your homework, completing course assignments on time, and studying for tests. It means asking for help from your teachers if you are having difficulty or if you have missed classes because of illness. **It means making sure that athletics, a part-time job, or**

extra-curricular involvements do not interfere with school work. It means reviewing class work periodically, not just the night before a test. It means reading for pleasure, as well as the books assigned in class, and keeping up with news and current events.

PSAT……
Students should plan to take the PSAT as sophomores and juniors. The PSAT will give you valuable experience in preparing for the more important SAT exam. Sophomores who have taken or are taking Geometry are encouraged to take the PSAT for practice. **Scores on the PSAT taken by juniors are used to determine National Merit Scholarship semifinalists and commended students for the following school year.** For this reason, students should be sure to take the test in their junior year even if they have taken a practice test as sophomores.

SAT……
Colleges consider your scores on the SAT. Colleges may also look at results of SAT Subject Tests and Advanced Placement Tests, where applicable. More selective colleges may require students to take one or more SAT Subject Tests. These tests may also be used for placement in college courses. Please make sure that you have your scores sent to your high school. Visit www.collegeboard.org for online registration, test preparation, and further information.

ACT……...
Some students may choose to take the ACT. All colleges accept ACT scores for consideration in addition to (or in place of) both SAT and SAT Subject Tests. Visit www.actstudent.org for online registration test preparation, and further information.

Take the AP Test as Part of Your AP Course……...
Students who take Advanced Placement courses should plan to take the appropriate Advanced Placement Exam. When you take the AP exam, you can compare your ability with that of students across the country. AP test scores are not placed on the high school transcript. However, 8 good AP scores will reflect well on your academic abilities when colleges consider your high school program. If you score high enough on the AP Exam (qualifying scores vary among colleges), many colleges will award college credit or allow you to skip the beginning level of a course sequence. Students sometime hesitate to take the AP exam because they intend to take the beginning course in college, no matter how well they may score on the exam–especially when the college course is in the area of their intended major. Even if you achieve a high AP score, you can still take the beginning courses you want in college. No college will require that you skip a course.

Plan a Well-Rounded Program……...
College admission officers also look at the degree to which a student has contributed to the life of the school or community.
If you are planning to apply to highly selective schools, it's essential to have something that will set you apart from the thousands of other applicants who also have good grades and high SAT or ACT scores. An outstanding admissions interview, especially thoughtful and well-written answers to essay questions on your application, or a significant project can make a difference.
Depth in your activities is also important; the fact that you were responsible for a complete redesign of your student newspaper, for example, would mean more than just listing "school newspaper" on your application. You should also mention special talents, abilities, leadership, achievements, or experiences that might not be included in your high school record, such as Scouting honors, extensive travel, fluency in another language, or ability in a non-school activity, such as ballet, skating, or gymnastics.

Gather Information……
Visit college websites for applications and information, including financial aid and early-decision requests. Find out all you can about colleges and the application process. School counselors are your best source of information about college selections, admissions procedures, and testing schedules. Students should talk to counselors regularly and keep them informed of plans. Students should follow the recommended milestones in Naviance.

Both you and your parents should plan to attend college information programs provided by the Guidance Departments, along with the local College Fairs, which are typically scheduled each spring. Colleges also send representatives to each high school throughout the fall to meet with interested students. Information is available in the guidance office of Upper Perkiomen High School.

Guiding the Way to College and Career Opportunities……...
There is no one clear cut program of studies that will guarantee a student admission to any college in the United States. To be qualified for admission to most colleges, a student should have as a minimum:

English	4 credits	Social Studies	4 credits	World Language	2 credits
Math	4 credits	Science	4 credits		

The remaining units may be selected from other fields. The more depth a student has in each subject field, the greater chance a student has of admission to the college of his/her choice. This is true provided the student has maintained an acceptable grade point average and class rank. Be sure to take your chosen career field into consideration when you schedule courses. For example, a student planning a major in engineering would stress more math and science. There are a few general facts that all college-bound students should keep in mind. First, you will have to take some form of college entrance examination, and one part is always math. Algebra I, Algebra II, and Geometry are beneficial for a high test score. Secondly, the views of college admissions personnel on World Language are that two years is sufficient for a major in some fields; however, for the liberal arts student, four years of the same language is recommended.

High School Typical Course Sequence……...
Utilizing the graduation requirements outline above, the graph below outline a typical course sequence for both our Honors and Academic programs in the English, Mathematics, Science, and Social Studies

	9th		10th		11th		12th	
	Honors	Academic	Honors	Academic	Honors	Academic	Honors	Academic
English	English	English	English or Humanities	English	English or AP Language & Composition	English or AP Language & Composition	English Electives	English Electives
Math	Geometry or Algebra II	Algebra I	Algebra II or Algebra III	Geometry	Math Electives	Math Electives	Math Electives	Math Electives
Science	Biology	Biology	Chemistry or Physics	Environmental Science Academic or Chemistry or Physics	Science Electives	Science Electives	Science Electives	Science Electives
Social Studies	Social Studies	Social Studies	Social Studies or Humanities or AP World	Social Studies or AP World	Social Studies or AP US	Social Studies or AP US	Social Studies Electives	Social Studies Electives

Guidance for College and Career Planning……...
The Guidance Department of Upper Perkiomen High School supports all students academically and developmentally. Counselors collaborate with high school staff members, parents and outside agencies in servicing our students. In addition to meeting with students individually and in small groups, the counselors deliver a developmental guidance curriculum to students and parents based upon standards and best practices.

- 9th Grade Transitioning to the High School - Freshmen are introduced to the components of a high school transcript, i.e. GPA, weighted GPA, and graduation requirements. Students are given information about resources and supports for academic success and encouraged to become an involved high school student.
- Introduction to Career Exploration - Freshmen are introduced to the resources available to explore careers. An interest inventory is completed and careers investigated using our Naviance program.
- Introduction to College Searching - Utilizing Naviance, students learn how to research college information and find a good fit. They will learn how to do a college search and what to look for in a college.

9th Grade Academy/Freshman Preparation……..
Transition to high school can often be an overwhelming experience for students due to the expectation to adapt to a variety of instructional styles and conform to a different set of rules and expectations. To assist students in making the transition from middle school to high school, Upper Perkiomen High School utilizes an “Academy” approach. The 9th Grade Academy is a small learning community that reflects a structure more similar to that of the middle school. The purpose of the of the Academy approach and the Freshman Preparation course is to increase academic performance for all students by developing a community of learners that feel comfortable and willing to take learning risks, proficiently utilize technology as a vehicle for learning, and build the academic, social, and emotional skills necessary for success throughout and beyond high school. A critical component of the Freshman Preparation

experience is the development of a college and career plan which focuses students on the post-secondary goal planning and attainment.

Understanding the Course Offering Matrix……...
The following pages of the course guide offer a comprehensive look at all the course that will be offered during the 2018-2019 school year at Upper Perkiomen High School. From each matrix you can see the course title, credit value, meeting frequency, and grade in which the course is offered. Additionally, the farthest left-hand column indicates NCAA eligibility of the course and if a course prerequisite exists.

Course Symbol Key:

Symbol	Symbol Description
*	The course has a prerequisite – Please check the course description for details
✓	The course meets NCAA Eligibility Requirements

Course Listings by Department

ENGLISH									
	Course Code	Course Title	Year/ Sem.	Credit	Grade 9	Grade 10	Grade 11	Grade 12	Page
✓	011	English 9 Academic	Year	1.0	X				28
✓	012	English 9 Honors	Year	1.0	X				28
* ✓	020	Humanities English 10 Gifted	Year	1.0		X			33
✓	021	English 10 Academic	Year	1.0		X			28
✓	022	English 10 Honors	Year	1.0		X			28
✓	031	English 11 Academic	Year	1.0			X		28
✓	032	English 11 Honors	Year	1.0			X		29
* ✓	035	AP Language & Composition/American Lit	Year	1.0			X		29
✓	041	English 12 Academic	Year	1.0				X	30
✓	042	English 12 Honors	Year	1.0				X	30
	044	Film as Literature Academic	Year	1.0				X	30
	045	Film as Literature Honors	Year	1.0				X	30
✓	046	Short Fiction Academic	Year	1.0				X	30
*	050	AP Literature & Comp/*MCCC Dual Enrollment*	Year	1.0				X	30

SOCIAL STUDIES									
	Course Code	Course Title	Year/ Sem.	Credit	Grade 9	Grade 10	Grade 11	Grade 12	Page
✓	111	Social Studies 9 Academic	Year	1.0	X				31
✓	112	Social Studies 9 Honors	Year	1.0	X				31
* ✓	120	Humanities Social Studies 10 Gifted	Year	1.0		X			33
✓	121	Social Studies 10 Academic	Year	1.0		X			31
* ✓	122	Social Studies 10 Honors	Year	1.0		X			31
✓	123	AP World History	Year	1.0		X			32
✓	131	Social Studies 11 Academic	Year	1.0			X		32
✓	132	Social Studies 11 Honors	Year	1.0			X		32
✓	142	Introduction to Political Science	Year	1.0				X	32
✓	145	Sociology/Modern Social Problems	Year	1.0				X	32
* ✓	146	AP European History	Year	1.0				X	32
* ✓	149	AP Psychology	Year	1.0				X	33
* ✓	150	AP United States History	Year	1.0			X		33

MATHEMATICS									
	Course Code	Course Title	Year/ Sem.	Credit	Grade 9	Grade 10	Grade 11	Grade 12	Page
✓	211	Algebra I	Year	1.0	X	X	X		33
* ✓	212	Algebra II	Year	1.0	X	X	X	X	34
* ✓	213	Algebra II Honors	Year	1.0	X	X	X		34
✓	220	Geometry	Year	1.0	X	X	X	X	34
* ✓	221	Geometry Honors	Year	1.0	X	X	X		34
* ✓	222	Statistics	Year	1.0			X	X	34
* ✓	223	AP Statistics	Year	1.0			X	X	34
* ✓	224	Algebra III	Year	1.0		X	X	X	34
* ✓	225	Algebra III Honors	Year	1.0		X	X	X	34
* ✓	230	Pre-Calculus	Year	1.0		X	X	X	35
* ✓	231	Pre-Calculus Honors	Year	1.0		X	X	X	35
* ✓	240	Calculus	Year	1.0			X	X	35
* ✓	241	AP Calculus	Year	1.0			X	X	35

SCIENCE									
	Course Code	Course Title	Year/ Sem.	Credit	Grade 9	Grade 10	Grade 11	Grade 12	Page
✓	312	Biology Academic	Year	1.0	X	X	X		36
✓	313	Biology Honors	Year	1.0	X	X			36
✓	320	Chemistry Academic	Year	1.0		X	X	X	36
* ✓	321	Chemistry Honors	Year	1.0		X	X	X	36
* ✓	323	AP Chemistry	Year	1.0			X	X	37
✓	327	Forensics	Year	1.0			X	X	37
✓	328	Principles of Engineering	Year	1.0			X	X	37
* ✓	329	Physics Academic	Year	1.0		X	X	X	37
* ✓	330	Physics Honors	Year	1.0		X	X	X	37
* ✓	331	AP Physics	Year	1.0			X	X	37
✓	333	Environmental Science Academic	Year	1.0			X	X	37
* ✓	336	Anatomy & Physiology Honors	Year	1.0			X	X	37
* ✓	340	AP Biology	Year	1.0			X	X	37
✓	345	Energy, Matter and Motion	Year	1.0			X	X	38
* ✓	350	AP Environmental Science	Year	1.0			X	X	38

WORLD LANGUAGES									
	Course Code	Course Title	Year/ Sem.	Credit	Grade 9	Grade 10	Grade 11	Grade 12	Page
✓	411	French I	Year	1.0	X	X	X	X	39
* ✓	412	French II	Year	1.0	X	X	X	X	39
✓	421	German I	Year	1.0	X	X	X	X	39
* ✓	422	German II	Year	1.0	X	X	X	X	39
* ✓	423	German III	Year	1.0		X	X	X	39
* ✓	424	German IV	Year	1.0		X	X	X	39
✓	441	Spanish I	Year	1.0	X	X	X	X	40
* ✓	442	Spanish II	Year	1.0	X	X	X	X	40
* ✓	443	Spanish III	Year	1.0		X	X	X	40
* ✓	444	Spanish IV	Year	1.0		X	X	X	40
* ✓	445	Spanish V	Year	1.0			X	X	40

BUSINESS TECHNOLOGY									
	Course Code	Course Title	Year/ Sem.	Credit	Grade 9	Grade 10	Grade 11	Grade 12	Page
	505	Freshman Prep	Sem.	.5	X				40
	506	Professional Communications I	Sem.	.5	X	X	X	X	40
*	508	Professional Communications II	Sem.	.5	X	X	X	X	40
	510	Accounting I	Year	1.0	X	X	X	X	40
*	512	Accounting II	Year	1.0		X	X	X	41
	518	Personal Finance- *MCCC Dual Enrollment*	Sem.	.5			X	X	41
	529	Start Your Own Business (Entrepreneurship)	Sem.	.5	X	X	X	X	41
	530	Database/Spreadsheet I- *MCCC Dual Enrollment*	Sem.	.5		X	X	X	41
*	532	Database/Spreadsheet II	Sem.	.5		X	X	X	41
	535	Desktop Publishing	Sem.	.5	X	X	X	X	41
	540	College and Career Preparation	Sem.	.5			X	X	41
	540A	College and Career Preparation - *Online*	Sem.	.5			X	X	42
	544	Video and Presentation Production	Sem.	.5		X	X	X	42
*	550	Yearbook Advanced Publications	Sem.	.5		X	X	X	42
*	550B	Yearbook Advanced Publications	Year	1.0		X	X	X	42
	554	Web Page Design I	Sem.	.5	X	X	X	X	42
*	556	Web Page Design II- *MCCC Dual Enrollment*	Sem.	.5		X	X	X	42
*	557	3D Gaming and Design	Sem.	.5		X	X	X	42
	558	Sports and Entertainment Marketing	Sem.	.5		X	X	X	42
*	590	Programming and App Development - *MCCC Dual Enrollment*	Year	1.0		X	X	X	43
*	595	AP Computer Science - *MCCC Dual Enrollment*	Year	1.0			X	X	43

OTHER ELECTIVES									
	Course Code	Course Title	Year/ Sem.	Credit	Grade 9	Grade 10	Grade 11	Grade 12	Page
*	010	Gifted Seminar	Sem.	.5	X	X	X	X	33
	037	Film Production	Sem.	.5	X	X	X	X	29
	038	News Production - UPN	Year	1.0	X	X	X	X	29
	039	Sports Broadcasting	Sem.	.5	X	X	X	X	29
*	040	TV and Film Production Two	Sem.	.5		X	X	X	29
	PPLY	UP Personalized Learning Course - Year	Year	1.0	X	X	X	X	
	PPLS	UP Personalized Learning Course - Semester	Sem.	.5	X	X	X	X	

SUPPORT PROGRAMS									
	Course Code	Course Title	Year/ Sem.	Credit	Grade 9	Grade 10	Grade 11	Grade 12	Page
	030	Keystone Literature Support	Sem.			X	X		31
*	170	Foundational Reading	Year	1.0	X	X	X	X	31
*	171	English 9	Year	1.0	X				31
*	172	English 10-12	Year	1.0		X	X	X	31
	208	Foundational Mathematics	Year	1.0	X	X			35
	210	Proficiency Development in Mathematics	Year	1.0	X	X			35
	214	Keystone Algebra Support	Sem.		X	X	X		35

	302	Integrated Science Systems	Year	1.0	X				38
	314	Keystone Biology Support	Sem.			X	X		38
	909	Adapted Physical Education (Fall)	Sem.	.5	X	X	X	X	47
	910	Adapted Physical Education (Spring)	Sem.	.5	X	X	X	X	47

CREATIVE AND PERFORMING ARTS									
	Course Code	Course Title	Year/ Sem.	Credit	Grade 9	Grade 10	Grade 11	Grade 12	Page
	700	Energy Systems	Sem.	.5	X	X	X	X	43
	702	Creative Design and Engineering	Sem.	.5	X	X	X	X	43
	706	Team Design and Manufacturing	Sem.	.5		X	X	X	43
*	708	Multi-Material Fabrication	Sem.	.5		X	X	X	43
	711	Engineering Design	Sem.	.5	X	X	X	X	44
*	712	Advanced Engineering Design	Sem.	.5		X	X	X	44
	720	Community Service (Fall)	Sem.	.5				X	44
	721	Community Service (Spring)	Sem.	.5				X	44
	800	Introduction to Art	Sem.	.5	X	X	X	X	44
*	803	Drawing	Sem.	.5		X	X	X	44
*	804	Painting	Sem.	.5		X	X	X	44
	805	Ceramics	Sem.	.5	X	X	X	X	44
	806	Crafts and 3-Dimensional Design	Sem.	.5		X	X	X	45
*	807	Advanced Ceramics	Sem.	.5		X	X	X	45
*	808	AP Studio Art	Year	1.0			X	X	45
	809	Art History	Sem.	.5			X	X	45
	810	Sculpture	Sem.	.5			X	X	45
	813	Digital Photography	Sem.	.5	X	X	X	X	45
*	814	Digital Design	Sem.	.5		X	X	X	45
*	840	Concert Band/Marching Band	Year	1.0	X	X	X	X	45
*	840A	Concert Band/Marching Band (Fall)	Sem.	.5	X	X	X	X	46
*	840B	Concert Band/Marching Band (Spring)	Sem.	.5	X	X	X	X	46
*	850	“A” Choir	Year	1.0	X	X	X	X	46
*	850A	“A” Choir (Fall)	Sem.	.5	X	X	X	X	46
*	850B	“A” Choir (Spring)	Sem.	.5	X	X	X	X	46
*	852	Uptones/Women’s Choir	Year	1.0		X	X	X	46
*	852A	Uptones/Women’s Choir (Fall)	Sem.	.5		X	X	X	46
*	852B	Uptones/Women’s Choir (Spring)	Sem.	.5		X	X	X	46
	860	Show Choir	Year	1.0	X	X	X	X	46
	860A	Show Choir (Fall)	Sem.	.5	X	X	X	X	46
	860B	Show Choir (Spring)	Sem.	.5	X	X	X	X	46
	870	Musical Theatre	Sem.	.5	X	X	X	X	46
	876	Music Production	Sem.	.5	X	X	X	X	46
*	890	Orchestra	Year	1.0	X	X	X	X	47
*	890A	Orchestra (Fall)	Sem.	.5	X	X	X	X	47
*	890B	Orchestra (Spring)	Sem.	.5	X	X	X	X	47
*	853	Vocal Ensemble	Year	.25	X	X	X	X	47
*	854	Band Ensemble	Year	.25	X	X	X	X	47
*	855	String Ensemble	Year	.25	X	X	X	X	47

WELLNESS & FITNESS									
	Course Code	Course Title	Year/ Sem.	Credit	Grade 9	Grade 10	Grade 11	Grade 12	Page
	901	Physical Education: 9-12	Sem.	.5	X	X	X	X	47

	934	Health I	Sem.	.5	X				47
	935	Health II	Sem.	.5			X		47
	935A	Health II Online	Sem.	.5			X		48
	937	Aquatics and Water Safety	Sem.	.5	X	X	X	X	48
	945	Fitness and Sports Nutrition	Sem.	.5			X	X	48
	PEH 1,2,3,9	Physical Education/Health – Western Center Students Only	Year	.75	X	X	X	X	

WESTERN MONTGOMERY CAREER & TECHNICAL PROGRAMS									
	Course Code	Course Title	Year/ Sem.	Credit	Grade 9	Grade 10	Grade 11	Grade 12	Page
	AT 1,2,3	Automotive Technology	Year	3.25		X	X	X	48
	CR 1,2,3	Carpentry	Year	3.25		X	X	X	49
	CL 1,2,3	Collision Repair	Year	3.25		X	X	X	49
	CA 1,2,3	Commercial Art	Year	3.25		X	X	X	49
	CI 1,2,3	Computer Information Systems	Year	3.25		X	X	X	50
	CO 1,2,3	Cosmetology	Year	3.25		X	X	X	50
	CU 1,2,3	Culinary Arts	Year	3.25		X	X	X	50
	DO 1,2,3	Dental Occupations	Year	3.25		X	X	X	50
	DT 1,2,3	Diesel Technology	Year	3.25		X	X	X	51
	EC 1,2,3	Early Childhood Education	Year	3.25		X	X	X	51
	EM 1,2,3	Electro-Mechanical Technology	Year	3.25		X	X	X	51
	HS 1,2,3	Health Science Technology	Year	3.25		X	X	X	51
	HV 1,2,3	Heating, Venting, & Air Conditioning *HVAC)*	Year	3.25		X	X	X	52
	MT 1,2,3	Metal Technology	Year	3.25		X	X	X	52
	PLT 1,2	Biomedical Science	Year	3.25			X	X	48
	PS 1,2,3	Protective Services	Year	3.25		X	X	X	52
	SMI 1,2	Sports Medicine	Year	3.25		X	X	X	53
	GR9	Gr. 9 WCTS Cluster Programs	Year	3.25	X				53
	VOC 1,2	Career Explorations (C.E.O.)	Year	3.25	X	X	X	X	53

Career Pathways

The Upper Perkiomen School District is committed to assist every student focus his or her high school education on a deliberate post-secondary plan that matches the interests, skills, knowledge, and experience of each individual student.

A career path is a broad spectrum of careers that share similar characteristics and for which employment requirements call for common interests, strengths, and competencies. The U.S. Department of Education has identified sixteen (16) Career Clusters that were designed to help students focus on an area of interest and possible career path. UPSD combined the clusters to create five broad and flexible paths for student exploration and instruction.

The five pathways are:

Arts and Humanities

Global Leadership and Management

Human Services

Engineering and industrial Technology

Science and Health

Helping students recognize that they have direct control over the career path they choose is the challenge of career pathways. It is recommended that students select a career pathway during course selection of their 8th grade year. Students will then be able to examine specific careers and post-high school educational programs related to their pathway. In addition, elective course recommendations and technical program options will be available to assist parents and students in making course selections that will be most beneficial to their academic and career goals. This information will help students see a connection between what they learn within the classroom and the skills they need for success in their adult lives and the work world. The counseling department will also help to guide students in their course selection.

Arts and Humanities (AH) Pathway

Students interested in this career pathway will pursue courses that study how people process and document the human experience. Students interested in this career pathway will study topics such as philosophy, literature, religion, fine and practical art, music, history and language.

Pathway Focus Areas: Performing Arts (PA) Visual Arts (VA) Publishing Arts (PU)		
Are you interested in…..	***Can you...***	***Do you enjoy...***
☐Acting ☐Attending concerts ☐Designing logos or objects ☐Interviewing and Reviewing ☐Multi-media Productions ☐News Reporting and Writing ☐Performing in a band, chorus ☐Radio, TV, Film, Video	☐Act ☐Articulate Clearly ☐Be Creative ☐Express yourself artistically ☐Meet Deadlines ☐Play an instrument ☐Sell ☐Sing ☐Write and Conduct Interviews	☐Making Videos ☐Performing in Front of a Live Audience ☐Seeking Creative Ideas ☐Working with Film Props ☐Working with Sound Effects ☐Working with your hands to create ☐Working with Computers ☐Writing

Sample Careers

Entry (OJT)	***Technical/Skilled (1-3 yrs)***	***Professional (4 or + yrs)***
Announcers (PA) Circulation (PU) Copy Person (PU) Dancer (PA) Desktop Publisher (PU) Film Loader (VA) Floral Designer (VA) Florist (VA) Model (PA) Newsroom Worker (PU) Photographer (VA) Radio Operator (PA) Sound Technician (VA) Stage Hand (PA) Stunt Performer (PA) TV, Video & Motion Picture Operator (VA)	Actor (PA) Animator (VA) Choreographer (PA) Culinary Dancer (PA) *Desktop Publisher (PU) Disc Jockey (PA) Graphic Designer (VA) Jeweler (VA) Make-up Artist (VA) Musician (PA) Recording Engineer (VA) Talent Agent (PA) Video Manager (VA) Web Designer (PU)	Advertising Creator (VA) Architect(VA) Art Director (VA) Art or Music Teacher (PA) Cinematographer (PA) Composer (PA) Copy-Writer (PU) Culinary(PA) Curator (VA) Editor (PA) Fashion Designer (VA) Film Editor (PA) Graphic Designer(VA) Illustrator (VA) Industrial Designer (VA) Interior Designer (VA) *Interpreter or Translator (PU) Multi-Media Artist (PA) Music Director (PA) Music or Art Critic (PA) News Broadcaster (PA) Producer & Director (PA) Telecommunications (PU) Writer (PU)

**High Priority Occupations – job categories that are in demand by employers, have higher skill needs, and are most likely to provide family sustaining wages*

Arts and Humanities (AH) Pathway (UPHS classes)	
"A" Choir	German I, II, III, IV
3D Gaming and Design	Introduction to Art
Advanced Ceramics	Modern and Short Fiction
AP Language and Composition	Music Production
AP Literature and Composition	Musical Theatre
AP Studio Art	News Production - UPN
Art History	Orchestra
Ceramics I	Painting
Commercial Art (Western Center)	Show Choir
Concert Band/Marching Band	Spanish I, II, III, IV, & V
Crafts and 3-Dimensional Design	Sports Broadcasting
Desktop Publishing	Start Your Own Business (Entrepreneurship)
Digital Photography	TV and Film Production Two
Drawing	Uptones/Women's Choir
Film as Literature	Video and Presentation Production
Film Production	Web Page Design I & II
Fitness and Sports Nutrition	Yearbook
French I, II	

Global Leadership & Management (GL) Pathway

Students interested in this career pathway will pursue courses that relate to the pursuit of an professional venture or worldwide learning opportunity. Students interested in this career pathway will study topics that relate to his or her own role in the global economy. Designed to prepare students for careers in the world of business, finance and information services.

PATHWAY FOCUS AREAS
Marketing and Sales (MS) Finance (F) Information Technology (IT) Business Management (BM)

Are you interested in…	***Can you…***	***Do you enjoy…***
☐Business environments ☐Advertising ☐Computers and technology ☐Different work sites ☐Insurance ☐Office management ☐Presentations to groups ☐Record keeping ☐Sales ☐Telecommunications	☐Organize your time efficiently ☐Pay attention to details ☐Show initiative ☐Solve problems ☐Use computers and other technology ☐Work independently ☐Work easily with others ☐Work on a team ☐Work with statistics	☐Following directions ☐Learning new software programs ☐Making budgets ☐Meeting with groups ☐Organizing a project ☐Planning an event ☐Preparing financial reports ☐Processing numbers and figures ☐Selling products and services ☐Working with technology

If you answered "yes" to most of these questions, you might consider a future in one of the sample occupations listed below based on their level of post-secondary training.

Sample Careers

Entry (OJT)	***Technical/Skilled (1-3 yrs)***	***Professional (4 or + yrs)***
Accts. Payable Office Mgr (BM) Admin. Assistant (BM) *Advertising Sales Agent (MS) Bank Teller (F) Bookkeeper (F) Cashier (F) Computer Operator (IT) Customer Service File Clerk (BM) Payroll Clerk (F) Representative (MS) Reservation/Travel Agent (MS) Retail Sales Clerk (BM) School Secretary (BM) *Telemarketer (MS)	Bank Collection Officer (F) *Claims Adjuster (F) Computer Programmer (IT) Computer Salesperson (MS) *Computer Support Specialist (IT) Desktop Publisher (IT & MS) Medical Secretary (BM) Production Support Analyst (IT) Real Estate Agent (BM & MS) Restaurant Manager (BM & MS) Retail Buyer (MS) *Sales Representative (BM & MS) Software Engineer (IT) Tax Preparer (F)	Certified Public Accountant (F) Chief Executive Officer (BM) E-Commerce Analyst (IT) Economist (F) *Financial Manager (F) Hospital Administrator (BM) Human Resources Manager (BM) *Management Analysts (BM) Manufacturing Sales Representative (BM & MS) Marketing Manager (MS) *Securities Sales Representative (F) *Systems Analyst (IT) *Systems Software Engineer (IT)

Title Searcher (F)		

***High Priority Occupations**—job categories that are in demand by employers, have higher skill needs, and are most likely to provide family sustaining wages*

Global Leadership & Management (GL) (UPHS classes)	
Accounting I & II	Personal Finance
Advanced Publications (Yearbook)	Professional Communications I & II
AP Computer Science	Programming and App Development
AP World History	Sociology/Modern Social Problems
Computer Information Systems (Western Center)	Spanish I, II, III, IV
Database/Spreadsheet I & II	Sports and Entertainment Marketing
Desktop Publishing	Start Your Own Business (Entrepreneurship)
French I, II	Statistics
German I, II, III, IV	Team Design and Manufacturing
Introduction to Political Science	TV and Film Production Two
Multi-Material Fabrication	Video and Presentation Production
News Production - UPN	Web Page Design I & II

Human Services (HS) Pathway

Students interested in this career pathway will pursue courses that focus on the most basic needs of our communities, including the health and well being of individuals and families, assistance with social services as needed, help with preventing and solving problems and striving to provide the highest quality of life possible.

PATHWAY FOCUS AREAS

Counseling, Personal Care (CPC) Education (E)
Law, Public Safety and Government (LPG) Hospitality and Tourism (HT)

Are you interested in…	*Can you…*	*Do you enjoy…*
☐Aging Adults ☐Child Development ☐Counseling ☐Family & Social Services ☐Food Preparation ☐Owning Your Own Business ☐Teaching ☐Working with People	☐Assume Leadership ☐Be Conscientious and Dependable ☐Be Creative ☐Communicate Well ☐Organize Well ☐Plan and Direct Programs ☐Plan Budgets ☐Use Interpersonal Skills ☐Work with a Team	☐Communication Services ☐Counseling and Advising People ☐Handling Customer Complaints ☐Helping and Protecting Others ☐Interviewing People ☐Searching for Answers to Human Problems ☐Selling Products or Services ☐Serving Others' Needs ☐Working with People

If you answered "yes" to most of these questions, you might consider a future in one of the sample occupations listed below based on their level of post-secondary training.

Sample Careers

Entry (OJT)	*Technical/Skilled (1-3 yrs)*	*Professional (4 or + yrs)*
Aerobics Instructor (HT) Armed Services Career (LPG) Bailiff (LPG) Baker (HT) Cosmetics Representative (CPC) Dry Cleaning Operator (CPC) *Home Care Aide (CPC) Home Health Aide (CPC) Library Assistant (E) Postal Services Worker (LPG) Security Guard (LPG) *Teacher's Assistant (C) Textile Alternation (CPC) Travel Agent (HT) Utility Worker (LPG) Waitress (HT)	Armed Services Career (LPG) Barber (CPC) Bartender (HT) Chauffeur (HT) Chef (HT) Cosmetologist (CPC) Crime Lab Technician (LPG) Fashion Designer (CPC) Firefighter (LPG) Flight Attendant (HT) Manicurist (CPC) Massage Therapist (CPC) Meat Cutter (HT) Mortician (CPC) Personal Trainer (CPC) Postmaster (LPG) Teacher's Aide (E) Truck Driver (CPC)	Athletic Agent (HT) City Manager (LPG) *College Professor (E) Criminologist (LPG) Executive Chef (HT) FBI Agent (LPG) Food Services Manager (HT) Funeral Director (CPC) Hotel/Motel Management (HT) Lawyer (LPG) Marriage & Family Therapist (CPC) Mental Health Counselor (CPC) Park Ranger (LPG) Parole Officer (LPG) *Principal (E) *Teacher (E) Workforce Director (LPG)

***High Priority Occupations**—job categories that are in demand by employers, have higher skill needs, and are most likely to provide family sustaining wages*

Human Services (HS) Pathway (UPHS classes)	
“A” Choir	Forensics
Anatomy and Physiology	Health I & II
AP Psychology	Introduction to Political Science
AP United States History	Music Production
AP World	Orchestra
Concert Band/Marching Band	Show Choir
Cosmetology (Western Center)	Sociology/Modern Social Problems
Culinary Arts (Western Center)	Sports and Entertainment Marketing
Early Childhood Education (Western Center)	Uptones/Women’s Choir

Engineering and Industrial Technology (EIT) Pathway

Students interested in this career pathway will pursue courses that require students to use the engineering and design process and advanced technologies to develop or improve upon an idea or product.

PATHWAY FOCUS AREAS
Construction and Architecture (C) Engineering and Engineering Technology (ET)
Manufacturing (M) Transportation, Distribution and Logistics (TDL)

Are you interested in…	*Can you…*	*Do you enjoy…*
☐Building and Construction ☐Computer Technology ☐ Design and Architecture ☐Engineering ☐Fitness and Sports ☐How things work ☐Math and Science classes ☐Precision Work ☐Production Management ☐Tools, Equipment and Materials ☐Woodworking	☐Apply science and math to the real world ☐Organize reports and people ☐Read and understand directions ☐See a task through to completion ☐Solve problems of a complex nature ☐Understand directives and read maps ☐Use a Computer	☐Building with your hands ☐Designing/working with projects, models prototypes ☐Operating tools and equipment ☐Paying close attention to detail ☐Traveling ☐Working in a lab setting ☐Working on a team ☐Working with your hands

If you answered "yes" to most of these questions, you might consider a future in one of the sample occupations listed below based on their level of post-secondary training.

Sample Careers

Entry (OJT)	*Technical/Skilled (1-3 yrs)*	*Professional (4 or + yrs)*
Baggage Handler (TDL) Carpet Installer (C) Dockworker (TDL) Drywall Worker (C) Freight Handler (TDL) *Industrial Machine Mechanic (M) Laborer (C, M, TDL) Machine Operator (M) *Roofer (C) Warehouse Worker (C, M, TDL)	Air Traffic Controller (TDL) Auto Body Repair (TDL) Auto Mechanic (TDL) Bus Driver (TDL) *CAD/CAM Technician (M & ET) Civil Engineering Technician (ET) Diesel Mechanic (TDL) Digital Designer (C & ET) Dispatch (TDL) Draftsman (C) Electric Technician (M) Grader & Dozer Operator (C) Laser Technicians (M & ET) Metal Engineering Technician (M) Motorcycle Mechanic (TDL) Production & Operating Workers Robotics Technician (ET) Supervisor (M) Taxi Driver (TDL) Truck Terminal Manager (TDL) Welder (M)	*Construction Manager (C) *Cost Estimators (C) *Nuclear Engineer (ET) Aeronautical Engineer (ET & TDL) Aerospace Engineer (ET & TDL) Airline Pilot (ET & TDL) Architect (ET & C) Astronaut (ET) Chemical Engineer (ET) Civil Engineering (ET & C) Computer Network Engineering (ET) Industrial Engineer (ET & M) Industrial Production Manager (M) Mechanical Engineering (ET & M) NASA Scientist (ET) Navigator (TDL) Petroleum Engineer (ET) Purchasing Agent (M) Technical Writer (E) Transportation Engineer (ET & TDL)
Apprenticeships Brick Mason (C) Carpenter (C) Diesel Mechanic (TDL) Electrician (C) *HVAC (C) Machinist (M) Plumber (C) Surveyor (TDL & ET)		

***High Priority Occupations**—job categories that are in demand by employers, have higher skill needs, and are most likely to provide family staining wages*

Engineering and Industrial Technology (EIT) Pathway (UPHS classes)	
Advanced Engineering Design	Energy Systems
AP Computer Science	Engineering Design
Automotive Technology (Western Center)	Heating, Ventilation, & Air Conditioning (Western Center)
Calculus	Metal Technology (Western Center)
Carpentry (Western Center)	Multi-Material Fabrication
Collision Repair (Western Center)	Pre-Calculus
Creative Design and Engineering	Programming and App Development
Diesel Technology (Western Center)	Team Design and Manufacturing
Electrical Occupations (Western Center)	

Science and Health (SH) Pathway

This Pathway is designed to cultivate students' interests in the life, physical and behavioral sciences. In addition, it involves the planning, managing and providing of therapeutic services, diagnostic services, health information and biochemistry research and development.

PATHWAY FOCUS AREAS

Health Science (HS) Agriculture, Food & Natural Resources (AFN) Science, Technology and Math (STM)

Are you interested in…	Can you…	Do you enjoy…
☐Conservation ☐Environment & Conservation ☐Food Production ☐Health Care Environment ☐Information Systems ☐Medical Research ☐Pharmacy ☐Physical Therapy ☐Radiology ☐Science and Medicine ☐Sports/Fitness	☐Apply a scientific theory to real life problems ☐Collect and analyze data from experiments ☐Pay Attention to Detail ☐Use a computer and other technology ☐Work in a lab setting or medical facility ☐Work outdoors around animals and plants ☐Work with people in need ☐Work with science and math theories	☐Developing conclusions from data ☐Diagnosing and caring for sick animals ☐Making a contribution to society ☐Medical Lab Research ☐Solving problems ☐Working on a team ☐Working on cutting edge scientific research ☐Working with numbers ☐Working outdoors with wildlife

If you answered "yes" to most of these questions, you might consider a future in one of the sample occupations listed below based on their level of post-secondary training.

Sample Careers

Entry (OJT)	*Technical/Skilled (1-3 yrs)*	*Professional (4 or + yrs)*
Animal Caretaker (AFN) Breeder (AFN) Data Entry (STM) Dialysis Technician (HS) EEG Technician (HS) Extension Service Worker (AFN) Food Conservation Worker (AFN) Hazardous Waste Technician (STM) *Home Health Aide (HS) Hospital Worker (HS) Optician (STM) Patient Care Technician (HS) Physical Therapy Aide (HS) Surgical & Mapping Technicians (STM) Wildlife Reserve Worker (AFN)	*Biological Technicians (STM) Certified Nursing Assistant (S) Chemical Technicians *Dental Hygienist (HS) Dental Lab Technician (HS & STM) *Emergency Medical Tech. (HS) Fish & Game Worker (AFN) Forest Conversationalist (AFN) GPS Technician (AFN) Licensed Practical Nurse (HS) *Medical Lab Technician (HS) Nano Technician (STM) Personal Trainer (HS) *Radiological Technician (HS) Respiratory Therapist (HS) Sound Engineer (STM) Surveyor (AFN)	Agronomist (AFN) Athletic Trainer (HS) Chemist (STM) Dietician (HS) *Environmental Scientist (STM) Geneticist (STM) Geologist (AFN) Marine Biologist (AFN) Medical Examiner (HS) *Nuclear Engineer (STM) *Pharmacist (HS) *Physical therapist (HS) Physician (HS) *Psychiatrist *Physician Assistant (HS) Registered Nurse (HS) Soil Conversationalist (AFN)

	*Veterinary Technician (AFN)	Speech/Language Pathologist (HS) Statistician (STM) *Veterinarian (AFN) Zoologist (STM)

***High Priority Occupations**—job categories that are in demand by employers, have higher skill needs, and are most likely to provide family sustaining wages*

Science and Health (SH) Pathway (UPHS classes)	
Anatomy and Physiology	Fitness and Sports Nutrition
AP Computer Science	Forensics
AP Psychology	Health I & II
Biology	Health Science Technology (Western Center)
Biomedical Science (Western Center)	Introduction to Engineering
Calculus	Physics
Chemistry	Programming and App Development
Dental Occupations (Western Center)	Sports Medicine (Western Center)
Environmental Science	Statistics

COURSE DESCRIPTIONS

English

011 English 9 Academic Year Credit 1.00

Man's Inhumanity to Man

This course provides students with opportunities to further their skills in reading, writing, speaking, and listening with a focus on maintaining Common Core Standards in English, and prepares students for post-secondary education and careers. English 9 Academic is an examination of the social and personal implications of the unfair and inhumane treatment of peoples throughout Western History. The theme of this course questions the nature of humanity through an analysis of works including *Romeo and Juliet, A Christmas Carol, All Quiet on the Western Front, and Animal Farm.* Additionally, works of contemporary and current non-fiction texts, as well as poetry, are supplemented to further this theme. Writing is a central component of the course with specific emphasis on structure, focus and organization to help students further develop their written communication skills.

012 English 9 Honors Year Credit 1.00

The Indomitable Nature of the Human Spirit

This course examines the concept of the indomitable nature of the human spirit when faced with adversity through a close and detailed analysis of complex texts while challenging a student's ability to think and write critically about them. This theme is explored in great depth using works of fiction including *Romeo and Juliet*, *Animal Farm, A Christmas Carol, Shooting an Elephant, A Modest Proposal, The Moon is Down, Antigone,* and *All Quiet on the Western Front,* as well as various selections of non-fiction and poetry. English 9 Honors is a course designed to provide students with significant opportunities to demonstrate higher-order thinking skills, and emphasize creative and evaluative tools with a distinct focus on developing multiple modes of writing and academic style in preparation for Advanced Placement courses. Essential to success in this course is the ability to read, discuss, and write rigorously and independently about literature and its connection to society as a whole.

021 English 10 Academic Year Credit 1.00

The Need for Equality and Community

This course is an examination of cultural universals, globalization and the multicultural nature of these topics, comparing and contrasting them with the American experience. In addition, skills in reading, writing, speaking, listening, research and higher order thinking are developed. This course also emphasizes skills needed in the rapidly evolving workplace, as well as those needed for success in Keystone/ SAT testing and for continuing vocational education. It is geared toward students entering the workforce and/or entering vocational education schools upon graduation.

022 English 10 Honors Year Credit 1.00

The Need for Equality and Community

This course is an examination of cultural universals, globalization and the multicultural nature of these topics, comparing and contrasting them with the American experience. In addition, skills in reading, writing, speaking, listening, research and higher order thinking are developed. This course also emphasizes skills needed in the rapidly evolving workplace, as well as those needed for success in Keystone/ SAT testing and for higher education. The rigor and pace of this course is beyond that of the Academic with more reading, independent study and increased writing requirements. In addition, a greater variety of enrichment activities are made available to students who wish to challenge themselves with additional supplemental assignments. This course is geared toward students planning to attend college upon graduation. Recommended for students who currently maintain an "A" in English 9 Academic or a "B+" in English 9 Honors.

031 English 11 Academic Year Credit 1.00

The Changing Nature of the American Dream

This course is an examination of the American Dream and its constant shift in meaning since its inception. Students will explore this idea by examining various works of literature including, *Of Mice and Men, The Great Gatsby, A Raisin in the Sun, The Catcher in the Rye and The Things They Carried* in addition to various works of poetry. These works are balanced with relevant selections of non-fiction, both historical and contemporary, that allow students to focus on analysis skills and reading strategies tied to focused writing pieces. Students will also be required to complete two long-term research projects centered on literary criticism and a non-fiction topic. This course is intended to reinforce basic reading analysis and writing skills while providing students with opportunities to participate in thoughtful and focused discussions in preparation for post-secondary pursuits.

032 English 11 Honors Year Credit 1.00

The Search for Meaning and the American Dream

This course is an examination of the search for meaning in our public and personal lives through the definition and ever-changing nature of The American Dream. The course provides an overview of this theme using fiction and non-fiction from the early 1900s through present day including, but not limited to works such as *The Great Gatsby, Death of a Salesman, The Catcher in the Rye,* and *One Flew Over the Cuckoo's Nest* in addition to focused units on poetry and drama. The course also includes a long-term literary analysis research project to further develop and enhance research skills that promote higher-level thinking opportunities. Using appropriate learning strategies and a variety of media, student instruction is focused on developing supporting evidence and style in writing while teaching students how to independently search for knowledge, in addition to focused independent reading, analysis, and advanced discussion skills. Recommended for students who currently maintain an "A" in English 10 Academic or a "B+" in English 10 Honors.

035 AP Language and Composition/American Literature – Grade 11 Year Credit 1.00

Advanced Placement Language and Composition is a year-long course that requires students to become skilled readers of prose written in a variety of rhetorical contexts as well as genre conventions and language choice that contributes to an author's purpose. In doing so, students will read a variety of non-fiction, poetry and classical texts taught in American Literature such as *The Scarlet Letter, Death of a Salesman, The Great Gatsby,* and *The Catcher in the Rye*. Students will be expected to complete readings and essays independently and regularly participate as part of in-depth discussions during class, as well as give detailed presentations on a regular basis. Additionally, writing will focus on rhetorical analysis, persuasion and argumentation, and synthesis in preparation for the national Advanced Placement Test given in May. Recommended for students who maintain an "A" average in their current English course.

037 Film Production – UPN - Grades 9, 10, 11, 12 Semester Credit 0.50

You are that person that can't just a watch a movie. If the title of this course has peaked your interest, keep reading. From basic Cinematography to set lighting, lens choices, camera choices and so many other cinematic concepts- you are starting Film School in this course.Students study Action, Thrillers, Epics and Dramas by watching and reacting to the content of films and theories and intentions of the directors. Then, it's your turn to be on the crew of real films. Students write, direct and produce original short films, as well as perform the various roles in film production from acting to props management and set design. This is a performance-based class and students should be comfortable with computer and video technology, as well as writing. Students enrolled in this course will also have the chance to enter all of their films into local and regional film festivals in which the instructor has already guided dozens of students to top honors and scholarships for their work.

038 News Production - UPN - Grades 9, 10, 11, 12 Semester Credit 1.0

An introduction into the world of TV/Video Production as well as the creation of original News and TV Shows. Students who enroll in this course should have an interest in broadcast journalism and be ready to learn video production, editing, scriptwriting, and control room/studio tasks. Aside from having those desired skills, students enrolled in UPN should be self-directed, self-motivated and willing to work as part of a team. Students who elect this class must be self-directed and self-motivated.

039 Sports Broadcasting - Grades 9, 10, 11, 12 Semester Credit 0.50

Are you ready to produce professional level Sports videos for TV and Digital Media? Then, this is the course to get you started! From Camcorders to DSLR cameras and even your own Smartphone and tablet, you are about to dive in head first into the world of Sports Broadcasting and Sports Video Production! In this class, we shoot sports and entertaining videos on and around the campus as well as use popular videos and films to teach the concepts that help create them. Then, we teach you how to use the same to create your own. This is a performance-based class and students should be comfortable with computer and video technology, as well as writing. Students enrolled in this course will also have the chance to enter all of their Sports feature stories, documentaries ad play-by-play broadcasts into local and regional film festivals in which the instructor has already guided dozens of students to top honors and scholarships for their work.

040 TV and Film Production Two – Grades 10, 11, 12 Semester Credit 0.50

It's time to master filmmaking, Video Production and Digital Storytelling! In this master class, you will do it all and take all of the skills you have attained in the first level UPN courses and create a digital resume of professional projects! Are you ready for the

master level of all things TV and Film? This course can be taken multiple times for credit. Pre-requisite: Film Production, News Production 2- UPTV, News Production 1- UPN, Sports Broadcasting

041 English 12 Academic Year Credit 1.00
This course will focus on occupational literacy and is designed for the student who intends to enter the workplace, technical school, or enroll in college. The course will aid the student in enhancing and refining skills in communications needed for his or her future employment areas. The student will read and respond to a variety of types of non-fiction and literature from various types of media and sources, as well as investigate information concerning career goals. Overall, emphasis will be on practical and workplace usable language arts skills, individualized to a student's career goals.

042 English 12 Honors *(MCCC Dual Enrollment)* Year Credit 1.00
This course focuses on writing the college-level research paper and British Literature for college bound students. Students will develop mastery of communication, information literacy, and analytic skills with emphasis placed on research, documentation methods, and the study of literature; they will develop these skills in writing various types of essays: comparison-contrast, exemplification, and literary analysis. Furthermore, after sequenced instruction in research methods, students will analyze and evaluate primary and secondary sources to develop and synthesize a persuasive-argumentative thesis driven research paper using MLA documentation.

044 Film as Literature Academic - Grade 12 Year Credit 1.00
This course is designed to familiarize students with film genres, terminology, and techniques; to analyze film through literary modes; to sharpen critical analysis of all aspects of film; and to instill an appreciation of film as a cultural medium and an art form, not just entertainment. Primarily the course is designed to encourage students to learn to view film as a form of literature and apply the skills they have acquired in their previous English classes in a different medium while simultaneously continuing to build their thinking and writing skills. Within the course students will read two works that will be analyzed and compared to film adaptations. Students will be evaluated primarily through project-based assessments with a topic-focused research paper at the end of the course.

045 Film as Literature Honors - Grade 12 Year Credit 1.00
Honors Film as Literature is an intensive course designed to teach students how film functions as a form of literature. The course will aid students in learning how to be conscientious viewers and consumers of media and culture. Students will be provided with a rigorous instruction where they will be expected to understand motifs, symbols, metaphors, allusions, plot, theme, and other literary elements as they relate to both film and literature. In addition, students will develop an appreciation for the interaction of film elements such as scripting, directing, acting, producing, lighting, sound, music, editing, cinematography, special effects, set design and costuming. Throughout the course students will discuss, write, and analyze the integration of these elements. In addition to viewing films, students will write 4-5 papers, including a variation on the traditional research paper, as well as read three works.

046 Short Fiction Academic - Grade 12 Year Credit 1.00
Short Fiction: Other Voices in Modern and Contemporary Literature: The Short Fiction course will guide and encourage students to explore short stories and short novels (novellas) on a number of levels, including elements of fiction, various techniques of writing fiction, and themes. Theme, the broadest and most open for interpretation, will be a major focus; it may involve applications to authors, applications to issues of the times (for authentic connections), applications of various methods of literary analysis, and perhaps, the most common, applications to the human condition. In addition, the course will look at how literary form may affect or reflect presentation or perception of theme. Furthermore, after sequenced instruction in research methods, students will analyze and evaluate primary and secondary sources to develop and synthesize a thesis driven research paper using MLA documentation.

050 AP Literature & Composition - Grade 12 (*MCCC Dual Enrollment)* Year Credit 1.00
AP English Literature and Composition is a college level course in literature, criticism, and composition. This course is for highly motivated and talented 12th grade college bound students. The course will focus on a variety of world literature in the various genres (poetry, short story, drama, and novel). Literary criticism and the writing of critical papers, utilizing primary and secondary sources, will be assigned on a weekly basis. Extensive reading, research, writing and analysis will be required, leading to the taking of the Advanced Placement examination in the spring. The course is an elective for qualified students with instructor approval. AP English Literature and Composition is also a Dual-Enrollment course and may be taken for three college level credits through Montgomery County Community College. Recommended for students who maintain an "A" average in their current English course.

English Support Programs……

170 Foundational Reading Year Credit 1.00
The purpose of this course is to offer remediation in reading to students who have an IEP.
This course is open to the following students: Those who have been identified as needing remediation through the results of pretesting and scores of below basic or basic on the PSSA test. Prerequisite - must have an IEP and Special Education Teacher Signature.

171 English 9 Year Credit 1.00
This English course is taken in lieu of a regular English course. The course addresses the individual needs of the student, based on the student's IEP. Prerequisite - must have an IEP

172 English 10, 11, 12 Year Credit 1.00
This English course is taken in lieu of a regular English course. The course addresses the individual needs of the student, based on the student's IEP. Prerequisite - must have an IEP

030 Keystone Literature Support 10, 11 Semester Credit 0.50
This course is taken concurrently with other English courses, and is designed to support students with the Keystone Literature curriculum. Students will also receive instruction on the basics of test taking (such as Keystones, PSAT and SAT). This course will be required for students who are identified (using previous math grades, MAP, and Keystone exams) as needing remediation. This course cannot be used as an English credit towards graduation. Any Grade 11 student who scored below proficient in Literature on the Keystone Exam will be scheduled into this course.

Social Studies

111 Social Studies 9 Academic Year Credit 1.00
Academic Introduction to Western Civilization:
This is a survey course that focuses on the development of Western Civilization from the Enlightenment to the 20th century in Europe. The course is designed to focus on reading comprehension, critical thinking, speaking and listening skills. Using 21st Century skills, students will connect the past with the modern era in an attempt to better understand their place in the world. The curriculum and skills will focus on preparation for high school academic expectations and standardized tests.

112 Social Studies 9 Honors Year Credit 1.00
Honors Introduction to Western Civilization
This is an accelerated and enriched course that focuses on the significant development of Western Civilization from the Enlightenment to the 20th century in Europe. This course incorporates a rigorous workload that includes extensive reading and writing, critical thinking and analysis of both primary and secondary sources. Course work is accomplished in and outside the classroom and involves independent study activities. Students will complete a project that focuses on using historical research skills. Utilizing 21st Century skills, students will connect the past with the modern era in an attempt to better understand their place in the world. This course is recommended for students who are taking Honors English 9.

121 Social Studies 10 Academic Year Credit 1.00
Academic Introduction to World Cultures/Regional Studies and American Government
The majority of this course focuses on the Non-Western world, including the Middle East, Africa, India, China, Japan, and Korea, with an emphasis on their connection and comparison to American society. Additionally, the course provides students with an overview of the fundamental principles of government with an emphasis on the American political system. Embedded in the course are developmental opportunities for increasing reading, writing, speaking, listening, research, and higher order thinking skills. This course will enhance the students' ability to connect the past with the present in an attempt to better understand and undertake their roles in the modern world. The curriculum and skills will focus on preparation for high school academic expectations and standardized tests.

122 Social Studies 10 Honors Year Credit 1.00
Honors Introduction to World Cultures/Regional Studies and American Government
This is an accelerated and enriched course, that will focus primarily on the Non-Western world, including the Middle East, Africa, India, China, Japan, and Korea, with an emphasis on their connection and comparison to American society. The remaining part of the course focuses on the fundamentals, principles, and theories of government with particular emphasis on the American form. This

course incorporates a rigorous workload that includes extensive reading and writing, critical thinking and analysis of both primary and secondary sources. Course work is accomplished both in and outside the classroom and involves substantial independent study activity. Students will complete a project that will focus on the use historical inquiry, analysis, and interpretation skills . This course will enhance the students' ability to connect the past with the present in an attempt to better understand and undertake their roles in the modern world. The course is recommended for students who currently have a "A" average in the Academic level or an "B+" average in the Honors level in 9th grade Social Studies.

123 AP World History – Grade 10 Year Credit 1.00

This is a college level course designed to develop students' abilities to think conceptually about world history from approximately 8000 BCE to the present and apply historical thinking skills as they learn about the past. Five themes of equal importance — focusing on the environment, cultures, state-building, economic systems, and social structures — provide areas of historical inquiry for investigation throughout the course. AP World History encompasses the history of the five major geographical regions of the globe: Africa, the Americas, Asia, Europe, and Oceania, with special focus on historical developments and processes that cross multiple regions. The course is recommended for students who maintain an "A" average in 9th grade Honors Social Studies and Honors English.

131 Social Studies 11 Academic Year Credit 1.00

U.S. History and the American Dream:

This course examines U.S. history and the endearing concept of the American Dream and the changing nature of that Dream. The course provides a survey of this theme from the 1920s to the present. The historical development of what it means to be an American, as well as the challenges all humans face in pursuit of the Dream socially, economically, and politically. In addition, an emphasis will be placed on the development and use of 21st Century skills. The curriculum and skills will focus on preparation for high school academic expectations and standardized tests.

132 Social Studies 11 Honors Year Credit 1.00

U.S. History and the American Dream:

This course is a survey of American history from the 1920s to the present day. The primary focus of this course is to study and understand how historical events since the 1920s have influenced and changed the meaning or significance of the American Dream to the American citizen. The course is taught with the goal of making students aware of the events that have shaped modern America so that students can become well-informed citizens. This course incorporates a rigorous workload that includes extensive reading and writing, critical thinking and analysis of both primary and secondary sources. Course work is accomplished both in and outside the classroom. In addition, an emphasis will be placed on the development and use of 21st Century skills. The curriculum and skills will focus on preparation for high school academic expectations and standardized tests. The course is recommended for students who currently have a "A" average in the Academic level or an "B+" average in the Honors level in 10th grade Social Studies.

142 Introduction to Political Science - Grade 12 Year Credit 1.00

This academic course will investigate contemporary America and international political events and will consider the impact of those events socially, economically, and politically on a global scale. An analysis of the U.S. Constitution will be completed in order to better understand our freedoms, our rights, and our duties and the limitations to those freedoms and rights in preservation of a democratic society.

145 Sociology/Modern Social Problems - Grade 12 Year Credit 1.00

This course will examine social behavior and human groups. It will focus primarily on the influence of social relationships on people's attitudes and behaviors and on how societies are established and change. Topics of study will be culture, society and social interaction, the socialization process, deviance, social stratification (class/race/gender), the family, education, urbanization, population, and the environment.

146 AP European History - Grade 12 Year Credit 1.00

This is a college level course covering European History from the Renaissance to the fall of communism in Eastern Europe. Students will examine the social, economic, political, technological, and artistic changes that have occurred in Europe over the past six centuries. A college level textbook, supplemental readings and works of art will be used to enhance the learning experience and prepare the students for the national advanced placement examination in May. The course is recommended for students who have an "A" average or higher in their current Social Studies and English Courses.

149 AP Psychology – Grade 12 Year Credit 1.00

This is a college level course designed to introduce students to the systematic and scientific study of the behavioral and mental processes of human beings.. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice. The course is recommended for students who maintain an "B+" average or higher in 9th, 10th, and 11th grade Social Studies and English.

150 AP United States History - Grades 11 Year Credit 1.00

AP United States History is a course for highly motivated and talented students that cover pre-revolutionary times through the Reagan era. The course emphasizes interpretation and analysis of American History. Resources include a textbook, supplemental texts and selected readings from primary and secondary sources. This is a college-level course in content, reading, and writing, and is designed to give the student a collegiate experience and to prepare for the national advanced placement examination in May. The course is recommended for students who have a "B+" average in 10th Grade Honors Social Studies and Honors English or an "A" average in Academic level Social Studies and Academic English.

Gifted Program (G.I.E.P.)…….

010 Gifted Seminar – Grades 9, 10, 11, 12 Semester Credit 0.50

This elective course promotes open-ended problem solving, design thinking, critical thinking, independent inquiry and experimentation. The course encourages students to explore topics to which they have a personal connection. Prerequisite – Students with a G.I.E.P. only.

020 Humanities English 10 Gifted Year Credit 1.00
120 Humanities Social Studies 10 Gifted Year Credit 1.00

The primary purpose of the Humanities curriculum is to expose the student to the subject areas which deal with man as a human being, with the development of his ideas through successive periods in history, with the influences which have formulated those ideas, and with the cultural creations, intellectual or artistic, which have grown out of his ideas. The class is designed to facilitate discussion and dialogue through an atmosphere which encourages the student to express his/her opinions and to accept, tolerate, or challenge the viewpoint of others. This course is taken in place of English 021and Social Studies 121. It is team taught by English and Social Studies teachers. These courses are open to students who have been identified as mentally gifted (G.I.E.P.) Prerequisite – Students with a G.I.E.P. only.

Mathematics

Recommended course sequences in Mathematics ***(READ DOWN)***

Grade	Academic	Honors
9	Foundational Math and Proficiency and Development in Mathematics or Algebra I	Geometry (H) or Algebra II (H)
10	Algebra I or Geometry	Algebra II (H) or Algebra III (H)
11	Geometry or Algebra II	Algebra III (H) or AP Statistics or Pre-Calculus (H) or Calculus or AP Calculus
12	Algebra II or Statistics or Pre-Calculus or Calculus	

211 Algebra I – Grades 9, 10, 11, 12 Year Credit 1.00

Algebra I is designed for 9th grade students. The approach is from the modern viewpoint yet retains all the important traditional algebra concepts related to families of functions, solving equations, graphing, factoring, systems of equations, rational and radical expressions. In addition, the topics of sequences and quadratics are explored. The student will use mathematical vocabulary, problem solving skills, and applications of mathematics as they relate to the modern world. **It is strongly recommended that the student have a graphing calculator such as a TI-84C.**

212 Algebra II – Grades 9, 10, 11, 12 Year Credit 1.00

The course in second level algebra is devoted to a study of rational and real number systems and the properties of numbers. Definitions of important words are studied as well as theorems and postulates which are used in algebraic operations. Concepts learned in Algebra I such as the fundamental operations with polynomials, factoring, exponents, and radicals, and equations and inequalities are reviewed and extended. This background material provides a foundation for the study of functions which comprises a large part of the course. Included is a general study of relations and functions, linear functions, quadratic functions, cubic functions, piecewise functions, rational functions and polynomial models, and sequences and series. **It is strongly recommended that the student have a graphing calculator such as a TI-84C.** It is recommended that a student earns a C or better in Algebra I before taking this course.

213 Algebra II – Honors – Grades 9, 10, 11 Year Credit 1.00

Algebra II Honors is a more rigorous study of topics covered in Algebra II (see description for Algebra II); additional honor topics may include binomial theorem, Pascal's triangle, solving rational equations and geometric series. Graphing calculators are an integral part of studying functions and solving problems with Algebra. **It is strongly recommended that the student have a graphing calculator such as a TI-84C.** It is recommended that a student earns a 93% or better in Algebra I before taking this course.

220 Geometry – Grades 9, 10, 11, 12 Year Credit 1.00

Geometry is offered to our academic students in a program designed to encourage mathematical exploration, discovery, practice, and application. The course provides students opportunities to investigate geometric situations, develop conjectures, and prove their conjectures using a variety of methods. Both two-dimensional and three-dimensional concepts are analyzed throughout the course. **It is strongly recommended that the student have a scientific calculator such as a TI-30XIIS.**

221 Geometry - Honors – Grades 9, 10, 11 Year Credit 1.00

Geometry Honors is a rigorous course comprised of all Geometry topics with additional emphasis given to logical thinking and writing of definitions and proofs. Synthetic and coordinated approaches to geometry are included to help students understand and communicate the interrelated ideas of Algebra and Geometry. **It is strongly recommended that the student have a graphing calculator such as a TI-84C.** It is recommended that a student earns a 93% or better in Algebra I before taking this course.

222 Statistics – Grades 11, 12 Year Credit 1.00

This introductory statistics course is designed for the college-bound 11th or 12th grade students who are not necessarily math or science majors. Students will learn how to summarize sets of data by finding and interpreting measure of center, variation, and distribution. Descriptive and Inferential statistics will be studied. Topics will include probability distributions, confidence intervals, hypothesis testing, and several other areas of statistical analysis. Significant emphasis will be placed on the empirical rule and its application to many real-life applications. **It is strongly recommended that the student have a graphing calculator such as a TI-84C.** It is recommended that a student earns a passing grade in Algebra II before taking this course.

223 AP Statistics – Grades 11, 12 Year Credit 1.00

This course will involve the study of four main themes that are identified in the Course Overview of the Course Description for AP Statistics (College Board). The four areas are as follows: exploratory analysis, planning a study, probability, and statistical inference. The theoretical statistical methods mentioned within the four main areas will be studied and applied to real-life examples. This course is equivalent to a first year college statistics course and may permit the student to avoid taking a statistics course in college. **It is mandatory that the student have a graphing calculator such as a TI-84C.** Visit the following website for specific information: https://apcentral.collegeboard.org/courses/ap-statistics/exam#free-response It is recommended that a student earns a C or better in Algebra III before taking this course.

224 Algebra III – Grades 10, 11, 12 Year Credit 1.00

Algebra III provides refinement and extension of Algebra concepts learned in the previous levels with an increased emphasis on applying the process of mathematical modeling using real-life data applications. Topics include quadratic, rational, radical/rational exponent, exponential and logarithmic functions, sequences and series, trigonometry and conics. This course is offered to academic students in a program designed to encourage mathematical exploration, discovery, practice and application where the graphing calculator is an integral tool. **It is strongly recommended that the student have a graphing calculator such as a TI-84C.** It is recommended that a student earns a C or better in Algebra II before taking this course.

225 Algebra III - Honors – Grades 10, 11, 12 Year Credit 1.00

Algebra III Honors is a more rigorous study of topics covered in Algebra III (see description for Algebra III). Honor topics may include optimization, fractals, periodic functions and trigonometry. Graphing calculators are an integral part of studying functions and

solving problems with Algebra. **It is strongly recommended that the student have a graphing calculator such as a TI-84C.** It is recommended that a student earns a C or better in Algebra II Honors or an A or better in Algebra II before taking this course.

230 Pre-Calculus - Grades 10, 11, 12 Year Credit 1.00
Pre-Calculus contains units of study which are the foundations of more advanced courses such as calculus. The basic elements of the course show the relationships between algebra and geometry and provide a basis for the applications of mathematics. The first half of the course examines the polynomial, rational, exponential and logarithmic functions. The properties of these functions build an appreciation of the wide range and depth of the study of functions in theory and application. The second half of the course is Trigonometry, where the properties, applications and graphs of functions and trigonometric functions are studied and evaluated. Graphing calculators are an integral part of studying functions and solving problems with Pre-Calculus. **It is required that the student have a graphing calculator such as a TI-84C.** It is recommended that a student earns a C or better in Algebra III or Algebra III Honors before taking this course.

231 Pre-Calculus - Honors - Grades 10, 11, 12 Year Credit 1.00
Pre-Calculus Honors is a more rigorous study of topics in Pre-Calculus (see description for Pre-Calculus). In addition to the pre-calculus topics, honors topics include partial fractions, sequences and series, and an introduction to conics. Topics may also include parametric and polar equations, an introduction to limits and other calculus topics. Graphing calculators are an integral part of studying functions and solving problems with Pre-Calculus. **It is required that the student have a graphing calculator such as a TI-84C.** It is recommended that a student earns a C or better in Algebra III Honors before taking this course.

240 Calculus - Grades 11, 12 Year Credit 1.00
This is a college level mathematics course in differential and integral AB level calculus of one variable. It includes the study of functions and limits done numerically, algebraically and graphically. Techniques of both differentiation and integration are studied and then applied to optimization, related rates, area and volume problems. A graphing calculator is required. **It is required that the student have a graphing calculator such as a TI-84C.** It is recommended that a student earns a B or better in Pre-Calculus or a C or better in Pre-Calculus Honors before taking this course.

241 AP Calculus - Grades 11, 12 Year Credit 1.00
This course will take the AB level concepts and techniques introduced in Calculus and apply them to more challenging problem solving situations. Students will prove theorems and practice questions in an AP Calculus exam format. They will study additional BC level AP topics such as integration by parts, lengths of parametric, vector and polar curves and Maclaurin and Taylor series. S**tudents are required to have a graphing calculator capable of finding the zeros of a function and numerically calculating a derivative and definite integral.** This course must be taken within the same school year as Calculus.

Math Support Programs……..

208 Foundational Math - Grades 9, 10 Year Credit 1.00
This course is offered to students in Grade 9 who would like to continue to progress in mathematics but are not prepared for the quick pace of Algebra I. The course is part of the Algebra readiness sequence. This arrangement gives the student a review of basic computational skills. The pace of the course allows for additional practice, and therefore students will have a greater chance of understanding and succeeding in the study of Algebra. The course reviews concepts from arithmetic and shows the student how numbers and operations are related and builds a clearer conceptual understanding of mathematics, which is necessary for success in Algebra I. The course develops the basic concepts of algebraic systems and introduces graphing on the coordinate plane. Prerequisite – Teacher recommendation.

210 Proficiency Development in Mathematics -Grades 9, 10, 11 Year Credit 1.00
This is course is of the Algebra readiness sequence builds on the concepts developed in Foundational Math or CPM 8 so that the student learns to solve equations with two variables, to solve quadratic equations and to work with radicals and irrational numbers. Prerequisite –Foundational Math

214 Keystone Algebra - Grades 9, 10, 11 Semester Credit 0.50
This course is taken concurrently with other math courses, and is designed to support students with the Keystone Algebra I curriculum. Students will also receive instruction on the basics of test taking. This course will be required for students who are identified (using previous Keystone exams) as needing remediation. This course cannot be used as a math credit towards graduation. Any Grade 9-11 student who scored below proficient in Algebra 1 on the Keystone Exam will be scheduled into this course.

Science

Recommended course sequences in Science (READ DOWN)

Grade	Academic	Honors
9	Biology Academic or Integrated Science Systems	Biology Honors
10	Biology Academic or Chemistry Academic or Physics Academic or Environmental Science Academic	Chemistry Honors Physics Honors
11	Chemistry Academic or Energy, Matter and Motion or Physics Academic or Environmental Science Academic or Forensics or Anatomy & Physiology Honors or Principles of Engineering	Environmental Science Honors or AP Biology or AP Physics or AP Chemistry or AP Environmental Science Forensics or Anatomy & Physiology Honors or Principles of Engineering
12	Chemistry Academic or Energy, Matter and Motion or Physics Academic or Environmental Science Academic or Forensics or Anatomy & Physiology Honors or Principles of Engineering	Environmental Science Honors or AP Biology or AP Physics or AP Chemistry or AP Environmental Science Forensics or Anatomy & Physiology Honors or Principles of Engineering

312 Biology Academic - Grade 9, 10, 11 Year Credit 1.00

This course includes a practical approach to the study of life sciences. Development of laboratory skills and concept formation is stressed and students are expected to be able to apply principles learned in the classroom to practical situations. Students are required to take the PA Department of Education Biology Keystone Exam at the end of this course.

313 Biology Honors - Grades 9, 10 Year Credit 1.00

This course provides a rigorous introduction to biology, with emphasis on laboratory experience, analytical problem-solving and concept formation. This course is centered on the theories of molecular and cellular biology and is intended for those ninth and tenth grade students who have demonstrated ability in previous science courses. Students are required to take the PA Department of Education Biology Keystone Exam at the end of this course. Honors Course recommendation determined by a combination of Biology Readiness Assessment (8th grade) and standardized test scores. It is recommended students have earned an "A" in 8th grade science and "A" or "B" in Algebra I.

320 Chemistry Academic - Grades 10, 11, 12 Year Credit 1.00

This course is designed to familiarize non science majors with fundamental facts, principles, and techniques of chemistry. It also provides a foundation in chemistry for students who may want to take honors courses in science but need an additional semester to gain confidence. It is recommended that students have a passing grade in Algebra I to successfully complete the course.

321 Chemistry Honors - Grades 10, 11, 12 Year Credit 1.00

The Honors Chemistry Program is intended to help students learn complex scientific concepts using a dynamic online environment coordinated with in-class lectures and laboratory experiments. In-class lectures will cover all pertinent theory including, but not limited to, measurements and calculations, matter, representative particles, nomenclature, chemical reactions, (both general and in aqueous solutions), chemical composition and quantities, stoichiometry, energy, modern atomic theory, chemical bonding, and properties of gases, liquids, and solids. In the laboratory, experiments will focus on analysis of data, problem-solving through the use of scientific inquiry, and practice methods using Vernier Go Direct technology. The Honors Chemistry course prepares students for Advanced Placement Chemistry. A solid math foundation is necessary in order to participate in this theoretically oriented in–depth study of selected topics. It is recommended students have earned at least a "B" in Algebra II and a "B" in Honors Biology.

323 AP Chemistry - Grades 11, 12 Year Credit 1.00

The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first college year. For some students, this course enables them to undertake, in their first year, second-year work in the chemistry sequence at their institution or to register in courses in other fields where general chemistry is a prerequisite. For other students, the AP Chemistry course fulfills the laboratory science requirement and frees time for other courses. Prerequisites – Chemistry Honors.

327 Forensic Science – Grades 11, 12 Year Credit 1.00

Forensic Science is an advanced science course that will provide an introduction to criminalistics and forensics. Students will apply foundations of biology, chemistry, physics, anatomy and mathematics as well as use a wide range of lab techniques to process and analyze evidence found at simulated crime scenes. In addition, students will develop their thinking and writing skills as they read and critically review case studies of actual crimes. This course is intended for upper level science students who have successfully completed biology and chemistry or physics and show an aptitude in writing and math.

328 Principles of Engineering - Grades 11, 12 Year Credit 1.00

In this course students will be using scientific and engineering concepts to learn about the various areas of engineering. The may include: mechanical, civil, and bioengineering. Students will then use these science concepts and the engineering process to complete engineering challenges in each of these areas. Examples of these might include mousetrap cars, creating prosthetic limbs, and creating water treatment systems.

329 Physics Academic - Grades 10, 11, 12 Year Credit 1.00

Physics Academic focuses on the study of motion and its causes. Concepts studied include acceleration, forces, motion in one and two dimensions, friction, momentum, energy, and rotational motion. The course is algebra based and is a good application course for Algebra II. Hands-on Labs and projects are integral to the course. The course exposes students to skills that provide good preparation for college. Prerequisite – Algebra II and Geometry.

330 Physics Honors - Grades 10, 11, 12 Year Credit 1.00

Physics Honors students will study motion and its causes with an emphasis on analytical problem-solving and real-world applications. Concepts studied include acceleration, forces, motion in one and two dimensions, friction, momentum, energy and rotational motion. Students will be required to communicate their understanding of the concepts through mathematical, written, and oral means. Prerequisites – Geometry and Algebra II. This course is recommended for any student who plans to major in a STEM {Science, Technology, Engineering, and Mathematics} field in college.

331 AP Physics - Grades 11, 12 Year Credit 1.00

AP Physics is a continuation of mechanics concepts taught in Honors Physics I (forces, acceleration, projectile motion, momentum, energy, and rotational motion). AP Physics will explore the concepts of electrostatics and electricity, electromagnetic waves, sound, and simple harmonic motion. These are all the concepts necessary for students to take the AP Physics I test. With the time left in the course, the concepts of fluids and buoyancy, thermodynamics, optics, reflection, refraction, and more advanced electricity concepts will be taught. These concepts are more than half of the concepts needed for students to take the AP Physics II test. Inquiry, hands-on learning, labs, and projects will be an integral part of the course. Prerequisite -- Physics I Honors.

333 Environmental Science Academic - Grades 10, 11, 12 Year Credit 1.00

Environmental Science studies how man has impacted the environment. Topics for the course include air pollution like climate change and acid rain, renewable and non-renewable energy, resource management, biodiversity, and water quality. Students will also investigate ways to protect the environment and develop sustainable human systems. Students will be responsible for acquiring and analyzing data and problem solving. A key component of this course is a study of the Upper Perkiomen Watershed that includes field studies of the Macoby Creek and the Green Lane Reservoir.

336 Anatomy and Physiology Honors - Grades 11, 12 Year Credit 1.00

This course is offered for 11th and 12th grade students planning to enter a medical related career. Students who are planning to enter the field of nursing or practical medicine will find this course beneficial. The major emphasis of the course will be to help students to understand their own anatomy and physiology. Recommendation - Chemistry I Honors or a “B” in Chemistry Academic.

340 AP Biology - Grades 11, 12 Year Credit 1.00

This course is a college-level biology course designed for students who wish to be challenged in science. Advanced topics in biochemistry, cell biology, molecular and classical genetics and evolution will be covered. Prerequisite – Biology Honors or Chemistry Honors and teacher approval.

345 Energy, Matter and Motion - Grades 11, 12 Year Credit 1.00

This course is an inquiry based science course in which students research and study phenomena in the world around them. Much of the learning occurs through independent experimentation and collaboration with peers. Throughout this course students build upon their science knowledge as well as develop inquiry and problem solving skills as they gain an appreciation for the role science plays in daily life. Topics include consumer research, food chemistry, fuel efficiency, and more.

350 AP Environmental Science - Grades 11, 12 Year Credit 1.00

This is a rigorous, AP level course, and all work is meant to prepare the students for the AP Test in Environmental Science while also developing a deeper understanding of the state of our local and global environment, and the problems that exist within it. The goal of this course is to provide students with the scientific principles, concepts, and methodologies to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, and to evaluate the risks associated with these problems and examine alternative solutions for resolving and/or preventing them. Course work will include written tests, current events article analyses, hands-on projects, and a significant amount of field work and laboratory work. Prerequisites: Students must have completed Biology. Students also must have either completed Chemistry, or be taking a Chemistry course concurrently.

Science Support Programs……

302 Integrated Science Systems Year Credit 1.00

Integrated Science Systems is intended to prepare 9th grade students for Biology and other sciences offered at the high school if they do not take Biology in ninth grade. This course provides a hands-on approach to the study of matter as it relates to living things. This course will be lab-oriented and will study the properties of matter, both in living things and in the physical environment.

314 Keystone Biology - Grades 10, 11 Semester Credit 0.50

This course is taken concurrently with other science courses, and is designed to support students with the Keystone Biology curriculum. Students will also receive instruction on the basics of test taking. This course will be required for students who are identified (using previous Keystone exams) as needing remediation. This course cannot be used as a science credit towards graduation. Any Grade 10-11 student who scored below proficient in Biology on the Keystone Exam will be scheduled into this course.

World Languages

Language and communication are at the heart of the human experience. With changes in our global perspectives, the ability to communicate effectively, as well as the understanding of global cultures, is of paramount importance. The mission of the Upper Perkiomen World Language Department is to produce students who are linguistically and culturally equipped to communicate successfully in our society, as well as abroad. The study of world language enhances the students' communication skills in English through a greater understanding of vocabulary, as well as structure.

National standards for world languages learning include the following:
Communication: Students engage in conversations, understand written and spoken language and present information.

Cultures: Students demonstrate an understanding of the relationship between practices and perspectives of the culture studied.

Connections: Students reinforce knowledge of other disciplines and recognize distinctive viewpoints.

Comparisons: Students demonstrate an understanding of the connections between the language studied and their own.

Communities: Students use the language both within and beyond the school setting and show evidence of becoming lifelong learners.

We advise that students begin world language study as early as possible. Intensive scheduling allows academic students to attain proficiency in more than one language, to apply their knowledge of a language other than English in courses outside the language department, and to integrate other disciplines into world language courses.

To take advantage of enrollment in one or two languages, the following possible sequences are recommended (read down):

Level I	Level I	Level I	Level I

Level II	Level II	Level II	Level II
Level III	Level III	Level I (new language)	Level I (new language)
Level IV	Level IV	Level II	Level II
Level V	Level I (new language)	Level III	
	Level II	Level IV	

FRENCH……..

411 French I – Grades 9, 10, 11, 12 Year Credit 1.00

French I emphasizes a conversational approach to the learning of the language. The development of the skills of understanding, speaking, reading and writing is stressed through the teaching of pronunciation, vocabulary and basic grammar. All these skills are enhanced by the use of the many types of audio-visual materials. Emphasis on word derivation and comparative grammatical structure ultimately enhance the students understanding of English vocabulary and structure. The development of higher order thinking skills habits will assist the student in other academic disciplines as well. Proficiency in a modern world language is an asset to the student in other academic disciplines as well.

412 French II – Grades 10, 11, 12 Year Credit 1.00

French II continues to emphasize the development of reading, writing, listening, and speaking skills in French. This is done through a conversational approach. Speaking and listening skills are developed through interactive classroom activities such as skits, presentations, and dialogues. Authentic materials, including multimedia tools, aid in strengthening reading and writing skills. Students learn how to speak about events that have occurred in the past in addition to being able to discuss the present and the future. Prerequisite - French I

GERMAN…….

421 German I *(MCCC Dual Enrollment)* **– Grades 9, 10, 11, 12** Year Credit 1.00

German I is designed to give students the ability to understand, speak, read and write simple German. Emphasis is on listening comprehension and speaking skills. Primary goals are to introduce beginning students to basic grammatical structures of the German language and a command of idiomatic expressions used in daily situations. The students begin to learn about everyday life and customs in the German-speaking countries and obtain a basic foundation in German history and culture. The teaching of comparative grammatical structure ultimately enhances the students' understanding of English vocabulary and structure. The development of higher order thinking skills and study habits will assist the student in other academic disciplines as well. Proficiency in a modern world language is an asset to any professional career choice.

422 German II *(MCCC Dual Enrollment)* **– Grades 10, 11, 12** Year Credit 1.00

German II continues the study of grammar and vocabulary and will be based on the academic skills acquired in German I. In German II, students will be introduced to more challenging grammatical concepts such as the past tense and modal verbs as well as a wider range of vocabulary to expand communicative functions in the language. Emphasis is still on listening and speaking skills, but students begin to read brief selections and write short compositions. The teaching of culture, history and geography is continued to build and broaden cultural awareness and knowledge of the life in German-speaking countries. Prerequisite - German I

423 German III– Grades 10, 11, 12 Year Credit 1.00

German III focuses on developing reading and writing skills, while still practicing listening comprehension and oral communication. Authentic material such as short stories, magazine and newspaper articles and video clips are introduced to supplement the text and workbook and sharpen reading and listening skills. The use of such material will also enhance the cultural awareness. The finer points of grammar are studied and reviewed as necessary. Students have the opportunity to work on some individual and group projects such as presentations and research papers. Prerequisite - German II

424 German IV – Grades 11, 12 Year Credit 1.00

In German IV students use all their language skills at an advanced level to learn and inquire about all topics of German culture including geography, history, politics, art, music and literature. Emphasis is on reading, writing, and class discussions in German. The use of authentic material such as movies and books is increased to give students a real life experience of German in the classroom. Prerequisite - German III

SPANISH……..

441 Spanish I – Grades 9, 10, 11, 12 Year Credit 1.00
Spanish I emphasizes a conversational approach to the learning of the language. The development of the skills of understanding, speaking, reading, and writing is stressed through the teaching of pronunciation, vocabulary and basic grammar. All these skills are enhanced by the use of the many types of audio materials. Emphasis on word derivation and comparative grammatical structure ultimately enhances the students understanding of English vocabulary and structure. The development of higher order thinking skills and study habits will assist the student in other academic disciplines as well. Proficiency in a modern world language is an asset to any professional career choice.

442 Spanish II – Grades 10, 11, 12 Year Credit 1.00
The academic skills acquired in Spanish I are expanded in the second year of modern world language study. Understanding and speaking continue as the primary goals in Spanish II. In this year, additional emphasis is given to developing the reading and writing skills. The text is supplemented by additional readers. Social, cultural, and historical study of the Spanish-speaking nations is continued at a more advanced level. Prerequisite - Spanish I

443 Spanish III – Grades 10, 11, 12 Year Credit 1.00
The areas of concentration of second year Spanish are continued and accelerated in the third year. A knowledge of the fundamental principles of grammar is assumed and grammatical study is based upon class or individual difficulties. Reading skills are continued beyond the text in a variety of supplementary materials. Additional opportunities are provided for developing conversational abilities and creative writing skills. Prerequisite - Spanish II

444 Spanish IV – Grades 11, 12 Year Credit 1.00
Spanish IV is a continuation and acceleration of skills acquired in previous levels. Emphasis is on reading, writing and class discussion in Spanish. Literary and cultural units provide varied activities to practice acquired skills. Prerequisite - Spanish III

445 Spanish V – Grades 11, 12 Year Credit 1.00
Advanced Topics is a course designed for college-bound students who would like to maintain and increase their proficiency in Spanish. At this level, literary readings are more diversified in type and are characteristic of different historical periods. Additional opportunities will be provided to enhance oral and written proficiency. Prerequisite - Spanish IV and teacher recommendation

Business Technology

505 Freshman Prep - Grade 9 Semester Credit 0.50
This is a required course for all 9th grade students. The foundation for the course will be to provide students with opportunities for interest and career exploration while also focusing on skill development. The course will stress skills in academic readiness, personal/social development, as well as college and career readiness. Areas such as character building, study skills, work skills, goal-setting, etiquette, and more will be addressed throughout the course.

506 Professional Communications I – Grades 9, 10, 11, 12 Semester Credit 0.50
This course is designed to prepare students for the technology demands of high school, college, and the workplace. Working with Microsoft Word in this hands-on course, students will be given the essential tools and practice needed in writing effective business communication, formatting letters, memos, emails, tables, agendas, and reports. This course also works to develop proofreading and editing skill proficiency as well as improving grammar skills and mechanics.

508 Professional Communications II – Grades 9, 10, 11, 12 Semester Credit 0.50
This course applies the techniques and skills acquired in Professional Communications I to include more complex work using the Microsoft Office Suite. The focus will be on advanced business writing communications and grammar skills/mechanics, and formatting features of letters, memos, emails, tables, agendas, and reports. While using additional components of Word including building blocks, online forms, digital signatures, macros, and blog and web pages, graphic elements, special text features, and integrated applications with Excel, Access, and PowerPoint will be utilized. Prerequisite: 506 Professional Communications I and Teacher Recommendations

510 Accounting I – Grades 9, 10, 11, 12 Year Credit 1.00

In this course the student learns the need for financial records and the value of them in making economic decisions. Emphasis is placed upon the accounting cycle, special journals and ledgers, and other financial and business papers. Simulated projects are used to demonstrate keeping a set of company books for a complete fiscal period. The use of computerized accounting is introduced utilizing Microsoft Office Excel spreadsheets. Students will learn to make financial decisions based upon a variety of factors including business ethics. Students will have the opportunity to explore a variety of interests regarding the financial world including an Introduction to the Stock Market, Business Ethics, Taxation and Law, and Banking and Financial Systems. Accounting I is an excellent course for any student planning to study Business, Marketing, or Management in college, as well as going into the workforce after graduation.

512 Accounting II – Grades 10, 11, 12 Year Credit 1.00
This advanced course in Accounting is offered to those students who have successfully completed Accounting I and have an interest in developing their abilities in one of the business fields after graduation. The students delve more deeply into fundamental accounting principles learned in Accounting I. Emphasis is placed on departmental, partnership, and corporate accounting; systems and controls used in accounting and interpretation of financial statements. Accounting applications are expanded utilizing the Microsoft Office Excel spreadsheet computer application. Various projects, practice sets and computer simulations will be emphasized to give the student a more realistic experience. Prerequisite - 510 Accounting I and Teacher Approval

518 Personal Finance – Grades 11, 12 (*MCCC Dual Enrollment*) Semester Credit 0.50
This course is designed to provide an understanding of money management, creating wealth, and becoming a smart consumer. Topics include budgeting, saving, bank accounts, renting an apartment, buying a car, paying for college, online banking, credit and debit cards, credit scores, taxes, insurance, investing, risk and return, diversification, and saving for retirement. Students will utilize a computer simulation that presents real-life scenarios and provides an opportunity to make informed financial decisions. The financial knowledge gained in this course is intended to equip students with lifelong personal money management skills.

529 Start Your Own Business (Entrepreneurship) – Grades 9, 10, 11, 12 Semester Credit 0.50
Have you ever thought of a good business idea? In this class you will learn how to evaluate business ideas, create a business name, and develop a business plan. After gaining a strong foundation of entrepreneurship, students will pursue one of their business ideas. This will involve creating a website without any prior technical experience, utilizing various social media platforms, and developing a marketing plan. By the end of the semester, students will have the framework, ability, and confidence to run a successful business. This introductory course is a prerequisite for most business technology classes, and computer courses that are Dual Enrollment for Montgomery County Community College.

530 Database/Spreadsheet I – Grades 10, 11, 12 (*MCCC Dual Enrollment*) Semester Credit 0.50
This course introduces students to the uses of spreadsheets (Microsoft Excel) and databases (Microsoft Access) as useful tools in the workplace, for math and science projects, as well as personal use. Emphasis will be placed on Microsoft Excel, which has widespread uses and is a valuable skill to possess in the job market. Students will also learn various concepts related to computers, while utilizing Microsoft Word and PowerPoint. Some colleges require students to pass an Excel proficiency exam or take a remedial course; successful completion of Database/Spreadsheet I ensures students will have the Excel knowledge and skills needed for high school and college.

532 Database/Spreadsheet II – Grades 10, 11, 12 Semester Credit 0.50
This advanced course is a continuation of Database/Spreadsheet I. Students will learn advanced features of Microsoft Excel and Access, such as working with multiple worksheets, integrating images and screenshots, creating pivot tables, publishing HTML files, and utilizing advanced database features. Prerequisite – 530 Database/Spreadsheet I and Teacher Approval

535 Desktop Publishing – Grades 9, 10, 11, 12 Semester Credit 0.50
This course introduces concepts such as page design, page construction, and document modifications. Students will learn to prepare newsletters, ads, and brochures. Desktop publishing is a skill that students can use in their class work, for their personal use, in a volunteer organization, at college, or in the workforce. The use of scanners, digital cameras, and various software programs (Microsoft Publisher, Adobe Illustrator, and Adobe InDesign) will be employed to enhance student's work.

540 College and Career Preparation – Grades 11, 12 Semester Credit 0.50
Strongly recommended for grade 11.
This course is a continuation of Freshman Prep/Career Exploration, where students grow and develop their post-secondary plans. An emphasis will be placed on school-to-college and school-to-work transition success, and the effective utilization of Naviance's *Family Connections* profile. The goal is to prepare juniors for the upcoming college application process, employment opportunities, acquisition and retainment of employment, organizational structures, financial literacy topics, and skills that are essential to the

workplace. Students will gain an understanding of human relations in the workplace and a greater appreciation of social networking for careers. Sample topics will include post-secondary timelines, making the most out of college visits, college applications, letter of recommendations, resume writing, interviewing techniques, and scholarship and financial opportunities and job shadowing and college visitation are required component of this course.

540A Online College and Career Preparation – Grades 11, 12 Semester Credit 0.50
Strongly recommended for grade 11.
This is a web-based course. College and career preparation is a continuation of Freshman Prep/Career Exploration, where students grow and develop their post-secondary plans. An emphasis will be placed on school-to-college and school-to-work transition success, and the effective utilization of Naviance's *Family Connections* profile. The goal is to prepare juniors for the upcoming college application process, employment opportunities, acquisition and retainment of employment, organizational structures, financial literacy topics, and skills that are essential to the workplace. Students will gain an understanding of human relations in the workplace and a greater appreciation of social networking for careers. Sample topics will include post-secondary timelines, making the most out of college visits, college applications, letter of recommendations, job shadowing, resume writing, interviewing techniques, and scholarship and financial opportunities that include internships/work study. Job shadowing and college visits are required.

544 Video & Presentation Production – Grades 10, 11, 12 Semester Credit 0.50
In this course, students will be: 1. Creating a Video Montage in Adobe Premiere Pro. 2. Working with Production Graphics in Adobe After Effects. 3. Creating a Soundtrack in Adobe Audition. 4. Creating a Documentary Using Premiere Pro and Audition. 5. Editing a PSA and Commercial Using Premiere Pro and After Effects. 6. Working with Special Effects to Enhance Viral Videos Using Adobe Premiere Pro and After Effects. 7. Creating an Electronic Portfolio Using Adobe Encore. 8. Learning many other features/skills of multimedia software and hardware (Microsoft Office PowerPoint, scanners, CD burners, digital cameras, teleprompters and many other technologies in the Upper Perkiomen High School TV Studio).

550 Yearbook Advanced Publications (Semester) – Grades 10, 11, 12 Semester Credit 0.50
550B Yearbook Advanced Publications (Full Year) – Grades 10, 11, 12 Year Credit 1.00
Yearbook puts classroom learning into real-world action as students are involved in all phases of the planning, design, production, management, and distribution of the High School *Walum Olum* Yearbook. Students will create a lifelong publication using Jostens' Yearbook Avenue, Adobe InDesign, and Adobe Photoshop programs. This course provides students with a unique combination of training and skills in technology, photography, journalism, communication, leadership, business — and life! Recommended – 535 Desktop Publishing. Teacher approval is a ***must.***

554 Web Page Design I – Grades 9, 10, 11, 12 Semester Credit 0.50
This course focuses on the use of the computer as the tool of the designer, artist, and programmer to create, manipulate and edit 2D and 3D animation for digital website development. We will examine the impact of the Internet on society, explore web browsers, different types of websites, search engines and how websites make money. In designing web pages, students will utilize HTML 5 and CSS programming with NotePad. In addition, Adobe Dreamweaver web editor will be emphasized and students will enhance their web pages by incorporating student original graphics and animations utilizing Adobe Photoshop, Fireworks, Edge Animate and Flash. This course will include a concentrated, hands-on study of programming using Flash action scripting to design and create web applications and games for use on the Internet. Content, of course, includes computer animation and multimedia production along with storyboarding and story development to generate original ideas to create 2D and 3D animation for the web.

556 Web Page Design II – Grades 10, 11, 12 (*MCCC Dual Enrollment*) Semester Credit 0.50
This course will be a continuation of Web Page Design. Students will learn javascripting and the advanced features of HTML5 and CSS. More original customized graphics and advanced image editing techniques will be employed in web pages and multimedia animations/movies (Adobe Fireworks, Adobe Photoshop). In addition, advanced features of animation and multimedia will be used (Adobe Flash). Digital cameras, scanners, CD burners, USB flash drives, and a digital camcorder will be available for student use. Students retaking the course will be allowed to pursue independent multimedia projects. Prerequisite – 554 Web Page Design and Teacher Approval

557 3D Gaming & Design – Grades 10, 11, 12 Semester Credit 0.50
Students learn to create 3D models, animations, movies, and rendered 3D scenes. Using creative and integrated thinking, storyboard concepts are taught as they work towards creating a storyboard, and then apply those skills to bring concepts to life. Using a free, open source cross platform, the 3D creation software suite will allow students to apply and use their skills on web design, branded advertisement, character animation, e-commerce, product modeling, e-learning applications, e-marketing, presentations, and

post-production/visual effects. By the end of the course, students combine modeling and animation skills to create a full 3D production to be published on the web.

558 Sports & Entertainment Marketing - Grades 10, 11, 12 Semester Credit 0.50
Marketing is a specialized course which provides students with the opportunity to learn marketing principles in the fields of sports and entertainment. Students will produce and market activities for simulated athletic and entertainment events. This course includes business, management, and entrepreneurship, communication and interpersonal skills, economics, and professional development foundations. Emphasis is placed upon the functions of marketing - information management, pricing, product/service management, promotion, and selling. A significant portion of this program includes hands-on learning through student-developed activities to meet course goals. Instructional strategies may include computer/technology applications and real and/or simulated occupational experiences.

590 Programming & App Development – Grades 10, 11, 12 (*MCCC Dual Enrollment*) Year Credit 1.00
This course is intended for students who are interested in learning about a modern object-oriented programming language. The course will introduce object-oriented programming concepts using Java. Topics covered will include the following: Introduction to Java applets and applications; software development in Java; control structures; methods; arrays; object-oriented programming; strings and characters; graphics; and graphical user interface (GUI) components. This class establishes a firm foundation for further study in programming. Prerequisite – 211 Algebra 1

595 AP Computer Science – Grades 11, 12 (*MCCC Dual Enrollment*) Year Credit 1.00
This course is intended for students who are interested in learning about a modern object-oriented programming language. The course will introduce object-oriented programming concepts using Java. Topics covered will include the following: Introduction to Java applets and applications; software development in Java; control structures; methods; arrays; object-oriented programming; strings and characters; graphics; and graphical user interface (GUI) components. This class establishes a firm foundation for further study in programming. Prerequisite - 590 Programming and App Development

Technology, Engineering and Design

700 Energy Systems - Grades 9, 10, 11, 12 Semester Credit 0.50
This course explores Hydroponics and Aquaculture, Electricity and Electronics, and Mechanical Applications of Energy. The course will give each student a real world experience using the latest technologies including 3D printers and CNC equipment. Students will design and create: a hydroponic system to grow their own vegetables as well as a model of a residential electrical system.
Students will be assessed a lab fee $ 15.00

702 Creative Design & Engineering - Grade 9, 10, 11, 12 Semester Credit 0.50
This course will provide students with an active hands-on learning environment that promotes a higher level of thinking through real life problem solving situations. Students will use 3d printers, robotics, graphic vinyl plotters and a fully equipped manufacturing lab. Students will explore the world of creation using the "Design Thinking" process while building a table, a robot, 3D printed item and a graphic decal. Together students will form a foundation to help them succeed in our ever changing society.
Students will be charged a $20 lab fee for consumable materials in this course

706 Team Design & Manufacturing - Grades 10, 11, 12 Semester Credit 0.50
This course is designed to provide students with "real world" experiences by creating manufacturing teams that design and create professional grade products. Students will learn the value of teamwork, collaboration and responsibility as they work together to complete their projects. All groups will have access to cutting edge equipment including 3D printers, CNC routers, Laser cutters and Graphic equipment that is currently being used in manufacturing facilities around the world.
Students are required to pay for consumable materials

708 Multi-Material Fabrication - Grades 10, 11, 12 Semester Credit 0.50
This course allows students to create an individual project of their choice using the foundation of "Design Thinking" created in previous coursework. Students will learn the importance of planning, critical thinking and problem solving as they work through the design and construction of their own unique project. Projects for this course must contain a variety of materials and textiles using a broad scope of machines in the production process. All students will have access to cutting edge equipment including 3D printers,

CNC routers, Laser cutters, Metal and Wood fabrication equipment and Graphic equipment that is currently being used in manufacturing facilities around the world. Prerequisite – 706 Team Design & Manufacturing
(This course can be retaken for credit.) *Students are required to pay for consumable materials*

711 Engineering Design - Grades 9, 10, 11, 12 Semester Credit 0.50
This course will allow students to design and create using the latest 3D design software. This class will cover methods, materials, instruments used in today's design and manufacturing industry. Students will progress from technical sketching to 3D design and will see their ideas come to life through the use of 3D printers, CNC equipment and Laser cutter. Are you considering a career as an architect, designer, engineer, or related technical profession? This class is a must! *Students will be assessed a lab fee $ 10.00*

712 Advanced Engineering & Design - Grades 10, 11, 12 Semester Credit 0.50
This course will use various 3D design software programs to design innovative products that are driven by student passion. Students will design and create products that require a high level of design and fabrication using various materials. This course will give students access to high powered design software as well as 3D printers, CNC equipment, Laser cutter, Metal and Wood fabrication equipment and Graphic equipment. Prerequisite – 711 Engineering Design (This course can be retaken for credit.) *Students are required to pay for consumable materials*

720 Community Service - Grade 12 – (Fall Semester) Semester Credit 0.50
721 Community Service - Grade 12 – (Spring Semester) Semester Credit 0.50
This course offers seniors an opportunity to give back to their community through an independent, off campus service project of the students' choosing. There are a number of community service experiences available around the UPV such as; food banks, churches, schools, libraries, nursing homes, hospitals, veterinarians, fire companies, the Chamber of Commerce, and the YMCA, to name a few. **Students must submit a project proposal to the faculty advisor for approval. The course work requires weekly journals and a final project to be submitted online.**

Creative Arts

800 Introduction to Art - Grades 9, 10, 11, 12 Semester Credit 0.50
This course is designed to expose students to a variety of art techniques and mediums. The students will explore painting and drawing during this course. The students will also learn the importance of the "Elements and Principles of Design" gaining an appreciation of all types of art. This course is needed to continue in Drawing and Painting.
Students will be required to bring in some basic materials.

803 Drawing - Grades 10, 11, 12 Semester Credit 0.50
This creative course will teach students how to draw amazing art with pencil, color pencil, pastels and pen and ink. Students will explore a variety of drawing techniques and have an understanding in composition and the "Elements of Design." **This course can be retaken for credit up to 3 times.** Each time the student takes this course they will expand on their knowledge and create new projects. Prerequisite - Introduction to Art

804 Painting - Grades 10, 11, 12 Semester Credit 0.50
Students will create beautiful paintings with oils, acrylics and water colors in this course. Along with understanding the color wheel students will work with color theory and the "Elements of Design" to show a working composition. **Students can retake this course up to 3 times for credit.** Each time a student takes this course they will expand on their knowledge and produce new projects. Prerequisite - Introduction to Art

805 Ceramics - Grades 9, 10, 11, 12 Semester Credit 0.50
The student will learn a wide variety of clay techniques, ranging from learning how to knead the clay, hand build, and how to operate the pottery wheel. Various styles of applying glazes will be covered. Students will be required to pay a $10 materials fee.

806 Crafts & 3D Design - Grades 10, 11, 12 Semester Credit 0.50

Explore imaginative ways to make 3-Dimensional artwork. Students will work with a wide variety of materials during this course to create amazing works of art. Learn how to think outside the box and work with materials such as plaster, wood, and paper. *Students will be required to bring in some basic materials.*

807 Advanced Ceramics - Grades 10, 11, 12 Semester Credit 0.50

This exciting course expands on the hands on, project based learning of Ceramics. Students will continue to work on the pottery wheel as well as create pieces by hand. This course can be re-taken for credit and with each time the student takes the course they will be constructing new projects and expanding on their knowledge and skills. *Students will be required to pay a $10 materials fee each time Advanced Ceramics is taken.* Prerequisite - Ceramics

808 AP Studio Art 11, 12 Semester Credit 0.50

Design and explore your own area of focus in this upper level art course. Create a still life and a self-portrait to put into a working portfolio. Then choose your own projects to create. Students will select their personal direction of their artwork. Prerequisite – Drawing, Painting or Teacher Recommendation

809 Art History - Grades 11, 12 Semester Credit 0.50

Want to learn more about art throughout the ages? This course is designed to expose students to the artwork found around the world and throughout history. Students will mummify Barbie dolls, participate in a Japanese tea ceremony, travel to Philadelphia and New York, and learn about the major artists from different time periods.

810 Sculpture - Grades 11, 12 Semester Credit 0.50

This course is designed for the student who is willing to experiment with a variety of art mediums. Students will be asked to think outside the box utilizing their problem solving skills to create artwork in the round. Students will be working with a variety of mediums such as paper, plastic, plaster, wood, wire, and found objects. We will also be designing some projects on the computer which will be printed on the 3D printer. The course will touch on contemporary sculpture. Students will learn how to work in depth with expressing their personality in their artwork.

813 Digital Photography - Grades 9, 10, 11, 12 Semester Credit 0.50

Technology credit

This course is designed to expand your love of photography. Enjoy taking photos while understanding the elements of design, f-stop, shutter speed, and aperture. Students will also gain an understanding of Adobe Photoshop to enhance and alter photos. Students are required to have their own digital camera with a mega pixel of 12.0 or higher. They are also required to have a flash drive of 2GB or higher as well.

814 Digital Design - Grades 10, 11, 12 Semester Credit 0.50

Technology Credit

This course is designed to continue the skills students learned in Digital Photography. Students will continue to work with understanding the camera, lighting and use of backdrops while digitally enhancing photos in PhotoShop. But this course will also explore other digital design projects and equipment. Some examples are creating a graphic art piece, magazine cover, game character, and movie poster. Students will work with a 3-D printer to create a creature and game piece and also work with a laser engraver to create a new logo. Prerequisite - 813 Digital Photography (C or better)

Performing Arts

840 Concert Band/Marching Band – Grades 9, 10, 11, 12 Year Credit 1.00

This course is designed for all instrumental band students in grades 9 – 12. Students will study and rehearse a wide variety of concert and marching band literature in preparation for public performances. Students will also participate in X-Period sectional and lessons during the school year. Students will receive an additional .25 credit for a pull-out lesson throughout the school year. Students not enrolled in the band class but that are members of the band program are also required to take part in the band lesson program that will

be assigned at the beginning of the fall semester by the instructor. Please see below under “Band Ensemble”. Prerequisite - Instructor approval

840A	**Concert Band/Marching Band Fall Semester – *See 840***	Semester	Credit 0.50
840B	**Concert Band/Marching Band Spring Semester – *See 840***	Semester	Credit 0.50

850 “A” Choir – Grades 9, 10, 11, 12 Year Credit 1.00

Membership in the "A" Choir is open to 9th, 10th, 11th and 12th grade students and is highly selective. Selection is dependent upon audition and the approval of the director. Participants will study and rehearse a wide variety of choral literature in preparation for public performances. Students that select or are recommended by the instructor will receive an additional .25 credit for a pull-out lesson throughout the school year. Please see below under “Vocal Ensemble”. Prerequisite - Audition and instructor approval

850A	**“A” Choir Fall Semester – See 850**	Semester	Credit 0.50
850B	**“A” Choir Spring Semester – See 850**	Semester	Credit 0.50

852 Uptones/Women’s Choir – Grades 10, 11, 12 Year Credit 1.00

Students for the Uptones/Women’s Choir are drawn from the “A” Choir. This highly select ensemble is open to 11th and 12th grade students and a small number of 10th grade students. The focus of the group is ensemble singing at its highest level. Students that select or are recommended by the instructor will receive an additional .25 credit for a pull-out lesson throughout the school year. Please see below under “Vocal Ensemble”. Prerequisite - Audition and instructor approval.

852A	**Uptones/Women’s Choir Fall Semester** – See 852	Semester	Credit 0.50
852B	**Uptones/Women’s Choir Spring Semester** – See 852	Semester	Credit 0.50

860 Show Choir – 9, 10, 11, 12 Year Credit 1.00

Show Choir is a highly select ensemble open to grades 9, 10, 11 and 12. Students must audition in both dance and vocals to be selected for the Show Choir. The group performs throughout the school year at many events and music festivals both within and outside of the school district.

860A	**Show Choir Fall Semester – See 860**	Semester	Credit 0.50
860B	**Show Choir Spring Semester – See 860**	Semester	Credit 0.50

870 Musical Theater – Grades 9, 10, 11, 12 Semester Credit 0.50

Musical Theater offers students a “hands on” approach to every aspect of the modern musical. Students will plan, budget, and perform a class musical. All aspects of musical theater will be studied including producing, directing, lighting, sound, set-design, set construction, costume design, choreography, publicity, acting, and music performance. Students will also study the history of music and theater and its implications on society. Prerequisite – Instructor approval

876 Music Production – Grades 9, 10, 11, 12 Semester Credit .50

(Technology Credit)

This course will introduce students to some of the most commonly used software and hardware tools for producing music for the marketplace (including desktop PC, multitrack recording software, electronic synthesizer keyboard, adding DSP effects (reverb, EQ, etc.), microphone technique, and music notation software for “lead sheets.” The class will stress application and creative content, using a series of projects to give students exposure to music production tasks such as recording various kinds of signals (live instruments and MIDI), using electronic instruments, basic song arranging, and equipment configuration. The ideal student for this course has interest in recording, arranging, producing music of all kinds, possesses some experience playing in either a popular (rock, jazz, etc.) or classical tradition, and is comfortable reading either chord charts or conventional music notation.

890 Orchestra - Grades 9, 10, 11, 12 Year Credit 1.00

This course is designed for members of the string orchestral program. Students will study and rehearse a wide variety of orchestral literature in preparation for public performances. Students will also develop their sight-reading skills through a basic knowledge of music theory. Students will receive an additional .25 credit for a pull-out lesson throughout the school year. Please see below under "String Ensemble". Prerequisite – membership in the orchestral program

890A Orchestra Fall Semester – Grades 9, 10, 11, 12 – See 890 Semester Credit 0.50

890B Orchestra Spring Semester – Grades 9, 10, 11, 12 – See 890 Semester Credit 0.50

853 Vocal Ensemble - Grades 9, 10, 11, 12 Semester Credit 0.25

All students involved in the choral program are permitted to enroll in the Vocal Ensemble pull-out lesson groups. These lessons meet once per cycle on a rotating basis. Students that are unable to schedule "A" or Show Choir may enroll in Vocal Ensemble lesson groups.

854 Band Ensemble - Grades 9, 10, 11, 12 Semester Credit 0.25

All students involved in the band program are required to enroll in the Band Ensemble pull-out lesson groups. These lessons meet once per cycle on a rotating basis. Band students that are unable to schedule Band 840, 840A or 840B may also enroll in the Band Ensemble lesson groups. Prerequisite – membership in the concert or marching band program

855 String Ensemble - Grades 9, 10, 11, 12 Semester Credit 0.25

All students involved in the orchestra program are required to enroll in the String Ensemble pull-out lesson groups. These lessons meet once per cycle on a rotating basis. String students that are unable to schedule Orchestra 890, 890A or 890B may also enroll in the String Ensemble lesson groups. Prerequisite – membership in the orchestra program.

Wellness and Fitness

Physical Education

A student is required to take one semester of physical education each academic year for a total of 0.50 credits yearly. Students may elect to replace the physical education course with Aquatics and Water Safety. **Students should select only one per year.**

901 Physical Education – Grade 9, 10, 11, 12 Semester Credit 0.50

The Ultimate goal of the physical education program is to teach students the physical and behavioral skills they need to be active for life. The curriculum is designed to provide a variety of sports and activities aimed at developing health and skills related components of fitness as well as facilitating social development.

909 Adapted Physical Education – Grades 9, 10, 11, 12 Semester Credit 0.50

An individualized program designed to meet the needs of the student that is unable to participate in the regular physical education program

910 Adapted Physical Education – Grades 9, 10, 11, 12 Semester Credit 0.50

An individualized program designed to meet the needs of the student that is unable to participate in the regular physical education program

934 Health Education I - Grade 9 Semester Credit 0.50

This student-centered and interactive course emphasizes personal, social, and life skills, which are pertinent to an adolescent's well-being. The course subject matter consists of drug, tobacco, and alcohol education in addition to current information and research regarding HIV/AIDS education. Other topics and units include: social skills, goal setting and decision making, stress management, conflict resolution, refusal skills, fitness and nutrition, communication and relationships, along with personal health and wellness. Various teaching strategies, such as cooperative learning, role playing, individual projects, and small/large group discussions will be implemented and utilized.

935 Health Education II - Grade 11 Semester Credit 0.50

Health education seeks to develop in each student practices which will enable him/her to attain and maintain proper mental and physical health habits. The course subject matter traces human development from the beginning of life until death. Although all stages of development are discussed, a major emphasis is placed on adolescent development. This includes various topics such as human sexuality, decision making, drugs, alcohol, consumer health and mental health.

935A Health II Online – Grade 11 Semester Credit 0.50
This is a web based course that will meet online. Health education seeks to develop in each student practices which will enable him/her to attain and maintain proper mental and physical health habits. The course subject matter traces human development from the beginning of life until death. Although all stages of development are discussed, a major emphasis is placed on adolescent development. This includes various topics such as human sexuality, decision making, drugs, alcohol, consumer health and mental health.

937 Aquatics/Water Safety – Grades 9, 10, 11, 12 Semester Credit 0.50
Students may elect to take aquatics instead of a regular semester Physical Education course. This course will satisfy one (1) semester of the physical education requirement. The first phase of this course is designed to teach the basic fundamentals of aquatic skills including, stroke mechanics for different strokes as well as steps for one meter springboard diving. The second phase is a water safety program developed by the American Red Cross for swimmers as well as non-swimmers. Participants will learn about various water environments and their potential hazards and develop the skills and knowledge that will help them to become safer and healthier in, on, and around the water. The third phase is Adult C.P.R., where students will be taught what to do in an emergency.

945 Fitness & Sports Nutrition - Grades 11, 12 Semester Credit 0.50
This course is offered to the serious physical education student who is interested in pursuing and maintaining lifelong fitness. Students planning to enter the field of exercise science, athletic training or teaching in a related field will find this course beneficial. The major emphasis of this course is to help students develop an extensive background in weight training and nutrition.

Western Montgomery Career & Technical Center Programs

Description of Technical Programs
The Technology Centers That Work initiative was formed in 2007 and is designed specifically to assist shared-time centers in reviewing and implementing actions needed to produce high-demand, high-wage graduates who will be leaders in their selected careers. It is based on the belief that most students can master complex academic and technical concepts if schools create an environment that encourages students to make the effort to succeed. WMCTC is a partner with Upper Perkiomen High School to provide direction and meaning to obtaining your career goal.

Automotive Technology
AT1 Level 1 Credit 3.25
AT2 Level 2 Credit 3.25
AT3 Level 3 Credit 3.25
Automotive Technology Course Description - The Automotive Technology program has been specifically designed to prepare students to continue their training at postsecondary schools or continue into industry. The program follows Pennsylvania Department of Education's program of study. The program content consists of classroom instruction in: automotive fundamentals, brakes, steering and suspension, electrical/electronic systems, engine performance and PA Safety and Emission Inspection procedures. The program utilizes a combination of classroom instruction, computer based learning and hands-on lab work for an innovative learning process. Level 3 students have the opportunity to qualify for participation in various manufacturers' sponsored automotive skills competitions that offer scholarship money and prizes.
COLLEGE OPPORTUNITIES: Penn College of Technology; Northampton Community College; Automotive Training Center.
This program is an approved Program of Study and is aligned with the PDE SOAR Program.

Biomedical Sciences - Grades 11 and 12 only (Formerly Health Careers Academy)
PLT1 Level 1 Credit 1.625
PLT2 Level 2 Credit 1.625
PLT3 Level 3 Credit 1.625
PLT4 Level 4 Credit 1.625
The Project Lead the Way (PLTW) Biomedical Science program is designed for college-preparatory students who are interested in pursuing a medical or health science career. The rigorous three- course Biomedical Science sequence, Principles of Biomedical

Science, Human Body Systems, and Medical Intervention is a nationally recognized curriculum that allows students to investigate the roles of biomedical professionals as they study the concepts of human medicine, medical terminology, physiology, genetics, microbiology, and public health. The PLTW curriculum is project-based and will expose students to the design process, research and analysis, teamwork, communication skills, global medicine, and human impacts. The curriculum prepares students to be the next generation of problem solvers, critical thinkers, and innovators for the global economy.
COLLEGE OPPORTUNITIES: Penn State University, Temple University, Duquesne University, University of Pittsburgh, Alvernia University, Rutgers University, West Chester University, Eastern University, Montgomery County Community College.

The opportunity for clinical experience in various health care facilities is always pursued for these students.
Students applying to this program will need to submit an application, interview with instructor, have a recommended 3.0 GPA, upper level science/math, and the ability to provide their own transportation to clinical sites.
An updated immunization record, 2-step PPD, and a background check may be required for participation in the clinical experience.
This program is given an Honors level GPA weight.

Carpentry

CR1	Level 1	Credit 3.25
CR2	Level 2	Credit 3.25
CR3	Level 3	Credit 3.25

For individuals with an aptitude for working with tools and materials, the Carpentry program can be the stepping-stone to a variety of rewarding careers. Training in both carpentry and cabinetmaking prepares the student for job opportunities in new home construction, commercial construction or the woodworking industry. Students may focus on areas of specialization such as framing, roofing, siding, finish work or cabinetmaking. Residential carpentry construction makes up the major portion of the program with production cabinetmaking available for all interested students. Students should enjoy working both indoors and outdoors, have good mechanical ability and manual dexterity, have a sincere interest in building or woodworking, and a desire to work with other people. Students will learn the following: proper use of hand and power tools, site layout using the transit, residential framing including floor, wall, and roof, exterior finish work including roofing and siding, door and window installation, installation of aluminum soffits, gutters, and downspouts, interior finish work including dry walling and hanging doors, interior trim work including installing hardwood flooring, blueprint reading, estimating, and introduction to construction management.
COLLEGE OPPORTUNITIES: Penn College of Technology; Thaddeus Stevens State College of Technology; Associated Builders & Contractors (ABC) Apprenticeship program.
This program is an approved Program of Study.

Collision Repair

CL1	Level 1	Credit 3.25
CL2	Level 2	Credit 3.25
CL3	Level 3	Credit 3.25

This program is designed for students interested in pursuing employment in the field of collision and auto body repair. Students have the opportunity to gain entry-level skills required for this profession. These skills are acquired through classroom presentations, textbook readings, and hands-on experiences. Students use hand tools and power tools to perform the various training activities. The Collision Repair program covers instructional areas such as: safety instruction, estimating and customer relations, frame and unibody repair. Students are also instructed in metal straightening, welding and cutting, panel replacement and alignment, surface preparation, and masking and painting. During the course, students are expected to develop job acquisition skills. The importance of safety, quality, productivity, and teamwork is also emphasized in this program. Students in this program should have patience and attention to detail. Additionally, the Collision Repair program follows the ICAR (Industry Curriculum of Automotive Repair) curriculum.
COLLEGE OPPORTUNITIES: Penn College of Technology; Thaddeus Stevens State College of Technology; ATC (Automotive Training Center); Ohio Auto College; Nashville Auto College; Universal Technical Institute.

- *This program is an approved Program of Study.*

Commercial Art

CA1	Level 1	Credit 3.25
CA2	Level 2	Credit 3.25
CA3	Level 3	Credit 3.25

The students in this program will be introduced to the tools and techniques used by successful commercial artists. Students will learn to use their creative art skills to translate client's needs into marketable artwork. The core curriculum is structured to encompass design, composition, layout, illustration, computer graphics, desktop publishing, and electronic production art. The Commercial Art program is an excellent prelude to advanced post-secondary training in both colleges and commercial and fine art schools. A career in

art can take three different directions: fine arts, teaching, or commercial art. The field of commercial art offers a broad number of employment opportunities and provides great earning potential. Students successfully completing this program will be prepared to work in entry-level positions that could lead to an exciting career as a Commercial Artist, Art Director, or Production Supervisor.
COLLEGE OPPORTUNITIES: Penn College of Technology; Montgomery County Community College; Art Institute of Philadelphia; Antonelli Institute; Kutztown University and many more.
This program is an approved Program of Study.

Computer Information Systems

CI1	Level 1	Credit 3.25
CI2	Level 2	Credit 3.25
CI3	Level 3	Credit 3.25

Computer Information Systems is a program designed for students interested in pursuing careers in Information Technology. Areas of focus include basic and advanced hardware and software topics with an emphasis on Networking. Students will be using A+ and Net+ curriculum and will be eligible to test for A+, Net+, and Cisco CCENT Certification. Students enrolled in the CIS program must be highly motivated and committed to achieving personal excellence. Based on the amount of technical information each student must acquire from books and manuals, good reading and comprehension skills are essential for success in the program.
COLLEGE OPPORTUNITIES: Allentown Business School; Delaware County Community College; Immaculata University; Penn State University; Temple University; Montgomery County Community College; and many more.

Cosmetology

CO1	Level 1	Credit 3.25
CO2	Level 2	Credit 3.25
CO3	Level 3	Credit 3.25

The three-year Cosmetology program is designed to prepare students for the state's professional licensing examination for Cosmetologists and entry-level employment in the beauty profession. In this three year program, students are provided the opportunity to earn 1250 hours of state required instruction and develop skills in all aspects of Cosmetology including: sculpting, styling, perming, hair color, skin care, chemical hair straightening, nails, and most importantly, people skills. It is necessary for students to keep their work area and equipment organized and well maintained. Students should also possess a sense of form, artistry, and creativity. Hands on experience is obtained several days a week in The Salon. Upon completion of 900 hours, students are eligible and encouraged to take the state licensing exam. Students who pass the state board exam and successfully complete 1250 hours will qualify for PA state licensure.
COLLEGE OPPORTUNITIES: Cosmetology schools offer post-secondary training for students who wish to pursue a Cosmetology teacher's license.

Culinary Arts

CU1	Level 1	Credit 3.25
CU2	Level 2	Credit 3.25
CU3	Level 3	Credit 3.25

The Culinary Arts program prepares students for successful and rewarding careers in the food service industry. Students will cover culinary equipment use, safety and sanitation, soups, sauces, meats, fish, starches and vegetable preparation as well as cake decorating and techniques in BBQ cooking. Students will operate an in-school dining room to help them prepare to work in fine dining restaurants. The students are also eligible to participate in student run organizations with the possibility of competing in culinary competitions.
COLLEGE OPPORTUNITIES: Culinary Institute of America; Johnson & Wales University; Penn College of Technology; Montgomery County Community College; Baltimore International College; Philadelphia Restaurant School.
This program offers dual enrollment in meeting with Montgomery County Community College requirements.
This program is an approved Program of Study.

Dental Occupations

DO1	Level 1	Credit 3.25
DO2	Level 2	Credit 3.25
DO3	Level 3	Credit 3.25

The Dental Occupations program prepares students for entry level employment as a dental assistant and a strong foundation for continuing to post-secondary education. Dental occupations continue to be a high prior occupation. This program incorporates lectures, demonstrations, and hands-on experience in a variety of dental related subjects. The students will study everything from

anatomy and physiology to infection control, four-handed dentistry and radiology, as well as learn about procedures for running a dental office and complying with Occupational Safety and Health Administration standards. Students will be able to continue their education to become an expanded functions dental assistant, dental hygienist, or dental school after the completion of this program.
COLLEGE OPPORTUNITIES: Montgomery County Community College, Penn College of Technology, Harcum Junior College, Northampton Community College

Diesel Technology

DT1	Level 1	Credit 3.25
DT2	Level 2	Credit 3.25
DT3	Level 3	Credit 3.25

The Diesel Technology program is designed to prepare students to repair and service diesel engines used to power buses, trucks and construction machinery. The employment outlook for diesel mechanics and technicians in PA is projected to increase over the next several years. Instruction in this program will include the diagnosis of engine malfunctions, disassembly of engines, examination of parts, reconditioning and replacement of parts, controls and transmissions, the PA state inspection code, and many other skills necessary to enter the diesel automotive field in an entry level position. Classroom instruction, computer based learning and hands-on lab work are utilized for effective learning.
COLLEGE OPPORTUNITIES: Penn College of Technology

Early Childhood Education

EC1	Level 1	Credit 3.25
EC2	Level 2	Credit 3.25
EC3	Level 3	Credit 3.25

The Early Childhood Education program offers training for either direct employment in the early childhood profession or a strong foundation for continuing into post-secondary education. This "teacher training" course emphasizes the development of knowledge and skills necessary to provide safe, healthy, positive, developmentally appropriate, high quality care for young children. Classroom instruction is reinforced with hands-on experience through the WMCTC on-site pre-school program for toddlers and preschool-age children. Course work includes: instruction in PA Dept. of Welfare regulations, first aid, nutrition, child development, structuring routines, time management, curriculum planning, positive guidance techniques, observation of children's behavior, and supervisory skills relating to children. Emphasis is placed on self-help skills, self-concept, art, language arts, music, math, science, social sciences, infection control, room arrangement and developmentally appropriate practices.
COLLEGE OPPORTUNITIES: Montgomery County Community College; Reading Area Community College; most 4-year colleges.
This program is an approved Program of Study.

Electrical Occupations

EM1	Level 1	Credit 3.25
EM2	Level 2	Credit 3.25
EM3	Level 3	Credit 3.25

This program has been developed to give students entry level skills and knowledge to directly enter the workforce or pursue further education. The program incorporates a combination of theory lessons and practical experiences that provides the instruction in electrical theory, National Electrical Code, residential, commercial, and industrial wiring techniques, telecommunications, security, fire alarm, and electrical maintenance. The importance of safety, quality, productivity and teamwork is also emphasized. WMCTC provides the opportunity for students to participate in real electrical jobs around the school. Graduates may enter an apprenticeship program to be trained as a highly paid journeyman electrician or lineman. Electricians install, connect, test, and maintain electrical power systems for residential, commercial, and industrial buildings. Students can also further their education at a technical school or university to become an electrical systems technician or an electrical engineer. The electrical occupations student should have good mechanical aptitude, manual dexterity, eye-hand coordination, be able to distinguish between colors, mathematics fundamentals, and reading ability.
COLLEGE OPPORTUNITIES: Penn College of Technology; Penn State University; Montgomery County Community College; Thaddeus Stevens State College of Technology; Reading Area Community College; Associated Builders & Contractors (ABC) Apprentice Program; Lincoln Technical School; International Brotherhood of Electrical Workers (IBEW) Apprentice Program
This program is an approved Program of Study.

Health Science Technology

HS1	Level 1	Credit 3.25
HS2	Level 2	Credit 3.25

HS3 Level 3 Credit 3.25

The NA Prep component provides students with skills that enable them to work in a long-term care facility, hospital, or home care setting following completion of a three week course outside of school at an approved PDE testing site. A Nurse Assistant (NA) is a member of a team that provides direct patient care as directed by the RN, while utilizing technical skills. This individual is also responsible for completing and documenting patient care activities. A Nurse Assistant promotes communication between the health care team and the patient, and demonstrates initiative, flexibility and good work ethic. Students are instructed in skills, clinical rotation and theory as required by the Pearson Vue/PDE competency program. In addition, students will complete requirements to be certified in CPR/First Aid.

The MA component will teach anatomy and physiology in depth as well as nutrition, communication, pharmacology and medical ethics. The Medical terminology component provides a blueprint for learning medical vocabulary that is used in all aspects of health care. Skills that will be taught include EKG technique, principles of phlebotomy, blood and body fluid precautions, vital signs, positioning a patient for procedures, and medication administration. First Aid certification and school-to-work based opportunities are available to eligible students.

COLLEGE OPPORTUNITIES: Montgomery County Community College; Gwynedd Mercy College; Northampton Community College; Reading School of Nursing and Radiology; Alvernia College, Duquesne University, Georgia Southern University and others.

This program offers dual enrollment in meeting with Montgomery County Community College requirements

This program is an approved Program of Study.

Heating, Ventilation & Air Conditioning (HVAC)

HV1 Level 1 Credit 3.25

HV2 Level 2 Credit 3.25

HV3 Level 3 Credit 3.25

This program provides entry level knowledge and skill training in: Introduction to HVAC, safety, hand & power tools, blueprint reading, piping practices, and HVAC electricity. The student will learn entry level skills to install, troubleshoot, & service oil, gas & electric heating, air conditioning, and heat pump Units. The combination of lab practice and theory prepares students for entry level employment for advancement in today's HVAC industry. Students entering this program should have a basic mechanical aptitude, be able to move heavy objects, be self-motivated and a self-starter. This program is HVAC Excellence accredited.

COLLEGE OPPORTUNITIES: Penn College of Technology; Montgomery County Community College; Thaddeus Stevens State College of Technology; Associated Builders & Contractors (ABC) Apprentice Program.

This program is an approved Program of Study with the Pennsylvania Department of Education.

Metal Technology

MT1 Level 1 Credit 3.25

MT2 Level 2 Credit 3.25

MT3 Level 3 Credit 3.25

This course of study prepares students with the entry-level skills and knowledge necessary to gain employment in a variety of machining and welding career paths, and/or pursue post-secondary education in the field. The Metal Technology program emphasizes safe and proper operation, as well as control of metalworking machine tools such as: lathes, milling machines, precision grinders, drill presses, and band saws. Hand tools, heat treatment, and the proper use of precision measuring tools and gauges is also explained, demonstrated, and utilized. The set-up, operation, and programming of Computer Numerically Controlled (CNC) machine tools is taught with this course. The emphasis of the welding portion of the program will be in the safe operation and techniques of oxy-acetylene welding, shielded metal arc welding, gas metal arc welding, and gas tungsten arc welding. In addition to practical skills, manufacturing related theory, including tool technology, technical drawing/blueprint interpretation, and employability skills are presented to each student. The Metal Technology program follows the National Institute for Metalworking Skills (NIMS) competency list and facilitates NIMS certification testing.

COLLEGE OPPORTUNITIES: Thaddeus Stevens State College of Technology; Penn College of Technology; Montgomery County Community College and Reading Area Community College.

Protective Services

PS1 Level 1 Credit 3.25

PS2 Level 2 Credit 3.25

PS3 Level 3 Credit 3.25

The mandated curriculum includes training in: Communication Skills, Control Tactics, Motor Vehicle and Crimes Code, Criminal Procedure, Laws of Arrest and Criminal Investigation. Additionally, students will also learn Forensic Science, Finger Printing, Crime Scene Analysis and other types of physical evidence. Students will also be introduced to Fire Prevention and Fire Suppression, Accident Investigation, Interviewing and Interrogation, physical conditioning, and Emergency Medical Services within the program.

Students who successfully complete the program may continue their studies to the college level and obtain a criminal justice or fire science degree. Since the inception of the program, students who graduated from Protective Services have entered the military, graduated with their two year associate degree in criminal justice, currently working in private security, corrections, or have already entered a police academy.
COLLEGE OPPORTUNITIES: Penn State University; West Chester University; Montgomery County Community College; Northampton County Community College; Penn College of Technology and most four-year colleges.

Sports Medicine
SM1 AM Session (Sophomores & Juniors**)** Credit 3.25
SM2 PM Session (Seniors) Credit 3.25
Sports Medicine program will be designed to prepare students for a number of technical fields related to kinesiology. Instruction includes theory and applications related to: Athletic training, anatomy and physiology, medical terminology, exercise physiology, pathophysiology, injury recognition, injury management, rehabilitation, restorative care, physical therapy, strength training and high intensity training, weight management, nutrition, resistance training, exercise programming, mental health and wellness. Students will learn essential skills directly related to the Athletic Training and Physical Therapy career paths. Students will learn to design safe and effective exercise prescriptions, conduct individual exercise programs, and fitness testing. Students will be prepared for employment in a wide variety of settings that include but are not limited to, athletic teams, hospitals, corporate wellness programs, strength and conditioning, clinical rehabilitation programs, and fitness clubs. In addition, the program serves as a strong foundation for students wishing to pursue advanced degrees in the field of exercise science or enter professional disciplines such as physical or occupational therapy. Industry certifications may be earned in American Heart CPR/AED, American Heart First Aid and Personal Training Certification (ACSM)

- *Sophomore and Juniors will attend the AM Session.*
- *Seniors will attend the PM Session.*

Career Exploration Opportunities – Formerly V.O.I.C.E.
VOC1 Level 1 Credit 3.25
VOC2 Level 2 Credit 3.25
This program is designed to integrate career education and transition planning for students. The foundation of the C.E.O. program is built on the effectiveness of applied, hands-on instruction in career education. This program provides students with disabilities with intensive support in a variety of career areas. Additionally, students receive direct instruction in career development, job preparation, and skills training. The program exposes students to a variety of career opportunities to enhance employability skills.

GR9 WCTS Clusters Program Credit 3.25
During the 9th grade year students will have the opportunity to attend the Western Montgomery Career and Technology Center. Students will have the ability to explore two course offerings at WMCTC to help drive their decision-making process towards their future. Students will spend a half-year in two programs of choice within a cluster. When applying for this program, students will choose a cluster, then their top two choices of programs they would like to attend during their 9th Grade year. There are a limited number of spots for this program; as a result, students must work through their School Counselor to submit an application for this program. Applications can be found online at www.westerncenter.org. If you have questions please contact the counselor at 610-489-7272 x 214.

TRANSPORTATION	CONSTRUCTION	HUMAN SERVICES	INTRODUCTION TO MEDICAL CAREERS
Automotive technology	Carpentry	Commercial Art	Health Science Technology
Collision Repair	Electrical Occupations	Computer Information Systems	Sports Medicine

Diesel Technology	HVAC	Culinary Arts	Dental Occupations
Metal Technology			Emergency Medical Technician
Choose any two (2)	*Choose any two (2)*	*Choose any two (2)*	*Presented as a single year-long class covering all programs listed*

School-to-Work Program at the Western Montgomery Career & Technology Center
WMCTC strives to provide every student with the opportunity to participate in an on-the-job experience. WMCTC has partnered with various businesses and industries to provide employment in the student's technical field of study. Students must meet the eligibility requirements along with the recommendation from their technical instructor. This opportunity occurs during the capstone of the student's technical program.
Other school-to-work programs include job shadowing, clinical experiences and internships.

For further information regarding enrollment into the Western Montgomery Career & Technology Center, contact your guidance counselor or the WMCTC counselor at (610) 489-7272 Ext. 214.