# Peters Township High School Anticipated Course Selection with Career Clusters 2023-2024

# **Career Clusters**

Career clusters are a way of grouping careers based on similar skills and training required. Take the Career Interest Profiler in Naviance to find what career clusters are most relevant to interests and abilities based on questions answered. Each course in the course description book has career clusters associated with the course below the course description. Information below is provided from Naviance.

## Agriculture, Food and Natural Resources - (AFN



The Agriculture, Food and Natural Resources Career Cluster prepares learners for careers in the planning, implementation, production, management, processing, and/or marketing of agricultural commodities and services, including food, fiber, wood products, natural resources, horticulture, and other plant and animal products. It also includes related professional, technical and educational services.

#### Architecture and Construction - ( AC



The Architecture and Construction Career Cluster prepares learners for careers in designing, planning, managing, building and maintaining the built environment. People employed in this cluster work on new structures, restorations, additions, alterations and repairs.

#### Arts, Audio/Video Technology and Communications - (AVTC)



The Arts, Audio/Video Technology and Communication Career Cluster offers two different avenues of concentration. Careers in the Performing Arts, Visual Arts or certain aspects of Journalism, Broadcasting and Film require courses and activities that challenge students' creative talents.

#### Business Management and Administration - (BMA)



The Business Management and Administration Cluster prepares learners for careers in planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. Career opportunities are available in every sector of the economy and require specific skills in organization, time management, customer service and communication.

#### **Education and Training - (ET**



This Education and Training Career Cluster prepares learners for careers in planning, managing and providing education and training services, and related learning support services. Each year many learners train for careers in education and training in a variety of settings that offer academic instruction, career technical instruction, and other education and training services.

#### Finance -



The Finance Career Cluster prepares learners for careers in financial and investment planning, banking, insurance and business financial management. Career opportunities are available in every sector of the economy and require specific skills in organization, time management, customer service and communication.

#### Government and Public Administration - GPA



Government affects everyone in countless ways. In a democratic society, government is the means of expressing the public will. In fact, virtually every occupation can be found within government. There are some activities unique to government. The federal government defends the public from foreign aggression; represents the nation's interests abroad; deliberates, passes and enforces laws; and administers many different programs. State and local governments pass laws or ordinances and provide vital services to constituents. There are many opportunities in government in every career area. The Government and Public Administration Career Cluster focuses on unique careers only available within government.

# Health Science - (HSc



The Health Science Career Cluster orients students to careers that promote health, wellness, and diagnosis as well as treat injuries and diseases. Some of the careers involve working directly with people, while others involve research into diseases or collecting and formatting data and information. Work locations are varied and may be in hospitals, medical or dental offices or laboratories, cruise ships, medivac units, sports arenas, space centers, or within the community.

#### Hospitality and Tourism - ( HT



The Hospitality and Tourism Cluster prepares learners for careers in the management, marketing and operations of restaurants and other food services, lodging, attractions, recreational events and travel-related services. Hospitality operations are located in communities throughout the world.

#### **Human Services -**



This diverse Career Cluster prepares individuals for employment in career pathways related to families and human needs.

#### Information Technology - IT



A career in IT is challenging and ever-changing. Those who pursue jobs in the IT sector will quickly discover ongoing opportunities to learn about and work with exciting new technologies that are transforming the world. IT education can be obtained in in high schools, technical colleges/institutes and universities.

#### Law, Public Safety, Corrections and Security - (LPCS)



The Law, Public Safety, Corrections and Security Career Cluster helps prepare students for careers in planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.

#### Manufacturing - (



This diverse Career Cluster prepares learners for careers in planning, managing, and performing the processing of materials into intermediate or final products. Careers also include related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering.

# Marketing - (Mark)

This diverse Career Cluster prepares learners for careers in planning, managing and performing marketing activities to reach organizational objectives.

# Science, Technology, Engineering and Mathematics - (STEM)



A career in science, technology, engineering or mathematics is exciting, challenging, and ever-changing. Learners who pursue one of these fields will be involved in planning, managing, and providing scientific research and professional and technical services including laboratory and testing services, and research and development services.

#### Transportation, Distribution and Logistics - (TDL)



The Transportation, Distribution and Logistics Career Cluster exposes students to careers and businesses involved in the planning, management, and movement of people, materials, and products by road, air, rail and water. It also includes related professional and technical support services such as infrastructure planning and management, logistic services, and the maintenance of mobile equipment and facilities.

# **English Course Offerings**

Each student must be enrolled in one of the required English courses each year. In order for a student to be eligible for graduation, the student must satisfactorily complete 4 credits of English. No student may be enrolled in more than one required English course within any given school year without approval of the High School Principal.

Required Course Offerings					
Grade 9	Grade 10	Grade 11	Grade 12		
English 9 Academic	English 10 Academic	English 11 Academic	English 12 Academic		
English 9 Honors	English 10 Honors	English 11 Honors	English 12 Honors		
		AP English Language & Composition	AP English Literature & Composition		
Semester Electives					
The Bible in Literature I (9,10,11,12)		Speech (9,10,11,12)	Theater Arts I (9,10,11,12)		
The Bible in Literature II (10, 11,12)		World Mythology (9,10,11,12)	Theater Arts II (9,10,11,12)		
Humanities (9,10,11,12)		Creative Writing (10,11,12)	Writing Workshop (10,11,12)		
Movies and Meaning (9,10,11,12)					

# **ENGLISH 9 ACADEMIC (0101)**

**Grade 9** 

1.0 credit

1 year

Prerequisite: None

This course continues the sequential study of skills in reading, writing, speaking and listening, and research. Students will increase independent reading and analysis skills by studying elements and devices of novels, dramas, short stories, and poetry. Students will apply the writing process in order to improve grammar and written expression in paragraph and multi-paragraph literary analysis. Students will also express their ideas orally in small and large group discussion and presentations. They will apply the research process in order to supplement their understanding of the historical contexts of literary works.



#### **ENGLISH 9 HONORS (0102)**

Grade 9

1.0 credit

1 year

#### Prerequisite: Grade of "A" in 8th Grade English or Teacher Recommendation from MS Language Arts/Literature Dept.

At an accelerated pace, this course deals with a review of the nature and structure of the language. The students complete literary analyses of novels, dramas, short stories, and poetry. A unit of library skills is followed by library projects throughout the year. Students develop writing skills through experiences with various types of writing, and they practice techniques of group discussion. Students will read designated literary works during the summer prior to freshmen year. Required summer reading will be assessed upon entrance to the course.



## **Prerequisite: Completion of English 9 Academic**

With a focus on World Literature, students will read short stories, plays, and novels while emphasizing the philosophical and cultural contexts of the texts. This course reviews grammatical principles with the emphasis upon mechanics and usage. Students refine their understanding of more complex aspects of literary analysis. Students are taught to recognize their personal needs in communication and work for personal improvement in informal as well as formal communication. Students involve themselves in prewriting and revision activities and become more familiar with all aspects of the writing process.



#### **ENGLISH 10 HONORS (0105)**

Grade 10

1.0 credit

1 year

Prerequisite: Grade of "B" or better in the previous honors course(s), or "A" for the previous academic course, or Teacher Recommendation

With a focus on World Literature, this course is designed as a Pre-AP program in language arts skills. Students will read selections from ancient texts to contemporary works reflecting a variety of philosophical and cultural contexts. Emphasis is placed on text-based analysis; clear, correct and coherent writing; and knowledge of literary terminology as a tool for critical study. Summer reading of designated books is required and will be assessed during the first week of school.



#### **ENGLISH 11 ACADEMIC (0107)**

**Grade 11** 

1.0 credit

1 year

#### Prerequisite: Completion of English 10 Academic

This course provides a survey of American Literature through reading comprehension with an emphasis on citing textual evidence to develop written and oral analysis. Students' compositions must reflect proficient understanding of structure, development and clarity. Students identify and improve clear, grammatical constructions and are encouraged to eliminate substandard patterns of language.



#### **ENGLISH 11 HONORS (0108)**

Grade 11

1.0 credit

1 year

Prerequisite: Grade of "B" or better in the previous honors course(s), or "A" for the previous academic course(s), or Teacher Recommendation

This advanced course focuses on American Literature and explores how universal themes are represented in American culture from Puritan times to the present. Students read and discuss many complete works of literature rather than survey materials. The writing component emphasizes analytical and critical compositions. Students will read designated literary works during the summer prior to junior year and will complete an assessment during the first weeks of school. *Required summer reading will be assessed upon entrance to the course.* 



#### ADVANCED PLACEMENT AND LANGUAGE COMPOSITION (0140) Grades 11, 12 1.0 credit 1 year

### Prerequisite: Grade of "B" in the previous honors course or Teacher Recommendation

AP Language and Composition engages students in becoming skilled readers of prose written in a variety of rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Through their writing and reading experiences students will be aware of the interactions among a writer's purposes, audience expectations, and subjects as well as the way generic conventions and resources of language contribute to effectiveness in writing. Required summer reading will be assessed upon entrance to the course. Students who complete this course are expected to take the AP examination in May at the student's expense.



**ENGLISH 12 ACADEMIC (0110)** 

Grade 12

1.0 credit

1 year

#### Prerequisite: Completion of English 11 Academic

This course is a chronological survey of English literature (and related supplemental interdisciplinary material) focusing on literary analysis, and critical thinking and reading skills. Communication skills are enhanced via assorted oral and written assignments, which challenge the students' sense of articulation and clarity.

## **ENGLISH 12 HONORS (0113)**

Grade 12

1.0 credit

1 year

Prerequisite: Grade of "B" or better in the previous honors course or "A" in academic course or Teacher Recommendation Students will begin their study of British literature with an exploration of Greek drama from the 5<sup>th</sup> century BC, viz., *Oedipus Rex* as the basis for all future drama. Students will also study a range of British literary masterworks spanning several centuries. Primary instruction and emphasis will be on close reading and the subsequent strengthening of critical thinking, reading comprehension, communication skills and critical analytical composition skills requiring text-based evidence. Assessments will include objective texts, essays, compositions, oral reports, and research. Required summer reading will be assessed upon entrance to the course. Honors weighting will apply.



# ADVANCED PLACEMENT LITERATURE AND COMPOSITION (0111) Grade 12 1.0 Credit 1 year

# Prerequisite: Grade of "B" or better in the previous Advanced Placement course (0140), Grade of "A" in previous honors course or Teacher Recommendation

This course approximates the college experience where students assume a greater role in the learning process. Accordingly, students will be expected to contribute constructively to the discussion of world masterpieces. The primary objective of the course is to develop analytical skills and effective writing, so there is an emphasis on close reading, literary analysis, and composition of critical essays. Prior to the beginning of senior year, students will read a detailed essay on the art of literary analysis. Students will be assessed on this required summer reading upon entrance to the course, and the text will be referenced continually throughout the year. Students who elect this course are expected to take the AP examination in May at the student's expense.



THE BIBLE IN LITERATURE I (01200NL)

Grades 9, 10, 11, 12

0.5 credit

1 semester

**Prerequisite: None** 

This semester course will provide students with the opportunity to study one of the most influential books ever written - the Bible. In the Bible in Literature I, students will learn about the different kinds of writing and the various books that make up the Old Testament, also known as the Hebrew Scriptures. Parts of the Bible like Genesis, Exodus, the Prophets, and the Psalms will be read for their literary impact and narrative appeal. In addition, students will also read other classic works of literature - a novel, short stories, and poetry - to analyze and interpret the Bible's influence. Knowledge of the Bible and its stories has long been recommended by colleges and universities because of the many biblical allusions that are found in great literature.



#### THE BIBLE IN LITERATURE II (01210NL)

**Grades 10, 11, 12** 

0.5 credit

1 semester

#### Prerequisite: Bible in Literature I

This semester course will provide students with the opportunity to study one of the most influential books ever written - the Bible. Students will read the Gospels and other writings of the New Testament and examine biblical allusions in classic literature. Students will read other classic works of literature - a novel, short stories, and poetry - to analyze and interpret the Bible's influence. Knowledge of the Bible and its stories has long been recommended by colleges and universities because of the many biblical references that are found in great literature.



#### **CREATIVE WRITING (0116)**

**Grades 10, 11, 12** 

0.5 credit

1 semester

#### Prerequisite: None

"If a story is in you, it has got to come out," declares William Faulkner. This writing workshop course provides an opportunity for students to develop their abilities in writing short fiction, poems, and other creative pieces. Informal instruction and discussions center on work to be completed in an independent or team environment. Our goals are to become more confident in expressing our thoughts and feelings in words, while stretching our abilities by experimenting with a variety of styles of creative writing. Opportunities for publication will also be explored.



### **HUMANITIES (0112)**

Grades 9, 10, 11, 12

0.5 credit

1 semester

#### **Prerequisite: None**

Learn to think more critically and to analyze the human experience through studying the humanities. From every period of history and from every corner of the world, people have defined and documented the human experience through philosophy, literature, the visual arts, and the performing arts. Connect with the great minds from the past, and explore these branches of culture – philosophy, literature, art, architecture, music, theatre, and dance – to better understand and appreciate life.

AFN AC BMA ET GPA HSc HT HS LPCS

#### **MOVIES AND MEANING (0122)**

Grades 9, 10, 11, 12

0.5 credit

1 semester

#### Prerequisite: None

Great films explore great themes, which help us get acquainted with our own lives. In this class, students will view, discuss, write about, and research some of the world's finest and most renowned examples of cinema. Students will learn to "read" film in order to appreciate, interpret, and critique history's most complex art form.



## **SPEECH (0114)**

Grades 9, 10, 11, 12

0.5 credits

1 semester

#### **Prerequisite: None**

"Speech is power: speech is to persuade, to convert, to compel." ~ Ralph Waldo Emerson, American philosopher. This highly recommended semester class is a practical course designed to offer the novice speaker numerous opportunities to prepare and practice public speaking assignments. Students will become strategic, confident, and credible communicators in academic settings, the workplace, and the community. Emphasis is on the organization, research support, delivery, and evaluation of informative, persuasive, entertaining, and inspirational speeches. The meaningful use of presentation technology will also be included. Speech class offers the opportunity to make yourself heard. What's stopping you?



#### THEATER ARTS I (0677)

Grades 9,10,11,12

0.5 credit

1 semester

#### **Prerequisite: None**

Students do NOT have to have any acting experience to enroll in this course, although a basic understanding and appreciation of the art form is encouraged. This is a performance-based course that offers activities in the art and craft of live theatre. The student will have the opportunity to investigate several topics such as group and solo acting, improvisation, and pantomime as well as gain knowledge of the technical arts of costume, makeup design, and stage management.



#### THEATER ARTS II (0678)

Grades 9, 10, 11, 12

0.5 credit

1 semester

#### Prerequisite: Completion of Theater Arts I

Students in this performance-based course will build on the acting skills and theory learned from Theater Arts I. The course combines the theory of acting with ample performance opportunities requiring much enthusiasm, creativity and effort thereby building confidence and marketable skills to this performing art. This course will concentrate heavily on characterization, script analysis, performance, audition skills, and written self-reflections and peer review. This course is for the advanced student of acting who wishes to push their craft to the next level.



#### WORLD MYTHOLOGY (01300NL)

**Grades 9,10,11,12** 

0.5 credit

1 semester

#### Prerequisite: None

This course details the myths of the world. Students will study myths thematically, thus tying the human condition and similarities to ancient pieces of literature. Students will also gain insight to the literary impact of myths on our contemporary world of writing. This course offers an opportunity for students to discover diversity. This course is taught in a blended environment.



#### **Prerequisite: None**

This course is designed for students who want to continue developing their creative writing skills. The course concentrates on enhancing students' existing works of fiction and nonfiction such as poetry, short stories, drama, or personal essays. As a workshop class, students will have ample opportunities to collaborate with their peers in order to share, edit, and revise their written work. This course will also review opportunities for publishing student work.

















# **Math Course Offerings**

Students must complete 4 credits of Math to graduate. Calculators: it is required that students purchase a graphing calculator for their use during high school. In the classroom, the teachers will be using the TI-84 Plus or TI-84CE.

	Recommended Sequences for Required Courses					
Sequence	Grade 9	Grade 10	Grade 11	Grade 12		
1	Geometry Academic	Algebra II Academic	Precalculus Academic	Calculus I Honors		
	Geometry Honors	Algebra II Honors	Precalculus Honors	AP Calculus AB		
			Algebra III & Trigonometry	AP Calculus BC		
			AP Statistics	Precalculus Academic		
				AP Statistics		
2	Algebra II Honors	Precalculus Honors	AP Calculus BC	Linear Algebra Honors		
		AP Statistics	AP Calculus AB	AP Statistics		
			Calculus I Honors	AP Calculus BC		
			AP Statistics			
3	Algebra I Academic	Geometry Academic	Algebra II Academic	Algebra III and Trigonometry		
		Geometry Honors	Algebra II Honors	Precalculus Academic		
				AP Statistics		
				Personal Finance		
4	Algebra I Foundations	Algebra IIA Foundations	Geometry Foundations	Algebra IIB/Trigonometry Foundations		
Semester Electives			Full Year Electives			
Financial Literacy (11, 12)			Accounting I (10, 11,12)			
			Personal Finance (12)			

#### **Prerequisite: Teacher Recommendation**

This course is a study of the language, concepts, and techniques of Algebra that will prepare students to approach and solve problems following a logical succession of steps. This course is the foundation for high school mathematics courses. Topics include simplifying expressions, evaluating and solving equations and inequalities, and graphing linear and quadratic functions and relations. Real world applications are presented within the course content and a functional approach is emphasized. Students will have more hands-on practice within the classroom so that they can receive immediate feedback. (8 periods/week)



**ALGEBRA I ACADEMIC (0322)** 

Grade 9, 10, 11, 12

1.0 credit

1 year

Prerequisite: None

This course is a study of the language, concepts, and techniques of Algebra that will prepare students to approach and solve problems following a logical succession of steps. This course is the foundation for high school mathematics courses. Topics include simplifying expressions, evaluating and solving equations and inequalities, and graphing linear and quadratic functions and relations. Real world applications are presented within the course content and a function's approach is emphasized.



**GEOMETRY FOUNDATIONS (0326)** 

Grades 9,10,11,12

1.0 credit

1 year

**Prerequisite: Teacher Recommendation** 

This course is a study of the language, concepts and techniques of Geometry that will prepare students to critically analyze and logically solve problems. This course is the foundation for students' ability to recognize spatial relations and apply logical reasoning skills. Topics include parallel and perpendicular lines, triangle congruence and properties, polygons, similarity, trigonometry, circles and spatial reasoning. Many real-world applications are presented within the course content.



**GEOMETRY ACADEMIC (0327)** 

Grades 9,10,11,12

1.0 credit

1 year

Prerequisite: Grade of "C" or better in Algebra I (incoming 9th graders must show proficiency on Algebra I Keystone Exam)

This course is a study of language, concepts and techniques of Geometry that will prepare students to critically analyze and logically solve problems. This course is the foundation for students' ability to recognize spatial relations and apply logical reasoning skills. Topics include parallel and perpendicular lines, triangle congruence and properties, polygons, similarity, trigonometry, circles and spatial reasoning. Many real-world application questions are studied in each unit.



## Prerequisite: Grade of "A" in Algebra I, "B" or better in Algebra I Enriched or Teacher Recommendation

This course is a study of language, concepts and techniques of Geometry that will prepare students to critically analyze and logically solve problems. This course is the foundation for students' ability to recognize spatial relations and apply logical reasoning skills. Topics include parallel and perpendicular lines, triangle congruence and properties, polygons, similarity, trigonometry, circles and spatial reasoning. Many real-world applications are presented within the course content. The pacing of this course is more rigorous than the academic level, as it is designed for the extremely capable student who has completed Algebra I. All topics taught in the Geometry academic course will be addressed in more detail.



#### **ALGEBRA IIA FOUNDATIONS (0332)**

Grades 10, 11, 12

1.0 credit

1 year

#### Prerequisite: Completion of Algebra I Foundations or Teacher Recommendation

This course is a study of the language, concepts, and techniques of Algebra that will prepare students to approach and solve problems following a logical succession of steps. This course is the foundation for high school mathematics courses. Topics include the study of functions (polynomial, exponential, logarithmic, rational, radical, and trigonometric), probability and statistics. Real world applications are presented within the course content and a function's approach is emphasized. Students will have the opportunity for one-on-one help within the classroom and will receive more hands-on practice in order to allow for immediate feedback.



## **ALGEBRA II ACADEMIC (0331)**

Grades 10, 11, 12

1.0 credit

1 year

#### Prerequisite: Grade of "C" in Algebra I and completion of Geometry Academic

This course is a study of the language, concepts, and techniques of Algebra that will prepare students to approach and solve problems following a logical succession of steps. This course is the foundation for high school mathematics courses. Topics include the study of functions (polynomial, exponential, logarithmic, rational, radical, and trigonometric), probability and statistics. Real world applications are presented within the course content and a function's approach is emphasized. Appropriate technology will be utilized.



#### **ALGEBRA II HONORS (0330)**

**Grades 9, 10, 11** 

1.0 credit

1 year

#### Prerequisite: Completion of Algebra I Enriched and Geometry Honors

Algebra II Honors is designed for the extremely capable student who has completed Algebra I and Geometry. This course is a study of the language, concepts, and techniques of Algebra that will prepare students to approach and solve problems following a logical succession of steps. This course is the foundation for high school mathematics courses. Topics include the study of functions (polynomial, exponential, logarithmic, rational, radical, and trigonometric), probability and statistics. Real world applications are presented within the course content and a function's approach is emphasized. All topics taught in Algebra II Academic will be addressed in more detail and the pace of the course will be accelerated. Appropriate technology will be utilized.



# **ALGEBRA IIB/TRIGONOMETRY FOUNDATIONS (0337)**

Grade 12

1.0 credit

1 year

#### Prerequisite: Completion of Algebra II Foundations or Teacher Recommendation

This course is a study of the language, concepts, and techniques of Algebra and Trigonometry that will prepare students to approach and solve problems following a logical succession of steps. Topics include the study of functions (exponential, logarithmic, rational, radical, and trigonometric), conic sections, probability and statistics. Real world applications are presented within the course content and a function's approach is emphasized. Students will have the opportunity for one-on-one help within the classroom and will receive more hands-on practice in order to allow for immediate feedback.



**ALGEBRA III and TRIGONOMETRY (0323)** 

**Grades 11, 12** 

1.0 credit

1 year

#### Prerequisite: Completion of Algebra II Academic

This course is designed for college bound students who need to strengthen algebraic skills and develop trigonometric skills to prepare them for Precalculus Academic. Students will continue learning the algebraic, geometric, and trigonometric concepts developed in the Algebra I, Geometry and Algebra II courses. Special emphasis is placed on problem solving strategies and the integration of the graphing calculator in order to interpret mathematical functions. Topics include solving algebraic, exponential, and logarithmic equations, right triangle trigonometry, and analytic trigonometry.



#### PRECALCULUS ACADEMIC (0311)

Grade 11, 12

1.0 credit

1 year

#### Prerequisite: Grade of "B" or better in Algebra II Academic or Teacher Recommendation

This course includes an in-depth study of: Inverse Functions, Polynomial Functions, Rational and Radical Functions, and Exponential and Logarithmic Functions. Trigonometry and its applications will be thoroughly investigated in this course. All functions and their applications will be explored further using graphing calculators. This course is designed to prepare students for college level Calculus. A graphing calculator is required for this course.



#### PRECALCULUS HONORS (0312)

**Grades 10, 11, 12** 

1.0 credit

1 year

#### Prerequisite: Grade of "B" or better in Algebra II Honors or Teacher Recommendation

In addition to a careful study of the topics taught in Pre-calculus Academic, systems of equations and inequalities, sequences and series, lines in the plane, conic sections, and polar coordinates, and limits will be studied in-depth. The pace of this course will be accelerated commensurate with the ability of the class. A graphing calculator is required for this course.

BMA F IT STEM

Prerequisite: Grade of "B" or better in Precalculus Academic or "C" or better in Precalculus Honors.

This course is designed for the student who desires to study the calculus but is not prepared to work at the pace or with the rigor that is necessary in the advanced placement course. Some of the topics taught are properties of functions, limits, and the derivative, techniques of integration, the definite integral, and applications of the integral. Computers will be used where appropriate.



ADVANCED PLACEMENT STATISTICS (0315) Grades 10, 11, 12 1.0 credit 1 year

Prerequisite: Grade of "C" or better in Algebra II Honors, "B" or better in Precalculus Academic or Teacher Recommendation This one-year course is designed for the student who wishes to study statistics and related topics at an accelerated pace comparable to courses in colleges and universities. The curriculum will be learned by the end of April, in order to properly prepare for the AP exam. Some of the topics taught include: designing experiments, probability, sampling distributions, the normal distribution, confidence intervals and sample size, hypothesis testing, correlation and regression, chi-square tests, and describing distributions.



ADVANCED PLACEMENT CALCULUS AB (0302)

**Grades 11, 12** 1

1.0 credit

1 year

Prerequisites: Grade of "B" or better in Precalculus Honors, "A" in Precalculus Academic OR Teacher Recommendation

This course consists of a full academic year of work in calculus and related topics comparable to courses in colleges and universities. The curriculum will be learned by the end of April, in order to properly prepare for the AP exam. Some of the topics taught are properties of functions, limits, the derivative, and applications of the derivative, techniques of integration, the definite integral, and applications of the integral. The motivation for taking the course should be to test out of beginning calculus in college, not as a preparation for college calculus. Students who complete this course are expected to take the AP examination in May at the student's expense. Computers and calculators will be used where appropriate. It is required that the student purchase his/her own graphing calculator. Students who sign up for this course should be prepared for the rigor of a college level course.



# ADVANCED PLACEMENT CALCULUS BC (0303) Grades 11, 12

1.0 credit

1 year

Prerequisite: Grade of "C" or better in AP Calculus AB or "A" in Precalculus Honors or Teacher Recommendation

This course is not a sequence to follow AP Calculus AB. They are stand-alone courses. This course consists of a full academic year of work in calculus and related topics comparable to courses in college and universities. The curriculum will be learned by the end of April in order to properly prepare for the AP Exam. Some of the topics taught include: vector valued functions, parametric equations, sequences and infinite series (topics not covered in AB), and limits, continuity, differential and integral (topics covered in AB) The motivation for taking the course should be to test out of the first year (2 semesters) of calculus in college, not as a preparation for college calculus. Students who complete this course are expected to take the AP examination in May at the students' expense.



Grade 12

1.0 credit

1 year

Prerequisite: Grade of "C" or better in Calculus I Honors, AP Calculus AB, AP Calculus BC or Teacher Recommendation

This college level mathematics course will cover linear algebra and matrix theory emphasizing topics useful in other disciplines such as physics, economics, and engineering. Key topics include solving systems of equations, evaluating vector spaces, performing linear transformations and matrix representations. Linear Algebra Honors is designed for the extremely capable student who has completed one year of calculus. Students who sign up for this course should be prepared for the rigor of a college level course.



# **Math Elective Course Offerings**

**ACCOUNTING I (08000NL)** 

Grades 10, 11, 12

1.0 credit

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**Prerequisite: None** 

All students who will major in business or who will at one time have their own business (small businesses, law firm, medical/dental office, etc.) are encouraged to take this course. This class will introduce students to computerized financial accounting. The primary objective of the course will be to learn the rules and procedures of accounting for a profit-motivated business. All journals, ledgers, worksheets, financial reports, and study guides will be completed using a web-based accounting tutorial site (mindTap.com) which will provide immediate feedback. Students will expand their knowledge of spreadsheets, and computerized simulations for proprietorships, partnerships, and small corporations. All assessments will be web-based.



FINANCIAL LITERACY (0333)

**Grades 11, 12** 

0.5 credit

1 semester

**Prerequisite: None** 

The focus of this course is on financial management knowledge and skills. Topics include employee compensation, payroll deductions, banking, income tax, personal credit and investments. There is reading associated with the various topics, and financial vocabulary is an important focus, in addition to the mathematics. Students are assessed on a combination of numerical skills, interpreting directions and word skills, and organizational skills. Class projects will include use of the Internet. Successful completion of this course will prepare students to handle their personal finances both as a senior and after graduation. It is required that the student purchase his/her own calculator.



PERSONAL FINANCE (0340)

**Grade 12** 

1.0 credit

1 year

#### Prerequisite: Algebra II for Elective Credit; Teacher Recommendation for Math Graduation Credit

Using mathematical modeling, this course is designed to educate students in concepts of personal finance and money management using algebraic concepts, applications, and technology. College preparatory mathematics are applied to the seven financial concepts of Banking, Investing, Credit, Employment and Income, Taxes, Automobile Ownership, Independent Living, and Retirement Planning and Household Budgeting. This course allows students to experience the interrelatedness of mathematical topics through application and problem-solving in real-world contexts. Students will be exposed to advanced algebra, statistics, and probability concepts as used in real-world financial situations. This course prepares students to apply the mathematics they know to solve problems arising in everyday life, society, and the workplace.





# Science Course Offerings

All science course offerings are aligned with the Pennsylvania Science, Technology and Engineering Standards. Students must complete 4 credits of Science to graduate. All students are required to take a biology course. It is highly recommended that students complete a Science program of studies that includes a biology course, chemistry course and a physics and/or physical science course in order to gain exposure to all major areas of science study. Students are encouraged to check with prospective colleges to ensure that appropriate courses are selected for potential college majors. Calculators: It is strongly suggested that students purchase a graphing calculator for their use during high school.

Recommended Sequences for Required Courses					
Sequence	Grade 9	Grade 10	Grade 11	Grade 12	
1	Physical Science Academic	Biology Academic	Chemistry Academic  May also take concurrently: Geoscience Academic	Select one or more: Physics Academic AP Environmental Science Geoscience Academic *CHS Anatomy & Physiology	
2	Biology Academic	Chemistry Academic or Honors	Physics Academic or AP Physics I  May also take concurrently: AP Environmental Science Geoscience Academic *CHS Anatomy & Physiology	Select one or more:  AP Biology  AP Chemistry  AP Physics C  AP Environmental Science  Geoscience Academic  *CHS Anatomy & Physiology	
3	Biology Honors	Chemistry Honors	AP Physics I  May also take concurrently: AP Biology AP Chemistry AP Environmental Science Geoscience Academic *CHS Anatomy & Physiology	Select one or more: AP Biology AP Chemistry AP Physics C AP Environmental Science Geoscience Academic *CHS Anatomy & Physiology	
4	Chemistry Honors	AP Physics I  May also take concurrently: AP Biology AP Environmental Science Geoscience Academic *CHS Anatomy & Physiology	Select one or more:  AP Biology  AP Chemistry  AP Physics C  AP Environmental Science  Geoscience Academic  *CHS Anatomy & Physiology	Select one or more:  AP Biology  AP Chemistry  AP Physics C  AP Environmental Science  Geoscience Academic  *CHS Anatomy & Physiology	
	Semester Electives Anatomy & Physiology Mentorship (11, 12)				
	Organic Chemistry Honors (11,12)				

<sup>\*</sup>Pending School Board Approval

**Prerequisite: None** 

Physical Science is designed for 9th grade high school students and introduces the fundamental topics associated with physics, chemistry, and biochemistry. It includes an overview of motion, Newton's Laws, simple machines, work, power, energy, electricity, waves, light, sound, atomic structure, the periodic table, chemical bonding, acids, bases, and an analysis of water's structure and behavior. It is designed to prepare students for further studies in science. Students will develop skills critical for success in science, including problem solving, graphing, metric conversions, and correct vocabulary usage. During lab activities, students will demonstrate proper lab techniques. During class several instructional modes will be used including: lectures, individual work, small group work, large class discussions, problem solving sessions, question/answer sessions, hands on activities, and lab activities. The student will also have the opportunity to use the Internet for research, experiments and projects. (5 periods)



BIOLOGY ACADEMIC (0400)

**Grade 9, 10** 

1.0 credit

1 year

**Prerequisite: Completion of Physical Science Academic** 

For incoming 9<sup>th</sup> grade students:

• Science Prerequisite: 85% in 8th grade science

Math Prerequisite: 80% in Algebra I and Teacher Recommendation

Academic Biology is a first-year biology course which provides students with an overview of the biological sciences. It is structured around 2 big ideas: Cells & Cell Processes and The Continuity & Unity of Life. Students will learn the basic characteristics of all living things, and the structure of the cell, before then learning cellular processes including methods of transporting substances into and out of the cell, and methods of processing energy including photosynthesis and cellular respiration. The course concludes with a culminating discussion of heredity, genetics, growth and development through cell division, and finally the evolution and study of populations and their ecological interactions. Academic Biology is primarily concerned with the development of students' basic understanding of life on earth, how life on earth is studied, and the common processes governing all living organisms. Through this course of study, the class emphasizes scientific and hands-on investigation through the scientific method and analysis of experimental data that leads to the discovery and understanding of basic biological processes. (5 periods)



**BIOLOGY HONORS (0404)** 

**Grade 9, 10** 

1.0 credit

1 year

Prerequisite: Grade of "A" in Physical Science Academic and Teacher Recommendation

For incoming 9<sup>th</sup> grade students: Science Prerequisite: 90% in 8<sup>th</sup> grade science; Math Prerequisite: 80 % in Algebra I and Teacher Recommendation

Biology Honors is a first-year biology course designed for students interested in careers such as science, medicine and engineering. It is a fast-paced course that requires daily reading and review. Students who complete this course will be prepared for future Advanced Placement science courses. The aim of the course is to engage students in the wonders of the living world. The goal of Biology Honors is to provide students the framework of key biological concepts into which they can integrate the many new things that they learn and encounter throughout their lives and to familiarize students with the scientific process. This course incorporates hands-on activities, technology and labs when appropriate and is taught in a combination lecture-lab room. Topics covered include: themes in the study of biology, biochemistry, cells and cellular energetics, heredity, molecular genetics, DNA technology and genomics, concepts of evolution, biological diversity, structure and function of plants and animals, and ecology. This curriculum is aligned with both the Pennsylvania State Standards as well as the assessment anchors posted for the Keystone Exams. (5 periods)



1.0 credit

1 year

AP Biology should be taken after or concurrently with a physics course.

Science Prerequisite: Grade of "B" or better in Biology Honors and Chemistry Honors or grade of "A" or better in Biology Academic and Chemistry Academic or Teacher Recommendation

To be successful in this course a score of proficient or advanced on the first administration of the Biology Keystone Test is suggested. This course consists of a full academic year of work in biology comparable to courses in colleges and universities. Students interested in science related careers such as medicine and engineering should consider this course. The course includes both lecture and extensive laboratory work. Students are expected to spend five to ten hours each week working on biology outside of class. Topics covered in the course include chemistry of life, cells and cell energetics, heredity, molecular genetics, evolution, diversity of organisms, structure and function of both plants and animals and ecology. This course includes 2 lab periods a week. Students who complete this course are expected to take the AP examination in May at the student's expense. (7 periods)



#### **CHEMISTRY ACADEMIC (0405)**

**Grades 10, 11** 

1.0 credit

1 year

#### **Science Prerequisite: Completion of Biology**

Chemistry Academic deals with matter: its structure, behavior, and the changes it undergoes. The structure of matter and the nature of chemical changes are approached through discussions, demonstrations, experiments and guided discovery. Along with the traditional theoretical approach, students will be exposed to how chemistry impacts society, including the students' personal and future professional lives. Students will use chemical principles to think more intelligently about current issues involving science and technology. A great deal of emphasis will be placed on mathematical functions and how they are applied to chemical situations, so students will need to be prepared to bring a scientific calculator to every class. This course includes 1 lab period. (6 periods)



#### **CHEMISTRY HONORS (0406)**

Grades 9, 10, 11

1.0 credit

1 year

Science Prerequisite: Grade of "B" or better in Biology Honors, Grade of "A" in Biology Academic Math Prerequisite: Grade of "B" or better in Geometry Honors or grade of "A" in Geometry Academic Or Teacher Recommendation

Chemistry Honors is an introductory course intended for students who are planning careers in science, medicine and engineering. It involves an examination of the major concepts and theories of inorganic chemistry; experimental basis for these ideas and their historical context. Emphasis is also placed on quantitative relationships and problem solving. The laboratory portion of the course provides opportunities for students to develop and clarify concepts and relationships while developing skill and confidence in the execution of experiments and analysis of results. Students should possess strong math skills and be comfortable with algebraic manipulations. To succeed in Chemistry Honors students should expect to fully complete nightly assignments outside of class and be self-motivated and proactive in seeking assistance from their instructor with concepts or calculations they do not understand. Good attendance and strong worth ethic are necessary for success in this course. This course includes 2 lab periods. (7 periods)



AP Chemistry should be taken after or concurrently with a physics course.

Science Prerequisite: Grade of "B" or better in Chemistry Honors

Math Prerequisite: Grade of "B" or better in Algebra II Honors or grade of "A" in Algebra II Academic

#### **Or Teacher Recommendation**

AP Chemistry is intended as a course for those students who are interested in pursuing a career in science and engineering and have the interest and ability to study college level material in high school. This course covers the major topics of the first year college chemistry curriculum including in-depth treatments of atomic theory, bonding theory, acids and bases, thermodynamics, equilibrium and oxidation-reduction. A heavy emphasis will be placed on problem solving and laboratory investigation. Students who select AP Chemistry should be self-disciplined and of the maturity level expected for a college level course. Students who complete this course are expected to take the AP examination; students who pass this exam secure between 8 and 10 college credits. A graphing calculator (TI-83+) is required for AP Chemistry. This course includes 2 lab periods. (7 periods)



#### PHYSICS ACADEMIC (0410)

**Grades 11, 12** 

1.0 credit

1 year

Science Prerequisite: Completion of Chemistry Academic or Honors Prerequisite: Algebra II Academic or Honors with a "C" or better

Physics Academic is designed to increase the student's understanding and appreciation of the physical world. This course will emphasize how the laws of physics apply to everyday life. Topics include: the nature of science, measurement and problem solving, velocity, acceleration, Newton's laws, forces, periodic motion, momentum, energy, and waves. Students are required to use and develop problem solving skills during lecture and laboratory work. The student is expected to make connection with the subject matter across topics and disciplines in an interactive and technological environment. This is a very student-centered/hands on course. A graphing calculator is required for this course. This course includes 1 lab period. (6 periods)



#### ADVANCED PLACEMENT PHYSICS I: ALGEBRA BASED (0415) Grades 10, 11, 12 1.0 credit 1 year

Science Prerequisite: Grade of "B" or better in Chemistry Honors or grade of "A" in Chemistry Academic Math Prerequisite: Grade of "B" or better in Algebra II Honors or grade of "A" in Algebra II Academic Or Teacher Recommendation

This course is a first-year algebra-based physics course which focuses on the big ideas typically included in a first semester, algebra-based, introductory college-level physics course. This course is designed for the college bound student planning a career in science, medicine or engineering or any highly motivated student with a desire to learn about the physical world. This course provides students with enduring understandings to support future advanced coursework in the sciences. Using an inquiry-based approach, students will develop critical thinking, reasoning and problem-solving skills with content knowledge and reasoning skills being equally important. Topics for this course will include, but not limited to: kinematics; forces and Newton's Laws; circular motion and gravitation, work, power, energy; momentum; rotational and oscillatory motion; and rotational motion. Students will spend a minimum of 25% of course time in lab work with an emphasis on inquiry-based experiences which provide opportunities for students to investigate the foundational physics principles while demonstrating best science practices. A graphing calculator is required for this course. This course includes one lab period. Students who complete this course expected to take the AP examination in May at the student's expense. (6 periods).



#### ADVANCED PLACEMENT PHYSICS C: MECHANICS AND E & M (0412) Grades 11, 12 1.0 credit 1 year

Science Prerequisite: Grade of "B" or better in AP Physics I or grade of "A" in Physics Academic Math Prerequisite: Have completed or enrolled concurrently in calculus course and/or Teacher Recommendation

AP Physics C: Mechanics and Electricity & Magnetism together represent a rigorous, year-long second year course of study in physics and is for the student planning a career in science, medicine, engineering or any highly motivated student. This course emphasizes a thorough understanding of physics principles and concepts and the advanced placement student is expected to develop sophisticated problem-solving skills, an ability to think critically and an appreciation of the world in which he/she lives. Problem solving will include the use of calculus. Studies of mechanics are generally found during the first semester with studies of electricity and magnetism during the second semester. Topics to be addressed will include kinematics in one and two dimensions; forces and Newton's Laws; work, energy, power and momentum; rotational and oscillatory motion; the nature of charge, the electric force, Gauss's Law and electric fields; electric potential; current, resistance and electric circuits; the nature of magnetism and the magnetic field and electromagnetic induction. Students who complete this course are expected to take the AP examination in Mechanics and/or Electricity and Magnetism. A graphing calculator is required for this course. This course includes 2 lab periods. (7 periods)



#### CHS ANATOMY & PHYSIOLOGY (0873)

**Grades 10, 11, 12** 

1.0 credit

1 year

CHS Anatomy & Physiology should be taken after or concurrently with a physics course. Science Prerequisite: Grade "A" or better in Academic Biology of "B" or better in Honors Biology; Grade "B" or better in Academic Chemistry or Honors Chemistry. \*Pending School Board Approval

CHS Anatomy & Physiology is a college level course providing an introduction in human anatomy and physiology, aimed at preparing student who are interested in pursuing a career in the biological/health sciences or medical field. This course will examine the structure and function of the human body including the study of cells, tissues, and the following major body systems; integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic, digestive, respiratory, urinary, and reproductive. The goal of the course is to develop student understanding of the human body both in terms of structure and function. Anatomy & Physiology is difficult in nature and time will be required outside of class to properly prepare for exams and practicals. Laboratory components including anatomical studies using microscopy and dissection and the study of physiological concepts via experimentation are also an integral part of this course. **Upon completion of this course students will have the opportunity to earn up to 8 college credits through a partnership with Carlow University.** (5 periods)



#### **GEOSCIENCE ACADEMIC (0408)**

Grade 12

1.0 credit

1 year

#### Science Prerequisite: None

Geoscience Academic is a full year course designed to provide an in-depth approach to concepts and relationships in meteorological science, oceanography, astronomy and resources and the environment. Study in meteorological science will focus on how and why our weather occurs and its effect on our daily lives. Advanced astronomy concepts will emphasize astronomical history, measurement, and the nature of the moon, sun, stars, stellar material, planets and space travel. Oceanography studies will concentrate on oceanic features, geology of the ocean, oceanic movements, life in the ocean and oceanic resources. Resources and the environment focuses on traditional and alternative resources and the impact of human use of these resources. (5 periods)



Science Prerequisites: Grade of "B" or better in Biology Honors and Chemistry Honors Or grade of "A" in Biology Academic and Chemistry Academic Or Teacher Recommendation

To be successful in this course a score of proficient or advanced on the first administration of the Biology Keystone Exam is suggested. The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. Environmental science is interdisciplinary; it embraces a wide variety of topics from different areas of study. The following themes provide a foundation for the structure of the AP Environmental Science course: The Earth itself is one interconnected system. Natural systems change over time and space. Biogeochemical systems vary in ability to recover from disturbance. Humans alter natural systems. Environmental problems have a cultural and social context. Human survival depends on developing practices that will achieve sustainable systems. Students who complete this course are expected to take the AP examination in May at the student's expense. (6 periods)



# **Elective Course Offerings**

ORGANIC CHEMISTRY HONORS (0421) Grades 11, 12 0.5 credit 1 semester

Organic Chemistry Honors should be taken after or concurrently with a physics course. Science Prerequisite: Grade of "A" in Chemistry Academic or grade of "B" or better in Chemistry Honors or Teacher Recommendation

Organic Chemistry Honors is a demanding elective course that deals with the chemistry of carbon compounds, their structure, nomenclature, reaction mechanisms and syntheses. It is roughly equivalent to one semester of college-level organic chemistry. Students who intend to pursue a career in chemistry, medicine, pharmacy, biology, nursing or veterinary medicine will find this course extremely beneficial. This course will count as a 0.5 elective credit. (5 periods)



#### ANATOMY & PHYSIOLOGY MENTORSHIP (0874) Grades 11, 12 0.5 credit 1 semester

Prerequisites: Grade of "B" or better in Anatomy & Physiology I or II AND Teacher Recommendation

- Students must be in good standing with attendance, grades, and discipline.
- The student must be able to provide his/her own automobile transportation to and from the mentoring site.
- The student must complete the Application form for Mentorship Courses (see appendices) and submit to the counseling office prior to scheduling.
- Due to class size limitations, a committee will review applications using rubric (see appendices).

The goal of Anatomy & Physiology Mentorship is to further enhance the practical "real world" experiences of students interested in pursuing a post-secondary career in a medically related field. The second phase of the program places the students in community-based situations (e.g., hospitals, offices, clinics) and interning or shadowing under the supervision of certified medical personnel in the student's chosen field of endeavor. Students will be required to log a minimum of 70 hours at the mentoring site. (5 periods)



# Social Studies Course Offerings

Required Course Offerings					
Grade 9	Grade 10	Grade 11	Grade 12 (Choose one from each list)		
Global Studies	American History	American Government	Economics Academic	History of Western	
Academic	Academic	Academic		Civilization Academic	
			Economics Honors		
Global Studies	American History	American Government		History of Western	
Honors	Honors	Honors	AP Economics*	Civilization Honors	
	AP United States	AP United States		AP European History*	
	History	Government and Politics			
Semester Electives			Full Year Electives		
History in the Headlines (9,10,11,12)			AP European History* (11, 12)		
Leadership (9,10,11,12)			AP Economics* (11, 12)		
Psychology (10, 11, 12)			AP Psychology (10, 11, 12)		
Philosophy (10, 11, 12)					
Sociology (10, 11, 12)					
American Legal Systems (10, 11, 12)					
Community Service Learning (11, 12)					

<sup>\*</sup>This course will fulfill part of the grade 12 Social Studies requirement

# **GLOBAL STUDIES ACADEMIC (0211)** Grade 9

1.0 Credit

1 year

#### Prerequisite: None

The Global Studies Academic course will introduce students to the interdependent nature of the modern global community. Students will explore the culture, political structure, and history of Africa, the Middle East, South Asia, and East Asia. Modern issues facing each part of the world will be examined. Students will work on developing historical thinking skills in comparison, causation, and continuity and change. Historical reading and writing will also be emphasized.



### **GLOBAL STUDIES HONORS (0215)**

Grade 9

1.0 Credit

1 year

#### Prerequisite: Grade of "A" in 8th grade Social Studies or Teacher Recommendation

This honors course will analyze the interdependent nature of the modern global community. The course is designed to explore the cultures of Africa, Southwest Asia (the Middle East), South Asia, and East Asia. Students will investigate the geographic, political, social, and economic aspects of the non-western world. Students will synthesize information to recognize historical and current patterns and what makes each region or nation unique and significant. An emphasis is placed on developing critical thinking, writing, and communication skills. Regular class discussions require active participation. This course includes independent homework, supplemental text readings and research to explore concepts in greater depth and complexity.



#### **AMERICAN HISTORY ACADEMIC (0203)**

**Grades 10** 

1.0 credit

1 year

#### **Prerequisite: None**

This course in modern American History will use a chronological cause and effect approach to the political, economic, and social history of the United States from the early 1900's to the present day. The course focuses on the decisions, events, and people that shaped the nation's history in the 20th and early 21st centuries. Areas of concentration include U.S. diplomacy and involvement in foreign wars, the increasing role of government in American life, the changing status of women and minorities, and areas of significant social and economic change. A skill focus in this course is analysis of primary source documents. Students will be assessed on both content and skill development.



#### AMERICAN HISTORY HONORS (0221)

Grades 10

1.0 credit

1 year

# Prerequisite: Grade of "B" or better in Global Studies Honors, Grade of "A" in Global Studies Academic or Teacher Recommendation

This honors course in modern American history emphasizes the political, economic, and social history of the United States from WWI to the present day. The course focuses on the decisions, events, and people that shaped United States' history from the 20th century to the present. Areas of concentration include U.S. diplomacy and involvement in foreign wars, the increasing role of government in American life, the changing status of women and minorities, and areas of significant social and economic change. Students will analyze the past to inform and analyze the present. The course includes nightly homework and reading assignments with a skill focus on high-level writing/research assignments and document-based question analysis. Regular class discussions and debates require students to apply critical thinking skills.



# ADVANCED PLACEMENT UNITED STATES HISTORY (0205) Grade 10 1.0 credit

1 year

# Prerequisite: Grade of "B" or better in previous Honors or AP course, grade of "A" in previous Academic course or Teacher Recommendation

This course is a comprehensive survey of American history and culture comparable to introductory college courses. The course extends chronologically from early Native American society to the present. It will require, and foster, a strong interest in the development and application of historical thinking skills central to the practice of being a historian. There are extensive reading assignments from a college text, selected literature, primary sources, and collections of historical viewpoints. This course also focuses on writing which includes assigned document based and thesis-based essays. Additional assessments include standardized college tests and various debates and historical simulations. Students who complete this course are expected to take the AP examination in May at the student's expense.



#### **AMERICAN GOVERNMENT ACADEMIC (0200)**

Grade 11

1.0 credit

1 year

#### **Prerequisite: None**

This introductory course explores the creation and history of the American system of government. Topics include the foundations of the American Government (Constitution and Bill of Rights), the three branches of the national government, rights of individuals, participation in government, and state/local government systems. This course will emphasize the development of critical thinking, writing, and application of knowledge skills.



Grade 11 1.0 credit

1 year

Prerequisite: Grade of "B" or better in American History Honors or "A" in American History Academic or Teacher Recommendation

This honors course provides both an introduction and an analytic perspective to the foundations, principles and processes that shape and direct the function of American government. This course includes independent reading, outlining, research questions, and active participation in class discussions. This course will emphasize the development of critical thinking, writing and application of knowledge skills. By the end of this course, students will be expected to explain and analyze the institutions and practices of American democracy, the structure and function of the U.S. Constitution, the Bill of Rights, and the relationship between the three branches of government at the national, state, and local levels.



#### ADVANCED PLACEMENT UNITED STATES GOVERNMENT AND POLITICS (0204) Grades 11, 12 1.0 credit 1 year

Prerequisite: Grade of "B" or better in previous Honors or AP course, grade of "A" in previous Academic course or Teacher Recommendation

This challenging political science course is designed to provide students with an analytical perspective of the institutions of American government, democracy, and political behavior. In addition to acquiring an understanding of basic political institutions, students will closely analyze concepts and theories used to interpret U.S. government and politics. This course utilizes an AP-level textbook, political science essays and primary source documents, and resources from various approved online sources (news and political-based websites). A foundation in the basics of American government (the three branches, the Constitution, citizenship, and participation) is recommended but not required. Students are strongly encouraged to read any book which provides a basic, foundational view of these elements in the summer preceding their junior year (see teacher for examples). Students who successfully complete the course are strongly encouraged to take the AP U.S. Government and Politics exam given in May of each school year.



**ECONOMICS ACADEMIC (0208)** 

Grade 12

0.5 credit

1 semester

Prerequisite: None

This course is designed as an introduction to the fundamental concepts and principles of economics with an emphasis on the American economic system. Students will develop a foundational understanding of both micro and macroeconomics and learn the basics of economic thinking, supply and demand, and other economic concepts. By the end of the course, students will be able to analyze economic problems and make choices based on the consideration of costs and benefits.



## **ECONOMICS HONORS (0222)**

Grade 12

0.5 credits

1 semester

Prerequisite: Grade of "B" or better in previous Honors course or grade of "A" in previous Academic course or Teacher Recommendation

This honors course will introduce students to the basics of both micro and macroeconomics. By analyzing economic markets, models, systems, and terms, students will begin to understand the economic way of thinking. This includes the study of business and investment, the role of the government in the economy, and performance indicators used to evaluate the health of the economy. Students will be expected to demonstrate high level critical thinking, reading, and writing skills through assignments, class participation in discussions, group activities and document/resource question analysis.



#### ADVANCED PLACEMENT MICRO AND MACRO ECONOMICS (0227) Grades 11, 12

1.0 credit

1 year

# Prerequisite: Grade of "B" or better in previous Honors or AP course or grade of "A" in previous Academic course or Teacher Recommendation

This university level course will provide a thorough understanding of the fundamental principles of micro and macroeconomics. Students study economics that applies to the function of individual decision makers within a society and the function of an economic system. Students are encouraged to think critically about economics, promote an awareness and understanding of internationalism in economics and encourage students' development as independent learners. Assessments include multiple choice, free response, and data-based tests, in addition to projects and presentations. Students who successfully complete this course are encouraged to take two Advanced Placement Exams administered in May of each school year.



HISTORY OF WESTERN CIVILIZATION ACADEMIC (0225) Grade 12 0.5 credit 1 semester

#### Prerequisite: None

This survey course covers the history of western civilization and its significance to both American culture and other civilizations around the world. The course begins with an overview of the age of Greco-Roman civilization and continues through the Middle Ages, the Renaissance, the Enlightenment, and the turn of the 20th century. Students will engage in higher-level writing/research assignments, analyze social, economic, and political events, evaluate primary sources, and participate in group discussions or historical simulations.



HISTORY OF WESTERN CIVILIZATION HONORS (0224) Grade 12 0.5 credit 1 semester

# Prerequisite: Grade of "B" or better in previous Honors or AP course grades of "A" in previous Academic course or Teacher Recommendation

This rigorous honors course is a survey of the history of western civilization, and the significance of this history upon our American culture and other civilizations around the world. The course begins with an overview of the age of Greco-Roman civilization and continues through the Middle Ages, the Renaissance, the Enlightenment, and the conclusion of World War I. Students will engage in extensive independent readings, higher-level writing/research assignments, analysis of social, economic, and political events, evaluation of primary sources and group discussions. Parallels will be drawn to events in modern history throughout the course. Students will learn the nature of what Western Civilization represents, what world societies belong(ed) to this tradition, and its unique contributions to United States & World History. Students will develop a basic understanding of chronology, geographical events, movements (cultural, economic, environmental & political), persons, and literary works from the Western Tradition.



Prerequisite: Grade of "B" or better in previous Honors or AP course, grade of "A" in previous Academic course or Teacher Recommendation

This course covers European history from 1450 (the Renaissance) to the present. An emphasis is placed on the intellectual and cultural, political and diplomatic, and social and economic history of Europe. Students will have extensive required reading, analytic writing/research assignments, and formal assessments in a seminar classroom setting. This course is taught in a blended environment. Any students interested in the Engineering and Industrial technology, Science and Health or Human Services career clusters should take this course. For students who are academically motivated and looking to expanded historical understanding of Western and World History. Students who complete this course are expected to take the AP examination in May.



# **Social Studies Elective Course Offerings**

**HISTORY IN THE HEADLINES (0223)** Grades 9, 10, 11, 12 0.5 credit

1 semester

Prerequisites: None

Students will develop a historical perspective through inquiry and analysis of current social, political, economic, and technological world, national, and regional events. This course will be taught through the use of mainstream news sources. Students enrolled in this course will increase their knowledge of world, national, and regional issues. They will enhance their ability to observe events from a critical perspective and improve their global awareness.



LEADERSHIP (0212)

**Grades 9, 10, 11, 12** 

0.5 credit

1 semester

Prerequisite: None

The main emphasis of this course will be to help students become personal leaders. Students will develop skills and study the components of personal mastery. Also, students will analyze the positive and negative aspects of historical and contemporary leaders. This course is excellent for students interested in leadership roles in the family, school, or community environments.



**PHILOSOPHY** 

(0229)

Grades 10, 11, 12

0.5 credit

1 semester

Prerequisite: None

Have you ever asked yourself questions that you weren't sure how to answer? Is the death penalty justice? Will a good person ultimately live a happy life? Are love and attraction the same thing? Philosophy is a course that looks at these difficult questions about human nature and the world around us and teaches you how to think critically about them. This class will explore some of the major philosophical questions such as love and beauty, morality and ethics, truth and reality, self and the universe. Students will apply logic and reason to seek answers to these questions and investigate how these questions have been answered by the great philosophers throughout time. Philosophy is a participation centered class. Students who take this course should enjoy contributing to class discussions and engaging in lively debates.



**Prerequisites: None** 

This course is designed to give students an introduction to the study of human behavioral and mental processes with particular emphasis on how course content connects to greater personal understanding of ourselves. The course will focus on a brief foundation of: biopsychology, sensation and perception, consciousness, memory, learning, cognition, motivation, emotion, stress, personality and psychological disorders. Students taking the course should enjoy engaging in class discussions, guided lectures, group projects, and independent and collaborative learning activities. Students should anticipate an average of two homework assignments each week to support initial learning or reinforcement of course material.



SOCIOLOGY (0214)

Grades 10, 11, 12

0.5 credit

1 semester

Prerequisite: None

Students taking sociology will be provided with a greater understanding and appreciation of the theoretical background, content, and research methodology of the field of sociology. The course is designed as an introductory survey addressing topics such as: cultural diversity, social structure, group dynamics, adolescence, deviance, and socialization. In this course, students will examine socially transmitted beliefs, values, institutions, behaviors, traditions and way of life of a group of people and their interaction with one another through group and individual projects and class participation. Special focus will be placed upon the student recognizing his/her relationship to peers, social groups, and institutions. Students will be assessed through summative evaluation and project-based assessment.



ADVANCED PLACEMENT PSYCHOLOGY (0213) Grades 10, 11, 12

1.0 credit

1 year

Prerequisite: Grade of "B" or better in previous Honors or AP course, grade of "A" in previous Academic course or Teacher Recommendation

The goal of this rigorous course will be to promote a greater understanding of the methodology, theory, and research of psychology. This course will provide an introduction to the principle subject areas that make up the scientific study of human behavior. Students will have extensive required reading, many analytic writing assignments, and formal assessments in a seminar classroom setting. Students who successfully complete the course are encouraged to take the Advanced Placement Examination (at their own expense), administered in May of each school year.



AMERICAN LEGAL SYSTEMS (0206)

Grades 10, 11, 12

0.5 credit

1 semester

Prerequisite: None

American Legal Systems is designed to provide students with a realistic understanding of law and the legal system in the United States. Emphasis will be on practical, participatory education concerning the law, legal rights and responsibilities, engagement in the democratic process, and the criminal justice system. The course is designed to improve basic skills, including observation, problem solving, critical thinking, and reasoning. The curriculum includes a balance of legal knowledge and application of this knowledge through discussion and activities such as legal case studies and a mock trial. This course also exposes students to real-life situations related to law by providing field trip opportunities to local courts. This course will give students an introduction to the knowledge and skills that are required for a legal career, but it is not limited to those considering such a vocation.



**Grades 11, 12** 

0.5 credit

1 semester

Prerequisite: A valid driver's license, be able to provide own automobile transportation to and from site, be in good standing with attendance and grades, and have no disciplinary suspensions. Grade 11: students require teacher approval

Students enrolled in community service will engage in active participation in community service at delegated, local, non-profit or for-profit community agencies/sites. These sites include but are not limited to hospitals, nursing homes, libraries and daycare centers. After an orientation period, students will meet weekly for one period of classroom instruction and four periods of field experience at the community service site. Evaluations will be based on the completion of a set of competencies, including, but not limited to: 54 hours of documented community service, a daily journal, weekly class attendance, individual/group projects and online proficiency. This course may not be repeated.













# Fine Art Course Offerings

**Art Offerings** 

**COMPUTER ART: GRAPHICS AND DESIGN (0607)** 

**Grades 10, 11, 12** 

0.5 credit

1 semester

**Prerequisite: None** 

This course will introduce students to Adobe Photoshop and Illustrator through the creation of unique compositions. Students will learn how to use the computer as an art tool to manipulate, edit, and reproduce their own computer-generated images. The elements of art and principles of design will be studied during the creation of art and graphic design projects.







ART I (0600)

Grades 9, 10, 11, 12

0.5 credit

1 semester

**Prerequisite: None** 

Art I serves as a foundation course for those interested in taking 2-dimensional art classes here at the high school. Art I incorporates exercises and major projects designed to increase visual skills and knowledge of the elements of Art using of a wide variety of materials. Art I stresses design principles in compositions with organized expression. Projects may include drawing, painting, color theory, still life or textural studies. This course is designed to increase art appreciation in the student through a hands-on exploration of Art History.





ART II (0601)

Grades 9, 10, 11, 12

0.5 credit

1 semester

### Prerequisite: Completion of Art I with a "B" or higher

Art II is a one-semester course that serves as a continuation of the concepts introduced in Art I. Students will further explore the study of color, theory, and the elements of Art and design principles. Drawing and painting skills will continue to be developed.



ADVANCED ART III, IV, V (0623)

**Grades 10, 11, 12** 

1.0 credit

1 year

Prerequisite: Grade of "B" or better in Art II

#### \*Pending School Board Approval

This is an advanced level course providing many of the opportunities featured in Advanced Art I Honors, but offered for only one-semester for the student with a special ability and skill in art. This course is a must for those students interested in the visual arts as a career or serious avocation. Students will work towards the following goals: independence, quality craftsmanship, innovative solutions, high productivity and mastery of techniques. In addition to in-class projects, students will be required to complete out-of-class sketchbook assignments.



**PAINTING (0608)** 

Grades 10, 11, 12

0.5 credit

1 semester

#### Prerequisite: Grade of "B" or better in Art II or Studio Arts and Teacher Recommendation

Painting is an advanced course that offers an exploration of watercolor and acrylic techniques. Strong drawing skills are needed. Color theory and composition will be explored and applied to painting projects. This course emphasizes developing knowledge and mastery of painting techniques through experimentation and exploration of painting media. The elements of art and principles of design will be studied during the creation of painting projects and art history will be studied through the creation of painting projects.



**CERAMICS I (0604)** 

Grades 10, 11, 12

0.5 credit

1 semester

Prerequisite: None

This basic pottery class will include extensive studio work in hand-building and wheel-throwing techniques. Hand-built techniques will explore coil, pinch-pot, drape and/or slab as well as sculpture construction in clay. Wheelwork will include cylindrical forms (straight and shaped) handles and bowl forms. Various firing/glazing techniques and historical/cultural aspects of ceramics will be discussed and reviewed.



CERAMICS II (0605)

Grades 10, 11, 12

0.5 credit

1 semester

#### Prerequisite: Completion of Ceramics I with a "B" or better and Teacher Recommendation

This advanced pottery class will include extensive studio work in hand-building and wheel-throwing techniques. Students will build upon and refine skills established in Ceramics I. Experimentation in glazing techniques and wheel-thrown forms and development of individual styles will be addressed. Hand-built techniques will explore additive and subtractive sculpture in clay. Wheelwork will include bottle forms, plates, multiple attached forms and teapots (realistic/abstract).



### CERAMICS III: SCULPTURE AND GLASS (0622)

**Grades 11, 12** 

0.5 credit

1 semester

#### Prerequisite: Grade of "B" or better in Ceramics I and II and Teacher Recommendation (First Semester Only)

This is an advanced level course offered for only one semester for the student with a special ability in hand building. This semester course provides in-depth opportunities to further explore the art of hand building with a focus on large scale ceramic pieces as well as plaster, wire sculpture, glass and copper within an open environment. Students will work towards the following goals: independence, quality craftsmanship, innovative solutions, high productivity and mastery of techniques. Art will also be explored historically and critically. Students may choose to take either the Hand Building section (semester 1) or the Wheel Throwing section (semester 2) or may also choose to take both.



## **CERAMICS III: WHEEL THROWING (0621)**

**Grades 11, 12** 

0.5 credit

1 semester

#### Prerequisite: Grade of "B" or better in Ceramics I and II and Teacher Recommendation (Second Semester Only)

This is an advanced level course offered for only one semester for the student with a special ability in wheel throwing. This semester course provides in-depth opportunities to further explore the art of wheel thrown ceramics with a focus on large scale multiple attached pieces, altered wheel forms, double wall forms, as well as lidded pieces within an open environment. Students will work towards the following goals: independence, quality craftsmanship, innovative solutions, high productivity and mastery of techniques. Art will also be explored historically and critically. Students may choose to take either the hand building section (semester 1) or the Wheel Throwing section (semester 2) or may also choose to take both.



#### **CERAMICS HONORS (0616)**

**Grades 11, 12** 

1.0 credit

1 year

#### Prerequisite: Completion of Ceramics I & II with an "A" and Teacher Recommendation

The Honors Ceramic course is designed for students who are seriously interested in the practical experience of ceramic art and wish to develop mastery in the concept, composition, and execution of their ideas. Students will experience a variety of concepts, techniques, and approaches for the wheel as well as hand-building, designed to help them demonstrate their abilities and versatility with techniques, problem solving, and ideation. This is a college-level course designed to provide the student with an in-depth look into different media and techniques in an open environment.





# **Music Offerings**

DIGITAL AUDIO PRODUCTION I (0625) Grades 10, 11, 12

0.5 credit

1 semester

Prerequisite: None

Digital Audio Production is a course in creative musical composition and audio pre/post production for any high school student regardless of their musical background. This course will provide opportunities for students to understand, create and synthesize music and sound effects through the development of skills in music composition, Foley Artistry, sound effect production, ADR and many pre/post audio production skills in the electronic medium. Basic musical elements will be the focus on which students will develop creative musical ideas using electronic keyboards/synthesizers and music computer software applications.



DIGITAL AUDIO PRODUCTION II (0626) Grades 11, 12

0.5 credit

1 semester

Prerequisite: Completion of Digital Audio Production I or Teacher Recommendation

Digital Audio Production II is a continuation of the options to explore musical composition, Foley Artistry, sound effect production, ADR and many pre/post audio production skills in the electronic medium, using electronic keyboards/synthesizers and music computer software applications with an emphasis on the refinement, development and extension of creative ideas. Composition and electronic demonstration of student created musical art will be developed in larger musical forms. Projects will focus on musical composition and it is application and coordination with visual media.



**CONCERT BAND (0627)** 

Grades 9,10,11,12

1.0 credit

1 year

Prerequisite: None

This course provides an opportunity for the developing students to acquire additional technical skills beyond the middle school experience and become acquainted with the vast and ever-growing band repertoire. The repertoire will consist of selections from the march, show, orchestra and contemporary idioms. Particular emphasis will be placed upon ensemble playing and music interpretation and analysis. Students may be tested on their ability to play individual music selections and knowledge of terms and symbols. Performance of the band repertoire is an ultimate goal. Performance opportunities exist for students to perform as soloists, in trios, quartets and in County, District, and Regional band festivals. The Concert Band serves primarily underclassmen. Concert Band typically performs three concerts during the year. Dress rehearsals for public performances may be scheduled beyond the school day as needed. The class meets daily for a scheduled period.



**Prerequisite: None** 

Concert Choir provides an opportunity for the developing music student to acquire additional vocal technique in a large mixed ensemble through the continued study of music reading, vocal technique, music theory, and music history. A varied repertoire, consisting of traditional, Broadway, popular, as well as, folk and jazz literature may be explored and performed. Several performances are presented each year and frequently the choir performs in festivals. Opportunities exist for qualified students to perform as soloists, in trios, or quartets at County, District, Honors, Regional and All-State chorus festivals.



ACAPELLA ADRENALINE (0662)

Grades 10, 11, 12

1.0 credit

1 year

**Prerequisite: Teacher Recommendation and Audition** 

This course is a vocal ensemble for building a high-level performance in contemporary acapella singing. It is open to students in grades 10-12 who have successfully auditioned. The ensemble will perform, analyze, and research popular music of the 20th and 21st Centuries. Students will learn a variety of vocal styles using appropriate tone quality, intonation, diction, rhythms, musicianship, and microphone technique for performing acapella, commercial/pop music. In addition to the vocal experience, this class will equip the student with basic music literacy skills- clefs, notes, staves, keys, rhythm, etc. Focus parts are: Vocal Percussion, Soprano, Mezzo, Alto, Tenor, Baritone, and Bass. Performing and touring is a key part of this ensemble.



**JAZZ BAND (0636)** 

Grades 10, 11, 12

1.0 credit

1 year

**Prerequisite: Teacher Recommendation and Audition** 

Jazz Band is designed to provide orientation to all pertinent jazz techniques for the established instrumental music student. Content of the course includes an explanation of chords and the use of chord structure, articulations, relative note values and special effects. Great emphasis is placed on the student's developing creative abilities and instrumental technique, as well as, improvisation skills. The goal is for students to understand the style and to develop proficiency in jazz and jazz-rock idioms. Performance opportunities occur as many as five times per year and dress rehearsals for these events may be scheduled outside of the school day.



PIANO/SONGWRITING LAB (0640)

Grades 9,10,11,12

0.5 credit

1 semester

Prerequisite: None

Keyboard Lab will provide students the opportunity to develop beginning, intermediate and advanced piano and electronic keyboard skills. Students will work independently at their level of experience and progress through developmentally appropriate materials and literature. There will also be opportunities for students to participate in keyboard lab ensembles and to demonstrate their skill in a comfortable performance arena. Students will also have the opportunity to analyze songs and to develop their own through keyboard improvisation and the development of basic music composition skills.



MIXED CHOIR (0653)

**Grade 9** 

1.0 credit

1 year

**Prerequisite: None** 

Mixed Choir is a performing ensemble primarily for freshmen. Vocal technique, music reading, IPA and increased musical awareness are stressed. Traditional, popular, jazz, folk, and Broadway selections are performed. This group performs independently and with the other choirs at least twice per year, and serves as a preparatory experience for membership in Concert and Symphonic Choirs. Opportunities exist for qualified students to perform as soloists, in trios, quartets and in County, District, Honors, Regional and All-State chorus festivals.



# ADVANCED PLACEMENT MUSIC THEORY (0641) Grades 11, 12

1.0 credit

1 year

Prerequisites: Grade of "B" or better in Music Theory or Teacher Recommendation

Advanced Placement Music Theory is a course designed for music students with an advanced level of performance skill and theoretical knowledge. Generally, students who are on a career path in music or who have successfully completed courses in Keyboard Lab, Music Theory, Computer Music Production I & II, or who can demonstrate prerequisite skills necessary to enter this course should enroll. Students who complete this course are expected to take the Advanced Placement Exam in Music. The exam is offered in May and is at the student's expense. This is an excellent course for a student who is pursuing the college music major.



**MUSIC THEORY (06420NL)** 

Grades 9,10,11,12

0.5 credit

1 semester

**Prerequisite: None** 

Music Theory introduces the music student to the rudiments of music, rhythmic notation, interval recognition, scales, triads, chords, melody writing, harmonization and orchestration of simple melodies. The skills acquired help to form a solid foundation for the student who is interested in a music career. It will provide a more meaningful understanding of music to the student who chooses music as an avocation. Students will use computer software to reinforce theory concepts. This course is taught in a blended environment.



ORCHESTRA (0643)

Grades 9,10,11,12

1.0 credit

1 year

**Prerequisite: None** 

Orchestra is a performing ensemble, which continues to extend technical skills leading to "hands-on" performance of representative string and symphony orchestra literature. Style, technical execution, ensemble playing and interpretation and critical analysis are aspects of study leading to two (2) or more public performances per year. Outstanding instrumentalists will also have an opportunity to qualify for individual performance opportunities as potential participants in honors ensembles, which may include: Honors Orchestra, District Orchestra, Regional Orchestra and All-State Orchestra. Orchestras meets daily during the school day with limited additional rehearsals scheduled outside of school as needed.



#### Prerequisite: Teacher Recommendation and Audition

The Symphonic Choir is the advanced mixed choir and performs all styles of choral literature. Study includes vocal techniques, as well as, music reading, music theory, music history and a survey of the vast choral repertoire. Several performances are presented each year and frequently the choir performs in festivals and adjudication festivals. Opportunities exist for qualified students to perform as soloists, in trios, quartets and in County, District, Honors, Regional and All-State chorus festivals.



WIND SYMPHONY (0657)

Grades 10, 11, 12

1.0 credit

1 year

1 semester

#### **Prerequisite: Teacher Recommendation**

This ensemble serves to meet the instrumental music education needs of the advanced level performer. The Wind Symphony will perform a caliber of literature that will demand the highest quality of student musicianship. Students can expect to engage in an in-depth analysis of musical compositions and styles which will fully represent the highest quality of legitimate concert band literature. The Wind Symphony will perform throughout the year in a variety of venues, including adjudication festivals and public concerts. Outstanding instrumentalists will also have an opportunity to qualify for individual performance opportunities as potential participants in honors ensembles, which may include: Honors Band, District Band, District Orchestra, Regional Band, All-State Band and County Band. Wind Symphony meets daily during the school day with additional rehearsals scheduled outside school as needed.



# Physical Education & Health Course Offerings

**Health Offering** 

PERSONAL WELLNESS (0877)

**Grade 9 (Required for Graduation) 0.5 credit** 

**Prerequisite: None** 

This course will provide students with the basic framework of knowledge to develop a healthy lifestyle. Students will study mental health, and sexually transmitted diseases, first aid/emergency care, fitness, nutrition, healthy relationships, and substance use/abuse. Students will have the opportunity to apply understanding of health knowledge by incorporating decision-making skills and healthy choices into daily lifestyle practices. This course will make use of a combination of lectures, class discussions, group projects, oral presentations, research, demonstrations, guest speakers\*, and student activities. Each student must pass (show proficiency) in CPR in order to pass this course. \*As part of the Personal Wellness curriculum, students will receive a two-day lesson on sexually transmitted infections and HIV/AIDS. Parents are permitted to request an alternate assignment for their child instead of attending these sessions. For more information, visit the Health & Physical Education section on the curriculum page of the district website.



# **Physical Education Offerings**

The Physical Education Program will concentrate on all areas of physical development. It is designed to develop and maintain a satisfactory fitness level together with the development of a variety of skills that will contribute to the student's mental, physical and social development. This course is an elective program where students will select one physical activity and one fitness activity approximately every 3½ weeks. Classes will stress the importance of student participation and sportsmanship while learning and performing various life-long skills.



PHYSICAL EDUCATION I (0850)

**Grades 9, 10** 

0.25 credit

1 semester

**Prerequisite: None** 

Freshman will be required to complete physical education (PE I) sometime during their freshman year. Students must complete a second semester of physical education sometime in their remaining three years. One semester will meet ½ the requirement for P.E. PE I will focus on fitness, games, and leisure.



PHYSICAL EDUCATION II (0851)

Grades 10, 11, 12

0.25 credit

1 semester

Prerequisite: PE I

Students must complete a second semester of physical education sometime in their remaining three years. One semester will meet ½ the requirement for P.E. PE II will focus on fitness, games, and adventure (fly fishing, and archery).



# **Elective Offerings**

**COMPETITIVE GAMES (0885)** 

**Grades 11, 12** 

0.5 credit

1 semester

Prerequisite: B or better in PE I and PE II

This course is designed for students who enjoy highly competitive team games. This is an elective course for juniors and seniors who have successfully completed PE I and PE II and desire to remain active while developing team concepts and game strategies. Students should expect intense physical activity during PE III games and tournaments.



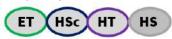
## PARTNERS PHYSICAL EDUCATION (0860) Grades 10, 11, 12

0.5 credit

1 semester

Prerequisite: PE I & II

This course is designed for students who would like to assist and develop partnerships with special needs students and those students who have medical restrictions that would benefit from one-on-one assistance to engage in physical activities to collaboratively meet the goals of Physical Education class. Due to class size limitations, students wishing to be a partner must be in good standing with attendance and discipline, be a positive role model and must complete the application and interview process meeting committee approval. The goal of this class is to enhance "real world" experience for those wishing to pursue a career in education, physical/occupational therapy, social work, or a strong desire to help others. Partners will be required to complete journals, reflections, and create a collaborative lesson. See appendices for application.



**DRIVERS THEORY (0900)** 

Grades 10, 11, 12

0.5 credit

1 semester

**Prerequisite: None** 

The course includes class work in theory of basic vehicle control, driving processes, safe and efficient driving practices, handling complex driving environments, emergency driving skills, financial responsibilities, traffic laws (national and PA specific), and the effects that drugs and alcohol on the driver's performance and decision making. Associated with the completion of this course is an insurance discount from most major providers. An additional 6 hours of practice instruction with a certified instructor will increase the insurance discount (not provided by PTSD).



## **Technology Course Offerings**

One Technology Course is required for graduation; these 4 courses are delineated with an asterisk\*.

**Business and Information Technology Courses** 

## \*AP COMPUTER SCIENCE PRINCIPLES (0805)

Grades 9, 10, 11, 12

1.0 Credit

1 year

#### Prerequisite: Successful completion of Algebra I

This course introduces students to the essential ideas of computer science and helps them to understand how technology can influence the world around them. As part of this course, students will be exposed to a broad range of computing tools and skills while creatively addressing real-world issues and concerns. AP CSP encourages creativity and provides the skills necessary to create digital projects – from simple games and apps to programs that can inspire the creation of visual art. The AP exam for this course consists of two project-based assessments and a written test. Both assessments will apply the course objectives learned throughout this yearlong course. No coding experience is required. This course will meet the Technology Credit for graduation.



## CHS COMPUTER PROGRAMMING JAVA (0837)

**Grades 9,10,11,12** 

0.5 credit

1 semester

#### **Prerequisite: None**

This is a beginning level programming course using Java. The focus of this course is on problem analysis and the development of algorithms, along with the writing of computer programs. Some of topics students will learn include: algorithms, programming fundamentals, statements and control flow; methods (functional abstraction), arrays, objects (data abstraction), and reading and writing files. \*For other information on Pitt's grading, tuition, policies, and procedures, please see your teacher or visit www.as.pitt.edu/chs.



## CHS INTRODUCTION TO INFORMATION SYSTEMS (0035) Grades 11, 12

0.5 credit 1:

1 semester

## Prerequisite: None

This course will introduce both information theory and the design and structure of information systems. You will learn how computers and networks work at a fundamental level. You will explore how social networks, collection of information (databases), and programming languages work. The course will spend particular attention on security and privacy issues. The course will provide you with basic skills such as building web page, programming using simple JavaScript on web pages, design and use of simple databases, and manipulation of digital media. The course is designed for students with minimal prior technical coursework and does not require previous programming experience.



## CHS COMPUTER SECURITY (0037)

Grade 12

1.0 credit

1 year

## Prerequisite: CHS Programming Java, CHS Introduction to Information Systems and CHS Cybersecurity and the Law

This course covers the fundamental concepts in Computer security and privacy. The course is intended to expose the various security threats and vulnerabilities in computer systems and provide an understanding of the various defense and protection mechanisms. Primarily, the course will focus on models and mechanisms related to insuring confidentiality, integrity and availability related to computer and information systems. We will cover the basic concepts of cryptography including symmetric and public key encryption schemes. We then focus on program security issues such as buffer overflow attacks and discuss various control mechanisms to handle malicious code. The second half of the course will cover the topics of Database Security and general security issues in Operating Systems. Towards the end, we discuss various security and privacy issues in the context of emerging cloud computing systems.



## \*TECHNOLOGY APPLICATIONS (0812) Grades 9, 10, 11, 12

0.5 credit

1 semester

#### Prerequisite: None

This course is designed to provide students with the necessary skills to perform hands-on computer applications. Students will create business related projects using documents, spreadsheets, presentations and databases within the Microsoft Office 2013 Suite. Specifically, students will learn intermediate and advanced skills in Word, Excel, PowerPoint, and Access. Students will understand the impact of these applications and be able to determine the appropriate time to use them to problem solve in the business world. Using the tools from this course, students can effectively create and design applications they can use within other disciplines in high school and college. Furthermore, the objectives achieved in Technology Applications provide all students the necessary skills to search for, obtain, and succeed within any career field. This course will meet the Technology Credit for graduation.



In this semester course, students will use a variety of web design platforms to organize, create, publish, and manage a web site. Throughout the course, students implement and enhance web pages by using HTML and CSS code. With these skills, students will learn to use different page layout techniques, text formatting, graphics, images, and multimedia while producing a functional website.



## INTRO TO PYTHON (0839)

Grades 10, 11, 12

0.5 credit

1 semester

This semester course is offered to 10th, 11<sup>th</sup> and 12<sup>th</sup> grade students. Intro to Python will provide a hands-on introduction to the Python programming language, with a focus on practical applications and projects. Students will design and build programs to solve problems using the CMU CS Academy online platform. As the course progresses, students will learn to work with packages, data structures, and object-oriented programming.



#### GAMING PROGRAMMING (0838)

Grades 9, 10, 11, 12

0.5 credit

1 semester

### **Prerequisite: None**

Gaming Programming is a video game design and development course that teaches students the fundamentals of game theory and game design. Students will be introduced to the creative and technical sides of interactive video game development from the conceptual stage through to the production stage. Students will learn how to use modern game engine software and art production software to produce their own video games.



#### **C-SUITE (0831)**

Grade 10, 11, 12

1.0 credit

1 year

## Prerequisite: Grade of "C" or better in CHS Programming Java or taking concurrently with AP Computer Science or Teacher Recommendation

This is a full year course that provides the students with the opportunity to learn the following C Programming Languages: C, C#, and C++. Students will receive a strong base in each of the languages in order to gain experience that is wanted by many college computer science programs. The students will use SoloLearn, an online learning platform to gain knowledge of the three languages.



## ADVANCED PLACEMENT COMPUTER SCIENCE A (0836) Grades 11, 12 1.0 credit 1 year

#### Prerequisite: Grade of "C" or better in either CHS Computer Programming Java or C++ or Teacher Recommendation

This class is designed to give students a comprehensive understanding of Java and to meet the objectives and standards for the AP Test. Some of the concepts that the students will learn in this course are: methods, classes, and objects, advanced object concepts, input, selection, and repetition, arrays and strings, graphics, introduction to inheritance, advanced inheritance concepts, file input and output, abstraction, and interfaces.



<sup>\*</sup>Pending School Board Approval

This course will give you a foundation of business topics that include business basics (pricing, staffing, financing and purchasing), information technology, international business, and human resource management. Students will learn these concepts by using a computerized virtual simulation. Find out the many opportunities that the field of business has to offer! This course will lay the foundation and provide the skills necessary to pursue higher education and careers in business management & administration, finance, information technology, marketing, manufacturing, transportation, distribution & logistics, education & training, government & public administration, hospitality & tourism, human services, law, public safety, corrections and security.



## **BUSINESS OPERATIONS I, II, III (0807)**

Grades 10, 11, 12

1.0 credit

1 year

## Prerequisite: Completing Business 101 with a B and teacher recommendation

This course is for the business student who plans to pursue a career in entrepreneurship, management, marketing, or sales. The students in this class will receive real-world experience through the daily operations and management of the school coffee shop, The Coffee Tree Roasters. The students will be responsible for learning every aspect of **operating** this business. The student will be responsible for product design and development, purchasing inventory, scheduling, inventory control, marketing, publicity, bookkeeping, website management, etc. Students may take this course more than once. This course will require students to operate the school store outside of regular school hours. Students interested in enrolling in this class are required to complete a job application and will go through a typical interview process for employment.



**ENTREPRENEURSHIP AND BUSINESS MANAGEMENT (0803)** 

Grades 10, 11, 12

0.5 credit

1 semester

## Prerequisite: None

Do you want to own your own business someday? Are you going to pursue a career in business? Then come behind the scenes of business operations and learn entrepreneurship, human resources, financial management, communications, marketing, ecommerce, and global integration. The purpose of this course is to provide the student with an understanding of business from the entrepreneur's point of view. Substantial time is spent investigating how an idea is developed into a business and how that business is created and managed through the use of technology, partnerships with businesses, and hands-on activities. This course will lay the foundation and provide the skills necessary to pursue higher education and careers in business management & administration, finance, marketing, education & training, government & public administration, hospitality & tourism, human services, law, public safety, corrections and security.



Marketing is a college preparatory course that introduces students to the process of creating, distributing, promoting and pricing products to consumers. Students will learn how business and non-business organizations engage in marketing activities to create and maintain satisfying exchange relationships with consumers. Topics of study include marketing research, consumer buying behavior, international marketing, e-marketing, marketing through social media, sports marketing, customer relationship management, branding, packaging, advertising, public relations, personal selling and sales promotion. Interactive projects, case studies, class discussions, computer simulations, presentations and guest speakers will be utilized throughout the course. Over one third of all US occupations are involved in some aspect of marketing. Learning marketing will help you explore different careers, enable you to become a better consumer and prepare you for further study in the business field. This course will lay the foundation and provide the skills necessary to pursue higher education and careers in business management & administration, finance, marketing, education & training, government & public administration, hospitality & tourism and human services.



CYBERSECURITY AND THE LAW (0038) Grades 11, 12

0.5 credit

1 semester

### **Prerequisite: None**

Computers, the Internet, and mobile information technologies have become routine elements of our daily lives. The percentage of our social, professional, and political discourse mediated by information systems increases each year. Critical infrastructure likewise follows suit, with financial, healthcare, energy and other utilities leveraging the Internet to increase both capability and efficiency. In the physical world, we publish rules (laws) to govern our interactions with one another. These rules tell us what behaviors are permissible and what responsibilities we have to one another. In cyberspace, where these rules exist – and what they require – are less clear. This course explores questions surrounding how we "govern" cyberspace in the context of cybersecurity and privacy issues. We will examine a series of examples, both real-world and hypothetical, to investigate what policy "tools" are in-place, available, and should be available to address Internet security and privacy issues.



#### **Media Courses**

\*MEDIA I – MASS COMMUNICATION (0028)

Grades 9,10,11,12

0.5 credit

1 semester

#### **Prerequisite: None**

This semester course will provide a survey of forms of mass communication. It creates a practical experience creating mass communication in photography and video. Students will learn photographic techniques, video planning, and editing. It compares and plans visual communication to study a practical experience. This course meets the Technology Credit for graduation.



## **MEDIA EDITING (0027)**

Grades 9,10,11,12

0.5 credit

1 semester

#### Prerequisite: None

Students in this semester course will use industry standard software and basic design principles to create projects using photographs, video and text. They will learn to design and share projects for video, print for the web and social media.



## **MEDIA ON-AIR TALENT (0030)**

**Grades 10, 11, 12** 

0.5 credit

1 semester

## **Prerequisite: None**

Students in this course will appear on the Morning Announcements and will teach students how to perform and present on camera for an audience. Students will write for media, prepare for camera appearances, and deliver a variety of television programs. The course puts public speaking in front of a camera and microphone.



#### MEDIA II, III, IV BROADCAST (0002C)

Grades 10, 11, 12

1.0 credit

1 year

### Prerequisites: Completion of Media I

This year-long class will explore various aspects of video production and television fields. Students will learn how to operate a multitude of equipment necessary to produce video projects using editing software that will be used for a variety of live productions. Students will be encouraged to become proficient in equipment usages, media literacy, critical analysis, and the components of live production.



## MEDIA II, III PHOTOGRAPHY (0032C) Grades 10, 11, 12

1, 12 1.0 credit

1 year

## Prerequisite: Completion of Media I

This year-long course will explore all areas of composition, exposure and manipulation in photography. The class will combine hands-on training with photographic theory. Students will be encouraged to become proficient in shooting, uploading, and manipulating images. Some specializations may develop as the year goes on, depending on student aptitudes and interests.



## MEDIA II, III, IV JOURNALISM (0007C)

Grades 10, 11, 12

1.0 credit

1 year

#### Prerequisite: Completion of Media I with a "C" or better or Honors English

Students will produce the news magazine, and the PTHS Showcase social media accounts in this year-long class based on national journalism standards. They will increase their proficiency in reporting, writing, photography, editing layout design, desktop publishing, fundraising and learn how to work within an organizational structure that includes student editors. Specializations will be assigned depending on student aptitudes, interest, and publication needs.



### Prerequisite: Completion of Media II Photography or Media II Broadcast

This year-long course will combine production training and practice with national standards of yearbook assembly. Students in this course will ultimately produce the school yearbook. Students will learn to work within an organizational structure that includes student editors. Students will increase their proficiency in desktop publishing, layout design, photography, writing, editing, and fund-raising. Specializations will be assigned depending on student aptitudes, interest, and publication needs. Students will also work to complete the Senior Video Yearbook as well as work on special projects for the school.



## MEDIA III, IV, V, VI TELEVISION PRODUCTION (0005C) Grades 11, 12 0.5 credit 1 semester

#### Prerequisites: Completion of Media II Broadcast and Application

This semester class produces the Morning Announcements and will combine pre-production and live production techniques, ultimately producing a variety of live productions, both school related and for Peters Township Community Television. The students will become proficient in all aspects of live production. This course will provide an opportunity for students to explore and utilize new technological advances in the television and communication fields. Students interested in enrolling in this class are required to complete an application.



### MEDIA IV, V DIGITAL PHOTOGRAPHY (0022)

**Grades 11, 12** 

0.5 credit

1 semester

## Prerequisite: Completion of Media III Photography and Teacher Recommendation

The semester course will teach advanced students how to think and act like a photographer. They will use their technical knowledge of the camera and editing software to produce specific types of photographs. They will further explore advanced ways to produce various exposures using the camera, in a lab type setting where they will work collaboratively to troubleshoot and experiment.



## **Technology Education and Applied Engineering Courses**

#### \*INTRODUCTION TO SCIENCE TECHNOLOGY ENGINEERING MATH (0756) Grade 9,10,11,12 0.5 credit 1 semester

#### Prerequisite: None

Introduction to STEM is designed as a basic overview for careers associated with Science, Technology Engineering and Math. Students who complete this course will gain exposure to areas necessary to design and develop concepts necessary to be successful in today's technological society. Exciting hands-on learning activities build skills for success through, research, experiments, and challenges that incorporate STEM concepts. Activities will be designed around problem solving with an emphasis on engineering systems that help meet the needs and wants of consumers. This course will meet the Technology Credit for graduation.



## **AGILE ROBOTICS I (0730)**

Grades 9,10,11,12

0.5 Credit

1 semester

### Prerequisite: None

Agile Robotics I provides a basic foundation in robotics technology with particular concentration on first generation robotics. Due to the multi-disciplinary nature of robotics, the student is exposed to the many facets of robotics including material from computer, electrical, and mechanical disciplines with a focus on engineering processes. Designed to cultivate students' interest, awareness and application to areas related to technologies necessary to design, develop, install and maintain physical systems. The course features a breadth/depth ratio of 80% lab component and 20% direction instruction component. The laboratory component features basic activities to solidify lecture concepts and team-oriented, hands-on projects to solve basic robotics problems. The STEM system of teaching is employed throughout this course to give the 21st century learner a great experience.



## **AGILE ROBOTICS II (0731)**

Grades 9,10,11,12

0.5 Credit

1 semester

## **Prerequisite: Completion of Agile Robotics I**

This course continues from Agile Robotics I by delving further into the details of robotics technology. Highlights of AR2 include use of discipline-specific software tools, additional details of robotic systems, application of robot control programming, motion planning, and additional applied electronics skills. The course follows a breadth/depth ratio of 50/50. The laboratory component features various projects to solidify lecture concepts and team-oriented, hands-on projects to solve various robotics problems. This course serves to highlight students' awareness of technologies necessary to design, develop, install and maintain physical systems at an advance level. Agile Robotics I is a required course before students enroll in Agile Robotics II.



## APPLIED ENGINEERING & INNOVATION (0738) Grades 11, 12

0.5 credit 1 semester

#### Prerequisite: Intro to STEM and Teacher Recommendation

This course is focused on collaborative problem-solving in conjunction with neighboring school districts and industry partners. Students will be involved in experiences that take them out of the traditional classroom paradigm to allow for project-based learning mimicking a real-world engineering challenge. Course work is student driven and directed by the challenges presented the industry partners.



#### ARCHITECTURAL ENGINEERING I (0748)

Grades 9,10,11,12 1.0 credit

1 year

## **Prerequisite: None**

This course will cultivate student awareness of fundamental skills and concepts necessary for architectural planning, design and drawing. Students will prepare a full set of residential architectural drawings, including floor plans, elevations and pictorial drawings. A portfolio will be developed that will aid the student when pursuing careers in related fields. Architectural parametric software will be the medium for which the student will design their 2D floor plans/3D walk-thru.



## **ARCHITECTURE ENGINEERING II (0733)**

Grades 10, 11, 12

0.5 credit

1 semester

### **Prerequisite: Completion of Architectural Engineering I**

The Architecture and Engineering II course will further investigate how the structure is designed and built beyond the layout of spaces between walls. Students will incorporate green building concepts and sustainable design in architecture. These concepts will be the foundation for students in choosing proper building materials and utility needs. Students will design and fabricate a scale model of their dream home as a culminating project.



**AUTOMATION ENGINEERING (0749) Grades 9,10,11,12** 

0.5 credit

1 semester

## Prerequisite: None

This course will introduce students to Automated Manufacturing Technology and how the countless products of society are produced. The elements and resources of manufacturing systems will be explained with new technology that is being employed to make our product systems more efficient. Students will see how lasers and robotics can improve manufacturing processes and end products. The use of computers in manufacturing (CAM) and design (CAD), automation, and other new developments will be part of the activities involved with this exciting course. Students taking this course will have the opportunity to create a project using the Technology Education Laboratory resources.



**COMPETITIVE TECHNOLOGY (0753)** 

Grades 9,10,11,12

1.0 credit

1 year

## Prerequisite: None

The course will allow students to apply their knowledge of technology, engineering, math, and science to compete with other students throughout the school, region, and state in problem-solving activities. Activities and competitions sponsored by the Technology Student Association (TSA) and Odyssey of the Mind (OM) will be the foundation of the course. This course is designed to cultivate students' interests in the life and physical sciences along with research and development. Creativity and ingenuity will be emphasized throughout the course. Many of the challenges introduced during the course will allow students to research and develop technology in an independent mode of study.



COMPUTER AIDED DRAFTING & DESIGN (0759)

Grades 9, 10, 11, 12 0.5 credit

1 semester

#### Prerequisite: None

The Computer Aided Drafting and Design (CADD) course cultivates the application and design of parametric engineering using *SolidWorks* software and digital content creation tools. Students will use *SolidWorks* to create working drawings of product designs, 3D modeling, assembly animation, and virtual prototyping. Many college engineering programs require use of this software. This course is an innovative course for students who are interested in pursuing advanced studies in any engineering-based career, 3D design and CADD fields.



Production Technology allows students to grow their knowledge of production systems as they relate to manufactured products. Beginning with the study of systems involving the use of inputs and processes, students will change the form of materials using processing and management technologies to produce packaged products. Students taking this course will also have the opportunity to not only design, but also create products using various tools within the Technology Education Laboratory. Activities are designed to cultivate student interest and awareness of hand tools and the use of those tools to create products that meet consumer needs and wants. Interactions with other students as part of the production team help foster social and management skills need in today's society.



RAPID PROTOTYPING ENGINEERING (0735)

Grades 10, 11, 12

0.5 credit

1 semester

**Prerequisite: CADD** 

The rapid prototyping engineering course allows students to further their studies in the area of parametric engineering design. Students will obtain hands-on exposure to processes commonly used to rapidly fabricate prototypes. Utilizing *SolidWorks* and *Ansys AIM* software, students will gain the knowledge and insight to select appropriate process/technologies to create student generated designs. Students will utilize the 3D technologies to produce, test and analyze their designs.



# World Language Course Offerings

French, German and Spanish courses are taught by a grammar and proficiency-oriented methodology designed to develop accuracy in listening, speaking, reading, and writing skills. Development of these skills will be done within the context of everyday authentic situations relevant to the student. Each of these skills will be emphasized to varying degrees throughout the five-year sequence; special emphasis will be consistently given to oral communication.

In addition to language skills, students will gain an understanding and appreciation of French, German, and Spanish speaking peoples and their historical, literary, and cultural significance. Students will be utilizing technology skills to aid in their acquisition of the language.

All students need to be aware that the rigor and expectations increase with each level of language. Furthermore, the target language is used more frequently as the primary language as the level increases and is used exclusively in the AP level. Lastly, a student may repeat the same World Language course two times only without successful completion.

**FRENCH I (0500)** 

Grades 9, 10, 11, 12

1.0 credit

1 year

Prerequisite: None

The Level I course is a full-year course which introduces students to the study of World Language and culture. The basic skills of listening, speaking, reading, and writing will be taught and practiced with emphasis on student performance in both grammar and vocabulary. Aspects of the culture of French-speaking people will be introduced and discussed.



**FRENCH II (0501)** 

Grades 9, 10, 11, 12

1.0 credit

1 year

Prerequisite: Grade of "C" or better in French I or Teacher Recommendation

The Level II course is a full-year course which continues the study of World Language and culture. The basic skills of listening, speaking, reading, and writing will continue to be taught and practiced with emphasis on student performance. More reading and writing is included than in Level I. Various aspects of culture will continue to be discussed, including geography and history.



FRENCH III (0502)

Grades 10, 11, 12

1.0 credit

1 year

Prerequisite: Grade of "C" or better in French II or Teacher Recommendation

The third level language course is a full-year course which continues the study of all aspects of language — listening, speaking, reading, and writing. There is increased emphasis on oral expression and on accuracy in spoken and written language. The student will use the language skills he/she acquires to increase cultural understanding through the use of authentic texts in the target language. There is an emphasis on application of previously learned and newly acquired concepts and skills. This level tends to require that students take more of a responsibility and ownership of reviewing material that was learned in previous levels.



FRENCH IV HONORS (0503)

**Grades 11, 12** 

1.0 credit

1 year

Prerequisites: Grade of "B" or better in French III or Teacher Recommendation

The fourth level language course applies fundamental grammatical concepts in a more sophisticated contextual setting. This course develops: increased handling of idiomatic expressions to make the student's speech and written work authentic; greater skill in pronunciation, rhythm and intonation; increased knowledge of the social, political, and environmental issues of the French speaking peoples; and progression in skills of speaking, reading, and writing. Increased emphasis will be placed on the study of literature and on social norms within the countries of the target language. Classroom instruction and discussion of grammar are almost exclusively in the target language. Students are expected to exhibit greater independence in their own acquisition of the language especially within the previously learned and newly acquired grammar concepts. This course also provides preparation for the AP program.

Grade 12

1.0 credit

1 year

## Prerequisites: Grade of "A" in Level IV Honors or "B" in Level IV Honors with Teacher Recommendation

The AP French course is designed to lead students toward mastery of all aspects of the language equal to a third-year college course in composition and conversation. As such, the focus continues to be on the mastery of listening, speaking, reading, and writing skills. Students will be expected to speak only in the target language, and submit essays in the target language which reflect an appropriate level of skills acquisition. Students will be expected to listen to the spoken language through online podcasts, television programs, and other materials at the teacher's request. The student will also be expected to write essays which synthesize information based on separate reading and listening assignments. Part of the course will be focused on the AP test, with the expectation that the student will take the test at his/her own expense.



### **German Electives**

**GERMAN I (0505)** 

Grades 9, 10, 11, 12

1.0 credit

1 year

Prerequisite: None

The Level I course is a full-year course, which introduces students to the study of World Language and culture. The basic skills of listening, speaking, reading, and writing will be taught and practiced with emphasis on student performance in both grammar and vocabulary. Various aspects of the culture of German-speaking people will be introduced and discussed.



**GERMAN II (0506)** 

Grades 9, 10, 11, 12

1.0 credit

1 year

#### Prerequisite: Grade of a "C" or better in German I or Teacher Recommendation

The Level II course is a full-year course which continues the study of World Language and culture. The basic skills of listening, speaking, reading, and writing will continue to be taught and practiced with emphasis on student performance. More reading and writing is included than in Level I. Various aspects of culture will continue to be discussed, including geography, and history.



**GERMAN III (0507)** 

Grade 10, 11, 12

1.0 credit

1 year

#### Prerequisite: Grade of a "C" or better in German II or Teacher Recommendation

The third level language course is a full-year course which continues the study of all aspects of language — listening, speaking, reading, and writing. There is increased emphasis on oral expression and on accuracy in spoken and written language. The student will use the language skills he/she acquires to increase cultural understanding through the use of authentic texts in the target language. There is an emphasis on application of previously learned and newly acquired concepts and skills. This level tends to require that students take more of a responsibility and ownership of reviewing material that was learned in previous levels.



**Grades 11, 12** 

1.0 credit

1 year

## Prerequisites: Grade of a "B" or better in German III or Teacher Recommendation

The fourth level language course applies fundamental grammatical concepts in a more sophisticated contextual setting. This course develops: increased handling of idiomatic expressions to make the student's speech and written work authentic; greater skill in pronunciation, rhythm, and intonation; increased knowledge of the cultural behavior and attitudes social, political, and environmental issues of the German speaking peoples; and progression in skills of speaking, reading, and writing. Increased emphasis will be placed on the study of literature and on social norms within the countries of the target language. Classroom instruction and discussion of grammar are almost exclusively in the target language. Students are expected to exhibit greater independence in their own acquisition of the language especially within the previously learned and newly acquired grammar concepts. This course also provides preparation for the AP program.



## ADVANCED PLACEMENT GERMAN LANGUAGE (0509) Grade 12

1.0 credit

1 year

#### Prerequisites: Grade of "A" in Level IV Honors or "B" in Level IV Honors with Teacher Recommendation

The AP German course is designed to lead students toward mastery of all aspects of the language equal to a third-year college course in composition and conversation. This class is noticeably more rigorous both in and out of class than the other levels. As such, the focus continues to be on the mastery of listening, speaking, reading, and writing skills. Classroom instruction and discussion of grammar are exclusively in the target language. The study of literature is integrated into this skill development. Students who complete this course are expected to take the AP examination. This exam is administered in May and is taken at the student's own expense.



**Spanish Electives** 

## **SPANISH 1B (0512B)**

Grade 9

1.0 credit

1 year

#### Prerequisite: Grade of "C" or better in Level 1A and Teacher Recommendation

Level 1B is a continuation of the 1A course from the Middle School Students are exposed to additional vocabulary and grammatical concepts providing them opportunities to expand their knowledge of the target language. Further exploration of cultural components enhances the language learning experience. Successful completion of the Level 1A course, in which the student maintained at least a "C" average, is a prerequisite for the Level 1B course. Students may test into level 1B if they have completed some level of Spanish at another school.



## **SPANISH I (0512)**

Grades 9, 10, 11, 12

1.0 credit

1 year

## Prerequisite: None

The Level I course is a full-year course, which introduces students to the study of World Language and culture. The basic skills of listening, speaking, reading, and writing will be taught and practiced with emphasis on student performance in both grammar and vocabulary. Various aspects of the culture of Spanish-speaking people will be introduced and discussed.



## Prerequisite: Grade of a "C" or better in Spanish I or Teacher Recommendation

The Level II course is a full-year course which continues the study of World Language and culture. The basic skills of listening, speaking, reading, and writing will continue to be taught and practiced with emphasis on student performance. More reading and writing is included than in Level I, and the course moves at a faster pace. Various aspects of culture will continue to be discussed, including geography and history.



**SPANISH III (0514)** 

Grades 10, 11, 12

1.0 credit

1 year

#### Prerequisite: Grade of a "C" or better in Spanish II or Teacher Recommendation

The third level language course is a full-year course which continues the study of all aspects of language — listening, speaking, reading, and writing. There is increased emphasis on oral expression and on accuracy in spoken and written language. The student will use the language skills he/she acquires to increase cultural understanding through the use of authentic texts in the target language. There is an emphasis on application of previously learned and newly acquired concepts and skills. This level tends to require that students take more of a responsibility and ownership of reviewing material that was learned in previous levels.



**SPANISH IV HONORS (0515)** 

**Grades 11, 12** 

1.0 credit

1 year

## Prerequisites: Grade of a "B" or better in Spanish III or Teacher Recommendation

The fourth level language course applies fundamental grammatical concepts in a more sophisticated contextual setting. This course develops: increased handling of idiomatic expressions to make the student's speech and written work authentic; greater skill in pronunciation, rhythm, and intonation; increased knowledge of the social, political, and environmental issues of the Spanish speaking peoples; and progression in skills of speaking, reading, and writing. Increased emphasis will be placed on the study of literature and on social norms within the countries of the target language. Many themes are taught within the historical context of the language. Classroom instruction and discussion of grammar are almost exclusively in the target language. Students are expected to exhibit greater independence in their own acquisition of the language especially within the previously learned and newly acquired grammar concepts. This course also provides preparation for the AP program.



ADVANCED PLACEMENT SPANISH LANGUAGE (0516) Grade 12

1.0 credit

1 year

## Prerequisites: Grade of "A" in Level IV Honors or "B" in Level IV Honors with Teacher Recommendation (others by appointment)

The AP Spanish course is designed to lead students toward mastery of all aspects of the language equal to a third-year college course in composition and conversation. This class is noticeably more rigorous both in and out of class than the other levels. As such, the focus continues to be on the mastery of listening, speaking, reading, and writing skills. The study of literature is integrated into this skill development. Students will be expected to utilize authentic sources for reading, writing, listening, and speaking. Furthermore, there is an expectation to communicate exclusively in the target language. Students who complete this course are expected to take the AP examination. This exam is administered in May and is taken at the student's own expense.



## **GLOBAL OUTLOOKS (0543)**

Grades 9, 10, 11, 12

0.5 credit

1 semester

### Prerequisites: Concurrent enrollment in a level II language or completion of at least a level II language

This is a semester elective course that will focus on one's role as an individual within the global community. Students will develop global competency skills through the integration of culture, communication, communities, comparisons, and connections within and between global societies. Students will study language through cultural comparisons and the effect of communication on culture. Students will analyze the importance of cultural identity, cultural sensitivity, and prepare to represent themselves effectively and appropriately in a globalized market.











# Western Area Career & Technology Center Course Offerings

Students from Peters Township High School who wish to obtain training in selected occupational fields may enroll in one of the following programs at the Western Area Career & Technology Center. Students have the opportunity to enroll either in the AM or the PM session. There is an additional application that must be completed prior to admission. This application is available in the Counseling Office. Upon the successful completion of the vocational course, these students will be awarded three credits per year upon successful completion of the course.

## **AUTOMOTIVE MECHANICS (1105)**

**Grades 10, 11, 12** 

3.0 credit

1 year

The three-year Automotive Mechanics program is for 10th, 11th, and 12th grade students. This program will prepare students for employment in the auto repair industry working with parts, tune-ups, brakes, transmissions, electrical and fuel systems. The program will also assist in the diagnosis and repair of various drivability conditions and routine vehicle maintenance.

TDL

#### AUTOMATION & ROBOTICS ENGINEERING TECHNOLOGY (1120) Grades 10, 11, 12 3.0 credit 1 year

This three-year course focuses on all aspects of industrial and commercial machines and robotics and is designed to prepare students for work in industry or continued education in engineering-related fields. The program includes design activities and instruction in operation, set-up, maintenance, troubleshooting, and repair of machines and systems found in commercial, packaging, medical, and food production facilities where high tech equipment is used. Curriculum and instruction include the areas of Electricity, Electronics, Sensor Technology, Machine Operations and Maintenance, Industrial Electronics, Computer Machine Controls, Machine Repair, Motors and Control Applied Physics, Fluid Power, Mechanical Components, Schematic Interpretation and Quality Control. Students are trained on a wide variety of tools for preventative maintenance and construction of equipment. Individuals entering this career should possess good mechanical aptitude, eye-hand coordination, math skills, manual dexterity, critical thinking skills, and the ability to work as a team member.



### **CARPENTRY (1107)**

Grades 10, 11, 12

3.0 credit

1 year

This three-year program prepares 10th, 11th, and 12th graders for all phases of residential carpentry. The course is taught in sequence with the construction of a house. Site layout, footer layout and forming, rough framing, exterior finish and roofing, insulation, drywall, and interior finish are covered. Each unit is taught in conjunction with related safety, estimating, and blueprint reading. Those who complete the course achieve skills needed to obtain employment as a carpenter.



## COLLISION REPAIR TECHNOLOGY (1103) Grades 10, 11, 12

3.0 credit

1 year

Through theory and related hands-on classroom instruction, students in this program will learn the latest techniques in five major topics. Instruction utilizes the I-Car curriculum, and numerous techniques and technologies are used to keep abreast of current industry trends and standards. Martin Senour Paint Systems are used throughout with an emphasis on waterborne systems.

TDL

## **COSMETOLOGY (1109)**

Grades 10, 11, 12

3.0 credit

1 year

Cosmetology is a three-year course for tenth, eleventh, and twelfth grade students. The course will be operated by the Western ACTC under the regulations of the State Board of Cosmetology. Students with regular attendance will receive the required 1250 hours of training needed to take the State Board exams for licensing.



## **CULINARY ARTS & BAKING (1117)**

Grades 10, 11, 12

3.0 credit

1 year

Instruction includes theory and applications related to food preparation, menu and banquet planning, food and beverage purchasing, quality control, cost analysis, safety, and sanitation. Students learn the safe and proper use of hand and power tools of the industry. Program components include Commercial Baking, Catering, Institutional Foods, Meat Cutting, Cooking Methods, Nutrition, Safety, and Sanitation. Program completion qualifies students for positions in the foodservice industry or advanced study at a culinary institute or college. A Hospitality component will complement this three-year program, which will include instruction and practical experiences in lodging management, office operation, leadership and management, marketing, food and beverage service, and operation of the physical plant.



### **ELECTRICAL OCCUPATIONS (1111)**

Grades 10, 11, 12

3.0 credit

1 year

10th, 11th, and 12th grade students are prepared for employment in the fields of residential, commercial, and industrial wiring, installation, and maintenance of equipment including electrical motors, transformers, control systems, communications systems, wired fiber optics, and related equipment. Those who complete the three-year course receive West Penn Wire CDT (fiber optics) certification.



## **HEALTH ASSISTANT (1112)**

**Grades 10, 11, 12** 

3.0 credit

1 year

This course prepares students for careers in the health field. Students are provided clinical and shadowing experiences in long-term care facilities and doctors' offices to enhance the learning experience and assist in the transition to employment. Core curriculum includes an Overview of Health Careers, Basic Anatomy and Physiology, Medical Terminology, Clinical Laboratory, Procedures, Universal Precautions, Legal and Ethical Aspects of Health Care, and Communication Skills. Students are also provided instruction to qualify them for certification in First Aid, CPR and CNA.



## HEATING, VENTILATION & AIR CONDITIONING (1113) Grades 10, 11, 12 3.0 credit 1 year

Heating Air Conditioning is a three-year program that prepares 10th, 11th, and 12th grade students for employment to assist the mechanic in the servicing and installation of residential and commercial heating and cooling systems. Students are also prepared for the EPA certification exam for safe refrigerant handling.



## **MACHINE SHOP (1135)**

Grades 10, 11, 12

3.0 credit

1 year

This three-year course provides 10th, 11th, and 12th graders the skills needed for entry into the machining field through basic hands-on machining practice on lathes, milling machines and grinders. Topics include set-up, tool selection, and methods used on various materials such as steel, aluminum, and brass. Computer-part programming and machine operation are also included in the training.



## **MASONRY (1130)**

**Grades 10, 11, 12** 

3.0 credit

1 year

This three-year instructional program prepares students in brick, block, stone, concrete, tuck pointing, and artificial stone construction. Students learn the types and sizes of masonry materials, various applications for materials, blueprint reading, masonry symbols, use of measuring instruments, leveling instruments, layout and design, bonds, hand tools, masonry equipment, mortar mixing, concrete mixing, estimation, practical problems in mathematics, preparation of material lists, masonry saw, tile saw, 14" dry cut saw, hammer drill, demolition, fireplaces, chimneys, barbecues fireplaces, steps, walls, scaffold construction, etc.



#### **NETWORKING (1119)**

Grades 10, 11, 12

3.0 credit

1 year

This three-year program provides 10th, 11th, and 12th graders with meaningful training toward a career and/or further study in the rapidly expanding occupational area through gainful, positive experiences whether or not they are coming from districts having their own networking programs. This program provides information and hands-on activity leading to certifications such as Cisco, Microsoft Certified Engineer, A+ and others. Networking topics include Software, Hardware, Operating Systems, Installation, and Solutions.



## REHABILITATION AIDE/SPORTS MEDICINE (1127) Grades 10, 11, 12 3.0 Credits

1 year

This three-year program offers students the career opportunity to pursue jobs in the fields of Personal Trainer, Coach, Rehabilitation Aide, Athletic Trainer, Physical Therapist Assistant. This program will teach key components of rehabilitation and exercise training through a foundation of human sciences and hands on lab training. Students will receive certifications in; OSHA OCC Safety & Health Administration, ACSM Personal Training, AMCA Physical Therapy Aide, First Aide, CPR AED certification. Other certifications that will be available are; Bloodborne Pathogens, OSHA 10, Mandate Reporting training concussion training.



**WELDING (1118)** 

Grades 10, 11, 12

3.0 credit

1 year

This course prepares students in oxy-fuel, shielded metal arc, gas metal arc, gas tungsten arc, flux core welding, carbon arc, plasma cutting, manual and radiograph cutting, and oxy-fuel brazing processes. 10th, 11th, and 12th grade students learn the use of measuring instruments, hand tools, portable grinders, metallurgy, blueprint reading, electrical principles, layout and design, fabrication, practical problems in math, preparation of material lists, cost estimating, and quality assurance methods. Successful students will be given the opportunity to earn AWS certifications.

