Gettysburg Area High School

COURSE SELECTION GUIDE

2023-2024



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GETTYSBURG AREA SCHOOL DISTRICT

Telephone: (717) 334-6254 opt 2 x6252 Fax: (717)334-9190 or (717)337-4439

The Gettysburg Area School District is located in rural Adams County and includes the Borough of Gettysburg and its surrounding townships. Located within 35 miles of Harrisburg and seventy miles of Washington, D.C. and Baltimore, MD, Gettysburg is home to a diverse population. Although tourism and agriculture are the major industries, people are also attracted to Gettysburg by Gettysburg College, Lutheran Seminary, and the Gettysburg Hospital. Gettysburg is also the county seat.

Graduation Requirements for Class of 2024 & 2025

Minimum requirements for graduation from Gettysburg Area High School (grades 9-12) are:

English	4.00
Mathematics (a)	3 or 4.00(b)
Science (a)	3 or 4.00(b)
Social Studies	4.00
Career and Work	.50
Research Writing	.50
Fine Arts/Practical Arts/Humanities/Vocation	n 2.00
Physical Education	2.00
Freshmen F.A.C.S	0.50
Safety Education	0.50
Health	0.50
Personal Finance	0.50
Selected Electives	<u>6.00</u>
	28

TOTAL CREDITS FOR GRADUATION 28.00

Graduation Requirements for Class of 2026 & beyond

Minimum requirements for graduation from Gettysburg Area High School (grades 9-12) are:

English	4.00
Mathematics	3.00
Science	3.00
Social Studies	3.00
Additional Core	1.00
Fine Arts/Practical Arts/Humanities/Vocation	2.00
Physical Education	2.00
Freshmen Advisory/Career Exploration	0.50
Safety Education	0.50
Health	0.50
Personal Finance	0.50
Selected Electives	8.00
	28

TOTAL CREDITS FOR GRADUATION 28.00

GAHS Mission and Vision

Mission -

Gettysburg Area High School will establish an environment of respect and integrity as our collaborative community creates opportunities to engage learners in experiences that provoke critical thought and challenge their creative intelligences.

Vision -

Gettysburg Area High School ensures that all learners have access to a rigorous curriculum of varied experiences that will develop into a personally relevant pathway to future success and ultimately mold citizens who will make positive and meaningful contributions to the world around them.

GAHS Career Pathways and Programs of Study

As explained in our vision statement, our goal is for our students to develop an educational plan that fits within a pathway that is personally relevant to their interests, talents, and passions. We will help students identify a pathway that fits their future ambitions for employment and assist them with their transition to post-secondary work or additional training/schooling. Our identified Career Pathways include: *Agricultural Sciences, *Business and Management, *Arts and Communication, *Engineering and Industrial Technology, and *Health Sciences and Human Services. Within each of these Career Pathways, we also offer students access to specific Programs of Study that offer a number of unique benefits. These benefits may include industry recognized credentialing, articulation agreements with post-secondary institutions, and/or opportunities for cooperative education and workplace experiences. We encourage students to work with their parents/guardians and school staff members to identify a fitting career pathway and make the most of Gettysburg Area High School's educational opportunities.

ACT 158

Beginning with the graduating classes of 2023, students must meet one of the state mandated pathway requirements outlined in Act 158:

- a. Keystone Proficiency Pathway
- b. Keystone Composite Pathway
- c. Career and Technical Education Concentrator Pathway
- d. Alternative Assessment Pathway
- e. Evidence Based Pathway
- f. Approved Individual Educational Plan Pathway

Honor Roll

In order to be eligible for inclusion on one of the Honor Rolls, a student must be enrolled as a full-time student. GAHS has two levels of Honor Roll. The criteria are as follows:

High Honors GPA 94-100% and no course grade lower than 94% Honor Roll GPA 85-93.99% and no course grade lower than 83%

Course Weighting

For the purpose of calculating class rank, final course grades will be on a 100 point scale and weighted with additional quality points according to the following:

Advanced Placement = 1.1 College in the High School=1.1 Accelerated=1.03

GETTYSBU	GETTYSBURG AREA HIGH SCHOOL – PLANNING GUIDE				
Name:	College Bound Athlete:				
Graduation year:	Graduation Pathway:				
Credit Requirements: (28 credits minimum)	Grade 9 (8.0 credits)	Grade 10 (8.0 credits)	Grade 11 (8.0 credits)	Grade 12 (8.0 credits)
English (4 credits)					
Social Studies (3 credits)					
Mathematics (3 credits)					
Science (3 credits)					
Physical Ed (2 credits)					
Wrap Around Courses (2 credits)	Freshman Advisory & Career Exploration (.5 cr.)	Safety Educ	cation (.5 cr.)	Health (.5 cr.)	Personal Finance (.5 cr.)
Additional Core (1 credit)					
Practical Art/Humanities (2 credits)					
Electives					
Electives					

^{*}This planning guide is for graduation years of 2026 and beyond.

Class Rank

Class rank will be determined using final percentage grades (rounded to three decimal places) in all Gettysburg Area School District courses for which graduation credit is awarded. Each student will be ranked individually among their class. Student rank will appear on all Official Transcripts. Gettysburg Area High School will select a Valedictorian and a Salutatorian based on class rank.

Dual Enrollment courses taken outside of the high school and taught by teachers not employed by the Gettysburg Area School District will not be included in the class rank calculations or subsequent decile placements. Independent study, test out courses, college audit, and foreign study credits will also not be included in the class rank calculations and subsequent decile placements. Students transferring to Gettysburg Area High School from other high schools will receive credit for work completed elsewhere. However, final grades for those courses will not be included in class rank calculations and subsequent decile placements

COLLEGE CREDIT OPPORTUNITY

Advanced Placement Courses

All Advanced Placement (AP) courses are college-level courses designed to prepare students for Advanced Placement tests. Depending upon how well a student does on the respective AP examination given in May, he or she may receive college credit in a particular subject area. Students electing to take an AP course are <u>required</u> to take the examination and pay for the cost (approximately \$97.00). Students may apply for financial assistance. Financial assistance availability varies from year to year. Payment of the fee can be made in three installments. Failure to pay the fee will result in an "Incomplete" being assigned for the class grade until the fee is paid.

Students desiring to take AP courses need to be highly motivated and should have experienced a high degree of success in non-AP versions of the course. Students will be required to do a great deal of reading, writing, and high-level problem solving.

In addition, students enrolled in AP courses are also required to complete summer assignments. Please see each individual course description for guidelines regarding summer work assignments. Assignments should be given directly to the teacher of the AP course. Exceptions may be granted by the teacher with the approval of the administration for extenuating circumstances only. Three college credits may be granted by the cooperating institution based on the student's exam score and the receiving college's AP credit policy.

Harrisburg Area Community College (HACC) College in the HIGH School (CHS) / Dual Enrollment (DE)

Gettysburg Area High School has partnered with Harrisburg Area Community College to provide college level courses and credit for eligible students in grades 11 and 12. College in the High School courses, offered at a reduced tuition rate (\$83.50 per credit) for eligible students, are courses taught by HACC certified teachers at the high school, offering the same course content as that offered at HACC. Dual Enrollment courses are courses taught on campus at HACC but available to our students at a reduced tuition rate (\$175.00 per credit). At the conclusion of the course, any student requiring a transcript for the transfer of credits to a college or university must submit their request through HACC. Students will earn college credits upon successful completion, a grade of C or higher, of this course.

Harrisburg University College in the High School (CHS)/Dual Enrollment

Gettysburg Area High School has partnered with Harrisburg University to provide college level courses and credit for eligible students in grades 10, 11 and 12. College in the High School courses are offered at a reduced tuition rate (\$200 per credit), are courses that are taught by Harrisburg University certified teachers at the high school, offering the same course content as offered at Harrisburg University. At the conclusion of the course, any student requiring a transcript for the transfer of credits to a college or university must submit their request through HU. Students will earn college credits upon successful completion, a grade of C or higher, of this course.

Course Audits

In cases where an 11th or 12th grade student is on schedule in meeting graduation requirements, he or she may choose to audit a college course through Gettysburg College. The student will receive a high school elective credit, however course audits are not factored into class rank or GPA. Course audit credits are not transferable to a college or university.

Early Graduation

Gettysburg Area High School offers senior students the opportunity to pursue early graduation by finishing their course work at the end of the 1st semester of their senior year. In order to be eligible for early graduation, students must:

- 1. Notify their counselor of their intent when scheduling during spring semester of junior year.
- 2. Have completed 24 of the 28 required classroom credits by the first day of school of their senior year.
- 3. Have satisfied the requirements of Act 158.
- 4. Pass all four courses during the 1st semester. Students not passing a course during the 1st semester will be expected to schedule classes during the 2nd semester.

Students who meet these eligibility requirements and complete the necessary coursework will not be required to attend GAHS during the 2nd semester of their senior year. Students who choose to do this will not be eligible for participation in school sports (per PIAA rules) or activities (with the exception of Prom, Senior Trip, and Graduation). Students will not receive a diploma until the spring graduation ceremony.

Independent Study

Gettysburg Area High School offers students the limited opportunity to schedule an independent study for an elective credit. In order for a proposal to qualify for an Independent Study:

- 1. A student must complete the necessary application with his/her counselor.
- 2. The course must be an elective credit.
- 3. The course must demonstrate daily documented work.
- 4. The course should be in a field of intended post-secondary study for the student.
- 5. The course must have clearly defined assessments.
- 6. A certified staff member at GAHS must agree to serve as an advisor for the study. The student will report to that staff member's class room each day during the designated period.
- 7. All Independent Studies must be scheduled and approved by the end of the first week of school in August. No independent studies will be approved at the semester break in January without extreme extenuating circumstances.

Scheduling Guidelines

- 1. All students must schedule eight credits for the school year.
- 2. Every course offered at Gettysburg has a credit value. Credits are earned from both required and elective courses
- 3. There are also some electives that students may not take unless they have taken the prerequisite courses. Pay attention to all courses requiring a prerequisite class.
- 4. Some electives require a fee to be paid to help offset the costs of materials used to create student projects (indicated by a "\$")
- 5. In order to be promoted to the next grade level status, a student must earn 4.0 credits to be a sophomore, 12.0 credits to be a junior, and 20.0 credits to be a senior.
- 6. Students planning to enter college are recommended to take an academic curriculum, maintain a high scholastic average and take the appropriate college entrance tests.
- 7. Course offerings are affected by student demand and/or teacher availability. If there is low student demand for the course or if a teacher's schedule is too full, it may be necessary to eliminate the course offerings from the schedule.

Student Schedule Changes

Students will be permitted to make schedule changes over the summer with the understanding that counselors have limited hours. Once the school year begins, students will be permitted to make schedule changes within 3 school days at the beginning of each semester. All "Schedule Change Request" forms must be submitted to the Counseling Center by the end of the third school day. After that third day, for courses that are dropped for academic reasons or extenuating circumstances, the withdrawal of that course(s) may be noted on the transcript.

GASD Cyber Program

We are pleased to continue offering our 100% cyber school option for students of the Gettysburg Area School District (GASD) for the 23-24 school year. Students have the choice of our traditional brick and mortar school, or our cyber school program, GASD Cyber, offered through Capital Area Online Learning Association (CAOLA™) for students in grades 6-12. For additional information for GASD Cyber, click here.

NCAA ELIGIBILITY CENTER QUICK REFERENCE GUIDE



NCAA DIVISION I ACADEMIC REQUIREMENTS

Full Qualifier

College-bound student-athletes enrolling at an NCAA Division I school need to meet these academic requirements to practice, compete and receive an athletics scholarship in their first year of full-time enrollment.

- Complete 16 core courses in the appropriate areas.
- Ten of the 16 core courses must be completed before the seventh semester (senior year) of high school.
- Seven of the 10 core courses must be in English, math or natural/physical science.
- Earn a core-course GPA of at least 2.300.
- Earn an SAT combined score or ACT sum score matching the core-course GPA on the Division I sliding scale.
- Submit proof of graduation to the Eligibility Center

Test Scores

If a student-athlete plans to attend an NCAA Division I college or university, they should use the sliding scale to review the core-course GPA and SAT/ACT score they will need to meet Division I full qualifier standards. When registering for the SAT or ACT, students should use code 9999 to ensure their test scores are sent directly to their Eligibility Center account. More information regarding the impact of COVID-19 and test scores can be found at on.ncaa.com/COVID19_Fall2022.

An SAT combined score is calculated by adding critical reading and math subscores. An ACT sum score is calculated by adding English, math, reading and science subscores. Students may take the SAT or ACT an unlimited number of times before they enroll full time in college. If a student takes either test more than once, the best subscores from each test are used for their academic certification process. <u>Test scores on transcripts</u> <u>will not be used</u>.

Grade-Point Average

The NCAA Eligibility Center calculates your core-course grade-point average based on the grades you earn in NCAA-approved core courses. Only your best grades from the required number of NCAA core courses will be used. This means that the cumulative GPA listed on your high school transcript could be different than the NCAA core-course GPA used in your certification. Your core-course GPA is based solely on the grades you received in NCAA-approved core courses. To find your high school's NCAA-approved core-course list, visit eligibilitycenter.org/courselist.

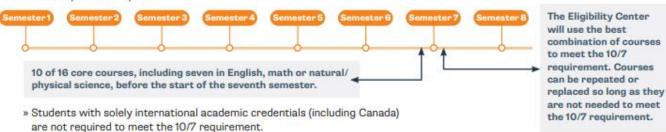
Your core-course GPA is calculated on a 4.000 scale. Numeric grades such as 92 or 87 are changed to letter grades such as A or B. As part of this calculation, each grade received is assigned "quality points".. The Eligibility Center does not use plus or minus grades when calculating your core-course GPA. For example, grades of B+, B and B- will each be worth three quality points. Weighted honors or advanced placement courses may improve your core-course GPA but your high school must notify the Eligibility Center that it awards weighted grades in these classes.

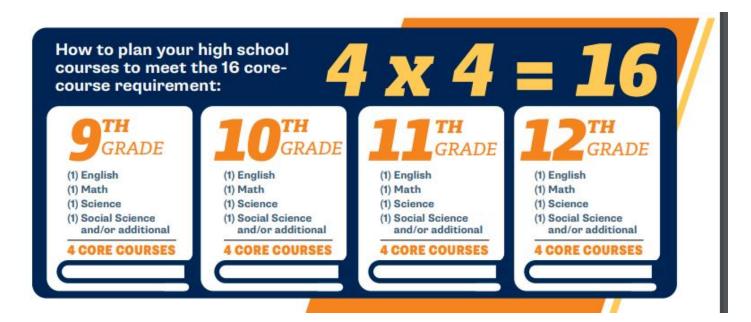
In "Pass/Fail" grading situations, the Eligibility Center will assign your high school's lowest passing grade for a course in which you received a "Pass" grade. For most high schools, the lowest passing grade is a D, so the Eligibility Center generally assigns a D as a passing grade. For information on the impact of COVID-19 on "Pass/Fail" grades, visit on.ncaa.com/COVID19_Fall2022.

Complete a total of 16 core courses in the following areas:



Complete 10 of your 16 core courses, including seven in English, math or natural/physical science, before the start of your seventh semester. Once you begin your seventh semester, any course that is needed to meet the 10/7 requirement cannot be replaced or repeated.





Core GPA	SAT*	ACT Sum*	Core GPA	SAT*	ACT Sum*
3.550	400	37	2.750	810	59
3.525	410	38	2.725	820	60
3.500	430	39	2.700	830	61
3.475	440	40	2.675	840	61
3.450	460	41	2.650	850	62
3.425	470	41	2.625	860	63
3.400	490	42	2.600	860	64
3.375	500	42	2.575	870	65
3.350	520	43	2.550	880	66
3.325	530	44	2.525	890	67
3.300	550	44	2.500	900	68
3.275	560	45	2.475	910	69
3.250	580	46	2.450	920	70
3.225	590	46	2.425	930	70
3.200	600	47	2.400	940	71
3.175	620	47	2.375	950	72
3.150	630	48	2.350	960	73
3.125	650	49	2.325	970	74
3.100	660	49	2.300	980	75
3.075	680	50	2.299	990	76
3.050	690	50	2.275	990	76
3.025	710	51	2.250	1000	77
3.000	720	52	2.225	1010	78

*Full sliding scale research between the new SAT and ACT is ongoing.

52

53

53

54

55

56

57

730

740

750

750

760

770

780

790

800

Academic Redshirt

2.975

2.950

2.925

2.900

2.875

2.850

2.825

2.800

2.775

All Division I academic redshirts may receive an athletics scholarship and practice during their first year of full-time enrollment at a Division I school, but may NOT compete.

2.200

2.175

2.150

2.125

2.100

2.075

2.050

2.025

2.000

1020

1030

1040

1050

1060

1070

1080

1090

1100

- Complete 16 core courses in the appropriate areas.
- Earn a core-course GPA of at least 2.0
- Earn an SAT combined score or ACT sum score matching the core-course GPA on the Division I sliding scale.
- Submit proof of graduation to the Eligibility Center

ACADEMIC REDSHI

79

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81

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83

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85

86

NCAA ELIGIBILITY CENTER QUICK REFERENCE GUIDE



NCAA DIVISION II ACADEMIC REQUIREMENTS

Full Qualifier

College-bound student-athletes enrolling at an NCAA Division II school need to meet these academic requirements to practice, compete and receive an athletics scholarship in their first year of full-time enrollment.

- Complete 16 core courses in the appropriate areas.
- Earn a core-course GPA of at least 2.200.
- Earn an SAT combined score or ACT sum score matching the core-course GPA on the Division II full qualifier sliding scale.
- Submit proof of graduation to the Eligibility Center.

Partial Qualifier

College-bound student-athletes that do not meet Division II full qualifier standards will be deemed a partial qualifier. All Division II partial qualifiers may receive an athletics scholarship and practice during their first year of full-time enrollment at a Division II school, but may NOT compete.

Test Scores

If a student-athlete plans to attend an NCAA Division II college or university, they should use the sliding scale to review the core-course GPA and SAT/ACT score they will need to meet Division II full qualifier standards. When registering for the SAT or ACT, students should use code 9999 to ensure their test scores are sent directly to their Eligibility Center account. More information regarding the impact of COVID-19 and test scores can be found at on.ncaa.com/COVID19_Fall2022.

A combined SAT score is calculated by adding critical reading and math subscores. An ACT sum score is calculated by adding English, math, reading and science subscores. Students may take the SAT or ACT an unlimited number of times before they enroll full time in college. If a student takes either test more than once, the best subscores from each test are used for their academic certification process. <u>Test scores on transcripts will not be used</u>.

Grade-Point Average

The NCAA Eligibility Center calculates your core-course grade-point average based on the grades you earn in NCAA-approved core courses. Only your best grades from the required number of NCAA core courses will be used. This means that the cumulative GPA listed on your high school transcript could be different than the NCAA core-course GPA used in your certification. Your core-course GPA is based solely on the grades you received in NCAA-approved core courses. To find your high school's NCAA-approved core-course list, visit eligibilitycenter.org/courselist

Your core-course GPA is calculated on a 4.000 scale. Numeric grades such as 92 or 87 are changed to letter grades such as A or B. As part of this calculation, each grade received is assigned "quality points," as shown below. The Eligibility Center does not use plus or minus grades when calculating your core-course GPA. For example, grades of B+, B and B- will each be worth three quality points. Weighted honors or advanced placement courses may improve your core-course GPA but your high school must notify the Eligibility Center that it awards weighted grades in these classes.

In "Pass/Fail" grading situations, the Eligibility Center will assign your high school's lowest passing grade for a course in which you received a "Pass" grade. For most high schools, the lowest passing grade is a D, so the Eligibility Center generally assigns a D as a passing grade. For information on the impact of COVID-19 on "Pass/Fail" grades, visit on.ncaa.com/COVID19_Fall2022.

CALCULATING YOUR QUALITY POINTS

In order to determine your quality points earned for each course, multiply the quality points for the grade by the amount of credit earned.

Examples:

- » An A grade (4 points) for a trimester course (0.34 units): 4 points x 0.34 units = 1.36 total quality points
- » An A grade (4 points) for a semester course (0.50 units): 4 points x 0.50 units = 2.00 total quality points
- » An A grade (4 points) for a full-year course (1.00 units): 4 points x 1.00 units = 4.00 quality points

Use the worksheets on pages 23 and 27 to help determine your core-course GPA.

QUALITY POINTS

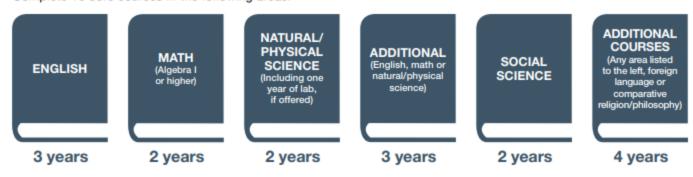
A = 4 points B = 3 points C = 2 points D = 1 point

UNITS OF CREDIT

1 quarter unit = 0.25 units 1 trimester unit = 0.34 units 1 semester unit = 0.50 units 1 year = 1 unit

CORE-COURSE REQUIREMENTS

Complete 16 core courses in the following areas:



FULL QUALIFIER SLIDING SCALE						
Core GPA	SAT*	ACT Sum*	Core GPA	SAT*	ACT Sum*	
3.300 & above	400	37	2.725	730	52	
3.275	410	38	2.700	740	53	
3.250	430	39	2.675	750	53	
3.225	440	40	2.650	750	54	
3.200	460	41	2.625	760	55	
3.175	470	41	2.600	770	56	
3.150	490	42	2.575	780	56	
3.125	500	42	2.550	790	57	
3.100	520	43	2.525	800	58	
3.075	530	44	2.500	810	59	
3.050	550	44	2.475	820	60	
3.025	560	45	2.450	830	61	
3.000	580	46	2.425	840	61	
			The second second			

2.400

2.375

2.350

2.325

2.300

2.275

2.250

2.225

2.200

850

860

870

880

890

900

910

920

62

63

65

66

67

68

69

70 & above

46

47

47

48

49

49

50

50

51

52

DIVICION II

590

600

630

650

660

680

690

710

720

Online Courses/ Nontraditional

2.975

2.950

2.925

2.900

2.875

2.850

2.825

2.800

2.775

2.750

Nontraditional courses are classes taught online or through distance learning, hybrid/blended, independent study, individualized instruction, correspondence or similar means.

These types of courses may be acceptable for use in the NCAA initial-eligibility certification process; however, it is important to make sure the nontraditional program has been approved and appears on the high school's list of NCAAapproved core courses.

^{*}Full sliding scale research between the SAT and ACT is ongoing.

Agriculture

Chairperson - Mrs. Kennedy Department Members – Mrs. Scott

The Agriculture Education program offers a wide variety of courses that are designed to provide students with the chance to demonstrate knowledge and skills through real-life applications. Teachers in the Agriculture Education program maintain close ties with business and industry personnel to ensure courses reflect current expectations within the marketplace. Students who complete the program have an opportunity to acquire industry-specific certifications and/or college credit. In addition, students will develop the skills necessary to enter the workforce while also preparing themselves for post-secondary education and/or technical school training.

*A **Program of Study (POS)** in **Horticulture** or a **CTE Program** in **Animal Science** can provide students the opportunity to earn college credit at selected technical schools and community colleges. A complete list of colleges participating in the statewide articulation program can be found at www.collegetransfer.net. The Animal Science program has a specific articulation agreement with Delaware Valley University (see Mrs. Kennedy or your school counselor for details).

Introduction to Agricultural Sciences

1 Credit

Agriculture Science investigates the various segments of science involved in agriculture. Specific studies include the history of agriculture and society, food science and marketing of products in America's largest industry, soil science, plant science and animal science. This course is a springboard for other classes in the agriculture curriculum.

This course may be used as either elective or science credit in meeting graduation requirements.

Animal Science I 1 Credit

Prerequisite: Introduction to Agricultural Sciences, Accelerated Biology, or teacher recommendation.

This course provides a comprehensive look at both small and large animals with an emphasis on animal science and veterinary medicine. Students will develop their knowledge in the following content areas: breed identification, nutrition, reproduction, internal and external anatomy and genetics. Other content areas that will be discussed are proper selection and use, diseases, prevention and treatment methods and animal behavior and handling. As part of this course, students will have the opportunity to work with live animals to further enhance their learning.

*This course may be used as either elective or science credit in meeting graduation requirements.

Animal Science II 1 Credit

Prerequisite: Animal Science I with a final grade of 75% or higher or teacher recommendation

This course provides a comprehensive look at production operations and management of both small and large animals. Students will develop their knowledge in production operations and management relating to the following content areas: proper management and production standards, care and handling, selection and use, technology, nutrition, reproduction, and disease prevention and treatment.

This course may be used as either elective or science credit in meeting graduation requirements.

**College Credit at Delaware Valley College is offered through completion of this course with a B or higher.

Certification Opportunities: Dairy Herd Management; Dairy Business Management

Introduction to Equine 1 Credit

This course will provide students with basic knowledge about horses and the equine industry. Topics will include basics on equine evolution, history of use, breed identification, tack and equipment identification, anatomy and physiology and career opportunities.

Agricultural Leadership 1 Credit

This course serves as an opportunity to develop basic leadership skills and student potential for premier leadership, personal growth and individual career success. Throughout this course, many personal and interpersonal leadership traits will be studied. Specifically, students will focus on understanding leadership and global citizenship, communication and speaking and leading individuals and small groups. Students will also have the opportunity to explore the many benefits of FFA and Supervised Agricultural Experience (SAE) and identify the many career opportunities available in agriculture.

Agribusiness Management

Prerequisite: 10th, 11th, or 12th grade standing

1 Credit

This course has been designed to give students a basic understanding of what it takes to manage an agricultural business. This course allows students to combine economic principles of business with sales, management, and service skills. Students will identify basic economic and business principles used within the agricultural industry. Specific areas of study include economics, business management, market foundations, product marketing and sales and sales techniques. Students will also have the opportunity to advance their knowledge through hands-on experiences provided by the agricultural department.

Environmental and Natural Resource Management

1 Credit

In this course, students will analyze the value of agriculture and how it sustains our everyday life and growing populations. Students will learn about various ecosystems and how they function to sustain all life forms with the influences of agricultural production methods. Students will study content areas such as forestry, wildlife, aquatics, water management, soil and land use, and current events relating to our local environmental health.

This course may be used as either elective or science credit in meeting graduation requirements.

Supervised Agricultural Experience (SAE)

Prerequisite: Introduction to Agricultural Sciences

.5 Credit per semester

This course is a self-initiated program, completed beyond the school day, for students continuing the supervised agricultural experience (SAE) project and utilizes work-based learning opportunities. Individual visitations may be made by the instructors to review project activities, review record-keeping, provide feedback and discuss career goals with the student and parent or employees. Students will be required to maintain their project book and keep accurate records of their activities including time on task, finances, photo journal, approved practices and leadership opportunities. Students may enroll in the course each semester.

Horticulture Production 1 Credit

Prerequisite: Introduction to Agricultural Sciences with a final grade of 75% or higher or teacher recommendation

This course is designed to engage students in the overall production of plant material and production crops. Students will learn about the anatomy of plants and their reliance on environmental conditions for optimal health and production. Additionally, students will identify the role of crops and animal nutrition. Students will maintain and care for the production and management of greenhouse crops such as poinsettias, vegetables, fruits, house plants, and much more.

This course may be used as either elective or science credit in meeting graduation requirements.

Certification Opportunities: Pennsylvania Certified Horticulturist (PCH) Associate credential; Pesticide Applicator

Landscape Design I 1 Credit

In this course, students will be introduced to the landscape industry. Students will learn about the many components of the landscaping industry sector. Students will develop an eye for the identification of plant material. Additionally, students will learn design principles of effective and functional landscape design. Students will learn how to use drawing tools and become familiar with drawing landscapes to scale.

Landscape Design II 1 Credit

Prerequisite: Landscape Design I with a final grade of 75% or more or teacher recommendation

In this continuation of landscape I, students will continue to learn how to identify more complex plant species that are used in the landscape. Additionally, students will begin to draw more complex landscape designs. Students will be responsible for creating their own themed landscape design. Selection of softscape material and hardscape material should demonstrate student knowledge of landscape uses and requirements.

Certification Opportunities: Pennsylvania Certified Horticulturist (PCH) Associate credential

Floral Design 1 Credit

This course is designed to provide students with the opportunity to design beautiful floral arrangements. Students in this course will focus primarily on the design/art aspects of floriculture as they learn various types of plant material, uses of plant material, styles of designs and applications of flowers. Students will also learn the general business management concepts to operate a floral business. A \$35 project fee is required to create a seasonal floral arrangement.

Agriculture Cooperative Education Capstone

1 Credit

Prerequisite: <u>Teacher recommendation only</u> and completion of Agribusiness Management and course of study in either animal science or horticulture production operations.

The Agriculture Cooperative Education Program will provide students with an opportunity to gain on-site career experience with business and professional organizations in his/her chosen area of interest within agriculture. The student will work with their teacher and on-site supervisor to develop a series of learning objectives and tasks that must be completed throughout their experience.

Art

Chairperson - Mrs. Myers Department Members - Mrs. Dreves

Art classes are all 'hands-on' with outcome-based projects providing the central method for learning. The Art Department offers visual and media arts, fine craft and art history courses geared toward production with a variety of modern and traditional tools and techniques. Students interested in a creative career or just sharpening creative thinking skills will have the opportunity to focus on top-notch design problem solving and projects suited for college entrance portfolio requirements, individual entrepreneurship and/ or competitive merit-based scholarships.

Art I - Two-Dimensional Design

1 Credit

This course emphasizes the exploration of visual art in a variety of 2-D media and design. Students learn skills in drawing, painting, illustration, beginning animation, and printmaking while applying their learning of art history, the elements and principles of design and art appreciation. A sketchbook is required. Students are required to purchase some drawing materials.

Art I - Three- Dimensional Design

1 Credit

This course emphasizes the exploration of visual art in a variety of 3-D media and design. Students learn skills in beginning architecture, sculpture, carving, casting, modeling, pottery, basic forming & construction methods while applying their learning of art history, the elements and principles of design and art appreciation.

Art I – Digital Media Art

1 Credit

Students explore technology through art with the creation of computer-generated art, exploring cross-platform processes to include analog and digital processes, digital citizenship and animation. Students strengthen their design abilities with fundamental art and design and history while creating a body of original artwork. This class is designed to stimulate creative thinking, develop an understanding of media art knowledge and sharpen software skills. This course prepares students for the Adobe Certified Associate (ACA) in Visual Design Using Adobe Photoshop CC Certification - Certification costs vary based on student selection. The Adobe Certified Associate certification is approximately \$63.00.

Drawing & Painting I Prerequisite: Art I

1 Credit

Students investigate chosen mediums in painting with concepts in museum studies and themes in art. Emphasis of historical and cultural context, visual literacy as it relates to current and historical trends in arts and technology. Students develop a deeper sense of their creative process and mastery of methods and techniques. Students take part in art show production and art history in a studio art, hands-on atmosphere. Students will visit art galleries and museums, participate in scholastic exhibitions and utilize technology in the classroom along with learning advanced skills.

Pottery & Sculpture

1 Credit

Prerequisite: Art I

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Students investigate and explore traditional pottery wheel & sculpture tools and techniques to fabricate unique pieces of usable pottery and large-scale sculpture. Emphasis is on clay and wood fabrication using the creative process, mastery of methods and techniques and art history in a studio art atmosphere. **This course has a \$55 project fee for Adirondack Chair materials.**

Jewelry & Metal Craft 1 Credit

Prerequisite: Art I

Students learn to use traditional jeweler's tools & techniques to form & fabricate unique pieces of wearable art jewelry & small-scale metal sculpture. Specific skills addressed will be soldering, cold connections, chain making/ wire fabrication, stone setting, and enameling, while addressing art history in a creative studio art atmosphere. A sketchbook and tool kit is required.

Tool kit is available for purchase for approximately \$50 wholesale.

Advanced Placement Studio Art- Two Dimensional Art

1 Credit

Prerequisite: Completion of at least one Art II level class or teacher recommendation based upon portfolio.

Hands-on class designed for the sophisticated art student seriously interested in the practical experience of studio art. Students will be expected to develop a strong technical 2D portfolio consisting of 15-20 original art works. The completed portfolio serves as the Advanced Placement Test. It may also be used for college entrance requirements. All students are required to take the AP test and are responsible for the approximate cost of \$97. Financial assistance is available.

Advanced Placement Studio Art- Three Dimensional Art

1 Credit

Prerequisite: Completion of at least one Art II level class or teacher recommendation based upon portfolio

Hands-on class designed for the sophisticated art student seriously interested in the practical experience of studio art. Students will be expected to develop a 3D portfolio consisting of 15-20 original art works concentrated on a theme or specific area. The completed portfolio serves as the Advanced Placement Test. It may also be used for the college admissions process. All students are required to take the AP test and are responsible for the approximate cost of \$97. Financial assistance is available.

Advanced Placement Studio Art- Drawing

1 Credit

Prerequisite: Any Art II Level or teacher recommendation based on portfolio

Hands-on class designed for the sophisticated art student seriously interested in the practical experience of studio art. Students will be expected to develop a drawing portfolio with specific theme or interest consisting of 15-20 complete, original art works. The completed portfolio serves as the Advanced Placement Test. It may also be used as a college entrance requirement. All students are required to take the AP test and are responsible for the approximate cost of \$97. Financial assistance is available.

Business and Computer Information Technology

Co-Chairpersons – Mrs. Sieg and Mrs. Osmolenski Department Members – Mr. Donahue, Mrs. Ramsburg, and Mr. Wadel

The United States is unique in the world because of its "free enterprise" systems and the dream that any person may become a success. The Business and Computer Information Technology Department offers courses that provide students with the necessary skills, attitudes, and knowledge which help ensure this success.

- * Programs of Study (POS) in <u>Communications</u>, <u>Accounting</u>, <u>Office Management</u>, and <u>Marketing/Sales/Distribution</u> provide students the opportunity to earn college credit at selected technical schools and community colleges. A complete list of colleges participating in the statewide articulation program can be found at <u>www.collegetransfer.net</u>.
- * You can learn more about Pathways and suggested courses in the Appendix
- * We offer 2 year programs of study, which require 720 hours of coursework (4 courses in a chosen pathway)

Accounting I 1 Credit

Prerequisite: 10th, 11th, 12th grade standing and 75% or higher in Algebra 1.5

If you plan to major in any area of business in college (most colleges recommend one, if not two, accounting courses as a background for business majors), to own your own business, or to maintain financial records in your daily life you should consider taking Accounting I. This course will provide students with a foundation for both personal and business recordkeeping methods. Students will study the accounting cycle through recording business transactions, preparing and interpreting financial statements, processing payroll, and completing banking procedures. A hands-on business simulation will be completed during this course. *Offered as a CHS course through Carlow University The fee for Carlow University in the High School courses is approximately \$75 per credit. The Carlow University establishes a fee for the course.

Accounting II 1 Credit

Prerequisite: Must have completed Accounting I with a grade of 80% or higher.

85% of the retail market share in small businesses uses QuickBooks as it's primary accounting software, while 4 out of 5 accountants recommend it to their small-business clients. So why not get certified while you're in high school? Some colleges even recognize the certification through the American Council on Education (ACE) and offer college credits. Get Intuit certified TODAY and graduate with certifications in Design Delight Innovator, Bookkeeping Professional, and QuickBooks! *Industry Certification Available with Parental Consent.

Business Basics 1 Credit

This course is designed to prepare an individual for the ever changing demands of the business world. Students will learn about FBLA (Future Business Leaders of America) organization, and will be given the opportunity to compete in a competitive event amongst their peers in the region. Students are also given the opportunity to compete for scholarship money in a business plan competition.

Business Law 1 Credit

Prerequisite: 11th or 12th grade standing

This course is designed to give students an understanding of how law governs business and individuals in our society. This is an excellent introduction to college-level Business Law and is also helpful to students pursuing careers as an attorney, owning their own business, entering the law enforcement field, and for learning more about personal/business contracts (ex: rental agreement).

Entrepreneurship 1 Credit

Do you want to be your own boss someday? Entrepreneurs have played a vital role in the development of this country. The willingness of such people to innovate, take risks, and devote themselves to building a business has been the stuff legends and heroes are made of. This course will discuss the theory and reality of entrepreneurship. Students will create a business plan, and also be involved in hands-on projects to innovate products.

HACC CHS Business 101 1 Credit

Prerequisite: 11th or 12th grade standing

This course introduces students to the broad field of business. The course covers an overview of the basic functions of business including management, marketing, finance, accounting, and human resources. The course also introduces students to basic economic systems and discusses the importance of ethics and corporate social responsibility to business success. The fee for HACC College in the High School courses is approximately \$83.50 per credit. HACC establishes fee for course.

HACC CHS Management 201-Virtual Course

Prerequisite: Placement Testing

This course is an introduction to primary functions of management and management theory. This course covers the knowledge and skills needed to plan, organize, control and lead organizations. Students discuss current events and issues-ethics and social responsibility, organizational culture, global management and technology. Students will also discuss and learn about the impact experienced by management and managers. The fee for HACC College in the High School courses is approximately \$83.50 per credit. HACC establishes fee for course.

1 Credit

Marketing Essentials 1 Credit

Product...Place...Price...Promotion...Did you know they affect your buying habits? This course covers the functions involved in the marketing of consumer goods to their users. Students will learn and apply basic marketing skills and strategies through the management of the school store.

Marketing Management 1 Credit

Prerequisite: Marketing Essentials

Marketing skills will be applied from the previous course to enhance the buyer's experience in the school store. Marketing management refers to internal activities that keep the marketing activities maximized and moving forward. Students will be responsible for the ordering activities related to the school store, and marketing the products to the correct target market. Students may also work with other groups, organizations, and teams throughout the school on marketing campaigns.

Personal Finance (scheduled simultaneously with 12th grade PE) .5 Credit

This course will help you learn how to use your personal financial resources to enjoy today and be financially secure tomorrow. Many young people fail in the management of their first consumer credit experience, establish bad financial management habits, and stumble through their lives learning by trial and error. Students will explore financial concepts such as money management, the tax system, buying or leasing a car, consumer credit and debit cards, banking, investing, and insurance. **This course is a graduation requirement for all students.**

Computer Information Technology

Introduction to Computer Programming

1 Credit

Prerequisite: Algebra I with a grade of 75% or higher

The demand for computer programmers continues to grow. This course will help you decide if this career is suited for you. Learn how to program using a web-based program designed by CMU (Carnegie Mellon University.) Begin by completing simple programs and completing the course with programming board games.

Advanced Computer Programming

1 Credit

Prerequisite: Introduction to Computer Programming

This course is a continuation of Introduction to Computer Programming. Students will use hands-on projects to analyze a problem, design and code a program, and test and debug the program in order to formalize a solution. Languages used will be C, Java, and other possibilities.

HACC CHS Introduction to Software for Business

1 Credit

Prerequisite: Working knowledge of computer operations and 11th or 12th Grade standing

This hands-on, project-oriented course provides a fundamental understanding of computers and familiarizes students with the interaction of computer hardware and software. Emphasis is placed on the use of microcomputers and software applications, including Word, Excel, Access and PowerPoint. Students will also have the opportunity to explore the advanced features of PowerPoint including web-based presentations, self-running kiosks, custom shows, actions buttons, slide masters and collaboration features. Students must meet the same requirements as those college students taking the course on the HACC campus. Students will receive 3 credits for CIS 105 (Intro to Software for Business) through HACC upon successful completion of the course. The fee for HACC College in the High School courses is approximately \$83.50 per credit. HACC establishes fee for course.

Microsoft Office Associate 1 Credit

Stand out and be seen! Microsoft Office training is the 3rd most requested skill for jobs. This course will allow students to get certified in Microsoft Office, and leave with a certificate in hand! This is a great way to build your resume and open the door to more opportunities in your future! *Industry Certification Available with Parental Consent

Microsoft Office Expert

1 Credit

Prerequisite: Microsoft Office Associate course completion with Associate Certificate

This course is a hands-on, project-oriented class covering the advanced features of Microsoft Office Word, Excel, and Access. Students will be provided with practice tests to prepare them for the Expert level certification exam. *Industry Certification Available with Parental Consent

Web Design 1 Credit

The demand for web designers continues to grow. The course will help you decide if this career is suited for you. Learn how to program in HTML and DreamWeaver using hands-on projects. Create simple web pages and move along to a cascade style sheet (CSS) finishing up with using Javascript and more advanced concepts.

Career and Advisory Department

Chairperson - Mrs. Sieg
Department Members - Mrs. Ramsburg

The vision of GAHS is to ensure that all learners have access to a rigorous curriculum of experiences that will develop into a personally relevant pathway to future success. These courses explore student interests, career aspirations and job related skills.

Career Internship/Teacher Assistant

1-2 Credits

Prerequisite: 11th or 12th grade standing

Junior and Senior students may arrange their own internships in off-campus work sites related to their career goal. Transportation is the responsibility of the student. Students are required to submit weekly journals and will be evaluated by their supervisor twice per semester. Students are required to see the Career Coordinator or their School Counselor for paperwork to schedule this course.

Freshman Advisory and Career Exploration

1 Credit

Required for all 9th grade students beginning with the class of 2026

Students will explore their interests and passions with the goal of planning their educational programming (including post-secondary training/schooling) to align with their future career aspirations.

Transition to Work 1 Credit

Prerequisites: 12th grade standing and administrative approval

Senior students may arrange to leave the building to go to work if they have administrative approval - academic foundation (above 70% GPA preferred), no disciplinary concerns, positive attendance, and the ability to maintain a weekly work schedule. **Students are required to see the Career Coordinator or their Guidance Counselor for paperwork to schedule this course.**

Career and Technology Department

Co-Chairpersons – Mrs. Kennedy and Mr. Licharowicz Department Members – Mr. Colgan, Mr. Deckert, Mr. Hardy, Mr. Sokol & Mrs. Smith

The Career and Technical Department offers a wide variety of courses which provide students with the chance to demonstrate knowledge and skills through real-life applications. Teachers in the Career and Technology Department maintain close ties with business and industry to ensure courses reflect current expectations in the marketplace. Students may select a single course from this department or may choose to complete an entire series of courses. Students who enroll in one or more of the courses, will develop job-entry skills or be prepared for post-secondary education or technical school training.

*Programs of Study (POS) in <u>Communications</u> or <u>Engineering</u> provide students the opportunity to earn college credit at selected technical schools and community colleges. A complete list of colleges participating in the statewide articulation program can be found at <u>www.collegetransfer.net</u>.

Photographic Technology I

1 Credit

This course is designed to give students a basic understanding of contemporary photographic technology. Photographic Technology I will provide opportunities for students to practice common procedures of contact prints, enlargement of pictures and finishing procedures. Additionally, the course will introduce students to digital photography and its uses and applications to modern photography and the world of information management. A \$15 consumable materials fee is also charged to replace in-house materials. This class qualifies as a prerequisite for Yearbook / Publications or Photographic Technology II

Photographic Technology II

1 Credit

Prerequisite: Photographic Technology I with a grade of 80% or higher

This course will review, emphasize, and build on the basic skills learned in Photographic Technology I. Students will participate in weekly photo assignments and photo design challenges to improve their problem-solving skills in camera handling, exposure control, composition, digital imaging, and visual presentation. Students have dedicated time to pursue their major area of interest with strong emphasis placed on the production of a professional quality portfolio. Personal photographic equipment is required! A \$20 consumable materials fee is also charged to replace in-house materials. This class qualifies as a prerequisite for Yearbook / Publications or Independent Study

Publication/Journalism 1 Credit

Students will study the various aspects of print and broadcast journalism, including history, law, ethics, and the role of the media in society and school. The course stresses the importance of being a member of a responsible press in the 21st century. Students will examine current events through the use of internet sources, daily news broadcasts, podcasts, and traditional newspapers. In this course, students will also have the opportunity for interdisciplinary collaboration in publishing with Adobe InDesign and skills associated with all phases of planning, creating, producing, advertising, and distributing printed products. Students will also have the opportunity to earn a certification in Adobe InDesign. Students who are interested in a career in some aspect of publishing or mass communication should consider taking this course. This course is co-taught by Mr. Deckert (Yearbook/Publications) and Mrs. Spagnola (Journalism).

Yearbook and Publications 1 Credit

Recommendation: Photo Tech I or Graphic Communications I with a grade of 80% or higher

Students in this semester course will learn and apply the knowledge and skills associated with all phases of creating, producing, advertising and distributing GASD Elementary School yearbooks, GASD District Calendar, and the monthly newspaper *Maroon and White*. Students should have some basic knowledge of the following software: Adobe InDesign CC and Adobe Photoshop CC. Students will apply the knowledge and skills associated with all scheduling for layout, capturing and editing photographs, soliciting advertisements, planning a yearbook sales campaign, and distributing the yearbook publication (Canon-Aid). In addition, students will obtain sports statistics and student activity information, meet deadlines, and use Adobe CC software to create a quality product while applying knowledge and skills.

Multimedia I 1 Credit

Students will become familiar with and explore production tools, roles, skills and processes used in multimedia. They will perform production roles, develop hardware and software skills, apply production processes and assimilate multimedia literacy. Student web and DVD portfolios are developed to showcase their growth with computer technologies, animation, software presentation, video, and television productions. Students are required to do morning announcements and perform production activities after the school day. This class has a \$10 fee for materials.

Multimedia II 1 Credit

Prerequisite: Multimedia I

Students analyze and critique multimedia structures as they develop and refine competencies within media production tools, roles, skills and processes. Students continue to develop a professional web and DVD portfolio showcasing their growth. The course will emphasize leadership, project management, classic Hollywood editing, message delivery, special effects and studio interviews/production. Students are required to arrive at school early to do morning announcements and perform production activities after the school day. **This class has a \$10 fee for materials.**

Advanced Multimedia 1 Credit

Prerequisite: Multimedia II

Students research, analyze and critique multimedia structures, production tools, roles, skills, occupations, and processes. Individual directed learning and production styles are nurtured. Students perform leadership roles and manage productions associated with televisions, video, animation, computer presentations, CD/DVD, web productions and media distribution. Students continue to develop a professional web and DVD portfolio showcasing their growth. Students are required to arrive at school early to do morning announcements and perform production activities after the school day. **This class has a \$10 fee for materials.**

Graphic Communications I 1 Credit

Graphic communication means the exchange of information in a visual form, such as words, illustrations, photographs, or a combination of these. In Graphic Communications I, students will have experiences in the use of digital cameras, desktop publishing using Adobe InDesign, Illustrator and Photoshop, vinyl sign printing and cutting, offset lithography (printing press) and screen printing designs on T-shirts. A \$10 consumable materials fee will be charged.

Graphic Communications II

Prerequisite: Graphic Communications 1

1 Credit

Graphic Communications II builds on the basic processes and procedures developed in Graphic Communications I. Students will use graphic arts industry standard software, such as Adobe InDesign, Illustrator, and Photoshop to create professional quality computer graphic designs, graphic layouts, and three-dimensional computer design projects. Advanced techniques in digital photography, color separation, and scanning are applied. Multi-color offset lithographic printing processes and screen process printing techniques will be explored. Students may have the option to test for Adobe certifications in Adobe Illustrator and Adobe Photoshop. **A \$15** consumable materials fee will be charged. Additional fees would be charged for Adobe certifications.

T.S.A. Graphic Production

1 Credit

Prerequisite: Graphic Communications 1 and/or teacher recommendation

Students participating in TSA Graphic Production will design, layout, and mass produce graphic images using screen printing processes, offset lithography and digital press production. Students function as members of the Technology Student Association leadership core, while exploring the basic concepts in graphic production processes. Students will follow contemporary business practices of marketing, sales, financial record keeping, design, production, and distribution of products. Students will be required to enter one of the TSA regional communication competitions in February.

Computer Aided Drafting and Design (CAD)

1 Credit

This is a Level 1 Course for Engineering POS

Computer Aided Drafting and Design (CAD) is designed to introduce students to the field of engineering through drafting and design. A variety of drawings will be completed using CAD. Students will study and apply sketching techniques and drafting concepts while learning and using AutoCAD to develop multi-view and pictorial drawings. Students will learn how to create three-dimensional models and assemblies using solid modeling software. Students will also receive exposure to basic engineering concepts through computer software simulation tools. In addition, students will experience 3D printing and CNC (Computer Numeric Control) machining. Career choices in engineering, computer aided design, and related fields will be discussed and explored. This class qualifies as a prerequisite for Mechanical Drafting and Design.

Materials Processing I

1 Credit

This is a Level 1 Course for Engineering POS

In this beginning course in the materials area, students will design and build a project from start to finish, learning how to safely and properly use all types of tools in the lab, including hand tools, portable power tools and large stationary power tools. Students will learn a number of production and manufacturing techniques, and a variety of materials will be available for use. Concepts being taught will include cutting, drilling, sanding, finishing and project design in both wood and plastics, and we have an assortment of tools on which to learn. A project or projects will be required. A cost will be incurred for materials for the project or projects of approximately \$30. This class qualifies as a prerequisite for Materials Testing and Manufacturing.

Materials Processing II

1 Credit

Prerequisite: Materials Processing I with a recommended grade of 75% or higher in all prerequisites and/or teacher recommendation

This class expands upon the experiences students received in Materials I. Students will continue to develop their skills and learn new techniques based upon the projects that they choose to design and construct. More advanced techniques and procedures will be taught, and students will have a better understanding of the complex systems involved in the manufacturing and production processes. Students will choose (with instructor approval), design and construct projects using the skills and techniques taught in this course, as well as previous classes in the materials path. A project or projects will be required. A cost will be incurred for materials for projects, cost will vary per student.

Electronics Technology 1 Credit

Prerequisite: Computer Aided Drafting and Design (CAD), or Materials Processing I; Algebra I with an 80% or higher

This is an introductory course to the basic fundamentals of electricity and electronics. Students use circuit training labs with a variety of electrical tools and electronic measuring devices to build and understand electronic circuits. Course concepts are explored through simulation software, prototyping circuits, and printed circuit board projects. Students will also construct and take home small electronic kits. This class would be useful for any student planning a career in electrical or electronics related fields. The content is core to an engineering foundation. A \$20 lab fee will be charged. Additional fees may be applied to choice projects. This course has a 4 credit articulation with Harrisburg Area Community College mechatronics programs of study.

Engineering and Design 1 Credit

Prerequisite: Computer Aided Drafting and Design (CAD), or Materials Processing I; 10th, 11th or 12th grade standing

Engineering and Design explores how things are made and how they work. It is an introduction to the human made world through a variety of hands-on projects applying Science, Technology, Engineering and Mathematics (STEM). Students use computers, tools and machines to design and construct projects such as toy cars, rockets, steam boats, bridges, and small lights. The course provides a formal introduction to technology- the ways in which people use tools, resources, information, and "know-how" to solve practical problems. Emphasis is placed on the technological design & problem solving process with an engineering perspective. Students explore the contributions and impacts of technology, modern manufacturing, as well as career opportunities in technical and engineering fields. A \$20 lab fee will be charged. This class qualifies as a prerequisite for T.S.A. Manufacturing or Materials Testing.

Mechanical Drafting and Design

1 Credit

Prerequisite: Computer Aided Drafting and Design (CAD)

Mechanical drafting and design is an advanced drawing and design course that builds upon the skills and knowledge attained in 1766-Computer Aided Drafting and Design (CAD). Students will learn and accurately utilize solid modeling software to design, test, and create prototype parts and assemblies. Students will be introduced to various fasteners and their role in assemblies. Students will also be introduced to computer numeric control (CNC), and 3D printing where they will manufacture components to complete a team design project. Students will also receive exposure to engineering concepts through computer software simulation tools. **This class qualifies as a prerequisite for Manufacturing.**

Digital Electronics 1 Credit

Prerequisite: Electronics Technology, Algebra 2 or higher, Trigonometry (recommended)

Digital Electronics and Devices is the second level study of electronic technology. This course examines the fundamentals of electronic circuits and devices used to detect, process, and control electrical signals. The course continues the study and application of semiconductors and linear electronic circuits introduced in Electronics Technology. It also introduces students to digital concepts and circuitry used in automation, mechatronics, robotics, computers and telecommunication systems. Students will work individually and collaboratively on project based labs, computer simulations, and hands-on robotic activities. Upon completion students would be prepared to take the optional Student Electronics Technician certificate exam. A \$20 lab fee will be charged.

This course has a 3 credit articulation with Harrisburg Area Community College mechatronics programs of study.

Materials Testing 1 Credit

Prerequisite: Computer Aided Drafting and Design (CAD), Materials Processing I; One or more of the following: Mechanical Drafting and Design, Engineering and Design, or Materials Processing II

Materials Testing builds upon the knowledge and skills acquired in Materials 1 and Engineering and Design to better understand different materials and their natural ability to sustain applied forces. Students will stress several materials in the categories of plastics, solid surface, metals, wood, concrete, and composites in various ways to measure and achieve dramatic results. Students will be introduced to Hook's Law, Torsion, Shear and Flexure Formulas.

T.S.A. Manufacturing 1 Credit

Prerequisite: Computer Aided Drafting and Design (CAD), Materials Processing I; One or more of the following: Mechanical Drafting and Design, Engineering and Design, or Materials Processing II

Manufacturing builds upon the knowledge and skills acquired in Mechanical Drafting and Design, Materials 1, and Engineering and Design. Students function as members of the Technology Student Association leadership core, while exploring the basic concepts of manufacturing to understand, develop and operate several manufacturing systems that create real products. Through lecture, classroom activities, and close ties to the local manufacturing industry, students will be introduced to production engineering, planning and control, computer aided design and manufacturing, Total Quality Management, ISO standards, and Lean manufacturing. Students will have the option to complete the OSHA 10 Hour General Industry Training Certification. Students will be required to enter one of the TSA regional engineering/manufacturing competitions in February. (The competition is held outside of school hours)

T.S.A. Robotics Engineering

1 Credit

Prerequisite: Computer Aided Drafting and Design (CAD), Materials Processing I; One or more of the following: Mechanical Drafting and Design, Engineering and Design, Electronics Technology, or Materials Processing II

The Technology Student Association (TSA) fosters Science, Technology, Engineering and Mathematics (STEM) Education through personal growth, leadership, and opportunities in Technology, Innovation, Design, and Engineering (TIDE). TSA Robotics Engineering is a specific STEM/TIDE leadership course for 10th–12th grade students who are interested in the design, engineering, and programming of robots and associated careers. Students function as members of the Technology Student Association leadership core, while exploring the basic concepts of robotics through team activities. They focus on the construction and programming of autonomous mobile robots in a lab based hands-on setting. The course follows Autodesk's VEX Robotics Curriculum using a variety of activities to build and test increasingly more complex mobile robots on the VEX EDR & VEX V5 ROBOTICS Design platforms. Students are required to compete as a team with their robots at a minimum of 1 of 3 public robotic design competitions. (all competitions occur outside of the regular school day).

Architectural Drafting and Design

1 Credit

Architectural drafting and design includes the study and design of residential structures. Students will explore various types of home designs and construction methods. Autodesk Revit will be used in the production of floor plans, elevation plans, wall sections, and other types of drawings required for the complete design of modern homes. Students will also have the opportunity to develop a three-dimensional computer aided walk through of the home that they designed.

Introduction to Geographic Information Systems (GIS) / FAA 107 Drone Certification

Prerequisite: CAD or Architectural Drafting and Design

1 Credit

Students will learn to use GIS to produce high-quality maps that expose complex spatial information and relationships in a clear and easy-to understand display. Cartographic concepts and techniques, used to create not only hard copy printed maps but also prepare cartographic data for modern devices such as web pages and digital media, are explored. The class emphasizes laboratory work and a final project that uses GIS from an initial map concept, through data collection and analysis, to a final product. Students will explore the use of drones as related to GIS and civil engineering and prepare to take the FAA 107 certification exam. Students must be 16 years of age or older by the end of the course to be eligible for the FAA 107 Certification. Students have the option to take the FAA 107 Exam and are responsible for the fee of approximately \$165. Financial assistance is available.

Participants in this course have the option to earn 3 college credits from Harrisburg University contingent upon acceptance of the application and payment of reduced tuition of \$600. Application occurs midway through the course.

Film and Studio Production

Prerequisite: Multimedia I and/or Teacher Recommendation

1 Credit

This course is designed to provide students with real-life work experience while heightening awareness of the influence that visual media has on our lives. Focusing on the actual production of a show and film every student will perform job-specific roles such as producer, screenwriter, director, production designer, cinematographer, editor, and talent/actor to prepare them for the various fields in film. Students will create short films, documentaries, transmedia, and be directly responsible for the weekly production of the school studio. A \$10 fee will be charged for materials. A \$60 fee will be charged for certification (optional).

Film and Studio Production II

1 Credit

Prerequisite: Film and Studio Production I with and 80% or higher

This course is designed to provide students with real-life work experience while heightening awareness of the influence that visual media has on our lives. Focusing on the actual production of a show and film every student will perform job-specific roles such as producer, screenwriter, director, production designer, cinematographer, editor, and talent/actor to prepare them for the various fields in film. Students will create short films, documentaries, transmedia, and be directly responsible for the weekly production of the school studio. Students in this course will be working to create original sound through the use of foley art. A \$10 fee will be charged for materials. A \$60 fee will be charged for certification (optional).

Advanced Film and Studio Production

1 Credit

Prerequisite: Film and Studio Production II with an 80% or higher

This course is designed to provide students with real-life work experience while heightening awareness of the influence that visual media has on our lives. Focusing on the actual production of a show and film every student will perform job-specific roles such as producer, screenwriter, director, production designer, cinematographer, editor, and talent/actor to prepare them for the various fields in film. Students will further their learning by collaborating with industry professionals when creating their productions. Students in this class will be expected to work primarily in Adobe After Effects and Animate to create and accent work for Adobe Premiere. A \$10 fee will be charged for materials. A \$60 fee will be charged for certification (optional).

Immersive Video Game Design

1 Credit

Prerequisite: Graphics Communications I or Multimedia I and/or Teacher Recommendation

This course focuses on the creation of an immersive video game. Students will use basic computer programming to design and code characters to complete an elaborate, multi-stage, storyline with multiple outcomes within virtual reality software. Students in this course will learn the basics of coding, graphics, storyboarding, video game design, marketing, as well as career expectations. **A \$60 fee will be charged for certification (optional).**

Immersive Video Game Design II

1 Credit

Prerequisite: Immersive Video Game Design with an 80% or higher

This course focuses on the creation of an immersive video game. Students will use basic computer programming to design and code characters to complete an elaborate, multi-stage, storyline with multiple outcomes within virtual reality software. Students will be expected to leverage 3D character programs as well as programs in the Adobe Suite to personalize characters and animation. Students in this course will learn the basics of script coding, building 3D graphics, using grids and planes, as well as career expectations for the field. A \$60 fee will be charged for certification (optional).

Advanced Immersive Video Game Design

1 Credit

Prerequisite: Immersive Video Game Design II with an 80% or higher

This course focuses on the creation of an immersive video game entirely from scratch. Students will use advanced computer programming to design and code characters to complete an elaborate, multi-stage, storyline with multiple outcomes within virtual reality software. Students in this course will learn how to incorporate obj and fx packages into third party gaming platforms while creating their own 3D graphics from the ground up in programs like blender. Students will also focus on marketing as well as career expectations of the field. A \$60 fee will be charged for certification (optional).

English Language Arts

Chairperson - Mrs. Ridinger

Department Members – Mrs. Bales, Dr. Kepner, Ms. Marconi, Mr. Murren, Ms. Roper, Mrs. Small, Mr. Turner, Mrs. Turner and Mrs. Spagnola

The English curriculum for grades 9-12 integrates language and real-world experiences through reading, writing, speaking, listening, research, and critical thinking. The English program is designed to teach our students to read critically, to write with clarity and coherence, and to develop discerning listening and viewing skills. Reflecting the individual differences and learning needs of students, the English program stresses the need for independent reading and technology-rich learning experiences. The English Department utilizes various methods of assessment consistent with the goals of the Pennsylvania State Keystone Standards.

9-10 COURSE OPTIONS IN ENGLISH

World Literature 9 1 Credit

The course is the study of world literature through the lens of literary genres: short stories, poetry, drama, nonfiction, and the novel. Students focus on an integrated approach to language arts skills by connecting the literature selections to reading comprehension, vocabulary, grammar, mechanics, writing and critical thinking activities. The writing process model is used throughout the course to concentrate on the narrative, informative, and persuasive styles of writing and to develop creative writing skills.

Accelerated World Literature 9

1 Credit

Prerequisite: 8th grade Reading and Writing PSSA Exam score of advanced or proficient, a grade of 88 or higher in the previous year's English course, and a recommendation from the previous year's English teacher

This course provides an accelerated approach to the study of world literature through the lens of literary genres: short stories, poetry, drama, nonfiction, and the novel. Students focus on an integrated approach to language arts skills by connecting the literature selections to reading comprehension, vocabulary, grammar, mechanics, writing and critical thinking activities. The writing process model is used throughout the course to concentrate on the narrative, informative, and persuasive styles of writing and to develop creative writing skills.

American Literature 10 1 Credit

Prerequisite: World Literature 9 or Accelerated World Literature 9

This course involves the study of American literature and emphasizes skills acquisition and practice. Through the study of fiction and nonfiction texts, students will develop and practice their skills in reading comprehension, literary analysis, and rhetorical analysis, and vocabulary in addition to writing, vocabulary, and critical thinking skills to prepare students for the Literature Keystone and beyond. GASD requires that 10th grade students take the Keystone Literature Exam.

Accelerated American Literature 10

1 Credit

Prerequisite: A grade of 88 or higher in the previous year's English course, and/or a recommendation from the previous year's English teacher

This course involves, at an accelerated pace, the study of American literature and emphasizes skills acquisition and practice. Through the study of fiction and nonfiction texts, students will develop and practice their skills in reading comprehension, literary analysis, and rhetorical analysis, and vocabulary in addition to writing, vocabulary, and critical thinking skills to prepare students for the Literature Keystone and beyond. GASD requires that 10th grade students take the Keystone Literature Exam.

11-12 LITERATURE TERM COURSE OPTIONS IN ENGLISH

Drama: Shakespeare to Today

.5 Credit

Prerequisite: World Literature 9 and American Literature 10

In this course, students will explore the substance of Shakespeare's work and connect it to events of today and other modern dramatic works. We will examine the roles of various characters and archetypes, themes, and the use of dramatic elements to tell a story. This term course meets one literature requirement for 11th or 12th grade students.

Modern Novels .5 Credit

Prerequisite: World Literature 9 and American Literature 10

This course will focus on the development of critical thinking, writing, reading, speaking and listening skills through the structured analysis of up to four required contemporary texts, fiction and nonfiction. Students will use a variety of communication modalities to respond to the novels. Supplemental texts, such as short stories, plays, film, and poetry may be added to support the reading of the core novels. This course meets the literature requirement for 11th and 12th grade students.

Monster Stories .5 Credit

Prerequisite: World Literature 9 and American Literature 10

In this course, students will read and analyze stories exploring everything scary from epic monsters to creepy Gothic romances to scary dystopian societies. Through these unsettling literary selections, students will continue to develop and refine a variety of skills, including close reading and analysis of literary elements in a variety of genres: the novel, short story, and poetry. This course meets the literature requirement for 11th and 12th grade students.

Multicultural Literature .5 Credit

Prerequisite: World Literature 9 and American Literature 10

Explore some of the diverse cultures that exist in the United States. What is the history behind different cultures or ethnic groups? What are the experiences? How, and to what extent, have they assimilated into mainstream U.S. culture? What misunderstandings have arisen because of cultural differences? Through the use of literature and film, we will reflect on how experiences of immigration, assimilation, and marginalization have influenced the experiences of individuals and groups. We will examine how different realities and values shape our perception of the world and of each other. This course will focus on understanding and connecting to the messages within the literature, including short stories, poems, films, nonfiction, and novels from the non-traditional literary canon. This course meets the literature requirement for 11th and 12th grade students.

Creative Writing and Publications

.5 Credit

Prerequisite: World Literature 9 and American Literature 10

This course is designed to expose students to the various forms of creative writing including expository, descriptive, convincing, and narrative writing. Students in this course will have the opportunity to write their own short stories, scripts, poems, speeches, and vignettes as if they were the author of their own book, blog, podcast, newspaper, or digital magazine. In this course, students will also have the opportunity for interdisciplinary collaboration in publishing softwares such as Adobe InDesign. Students who are interested in a career in some aspect of authorship, publishing, or mass communication should consider taking this course. This course meets the writing requirement for 11th and 12th grade students.

Writing for Project Design and Development

Prerequisite: Successful completion of World Literature 9 and American Literature 10

.5 Credit

This course focuses on building technical writing skills needed in the process of project design and development. Skill development will focus on reading technical manuals and bid requests, writing and organizing project proposals, document design, composing professional correspondence, writing instructions, and preparing oral presentations. Employers demand people who can communicate ideas and/or concepts clearly, ethically, and with authority. Students taking this course will be able to build their communication skills in preparation for employment in a trade, technical, or engineering field. This course meets the writing requirement for 11th and 12th grade students.

Writing to Persuade .5 Credit

Prerequisite: World Literature 9 and American Literature 10

In this course, students will learn to build, write, and share persuasive arguments on a variety of relevant, real-world subjects and issues. Through analysis and evaluation of a variety of mentor texts in nonfiction, including essays, speeches, and images, students will understand and implement a variety of rhetorical understandings, devices, and stylistic choices for a purpose, rhetorical situation, and audience. This course meets the writing requirement for 11th and 12th grade students.

Advanced Placement English 11: English Language Composition

1 Credit

Prerequisite: Keystone Literature score of advanced or proficient, A grade of 88 or higher in the previous year's English course and teacher/counselor input

AP English Language and Composition is a rigorous, college-level course that provides students with the opportunity to study writing—essays, philosophy, and even fiction—through the lens of rhetoric. In this course, students are asked to think critically, develop and revise their own arguments, and read like a writer. This class encourages discussion, analysis, and debate around a variety of rhetorical texts. AP Lang. is for all students building an especially rigorous transcript and those interested in pursuing any field of study—not just future humanities majors, including law, the sciences, psychology, politics, business, and a variety of other writing-oriented fields. In May, AP students take a national exam that can earn them up to three college credits.

This course requires the completion of a pre-course assignment. Failure to complete this assignment will result in a grade penalty at the beginning of the semester. All students are required to take the AP test and are responsible for the approximate cost of \$97. Financial assistance is available.

Advanced Placement English 12: English Literature & Composition

1 Credit

Prerequisite: A grade of 88 or higher in the previous year's English course and teacher/counselor input

AP English Literature and Composition is a rigorous course that provides the opportunity for intensive, reflective, and analytical approaches to a wide variety of literature. The course will emphasize and promote improved written and verbal communication skills necessary at the college level and beyond. This class encourages college-level discussion, analysis, and debate about literary selections. AP Lit is a good fit for students who want an especially rigorous college transcript. Students can also take AP Lit. to receive credit for freshman writing courses. In May, AP students take a national exam that can earn them up to six college credits.

This course requires the completion of a pre-course assignment. Failure to complete this assignment will result in a grade penalty at the beginning of the semester. All students are required to take the AP test and are responsible for the approximate cost of \$97. Financial assistance is available.

HACC CHS English 101: Composition for College Credit

Prerequisite: HACC On Campus Placement test

1 Credit

This course will focus on the development of fluency in writing clear, forceful, effective prose and reading and responding to texts of various forms in an academic manner. Students will demonstrate their ability to recognize and use different writing strategies, including narration, description, comparison and contrast, analysis, definition, and argument for specific tasks and audiences.

The fee for HACC College in the High School courses is approximately \$83.50 per credit. HACC establishes the fee for the course.

HACC CHS English 102: Advanced Research Writing for College Credit

1 Credit

Prerequisite: English 101 with a grade of 75% or higher

English 102 will build on its prerequisite English 101 with an emphasis on building connections to thinking, reading, writing, research, interpretation, and argumentation. This course will include exploring the school library resources to research and produce five to six informative or persuasive research essays. Students will be guided through the process of developing well-supported informative, argumentative or analytical essays, which will include locating and evaluating sources, note-taking, and narrowing the topic through the construction of annotated bibliographies. Students will generate a thesis, create an outline, and write a well-documented research paper following both MLA and APA guidelines

The fee for HACC College in the High School courses is approximately \$83.50 per credit. HACC establishes the fee for the course.

ELECTIVE COURSE OPTIONS IN ENGLISH

Journalism/Publications 1 Credit

Students will study all aspects of print and broadcast journalism, including history, law, and ethics, the role of the media in society and school, and the importance of a responsible press. Students will examine current events through the use of daily newspapers and the available online journalistic outlets. In this course, students will also have the opportunity for interdisciplinary collaboration as they produce and publish work done for the class. Students who are interested in a career in some aspect of mass communication should consider taking this course. This course is co-taught by Mr. Deckert (Yearbook/Publications) and Mrs. Spagnola (Journalism).

Introduction to Film 1 Credit

In this course, students will develop criteria for aesthetic awareness to enable them to analyze and evaluate film. In addition to covering the basics of mise-en-scene and the components of acting, directing, motion, sound, cinematography, and editing, students will examine how film affects viewers' thoughts, emotions, values, and lifestyles. The course traces the history of film to the present.

Fiction Writing/Poetry Writing

1 Credit

This course is for the student who has a strong interest in creative writing, either prose or poetry. Each student will develop a writing portfolio of creative work. Students will write daily producing a spectrum of creative work individually and in groups, ranging from multiple poetic forms, short stories, script writing, multimedia projects, flash fiction and the reading of several novels of their choice. In addition, all students must participate in the editing duties of our literary magazine *Interrobang*; submission of at least ten poems to the magazine for consideration; compete in the school-wide *Poetry Out Loud* annual competition that is held at the Majestic Theater; and perform in a *Poetry Alive!* Skit that takes poetry on the road around our building.

Family and Consumer Sciences Department

Chairperson – Mrs. Eastman Department Members – Mrs. Kriel

Courses taught in the Family and Consumer Sciences Department provide practical, hands-on learning. Skills learned can be applied to both everyday life and career choices. Each course meets the requirements for Practical Arts Electives, Family and Consumer Sciences electives and selected electives unless otherwise noted.

Culinary Arts 1 Credit

This course provides an introduction to healthy eating, nutrition labeling, kitchen and food safety and sanitation; kitchen tools, equipment use and care, as well as proper techniques of food preparation. Culinary Arts includes food laboratory experiences.

Global Cuisine 1 Credit

Prerequisites: Culinary Arts with a grade of 75% or higher; 10th, 11th, and 12th grade standing

Students will explore the culture, customs, and cuisine of Germany, France, Italy, Israel, Africa, China, India, and Mexico and discuss their cultural diets. Students will explore food related language, common ingredients and food preparation techniques for each country or region. This course includes more advanced foods laboratory experiences and students should be willing to sample new foods.

Food Trends 1 Credit

Prerequisites: Culinary Arts with a grade of 75% or higher; 10th, 11th, and 12th grade standing

This class will focus on food identity and food traditions within U.S. regional cuisines. Class research projects will explore topics such as food trends, food ingredients, and food science. There will be an opportunity for student-directed learning. This course will include food laboratory experience.

Baking and Pastry 1 Credit

Prerequisites: Culinary Arts with a grade of 75% or better; 11th or 12th grade students

This class will be a continuation of Culinary Arts, Global Cuisine and/or Food Ed where the focus will be upon theory and preparation of savory and sweet baked items utilizing more specialized culinary skills.

Clothing and Textile Arts I 1 Credit

Students will explore textiles in relationship to natural and man-made fibers. This class lays the foundation for students to learn basic sewing principles and practice beginner sewing skills. Students will learn about fabric, sewing tools and equipment, hand and machine sewing techniques, and project construction while completing beginning level sewing projects. No experience required. Students are responsible for purchasing materials. Cost of materials is determined by individual projects selected by the student.

Clothing and Textile Arts II

Prerequisites: Clothing and Textile Arts I

1 Credit

Students will expand their understanding of textiles and sewing principles learned in level I while improving sewing skills. This class allows for more flexibility when choosing intermediate level sewing projects based on interest and level of difficulty. There is also an opportunity to design and construct a recycled sewing project. Instruction is guided but self-paced. **Students are responsible for purchasing materials.** Cost of materials is determined by individual projects selected by the student.

Clothing and Textile Arts III

1 Credit

Prerequisites: Clothing and Textile Arts I, Clothing and Textile Arts II

Students may pursue areas of personal interest in regards to clothing and textile arts while refining sewing construction knowledge and skills learned in levels I and II. Students will work at an individualized pace while completing advanced level sewing projects. There is an opportunity to conduct research on fashion history, design process or careers. Instruction is student directed. **Students are responsible for purchasing materials.** Cost of materials is determined by individual projects selected by the student.

Human Development

1 Credit

Prerequisites: 10th, 11th, and 12th grade standing

This course will examine human development throughout the lifespan. This course is designed for 10th - 12th grade students and is particularly beneficial as students prepare to enter the adult world of work and relationships after high school. Learn about the physical, social, emotional, and intellectual changes that individuals encounter in each of the 7 stages of life. Learn how interactions with the people and world around us shape our development along with strategies for supporting our own healthy development throughout life. This course is filled with opportunities to work collaboratively, connect course content to personal experiences, and explore developmental processes.

HEALTH, SAFETY, & PHYSICAL EDUCATION

Department Members - Mr. Darr, Mrs. Black, Mr. Sieg, Mr. Laing, and Mrs. Pompei

Safety Education - (scheduled simultaneously with 10th grade PE)

.5 Credit

Driving tasks are highly stressed and real-life scenarios are discussed extensively. Particular emphasis is placed on the responsibilities that must be shared with other drivers. Students will also study first aid in conjunction with the classroom component of safety education.

Health - (scheduled simultaneously with 11th grade PE)

.5 Credit

Students will obtain necessary life skills and gain access to information that will help them become health-literate and to make healthful decisions throughout their life. Students will work through topics specific to the eight dimensions of wellness. These include social wellness, intellectual wellness, physical wellness, mental/emotional wellness, occupational wellness, spiritual wellness, environmental wellness, and financial wellness.

HACC CHS Healthful Living- (scheduled simultaneously with 11th grade PE)

.5 Credit

This course offers a study of current knowledge concerning attitudes and practices which promote and maintain the present and future health of the individual and the community. The course emphasizes the prevention of disease and a positive health attitude. Nutrition, fitness, drugs, and sexuality are some of the topics discussed. The fee for HACC College in the High School courses is approximately \$83.50 per credit. HACC establishes fee for course.

Physical Education - Grade 9 (scheduled simultaneously with Freshman Advisory/Career Exploration) .5 Credit

Students in ninth grade will develop an understanding of the 5 components of fitness and their relationship to overall well-being. Skill related fitness is addressed in connection to a wide variety of sports and fitness. Students will chart scores to improve personal fitness levels through the use of *Fitnessgram* testing. We attempt to foster a positive environment that allows for success within a wide spectrum of ability levels.

Physical Education - Grade 10 (scheduled simultaneously with Safety Education)

.5 Credit

All tenth grade students will take Physical Education, every other day, in conjunction with Safety Education. Students will be introduced to new sports as well as review previously taught activities. Students will continue to chart scores and improve personal fitness levels through the use of *Fitnessgram* testing. By engaging in regular activity and exercise students will improve their overall physical health.

Physical Education - Grade 11 (scheduled simultaneously with Health or HACC Health)

.5 Credit

All eleventh grade students will take Physical Education, every other day, in conjunction with Health. Students will participate in a curriculum which includes advanced level tennis, badminton, volleyball, soccer, and basketball. Students will be introduced to activities and lifetime fitness. All students will be fitness tested using the national *Fitnessgram* test.

Physical Education - Grade 12 (scheduled simultaneously with Personal Finance)

.5 Credit

Intermediate and advanced skills, rules, and strategies are taught in individual and team sports. An emphasis is placed on lifetime fitness activities.

JROTC

Senior Army Instructor - LTC (Ret) Michael Athanasakis Army Instructor - First Sergeant (Ret) Kenneth Klein

Army Junior ROTC is a high school elective with the mission "To Motivate Young People to be Better Citizens." The course builds life-long skills that every student needs for success in future life and career endeavors, focusing on the development of <u>six core</u> abilities:

- Apply critical thinking techniques Building capacity for life-long learning
- Communicate using verbal, non-verbal, visual, and written techniques
- Do their share as good citizens in the school, community, country, and the world
- Taking responsibility for their actions and choices
- Treat self and others with respect

The leadership, management, and communications skills learned are useful for any future career. The JROTC program provides ample opportunities for Service Learning and community service.

While there is no military obligation associated with this course, students who elect to enlist in the military services may be eligible for one advanced rank if they have successfully completed two or more years of JROTC. Students who plan to go to college will gain practical leadership experience desired by many institutions of higher education. Students seeking an ROTC scholarship or nomination to a U.S. military service academy will have documented leadership experience.

<u>Scheduling Note</u>: For students who are committed to the JROTC program, please talk to the instructors and/or your school counselor about flexible scheduling options.

LET 1 1 Credit

LET-1 introduces the student to the JROTC program including its mission and goals, military customs and courtesies, rank and organization and integrated-curricular opportunities. The majority of this course is focused on providing the student with foundations for success including self-awareness; personal learning styles; study, communication and conflict resolution skills. LET-1 also provides an introduction to leadership theory and its application, while developing a disciplined and motivated member of a team.

LET 2 1 Credit

Prerequisite: LET 1 and Completion of the 9th Grade

LET-2 addresses achieving a healthy lifestyle including basic principles of good nutrition and drug awareness and fundamentals of first aid; introduces map reading skills and explores citizenship in American history and government, with a focus on the framing of the Constitution, and the rights and responsibilities of citizenship.

LET 3 1 Credit

Prerequisite: LET 2 / completion of the 10th Grade (or dept permission after LET 1A / completion of the 9th Grade)

LET-3 builds on the previous two courses covering various leadership strategies including decision-making and problem-solving processes and additional foundations for success including public speaking, managing conflict, career/college exploration and planning; time-management; goals and goal setting; and financial planning. In LET-3 students assume leadership roles within the student chain of command.

LET 4 1 Credit

Prerequisite: LET 2 and LET 3 and Completion of the 11th Grade

LET-4 is the capstone course in the JROTC program and both completes and integrates the previous instruction with a focus on applied citizenship and leadership. LET-4 students assume primary leadership roles and responsibilities within the student chain of command and mentor/assist younger students. LET-4 involves numerous individual and group projects.

Mathematics

Chairperson – Mr. Godack
Department Members - Mr. David, Mrs. Bennett, Mr. Dolly, Mr. Groft,
Mrs. Miller, Ms. Norton , Mrs. Orleski, Mr. Orner, Mr. Tesoriero, Mr. Withers

GETTYSBURG AREA HIGH SCHOOL MATHEMATICS SEQUENCE

- Please talk to your current math teacher and school counselor in order to make an informed decision about mathematics course sequencing. Eighth grade teachers will be making recommendations for placement based upon performance and final grades. It is recommended that all 9th grade students take 2 math courses unless enrolled in Algebra 2 or Geometry or above.
- All students are required to complete Algebra 1, Algebra 1.5, and Geometry prior to graduation.
- <u>ADVANCED PLACEMENT COURSES</u> All math AP courses require the completion of a pre-course assignment. Failure to complete this assignment will result in a grade penalty at the beginning of the semester. All students are required to take the AP test and are responsible for the cost of approximately \$97. Financial assistance is available.
- <u>ACCELERATED COURSES</u> All accelerated math courses require the completion of a pre-course assignment. Failure to complete this assignment will result in a grade penalty at the beginning of the semester.

High School Calculator Policy

All students enrolled in a math class are required to have a graphing calculator. (Preferably from the TI-83 or TI-84 families

Mathematics Course Descriptions

On-Level Mathematics Courses

Algebra 1 1 Credit

Algebra 1 is the first course of a two course study of Algebra 1 concepts. It is designed to give the student a background in abstract reasoning where they will learn to translate problem situations into algebraic expressions and/or equations then learn techniques to solve/graph them. The graphing calculator will play an essential part in this course as a problem solving tool. Emphasis will be on applying algebra to real world problems. (9th graders that were not proficient in their middle school Algebra 1 course may be placed in Algebra 1 to fully develop their Algebra skills before continuing in the high school math sequence.)

Algebra 1.5 1 Credit

Algebra 1.5 is the second course of a two course study of Algebra after the completion of Algebra 1. All students that had Algebra 1 in 8th grade or above must take this course to complete the Algebra 1 standards. Continued emphasis will be on real world connections and the ability to solve problems using numeric, algebraic and graphical techniques. It is recommended that this course be scheduled in the same year that a student schedules Algebra 1. Students will be required to take the state Algebra 1 Keystone exam at the end of the Algebra 1.5 or Accelerated Algebra 1.5. The GASD requires that students demonstrate proficiency in Algebra through the Keystone Exam.

Algebra 2 1 Credit

Prerequisite: Algebra 1.5 and Geometry

Algebra 2 begins with a review of concepts and skills covered in Algebra 1.5 and leads into the study of transformations, operations with, inverses, regression and piecewise linear functions. These topics are then explored in several families of functions. These families include quadratic, polynomial and rational functions. The characteristics of these different families of functions are also addressed. This course will emphasize problem-solving techniques and engage the students in real-world applications of all functions studied.

Geometry 1 Credit

Prerequisite: Algebra 1.5

This course is designed to develop spatial awareness by making connections from concrete geometric examples to abstract concepts. Critical-thinking skills and real-world problems will be emphasized through the application of important postulates and theorems. We will study properties of congruency and similarity, parallel lines, angles, polygons, and circles. In addition to area and volume of plane and solid figures, trigonometric relationships also will be explored.

Trigonometry/Pre-Calculus

1 Credit

Prerequisite: Algebra 2

This course begins with a review of Algebra 2 concepts for course and SAT preparation. Connections are emphasized on solving problems algebraically, graphically and numerically. Students study graphical transformations and their relationship to their equations including basic and rational functions. Building functions from functions, compositions and inverses of these basic functions are also studied. Relationships are made between the equations and graphs of the common family of functions, exponential, logarithmic and sinusoidal functions. Two units of study are devoted to application and analysis of trigonometric functions and their graphs.

Calculus 1 Credit

Prerequisite: Trigonometry/Pre-Calculus

Take your algebra skills to a whole new level as you learn about derivatives and integrals. Calculus is the study of change and is an excellent companion to those students who enroll in Physics. Learn how to visualize and solve problems in three dimensions as well as finding slopes of nonlinear equations. This course is designed for the student who would like to have an overview of Calculus materials before taking the class in college. Note: Students who wish to take the Advanced Placement test should schedule AP Calculus.

Applied Mathematics 1 Credit

Prerequisite: 11th or 12th grade standing

Course is designed for students that have taken Geometry and are seeking an alternative to the college-bound mathematics track. Applied Mathematics is a project-based course where students learn to use mathematics effectively as a tool in their personal and consumer lives. Students will review and apply mathematical operations in various problem-solving situations. The course will explore concepts including, but not limited to,-percentages, interest, personal finance, probability and statistics.

Statistics 1 Credit

Prerequisite: Algebra 2

Statistics is a course that is applicable to many fields such as psychology, business, actuarial sciences and other sciences. Learn correct techniques for finding samples and how to perform calculations on data to communicate the trend in the data. Gain a critical eye for interpreting graphs and reading research articles. Utilize the graphing calculator, to perform various operations and create visuals with ease.

Accelerated Mathematics Courses

Accelerated Algebra 1.5 1 Credit

Prerequisite: Algebra 1 in 8th grade with a 90% or higher; Teacher input based on 7th grade Algebra 1

This accelerated course is for 9th grade students only and is designed for the able student who has elected to accelerate his or her math program. Students must have completed middle school Algebra 1 in either 7th or 8th grade. This is the second half of the Algebra 1 curriculum started in 8th grade and is intended to prepare students for Accelerated Algebra 2. This course studies polynomials, systems of equations and expressions while focusing on applying the concepts to real world situations. Students will be required to take the state Algebra 1 Keystone exam at the end of the Algebra 1.5 or Accelerated Algebra 1.5. The GASD requires that students demonstrate proficiency in Algebra through the Keystone Exam.

Accelerated Algebra 2 1 Credit

Prerequisite: Accelerated Geometry with a 90% or higher; teacher input

This course is designed for the able student who has elected to accelerate his or her math program. The course is fast paced, beginning with an abbreviated review of the concepts and skills covered in Algebra 1 & 1.5 by way of the pre-course assignment. The course develops the student's mathematical maturity by emphasizing discovery lessons, student self- reliance, verbal precision, a readiness to look for general principles, and a questioning attitude. In this course the student will study several families of functions including linear, quadratic, polynomial, and rational functions. Time will be spent exploring several discrete mathematics topics, if time allows. The student will study the characteristics of, transformations of, operations with, inverses of, and regression of each family of functions. This course will also emphasize problem-solving techniques and engage students in real-world applications of all functions studied.

Accelerated Geometry 1 Credit

Prerequisite: Accelerated Algebra 1.5 with a 90% or higher; teacher input

This course is designed for the able student who has elected to accelerate his or her math program. The course is designed to make connections from concrete geometric examples to abstract concepts and how they relate visually and spatially to the world around us. We emphasize subject specific vocabulary, communication, and application to real-world problems. Students are required to write formal and informal geometric proofs to rigorously justify conjectures and solutions. We will study and prove properties of plane and solid figures, regular and irregular shapes, circles, quadrilaterals and other polygons. Students will study basic trigonometric relationships and how they can be applied in a variety of settings. All students are required to successfully complete a pre-course packet to gain entry to the course.

Accelerated Trigonometry/Pre-Calculus

1 Credit

Prerequisite: Accelerated Algebra 2 with a 90% or higher; teacher input

This demanding course prepares students pursuing AP Calculus/AP Physics. A review of Algebra 2 skills will be completed in the pre-course assignment packet. Problem solving and applications are explored for all units of study throughout the course, while emphasis is placed on solving problems algebraically, graphically and numerically. The students will be exposed to radical, exponential, logarithmic and sinusoidal functions. The key features of all as well as their applications will be explored. Relationships are made between the equations and graphs of the exponential, logarithmic and sinusoidal functions. Two units of study are devoted to application and analysis of trigonometric functions and their graphs. Series and sequences will be explored and an introduction to limits will be completed to prepare for AP Calculus.

Advanced Placement Calculus 1(AB)

1.5 Credit

Prerequisite: Accelerated Trigonometry/Pre-Calculus with an 85%; teacher input

Calculus is the study of change and motion. This is why this course is co-taught with AP Physics which students must be enrolled in as well. The Calculus course includes topics from differential and integral Calculus and is designed for able math students, especially those who intend to go into the field of engineering, physics or mathematics. This course will consist of a full academic year of work in Calculus and related topics comparable to courses in college. Our goal will be to follow the Calculus syllabus as recommended by the College Board. Students who take the AP course will be prepared and are required to take the AB Advanced Placement exam.

All Students are required to take the AP test and are responsible for the cost of the approximately \$97. Financial assistance is available.

Advanced Placement Calculus 2 (BC)

1 Credit

Prerequisite: AP Calculus 1 (AB) or Calculus; teacher input

AP Calculus 2 (BC) is a one- semester, spring only course in the calculus of functions of a single variable. It includes all topics covered in AP Calculus 1 (AB) plus additional topics including the study of parametric equations, polar forms and vector forms, improper integrals, polynomial approximations, and series. Students must fully complete AP Calculus 1 (AB) or Calculus (with teacher recommendation) to enroll in this course.

All Students are required to take the AP test and are responsible for the cost of the approximately \$97. Financial assistance is available.

Advanced Placement Statistics

1 Credit

Prerequisite: Algebra 2; teacher input

The purpose of this course is to introduce students to the major concepts and methods for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: Exploring Data: Describing patterns and departures from patterns, Sampling and Experimentation: Planning and conducting a study, Anticipating Patterns: Exploring random phenomena using probability and simulation, and Statistical Inference: Estimating population parameters and testing hypotheses.

All Students are required to take the AP test and are responsible for the cost of the approximately \$97. Financial assistance is available.

Music

Chairperson - High School Chairperson- Mrs. Kriel Department Members –Mrs. Coolbaugh and Mr. Hofmann

The curriculum of the music department has been structured in a way that facilitates the continual development of each student. Students have the opportunity to study and participate in different types of musical organizations including band, chorus and orchestra. Through these opportunities they gain skills in performing with a group while increasing their individual skills and appreciation of music. Outside-of-school performances are required for Band, Band Front, Orchestra and Chorus. In order to enroll, students must participate in all aspects of the course. The Band, Orchestra, and Chorus meet as a course for the entire year. The maximum number of credits earned in one year in music performance is 1 credit.

Instrumental Music - Band

1 Credit

Prerequisite: Audition and/or a grade of 75% or higher for returning students

The band is an elective composed of musicians of various levels and interests. Students are involved in public performances, such as concerts, parades, and football games.

Music Theory

1 Credit

Prerequisite: 11th and 12th grade

This class involves learning scales and chord construction, music, notation, harmony, ear training, applied listening, music history, and arranging for vocal and instrumental groups. Students planning a musical career will find this course helpful. **Students must be in one of the performing groups OR take private lessons on an instrument.**

Music Technology and Recording

1 Credit

This class will allow students to explore the world of creating digital music. Students will become proficient in using online programs including Soundtrap, Noteflight, Garageband, and Audacity. Students will create projects including commercials, music arrangements, and movie music. During this project-based learning experience, students will also learn and apply musical concepts taught in traditional settings including harmony, time signatures, dynamics, and expression, among others. Students will acquire the foundations for creating computer-based music using varied software technologies that will introduce and enhance their understanding of basic digital recording techniques. Students will also gain an understanding of and appreciation for the history and development of recording technology and sound recording.

Instrumental Music - Orchestra

1 Credit

Prerequisite: Audition and/or a grade of 75% or higher for returning students

The purpose of the orchestra is to provide string, wind and percussion players with the opportunity to play all types of orchestral music from classical to pop. Performances of the orchestra include music for assemblies, concerts, and commencement. **Wind players in the orchestra must be regular members in good standing with the Band.**

Concert Chorus

1 Credit

Prerequisite: Audition Only

Chorus is open to all students in Grades 9-12. Students learn the basic skills of choral singing and develop their understanding of different musical styles and types of music. Performances may include public concerts, assemblies, exchange concerts, and music festivals.

Musical Theater (BEING OFFERED EVERY OTHER YEAR - 2022/2023 SCHOOL YEAR)

1 Credit

This course will explore two different aspects of the Broadway Musical: the hi**story of the Broadway Musical, and the study of the production of Broadway musicals. The study of the history of musical theater will include units on Early Musical Theater Forms (including opera, operetta, ballad operas, minstrelsy, vaudeville, and revue), Book Musicals, Concept Musicals, Mega Musicals, Jukebox Musicals, and Revivals. To become acquainted with each type, students will view videos, listen to recordings, read scripts, and watch live performances. The study of the production of musical theater will include units in Acting, Singing, Directing, Producing, Writing, Scenic Design, and Costume Design of musicals. Students will have the opportunity to perform dialogue and songs from shows, to direct musical scenes, and to design and produce sets and costumes. Students will have the opportunity to contribute to the production of the annual school musical.

Voice (BEING OFFERED EVERY OTHER YEAR - 2023/2024 SCHOOL YEAR)

1 Credit

This class will allow students to explore many aspects of their singing voice. We will work on practice techniques, vocal technique, sight-reading skills, basic music theory, IPA (international phonetic alphabet), and vocal pedagogy. This is a performance class and students will be required to perform a variety of vocal styles. Students in this class will also be auditioning for District Choir.

Science

Chairperson- Mrs. Biggins

Department Members- Mr. Armor, Mrs. Bechtel, Mr. Glassmann, Mr. Harvey, Mrs. Lain, Mr. Reese, Mr. Withers

Scientific literacy is essential in today's technological and data-driven world. Students and families are encouraged to create a sequence of science courses that can help them prepare for their future and also make them better consumers of information.

Earth Science 1 Credit

The Earth Science course will involve students in the study of the processes, cycles, and concepts that occur within Earth's spheres as well as the interaction of mankind and the Earth. This course will provide real-world experiences to encourage students to become scientifically literate and to understand the roles of society in this technological age. This course also contains ecological science concepts that will be necessary for the Biology Keystone Exam.

Accelerated Earth Science

1 Credit

Recommendation: Students should have been recommended to take Accelerated Algebra 1.5

The Earth Science course will involve students in the study of the processes, cycles, and concepts that occur within Earth's spheres as well as the interaction of mankind and the Earth at a faster pace and more in-depth than the standard Earth Science class. This course will provide real-world experiences to encourage students to become scientifically literate and to understand the roles of society in this technological age. This course also contains ecological science concepts that will be necessary for the Biology Keystone Exam.

Biology 1 Credit

Prerequisite: Earth Science, Accelerated Earth Science, Environmental/Natural Resource Management, or Intro to Ag Science

Biology is a laboratory-oriented course designed to acquaint students with basic biological principles. Biology incorporates five main topics: biochemistry, cell biology, genetics, evolution, and ecology. Scientific problem solving is emphasized throughout the course. Course objectives are achieved through classroom and laboratory work, critical thinking and cooperative learning exercises. **Students will be required to take the state Biology Keystone exam at the end of the course.**

Accelerated Biology 1 Credit

Prerequisite: Earth Science, Accelerated Earth Science, Environmental/Natural Resource Management, or Intro to Ag Science

Accelerated Biology is a laboratory-oriented course designed to be an in-depth study of biological principles at a fast pace. Biology incorporates five main topics: biochemistry, cell biology, genetics, evolution, and ecology. Scientific problem solving is emphasized throughout the course. Course objectives are achieved through classroom and laboratory work, critical thinking and cooperative learning exercises. Students will be required to take the state Biology Keystone exam at the end of the course.

Advanced Placement Biology

1 Credit

Prerequisite: Biology; Proficient or Advanced on the Biology Keystone Exam.

Recommendation: Students should take chemistry concurrently or prior to AP Biology.

This course is one semester only and is designed to be the equivalent of a two-semester college introductory biology course usually taken by biology majors during their first year. After taking the AP exam, some students may earn credit for a first-year Biology prerequisite or they may have fulfilled some other basic requirements and will be well-prepared for a College-Level Biology course. This course builds on the GAHS biology course that is a prerequisite. Students are expected to have exceptional lab skills and study skills. AP Biology follows the established curriculum as recommended by the College Board.

All students are required to take the AP test and are responsible for the cost of approximately \$97. Financial assistance is available. In addition, we are also offering this course through Harrisburg University. If enrolled through HU, participants (grades 10-12) in this course could earn 4 college credits from Harrisburg University contingent upon acceptance of the application and payment of reduced tuition of \$100 per credit. Application occurs midway through the course.

Infectious Disease

1 Credit

Prerequisite: Biology **Recommended:** Chemistry

Students will explore the microbial world around them, on them, and in them in an attempt to better understand the importance of these small interactions in their day-to-day lives. This course allows students to research a specific pathogen within each of the five pathogen classifications (i.e. Bacteria, Viruses, Parasites, Fungi, and Prions)

Specific areas of study include:

- The human immune system (structure and function)
- What is an infectious disease
- The five pathogens: Bacteria, Viruses, Parasites, Fungi, Prions
- Epidemiology/host & pathogen interaction
- Pandemics throughout history
- The effect of Disease on human history

HACC CHS Environmental Science (Bio 103)

1 Credit

Prerequisite: Biology or Accelerated Biology; Chemistry, Accelerated or AP Chemistry; Physics, Accelerated AP Physics; Agriculture Pathway program.

This course introduces the student to the basic concepts of environmental science and ecology, especially related to human interactions. Topics include fundamentals of ecology, thermodynamics, population dynamics, energy sources and uses, natural resources, pollution, pesticide use, agriculture and current issues of environmental concern.

The fee for HACC College in the High School courses is approximately \$83.50 per credit. HACC establishes fee for course. There will be a fee for required/assessed field trips.

HACC CHS Anatomy and Physiology I (Bio 121)

1 Credit

Prerequisite: Biology or Accelerated Biology and Chemistry or Accelerated Chemistry

This course is intended for students who contemplate careers in Allied Health fields. Basic body organization, biochemistry, cytology, histology, integumentary, skeletal, muscular, and nervous systems will be studied.

The fee for HACC College in the High School courses is approximately \$83.50 per credit. HACC establishes fee for course.

^{*}This course may be used as a fourth core credit in meeting graduation requirements.

Foundations of Physical Science & Technology

Prerequisite: Algebra I

1 Credit

This course provides the opportunity for students to understand the physical science at work within our technology. Students will work to better understand force and motion, energy and power, and the functions of basic electronics. The course will emphasize problem solving and engineering and design methodology. Students will investigate physical science concepts through experience in laboratories and field work using the process of inquiry. *This course is designed for students on a technical career path.

Chemistry 1 Credit

Prerequisite: Algebra I

First-year chemistry involves the study of the fundamental concepts that comprise this science. Emphasis is placed on atomic theory, chemical formulas and equations, the mole concept, stoichiometry, electronic configuration and the periodic table, the gas laws, chemical bonding, solutions, and introductory acid/base chemistry.

Accelerated Chemistry 1 Credit

Prerequisite: Algebra I

Accelerated Chemistry involves a more in-depth study of the fundamental concepts that are covered in the regular chemistry course. **The class moves at an accelerated pace which allows for the inclusion of more material.** This course is intended for high achieving students and requires the completion of a pre-course assignment..

Advanced Placement Chemistry I

1 Credit

Recommendation: Biology with an 85% or higher; Earth Science; Algebra II. A prior chemistry class is not required.

This is the first semester (fall) course of a two-semester program. This first-year 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. The course covers the same topics covered in the Accelerated Chemistry course as well as the AP Chemistry curriculum as recommended by the College Board. Students are expected to have exceptional lab skills and study skills.

Students taking AP Chem I are expected to take AP Chem II and take the AP exam in May at the conclusion of the AP Chem II class.

Advanced Placement Chemistry II

1 Credit

Prerequisite: Advanced Placement Chemistry I

This is the second semester (spring) course of a two-semester program. See the description for Advanced Placement Chemistry I. All students are required to take the AP test and are responsible for the cost of approximately \$97. Financial assistance is available.

Physics 1 Credit

Prerequisites: Algebra 1.5 and/or concurrent enrollment in Geometry

Physics is a computer-enhanced and laboratory-oriented course which focuses on explaining how and why things happen in the physical world. Mechanics, the study of motion, is the foundation of the course. Students will grow to appreciate that mathematics is the language used to explain these processes. A working knowledge of algebra is needed.

Accelerated Physics 1 Credit

Prerequisite: Concurrent or prior enrollment in Trig/Pre-Calc

Accelerated Physics involves a more in-depth study of the fundamental concepts that are covered in the regular physics course. **The class moves at an accelerated pace which allows for the inclusion of more material.** A working knowledge of trigonometry is needed.

Advanced Placement Physics

1.5 Credit

Prerequisite: Concurrently enrolled in AP Calculus.

Advanced Placement Physics covers the concepts of classical Newtonian mechanics. The course moves at an accelerated pace from an algebraic description to a calculus-based description of the physical world. Following the course description laid out by the College Board, students will prepare to take the AP Physics - C exam in May. All students are required to take the AP test and are responsible for the cost of approximately \$97. Financial assistance is available.

Social Studies

Chairperson – Mr. Sontheimer

Dept. Members - Mrs. Kubeck, Mr. Willard, Mrs. Spagnola, Mr. Haines, Mr. Jurney, Mr. Houser, Mr. Heiser

The primary objective of the social studies program is to prepare thoughtful, active citizens who can function productively in a multicultural, rapidly changing, and increasingly interdependent world. The secondary objective is to encourage students to critically examine history, develop thesis-based arguments reflective of their independent thought, and write critical essays that incorporate historical research. The social studies program is committed to fulfilling both of these objectives in every required course it offers, as well as in many of its electives.

The social studies courses are founded upon the philosophy that a democratic society depends upon responsible, educated, citizens to make rational decisions. To that end, students are instilled with an appreciation for democratic values and the importance of their participation within that process, while cultivating respect and dignity for each human being. The social studies classroom, the school, and the community provide settings where students can explore questions dealing with history, social values, and behavior. The process of inquiry and freedom of expression, paramount to a properly functioning democratic society, are stressed, with an emphasis on toleration for all opinions.

Students must take ONE from each of the following regions of the Social Studies offerings to fulfill their 3 credit requirements for Social Studies.. These include **World History (W), American History (A), and Government (G)** pathways. 9th graders will have the opportunity to choose between Modern American History, World Cultures, and with prior approval AP Human Geography. All students must take a civics test for graduation. All students will be administered this test during their government class or at a designated time. **AP summer assignments are due the 1**st day of the school year, for all AP social studies courses.

World Cultures (W) 1 Credit

This course focuses on studying how different world cultures, throughout history, have been impacted by geography, religion, imperialism, racism, conflict, revolution and the gains and losses of liberty and rights. The course explores Africa, the Middle East, the Americas, South and East Asia, and Europe.

Modern American History (A)

1 Credit

Modern American History examines the political, economic, social, and cultural developments in the United States during the 20th and 21st centuries. The roots of these developments are analyzed, along with their connections to recent U.S. and world events, to prepare students to participate as educated American citizens.

Advanced Placement World History (W) (AP)

1 Credits

Prerequisite: 10th, 11th, 12th grade standing; 93% in previous GAHS social studies course, and/or teacher recommendation

AP World History is a year-long course that emphasizes themes and topics across the spectrum of human history from the year 1200 CE to the present. This course is significantly different from the World Cultures course offering a comprehensive examination of the world's history as it unfolded over time. The course requires students to read extensively, master thesis-based essay writing, and thoroughly examine primary source evidence in preparation for the AP exam. All students are required to take the AP test and are responsible for the approximate cost of \$96. Financial assistance is available.

American Civil War (A)

1 Credit

Prerequisite: 11th and 12th grade standing

This course uses project-based instruction to examine the causes, events, concepts, effects, and aftermath of the American Civil War.

Advanced Placement United States History (A) (AP)

1 Credit

Prerequisite: 10th, 11th, 12th grade standing; 93% in previous social studies course, and/or teacher recommendation

AP United States History is a year-long course that analyzes the entire scope of American history. The course requires students to read extensively, master thesis-based essay writing, and thoroughly examine primary source evidence in preparation for the AP exam. All students are required to take the AP test and are responsible for the approximate cost of \$96. Financial assistance is available.

Government and Economics (G)

1 Credit

Prerequisite: 11th and 12th grade standing

Responsible citizenship requires an understanding of the nation's economic system and governmental structures. The government component focuses on the functions of our federal, state, and local government. The economic component will cover decision making and how goods and services are produced, distributed and consumed.

Advanced Placement U.S. Government and Politics (G) (AP)

1 Credit

Prerequisite: 11th and 12th grad standing; 93% in previous social studies course and/or teacher recommendation

AP Government is an intensive one-semester course that focuses on the national government and American political scene and culture. Students will focus on analyzing data and historical political events as well as primary sources to understand and evaluate the shifts and trends of the electorate of the United States. All students are required to take the AP test and are responsible for the approximate cost of \$96. Financial assistance is available.

Psychology

Prerequisite: 11th and 12th grade standing

1 Credit

Psychology is the study of our behavior and thinking. Topics for this course will be the study of personality, learning, social-cultural differences, memory and psychological disorders.

Performance Psychology

1 Credit

Performance Psychology is associated with the study of the psychological factors that contribute to performance. This class will focus upon the components necessary for individuals to excel to their fullest potential. The coursework will cover theory, research, and applied techniques across the fields of business, exercise physiology, the fine arts, military/team building, and sports psychology.

Advanced Placement Psychology (AP)

1 Credit

Prerequisite: 11th and 12th grade standing; and 93% in previous social studies course, and/or teacher recommendation

This course engages students in the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students thoroughly explore the major subfields within psychology and learn about the ethics and methods psychologists use in their science and practice. All students are required to take the AP test and are responsible for the approximate cost of \$96. Financial assistance is available.

AP Human Geography (AP) (W)

1 Credit

Prerequisite: 9th grade with 8th grade teacher recommendation only or 10th, 11th or 12th grade standing

This course explores how humans have understood, used, and changed the surface of the Earth. Students will use tools and thinking processes of geographers to examine patterns of human population, migration, and land use. All students are required to take the AP test and are responsible for the approximate cost of \$96. Financial assistance is available.

Sociology 1 Credit

Prerequisite: 11th and 12th grade standing

In this introductory course, students learn to use the sociological perspective to think critically and analytically about life and the world. The class will use readings, film, music and other pop culture sources to discuss and critically analyze topics such as race, class, gender, social movements, poverty, education, and globalization, and determine how these topics relate to current social issues. The ultimate goal of the class is to provide the students with the sociological tools necessary to identify social problems, consider possible solutions, and critically examine society and the individual's place in it. The complexity of the content in this course requires initiative on the part of students and is reading and writing intensive.

Global Issues (W) 1 Credit

Prerequisite: 11th and 12th grade standing

This current events driven class will challenge students to consider their roles as citizens and voters with a variety of course topics and themes. The class will combine projects, media productions, and analysis of world issues centered on a set of common themes that will include: Development, Poverty, Gender Issues, Environmental Policy, Technology, Conflict, Economic Health, and Globalization.

American History through Film (A)

1 Credit

Prerequisite: 11th and 12th grade standing; 75% in Modern American History OR AP US History

This class will aim to challenge students to question and evaluate the modern perception of United States history and how our understanding of history is affected by the manner in which we choose to learn about it. Our main focus will be the popular culture interpretation of history represented through featured films. Students will have the opportunity to view a variety of feature films and analyze, critique and review the story that is presented. Students will be encouraged to take into account multiple perspectives of each event and to dive deeper than the mainstream narrative to find a more holistic story. Our investigation will center on detecting bias and historical inaccuracies in our modern story and searching for motives as well as, deciding where in history the story became "lost in translation". In the end, the students will have had the chance to challenge the modern perception of our history and to provide their own insight on the value of films as a source of historical information.

World Languages

Chairperson – Mrs. Tarja Wilson

Department Members - Ms. Marlena Tosh, Mrs. Jenny Mendoza, Mr. Ryan Trone, and Mr. Jonathan Diehl

Comparative research clearly demonstrates that the study of World Languages significantly raises PSSA and SAT scores in both English and mathematics more than any other subject does. The World Language program includes instruction in modern languages. Since the study of any language should foster insight into inherent humanistic values in an evolving world, the selection of the specific language study should be based on student interests and needs as well as those of the local community and nation.

World Language study helps students better understand their own language(s) as well as those of other people. Language study enhances insights into the thought patterns and social institutions of others; it facilitates communication; it prepares students for career opportunities; and it assists them in adapting to the multiethnic environments and value orientations of others within their society. The modern world requires individuals who are competent in languages.

French I 1 Credit

This course offers basic foundations in the development of the three modes of communication – Interpretive, Interpersonal, and Presentational in conjunction with the ACTFL National Standards. At the end of Level I, the students should be able to communicate in the target language according to the Novice-Mid proficiency scale. Oral communication is encouraged. Beginning cultural enrichment is also an aspect of this course. Primary sources and authentic materials will be utilized.

French II 1 Credit

Prerequisite: French I

This course offers an extension of the foundations introduced in Level I. The three modes of communication – Interpretive, Interpersonal, and Presentational in conjunction with the ACTFL National Standards are continually developed. At the end of Level II, the students should be able to communicate in the target language according to the Novice-High proficiency scale. Further cultural enrichment through reading, conversation, and writing will be stressed. Enrollment in Level II, in addition to other requirements, provides students the opportunity to travel abroad.

French III 1 Credit

Prerequisite: French II

This course offers an extension of concepts introduced in Level II. The three modes of communication – Interpretive, Interpersonal, and Presentational in conjunction with the ACTFL National Standards are continually developed. At the end of Level III, the students should be able to communicate in the target language according to the Intermediate-Low proficiency scale. Cultural awareness through reading, conversation, and writing will be stressed. Intermediate communication and structural skills are developed along with reading comprehension. Study abroad is encouraged.

French IV 1 Credit

Prerequisite: French III

This course offers an extension of concepts introduced in Level III. The three modes of communication – Interpretive, Interpersonal, and Presentational in conjunction with the ACTFL National Standards are continually developed. At the end of Level V, the students should be able to communicate in the target language according to the Intermediate-Mid proficiency scale. Cultural awareness through reading, conversation, and writing is emphasized. Advanced communication and structural skills are developed along with reading comprehension. Study abroad is encouraged.

French V 1 Credit

Prerequisite: French IV

This course offers an extension of concepts introduced in Level IV. The three modes of communication – Interpretive, Interpersonal, and Presentational in conjunction with the ACTFL National Standards are continually developed. At the end of Level V, the students should be able to communicate in the target language according to the Intermediate-High proficiency scale. Cultural awareness through reading, conversation, and writing is emphasized. Advanced communication and structural skills are developed along with reading comprehension. Study abroad is encouraged.

German I 1 Credit

This course offers basic foundations in the development of the three modes of communication: Interpretive, Interpresonal, and Presentational in conjunction with the ACTFL National Standards. At the end of Level I, the students should be able to communicate in the target language according to the Novice-Mid proficiency scale. Oral communication is encouraged. Beginning cultural enrichment is also an aspect of this course. Primary sources and authentic materials will be utilized.

German II 1 Credit

Prerequisite: German I

This course offers an extension of the foundations introduced in Level I. The three modes of communication – Interpretive, Interpersonal, and Presentational in conjunction with the ACTFL National Standards are continually developed. At the end of Level II, the students should be able to communicate in the target language according to the Novice-High proficiency scale. Further cultural enrichment through reading, conversation, and writing will be stressed. Enrollment in Level II, in addition to other requirements, provides students the opportunity to travel abroad. Travel abroad is encouraged.

German III 1 Credit

Prerequisite: German II

This course offers an extension of concepts introduced in Level II. The three modes of communication – Interpretive, Interpersonal, and Presentational in conjunction with the ACTFL National Standards are continually developed. At the end of Level III, the students should be able to communicate in the target language according to the Intermediate-Low proficiency scale. Cultural awareness through reading, conversation, and writing will be stressed. Intermediate communication and structural skills are developed along with reading comprehension. Study abroad is encouraged.

German IV 1 Credit

Prerequisite: German III

This course offers an extension of concepts introduced in Level III. The three modes of communication –Interpretive, Interpersonal, and Presentational in conjunction with the ACTFL National Standards are continually developed. At the end of Level IV, the students should be able to communicate in the target language according to the Intermediate-Mid proficiency scale. Cultural awareness through reading, conversation, and writing is emphasized. Advanced communication and structural skills are developed along with reading comprehension. This course is taught exclusively in German. Study abroad is encouraged.

German V 1 Credit

Prerequisite: German IV

This course offers an extension of concepts introduced in Level IV. The three modes of communication – Interpretive, Interpersonal, and Presentational in conjunction with the ACTFL National Standards are continually developed. At the end of Level V, the students should be able to communicate in the target language according to the Intermediate-High proficiency scale. Cultural awareness through reading, conversation, and writing is emphasized. Advanced communication and structural skills are developed along with reading comprehension. This course is taught exclusively in German. Study abroad is encouraged.

Spanish I 1 Credit

This course offers basic foundations in the development of the three modes of communication: Interpretive, Interpresonal, and Presentational in conjunction with the ACTFL National Standards. At the end of Level I, the students should be able to communicate in the target language according to the Novice-Mid proficiency scale. Oral communication is encouraged. Beginning cultural enrichment is also an aspect of this course. Primary sources and authentic materials will be utilized.

Spanish II 1 Credit

Prerequisite: Spanish I

This course offers an extension of the foundations introduced in Level I. The three modes of communication —Interpretive, Interpersonal, and Presentational in conjunction with the ACTFL National Standards are continually developed. At the end of Level II, the students should be able to communicate in the target language according to the Novice-High proficiency scale. Further cultural enrichment through reading, conversation, and writing will be stressed. Enrollment in Level II, in addition to other requirements, provides students the opportunity to travel abroad.

Spanish III 1 Credit

Prerequisite: Spanish II

This course offers an extension of concepts introduced in Level II. The three modes of communication – Interpretive, Interpersonal, and Presentational in conjunction with the ACTFL National Standards are continually developed. At the end of Level III, the students should be able to communicate in the target language according to the Intermediate-Low proficiency scale. Cultural awareness through reading, conversation, and writing will be stressed. Intermediate communication and structural skills are developed along with reading comprehension. Study abroad is encouraged.

Spanish IV 1 Credit

Prerequisite: Spanish III

This course offers an extension of concepts introduced in Level III. The three modes of communication – Interpretive, Interpersonal, and Presentational in conjunction with the ACTFL National Standards are continually developed. At the end of Level IV, the students should be able to communicate in the target language according to the Intermediate-Mid proficiency scale. Cultural awareness through reading, conversation, and writing is emphasized. Advanced communication and structural skills are developed along with reading comprehension. Study abroad is encouraged.

Advanced Placement Spanish 1 Credit

Prerequisite: Spanish IV or Proficient Native Speaker

The Advanced Placement (AP) Spanish Language and Culture course emphasizes communication by applying the interpersonal, interpretive, and presentational modes of communication in real – life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. This course is taught exclusively in Spanish

All students are required to take the AP test and are responsible for the approximate cost of \$96. Financial assistance is available.

Spanish for Native Speakers I

Prerequisite: Native Spanish speaker

1 Credit

The course is designed for students who have had varying degrees of formal/informal exposure to Spanish while growing up. Students will learn how to prevent using *interlanguage*, or mixed utterances of English and Spanish. They will begin the process of writing, reading, listening and speaking Standard Spanish. Furthermore, they will learn to navigate life in two cultures.

This course will be taught entirely in Spanish. The three modes of communication – Interpretive, Interpersonal, and Presentational in conjunction with the ACTFL National Standards are developed. At the end of this course, students will communicate in standard Spanish at the Intermediate level, according to their needs. Cultural literacy is expanded through various literary selections. The cultural component of this course will allow native speakers to learn more about American and Latino cultures and will provide strategies for coping with cultural differences.

Spanish for Native Speakers II

Prerequisite: SNS I or teacher approval

1 Credit

This course offers an extension of concepts introduced in Spanish for Native Speakers I. The three modes of communication – Interpretive, Interpersonal, and Presentational in conjunction with the ACTFL National Standards are continually developed. The course is designed for students who have had varying degrees of formal/informal exposure to Spanish while growing up. Students will learn how to prevent using *interlanguage*, or mixed utterances of English and Spanish. They will continue to reinforce writing, reading, listening and speaking Standard Spanish. Furthermore, they will learn to navigate life in two cultures.

This course will be taught entirely in Spanish. The three modes of communication – Interpretive, Interpersonal, and Presentational in conjunction with the ACTFL National Standards are developed. At the end of this course, students will communicate in standard Spanish at the Intermediate and Advanced levels, according to their needs. This course includes an explanation of Spanish grammar rules and the orthography of Spanish. Cultural literacy is expanded through various literary selections. The cultural component of this course will allow native speakers to learn more about American and Latino cultures and will provide strategies for coping with cultural differences.

Adams County Technical Institute

Allied Health - Mrs. Penton Building Trades – Mr. Snyder Computer Networking - Mr. Kosmon Culinary Arts – Chef Schaffner Diesel Technology – Mr. Penton Early Learning – Mrs. Kehr Criminal Justice – Mr. Slimmer

www.acti-pa.org

The Adams County Technical Institute (ACTI) program is a two-year Career and Technical Education (CTE) program which is open to students from Bermudian Springs, Fairfield, Gettysburg, Littlestown and New Oxford high schools. Students apply to ACTI during 10th grade. ACTI classes are held on the campus of Gettysburg Area High School. Admission to ACTI is competitive. Students are admitted based on their application score and school district guidelines. ACTI staff visit the participating high schools during the fall semester to give sophomores information about our programs.

Students who choose to attend ACTI gain in-depth knowledge in a specific career area. They learn the theoretical foundations of the career field, then apply that knowledge through hands-on experiences. Juniors attend ACTI from 7:30 am - 9:30 am. Seniors attend ACTI from 12:00 noon - 2:35 pm. A 12th grade student may apply to ACTI, but preference is given to students in 11th grade.

After graduation, an ACTI student has multiple options. If a student chooses to enter the workforce, they are well prepared for their career in an entry-level position. If a student chooses to continue their education, they have a solid foundation and understanding as they enter a post-secondary program.

Culinary Arts

- Develop core culinary skills to unlock your inner food artist. Your canvas is a plate!
- Launch yourself into a dynamic Culinary Arts career including: Executive Chef, Pastry Chef, Private Chef, Food Stylist, Corporate Food Scientist and much more!
- Experience all aspects of running a restaurant by designing a menu and serving it in our open-to-the-public restaurant.

Early Learning

- Experience the joy of watching children learn and grow.
- Create exploratory experiences for preschool children.
- Participate in infant, toddler, elementary, and special needs classrooms.

Allied Health

- Develop patient care skills used by practicing healthcare providers.
- Explore the anatomy, physiology, and pathology of the human body.
- Communicate using medical terminology and language.
- Experience the healthcare environment through job shadowing and scenario experiences in the lab.

Criminal Justice

- Develop latent fingerprints using Forensic techniques.
- Use handcuffs to arrest a suspect.
- Manage evidence during a crime scene investigation.

Diesel Technology

- Disassemble and assemble diesel engines.
- Troubleshoot and repair vehicle electronics and electrical circuits.
- Use modern tools and test equipment.
- Experience what it is like to work in a diesel shop.

Building Trades

- Operate professional power tools and equipment safely to build a wide range of projects.
- Build a house using all skilled construction trades including framing, siding, roofing, electrical, masonry, plumbing, and HVAC.
- Establish industry standard safety skills through OSHA-10 and OSHA-30 certification in General Construction.

Computer Networking

- Create PCs from parts from an empty case to a functioning system and configure the operating system on your custom-made computer.
- Turn a system into a server and transform a tangle of wires into a managed network. Investigate and determine what data does and does not traverse across your domain.
- Expand your network into a wide area by connecting your domain to others, making sure to identify and troubleshoot problems as they occur.

Culinary Arts I 3 Credits

(PDE CIP 12.0508 Institutional Food Workers)

Prerequisite: Grade 11 or 12

Prepare for employment-related to institutional, commercial, self-owned food establishments or other food industry occupations. Instruction and specialized learning experiences include theory, laboratory and work experiences related to planning, selecting, preparing and serving of quality food and food products as well as sanitation precautions. Theory components include exploring the history of the foodservice industry, culinary math, Food Safety and Sanitation, purchasing and receiving and Menu Design. Lab classes cover knife skills, product identification, stocks, soups, sauces, starches, vegetable cookery, protein cookery, cooking methods and introduction to baking.

Culinary Arts II 4 Credits

(PDE CIP 12.0508 Institutional Food Workers)

Students continue to develop the skills needed to perform effectively in culinary arts and related occupations. Emphasis on the supervision and management of the food industry. Included; beverages and their impact on sales, banquet and buffet procedures, front of the house operations, table service, proper planning, bulk food production and execution of large scale restaurant functions, nutrition planning and receiving control, and menu design. Other areas of concentration are breakfast cookery, sandwiches and canapés, hors d'oeuvres, salads, garden manger, including pates, terrines, sausage making and curing meats. International and American Regional cuisine, ingredients, advanced baking, pastries and food presentation are included. Students have the opportunity to design, lead, and serve an open to the public luncheon.

Pennsylvania Department of Education "Programs of Study" articulations (9 credits) are available at various community colleges in Pennsylvania for those students who successfully complete this two year program.

Early Learning I 3 Credits

(PDE CIP 19.0708 Child Care and Support Services Management)

Prerequisite: Grade 11 or 12

Early Learning will prepare students with skills necessary for employment in any field involving children, including early childhood education, elementary education, pediatrics, and child care. Observations at local early learning facilities may be included throughout this course. Students will also receive training in Pediatric First Aid/CPR/AED.

A physical and Mantoux TB test are required at the student's expense.

Early Learning II 4 Credits

(PDE CIP 19.0708 Child Care and Support Services Management)

Early Learning II students will have the opportunity to apply what they have learned in Early Learning I. Students will have the opportunity for field experience in various types of early learning settings, as well as our own student-run preschool.

Pennsylvania Dept. of Education "Programs of Study" articulations (9 credits) are available at various community colleges in Pennsylvania for those students who successfully complete this two year program.

Allied Health I 3 Credits

(PDE CIP 51.9999 Health Professions and Related Clinical Sciences)

Prerequisite: Grade 11 or 12

Exploring Medical Language:

Medical Terminology is the study of frequently used medical terms, abbreviations, and symbols as found within their usual contexts. This course is approached through an integrative review of anatomy and physiology, common pathophysiological states, and related diagnostic tests and treatments (including an introduction to the metric system).

Harrisburg Area Community College (HACC) currently offers students the opportunity to register for the following course while participating in the Tech Prep program. Students must meet all HACC admission requirements.

BIO 105 – Medical Terminology (3 credits)

Anatomy and Physiology:

This course focuses on the structure and function of the human body. Study includes body systems; what they are, what they do, and how they work together. Class investigates common disease processes associated with each body system

Allied Health II 4 Credits

(PDE CIP 51.9999 Health Professions and Related Clinical Sciences)

Allied Health Science Technology

This course builds on the Level I experience and offers an introduction to Allied Health Professions, placing emphasis on such topics as the evolution and current status of healthcare delivery, various career opportunities, interpersonal and therapeutic communications, legal and ethical issues, and safety. An orientation to basic skills that are essential to the clinical setting is reinforced through laboratory sessions. The course is designed to provide an overview of the healthcare environment through clinical shadowing as well as the core skills and knowledge needed to provide safe and effective delivery of healthcare.

Harrisburg Area Community College (HACC) currently offers students the opportunity to register for the following course while participating in the Tech Prep program. Students must meet all HACC admission requirements.

AH 140 – Allied Health (3 credits)

Pennsylvania Department of Education "Programs of Study" articulations (9 credits) are available at various community colleges in Pennsylvania for those students who successfully complete this two-year program.

Criminal Justice I 3 Credits

(PDE CIP 43.0107 Criminal Justice/Police) Level I

Prerequisite: Grade 11 or 12

The course includes a general introduction into the criminal justice system. Included is the history, function, and the role of law enforcement, courts, and corrections in American society. Examine trends and issues in law enforcement including Constitutional rights and review court cases Explore use of force, deadly force, patrol procedures, criminal investigation techniques, and officer safety issues. Hands-on activities in officer safety, defensive tactics, arrest procedures, report writing, public speaking, report writing and the use of the Pa. Crimes Code and Vehicle Code. Students can participate in the College in the High School program through HACC and obtain 3 college credits in CJ101 Introduction to Criminal Justice if students meet HACC admission requirements.

Criminal Justice II 4 Credits

(PDE CIP 43.0107 Criminal Justice/ Police) Level II

Course expands the study of Police Operations, Criminal Law and Procedure, and Criminal Investigation. Emphasis is on the criminal justice system, criminal investigation, accident investigation, an introduction to forensic science, crime scene investigation, DUI investigation, and First Aid/CPR. Certifications available in the Management of Aggressive Behavior, Personal Protection Police Baton Tactics, Oleoresin Capsicum Aerosol Training, Practical and Tactical Handcuffing, and Personal Protection Defense and Control Tactics.

Students can participate in the College in the High School program through HACC and obtain college credits.

Junior Year: 3 credits in CJ101 Introduction to Criminal Justice

Senior Year: 3 credits in CJ104 Police Operations and 3 credits CJ212 Criminal Law and Procedure

Pennsylvania Dept. of Education "Programs of Study" articulations (9 credits) are available at various community colleges in Pennsylvania for those students who successfully complete this two-year program.

Diesel Technology I 3 Credits

(CIP Code/Title: 47.0613 Medium/Heavy Vehicle and Truck Technology/Technician)

Prerequisite: Grade 11 or 12

Program prepares individuals to apply technical knowledge and skills to repair and service diesel engines and diesel-powered equipment. Instruction is provided in diagnosis of malfunctions; disassembly of engines, fuel injection systems, oil and water pump, generators, auxiliary power units, and basic electrical. Technical manuals, the state inspection code, testing and diagnostic equipment and various hand and power tools are included in the program.

Diesel Technology II 4 Credits

(CIP Code/Title: 47.0613 Medium/Heavy Vehicle and Truck Technology/Technician)

Course expands on knowledge of technical manuals, hydraulic and air brake systems, electrical systems, steering and suspension systems, hydraulic fundamentals, powered axles and transmissions, state inspection code, testing, diagnostic equipment, forklift safety and operation training, and various hand and power tools. Students have the opportunity to shadow at facilities relevant to their career choice during the 3rd and 4th marking periods.

Pennsylvania Department of Education "Programs of Study" articulations (9 credits) are available at various community colleges in Pennsylvania for those students who successfully complete this two-year program.

Building Trades I 3 Credits

(PDE CIP 46.9999 Construction Trades)

Prerequisite: Grade 11 or 12

Students are taught the principles and industry practices related to the residential construction industry. Students receive instruction on safe tool operation, blueprint reading, masonry, framing, trim carpentry, electrical house wiring, interior and exterior wall finishing, plumbing, and heating and air conditioning.

Building Trades II 4 Credits

(PDE CIP 46.9999 Construction Trades)

Building Trades II is the lab practicum component to the Building Trades curriculum. Students will be onsite at the school district's designated work site practicing skills and techniques.

Pennsylvania Department of Education "Programs of Study" articulations (9 credits) are available at various community colleges in Pennsylvania for those students who successfully complete this two-year program.

A \$25 fee is required for the online OSHA 10 hour construction certification.

Computer Networking I

3 Credits

(PDE CIP 11.0901 Computer Networking and Telecommunications)

Prerequisite: Grade 11 or 12

This course is aligned with Cisco's IT Essentials 6.0 curriculum. IT Essentials introduces students to the fundamentals of computer hardware and software, mobile devices, printers, security and networking concepts and the responsibilities and soft skills required to become an IT professional. By the end of the course, students will be able to describe the internal components of a computer and assemble a computer system, install and understand operating systems on computers and mobile devices, connect to the Internet and share resources in a networked environment, and troubleshoot using system tools, diagnostic software, and critical thinking skills.

Computer Networking I prepares students for the CompTIA A+ certification exam. During the spring, students will explore cybersecurity essentials, and the first section of CCNA (Cisco Certified Network Associate) training – Intro to Networking.

Computer Networking II 4 Credits

During Computer Networking II, students will complete the first two portions of CCNA (Cisco Certified Network Associate) training – Intro to Networks and Routing and Switching Essentials. The first semester covers network architecture, structure and functions. It also introduces students to the principles and structures of IP addressing and the fundamentals of Ethernet concepts, media, and operations. By the end of CNNA I, students will be able to explain network technologies, explain how devices access local and remote network resources, describe router hardware, explain how switching operates, design IP addressing schemes, configure initial network device settings, and configure monitoring tools. CCNA II: Routing and Switching Essentials covers the architecture, components, and operations of routers and switches in a small network. Students will be able to implement VLANs, static routing, DHCP, NAT, and ACLs.

This course prepares students for CompTIA Network+ certification and/or CCENT (Cisco Certified Entry Network Technician). Pennsylvania Department of Education "Programs of Study" articulations (9 credits) are available at various community colleges in Pennsylvania for those students who successfully complete this two-year program.