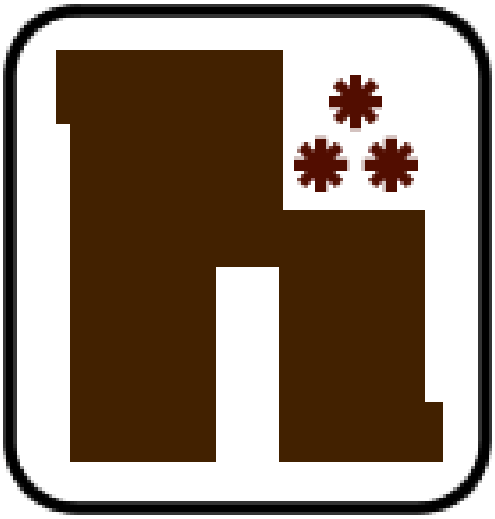
HIGHLANDS HIGH SCHOOL
Program of Studies
2018-2019



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1500 Pacific Avenue
Natrona Heights, PA 15065
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HIGHLANDS HIGH SCHOOL
2018-2019
PROGRAM OF STUDIES

REQUIREMENTS FOR GRADUATION

I. **GRADUATION REQUIREMENTS:** Graduation requirements are based on the standards set by the Pennsylvania Department of Education and the Highlands School District Board of Directors and Administration.

Graduating students must have demonstrated proficiency in the following areas: Reading, Writing, Mathematics, Science and Technology, and Environment and Ecology, as determined through successful completion of secondary level coursework in English Literature, Algebra I and Biology in which a Keystone Exam serves as end of course test.

Every student must successfully complete one credit of English, math, science and social studies each year.

Currently, the minimum 24.5 credits required for graduation and participation in commencement exercises are:

English	4 credits
Social Studies	4 credits
Mathematics	4 credits
Science	4 credits
Electives	4 credits
PE/Health/Aquatics	2.5 credits
Arts/Humanities	2 credits

II. **THE MENTOR / PORTFOLIO PROGRAM:** All students must successfully complete the Highlands High School Mentor / Portfolio Program as a requirement for graduation. Mentor assignments, community service hours, and career preparation activities will be included in the portfolio. Prior to graduation, each senior will present his/her portfolio to a small portfolio committee.

III. **KEYSTONE EXAMS:** All students must take the state-mandated series of Keystone tests and achieve a passing score in the Proficient range on each test to fulfill this graduation requirement. Students who receive an unsatisfactory score on any of the tests will be required to demonstrate proficiency through completion of coursework and retesting or a state approved project based assessment.

In order to participate in Commencement Exercises, a senior must have completed all graduation requirements prior to Commencement. Once students have successfully completed all requirements for graduation, they will have officially concluded their educational program at Highlands High School and will be graduated.

CREDIT EVALUATION

One credit equals a minimum of 200 minutes of classroom work per week for a period of 36 weeks. Partial units of credit are granted by the Highlands School District on the basis of 0.1 credit for each day a class meets during the six-day rotation. For example, a class or course which meets 3 periods each rotation for 36 weeks has a value of 0.5 credit.

In order to be promoted to the next grade level, the following minimums are established:

Grade Level	Credits
Sophomores	5
Juniors	11
Seniors	17

SCHEDULE CHANGE/COURSE CHANGE POLICY

Every effort is made to accurately schedule students in the required and elective courses that fit their educational plans. Students in grades eight through eleven will be scheduled for their core academic courses based on the recommendation of their current teacher under the guidance of the department chairperson. In the event that a parent feels that the scheduling recommendation is inappropriate, the parent can request a meeting with the building principal, the teacher, and the department chair to discuss the recommendation.

The only requests for schedule changes that will be honored by the guidance counselors **after August 15** are those that are the result of an error made by the school. Students will not be permitted to drop Band, Bandfront or Honors Band once summer Band Camp begins. Appeals to drop classes can be made to the building principal. In the event that the building principal grants a request to drop a class after the designated Add/Drop Period, a W grade (withdrawn) will be recorded on the transcript for the dropped course. The student will have to schedule another class to replace the dropped course.

IMPORTANT SCHEDULING INFORMATION

STUDY HALLS: Students will be limited to 6 study halls per rotation; some study hall time is recommended for make-up work or library use.

RELEASE TIME: Limited to seniors; students who apply for a release time/co-op program must have the department coordinator's recommendation. They must also be a student in good standing and on-track for graduation.

ADAPTED PE: This is an option for a student whose physician recommends the course. Medical consent must be provided by completing the specific form obtained from the PE Department or school nurse.

SUPPLEMENTAL COURSES: Consumer, Nutrition, Environmental, and Drug /Alcohol /Tobacco Education courses are included within the total curricula.

ADVANCED PLACEMENT: AP courses are taught on the college level. Colleges may grant credit based on scores on advanced placement tests administered in May. It is strongly recommended that students

enrolled in Advanced Placement courses take the AP exams for those subject areas. Students who take the AP exams must do so at their own expense. Students who qualify for free or reduced school meals may be eligible for an exam fee waiver.

LIBRARY INSTRUCTION: In compliance with the Pennsylvania Department of Education, 30 hours of library instruction is to be offered to students in grades 9-12. This instruction will be implemented on a yearly basis by means of integrating student assignments in academic subjects with library resources.

ARTS/HUMANITIES REQUIREMENT: All students are required to earn 2 course credits in Arts and Humanities to qualify for graduation. These credits may be earned in the areas of Art, Music, World Language, and English electives.

GIFTED SUPPORT PROGRAM: Gifted Support students will receive specially designed instruction in the regular education classroom and/or in the gifted resource room based on the individual student's needs.

LEARNING SUPPORT PROGRAM: Learning Support students will receive specially designed instruction in the regular education classroom and/or in a resource room based on the individual student's needs.

HIGHLANDS VIRTUAL ACADEMY (HVA)
Students may choose to enroll in the Highlands Virtual Academy to earn credits toward graduation. To register for HVA, interested students must attend an orientation, along with their parent/guardian. Students enrolled in HVA may also attend Forbes Road East Career and Technical School. Full-time and part-time HVA students are responsible for meeting all Highlands School District graduation requirements in order to earn a diploma.

NOTE: THE ADMINISTRATION RESERVES THE RIGHT TO CANCEL ANY COURSE OFFERING OR TO ADJUST STUDENT SCHEDULES ON THE BASIS OF INSUFFICIENT ENROLLMENT AND/OR TEACHER AVAILABILITY.

GENERAL INSTRUCTIONS FOR PROGRAM OF STUDIES

1. Using the scheduling card, obtain signatures of your current math, English, Social Studies and science teachers for their course recommendation.
2. Read course descriptions and consult with teachers about their course content and the subjects offered in their departments before making selections.
3. Sequential courses may not be scheduled concurrently.
4. After completing grade nine, students should check each year to be sure that all graduation requirements are being met. The guidance counselors can help students check their credits and required courses.
5. College-bound students are strongly advised to take a minimum of three years of a world language.
6. Beginning second semester of their 8th grade year, student athletes should check with their counselor regarding NCAA course approval.

ELECTIVES

ENGLISH DEPARTMENT
Journalism/Newspaper Design (10-12)
Multimedia Design I (10-12)
Multimedia Design II (10-12)
Young Adult Literature (9-12)
Graphic Novels (9-12)
Sports in Literature (10-12)
Drama (9-12)
Advanced Drama (9-12)
Etymology I, II (9-12)
Creative Writers at Work (9-12)
Greatest Stories of All Time (9-12)
Yearbook Design (10-12)
Ethical Dilemmas (9-12)
SAT Prep (10-11)

SOCIAL STUDIES DEPARTMENT
Intro to Psychology (11-12)
CHS Intro to Psychology (11-12)
Intro to Sociology (11-12)
CHS Intro to Sociology (11-12)
AP European History (11-12)
AP United States History (10-12)
Holocaust and Genocide Studies (11-12)
Modern American History (11-12)
Constitutional Law (11-12)
Civil Rights

MATH DEPARTMENT
CHS Probability & Statistics ***(11th or 12th depending upon math level)***
CHS Business Calculus (11-12)
Applied Mathematics (Oberg Course) (12)
History of Math (10-12)
CHS Introduction to Programming (10-12)
Computer Applications (9-12)
Advanced Computer Applications (9-12)
Game Making (10-12)
SAT Prep (10-11)

SCIENCE DEPARTMENT
CHS Biology (10-12)
Honors Biology II (11-12)
AP Chemistry (11-12)
AP Physics (12)
Anatomy & Physiology (12)
Earth & Space (11-12)
Natural Resources and Production Technology (12)
Intro to Engineering (11-12)
Geology and Planetary Science (12)
Natural Disasters and Environmental Issues (12)
Metrology (12)
JAA Introduction to Machining Lab (12)

DISTRIBUTIVE EDUCATION
Marketing & Sales (9)
Retailing Principles (10-12)
International Business (11-12)
Accounting I (11-12)
Cooperative Work Experience (12)

FINE ARTS DEPARTMENT
(*course requires resource fee)
*Fundamentals of Visual Art (9-12)
Independent Art (12)
Partners Program (11-12)
Drawing and Painting (10-12)
Ceramics (10-12)
Sculpture and Glass Fusing (10-12)
Printmaking and Mixed Media (10-12)
*Jewelry and Metal (10-12)
College in High School Art History (11-12)
Concert Choir (9-12)
Honors Choir (10-12, by audition)
*Band (9-12, Director's approval)
*Honors Band (9-12, Director's approval)
Stage Band (9-12, by audition, homeroom only)
Jazz Ensemble (9-12, by audition)
*Band Front (by audition, 9-12)
Theory & Harmony I (9-12, Director's approval)
AP Music Theory (10-12, Director's approval)
Music Appreciation/Musical Theater Production (9-12)
Music Technology (9-12, Director's approval)
Vocal Techniques/Intro to Broadway and Beyond (9-12)
Broadway and Beyond (9-12)
Student Accompanist (9-12)

TECHNOLOGY EDUCATION
Architectural Drafting & Design (10-12)
Introduction to Technology (9-12)
Engineering Design (CADD) (11-12)
Wood Manufacturing 1(10-12)
Wood Manufacturing 2 (11-12)
Wood Manufacturing 3 (11-12)
Robotics 1(11-12)
Robotics 2 (11-12)
Intro to Graphic Design (11-12)
STEM Lab (11-12)
JAA Precision Manufacturing (11-12)

WORLD LANGUAGES
Spanish 1
Spanish 2
Spanish 3
Honors Spanish 4
German 1
German 2
German 3
Honors German 4

HEALTH/PE
Strength and Conditioning
Lifetime Sports
Recreational Sports
Wellness through Yoga
Swimming (Advanced)
Swimming (Beginners)
Women's Advanced Physical Conditioning

OTHER
Fire Service Training Level 1(10-12)
Fire Service Training Level 2 (11-12)

ENGLISH REQUIRED COURSES

One course per grade level

REQUIRED COURSES (4 CR TOTAL)	**WKS**	**PDS**	**CR**
Academic English (9-12)	36	daily	1
Honors English (9-11)	36	daily	1
AP English Language & Composition 11	36	daily	1
AP English Literature & Composition 12	36	daily	1

<table>
<tr><td colspan="2">ACADEMIC ENGLISH 9</td><td colspan="2">Credit Value: 1.0</td></tr>
<tr><td colspan="2">Prerequisites: None</td><td colspan="2">Maximum Seats: 28</td></tr>
<tr><td>Duration:
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☐One Semester
☐Lab Course</td><td>Grade Level:
☒9th
☐10th
☐11th
☐12th</td><td>Graduation Obligation:
☒Required
☐Elective</td><td>Credit For:
☒English
☐Elective Courses</td></tr>
<tr><td colspan="4">Students will study writing basics, which include grammar, usage, and style. Additionally, students will continue to develop skills needed to write paragraphs, essays, and short creative writing pieces that are exemplary from both a technical and creative standpoint. Over the course of the school year, Academic English 9 can expect to read and analyze The Old Man and the Sea, The Lord of the Flies, Romeo and Juliet, and many other plays and short stories from authors, including Edgar Allan Poe, Nathaniel Hawthorne, Oscar Wilde, and others. In all reading assignments, students will incorporate reading strategies to increase reading comprehension. All papers are required to be submitted to the turnitin.com system. (See Research Requirement)*</td></tr>
</table>

HONORS ENGLISH 9		**Credit Value: 1.0**	
Prerequisites: None		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☒9th ☐10th ☐11th ☐12th	*Graduation Obligation:* ☒Required ☐Elective	*Credit For:* ☒English ☐Elective Courses
Students will study writing basics, which include grammar, usage, and style. Additionally, students will continue to develop skills needed to write paragraphs, essays, and creative writing pieces that are exemplary from both a technical and creative standpoint. These essays may include: basic five-paragraph essays, compare and contrast essays, character analysis essays, and particulars and details essays. Over the course of the school year, Honors English 9 students will read most or all of the following selections: *The Old Man and the Sea*, by Ernest Hemingway; *A Separate Peace* by John Knowles; *Dandelion Wine*, by Ray Bradbury; *The Prince and the Pauper*, by Mark Twain; *The Red Badge of Courage*, by Stephen Crane; *The Iliad*, by Homer; *The Tragedy of Romeo and Juliet*, by William Shakespeare; *The Importance of Being Earnest*, by Oscar Wilde and selected short stories from authors that may include Edgar Allan Poe, Nathaniel Hawthorne, Oscar Wilde, and others. In all reading assignments, students will incorporate reading strategies to increase reading comprehension. All papers are required to be submitted to the turnitin.com system. (See Research Requirement)*			
ACADEMIC ENGLISH 10		**Credit Value: 1.0**	
Prerequisites: English 9		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☒10th ☐11th ☐12th	*Graduation Obligation:* ☒Required ☐Elective	*Credit For:* ☒English ☐Elective Courses
Students will study intermediate grammar, usage, and style. Additionally, they will continue to develop their vocabulary throughout the year in preparation for intensive testing, such as the PSAT tests. Students will practice their writing skills by composing paragraphs, essays, and creative writing pieces. The Grade 10 reading selections are fairly advanced, and students will read most of all of the following: *To Kill a Mockingbird*, Edith Hamilton's *Mythology*, Homer's *The Odyssey*, *A Brave New World*, and *Julius Caesar*. Students will also read student selected short stories, poems, and non-fiction articles. In all reading assignments, students will use essential reading strategies to increase reading comprehension. All papers are required to be submitted to the turnitin.com system. (See Research Requirement)*			

HONORS ENGLISH 10		**Credit Value: 1.0**	
Prerequisites: English 9		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☒10th ☐11th ☐12th	*Graduation Obligation:* ☒Required ☐Elective	*Credit For:* ☒English
The class is an accelerated level of the Academic English 10. Students are challenged to analyze multi-levels of literature including: novels, poetry, playwriting, and short stories. Students extensively review the literature and culture of the Greeks and Romans focusing on the Olympians, lesser gods, and heroes. This examination includes Homer's *The Odyssey,* and Edith Hamilton's *Mythology*. Students also examine the life and times of Shakespeare and literature of his era. Students analyze Shakespearean language and ideas of assassination in his play, *Julius Caesar*. Students will also analyze other novels such as *To Kill a Mockingbird* and *A Brave New World*. Students are responsible for various projects, papers, and higher-level vocabulary skills throughout the course of the year. All papers are required to be submitted to the turnitin.com system. (See Research Requirement)*			

ACADEMIC ENGLISH 11		**Credit Value: 1.0**	
Prerequisites: English 10		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☐12th	*Graduation Obligation:* ☒Required ☐Elective	*Credit For:* ☒English ☐Elective Courses
Open to eleventh graders with an academic emphasis to prepare students for post-graduate education. Literature covers American authors sampling a variety of poetry, short stories and novels. Over the course of the school year, Academic English 11 can expect to read and analyze *The Scarlet Letter, The Crucible, The Great Gatsby, Death of A Salesman*, and many other poems and short stories from authors that may include Henry David Thoreau, Nathaniel Hawthorne, Walt Whitman, and others. Students will write in a variety of mediums as well, and will complete an analytical research paper based on a novel of the student's choice. Additionally, there is a strong emphasis on vocabulary development, SAT preparation and grammar review to prepare students for a college setting. Communication skills are stressed through both individual and group presentations. All papers are required to be submitted to the turnitin.com system. (See Research Requirement)*			

HONORS ENGLISH 11		**Credit Value: 1.0**	
Prerequisites: English 10		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☐12th	*Graduation Obligation:* ☒Required ☐Elective	*Credit For:* ☒English ☐Elective Courses
The class is an accelerated level of the Academic English 11. Open to eleventh graders with an advanced emphasis to prepare students for the rigors of college. Literature covers American authors sampling a variety of poetry, short stories and novels. Over the course of the school year, students can expect to read and analyze *The Scarlet Letter, The Crucible, The Great Gatsby, Death of A Salesman*, and many other poems and short stories from authors that may include Henry David Thoreau, Nathaniel Hawthorne, Walt Whitman, and others. Students will write in a variety of mediums as well, and will complete an analytical research paper based on a novel of the student's choice. Additionally, there is a strong emphasis on vocabulary development, SAT preparation and grammar review to prepare students for a college setting. Communication skills are stressed through both individual and group presentations. All papers are required to be submitted to the turnitin.com system. (See Research Requirement)*			
AP ENGLISH LANGUAGE AND COMPOSITION 11		**Credit Value: 1.0**	
Prerequisites: English 10		*Maximum Seats:* 20	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☐12th	*Graduation Obligation:* ☒Required ☒Elective	*Credit For:* ☒English ☐Elective Courses
The course teaches students to become skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects as well as the way generic conventions and the language contribute to effectiveness in writing. Students will write in several forms – narrative, exploratory, expository, argumentative – on many different subjects from personal experience to public policies, from imaginative literature to popular culture. The overarching purpose is to enable students to write effectively and confidently in their college courses across the curriculum and in their professional and personal lives. Open to 11th grade students only. Course will follow the AP College Board national syllabus. The reading list can be accessed at: http://www.collegeboard.com/student/testing/ap/sub_englang.html?englang. All papers are required to be submitted to the turnitin.com system. (See Research Requirement)*			

ACADEMIC ENGLISH 12		**Credit Value: 1.0**	
Prerequisites: English 11		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☐11th ☒12th	*Graduation Obligation:* ☒Required ☐Elective	*Credit For:* ☒English ☐Elective Courses

This course will prepare students for the demands of both the academic world and the working world. The course will focus on developing the skills necessary to read, interpret, and analyze texts. Readings for the course will be primarily from authors of the British Isles. Over the course of the school year, Academic English 12 can expect to read and analyze *Beowulf, The Canterbury Tales, The Heart of Darkness, The Stranger, Hamlet*, and many other many poems and short stories from authors that may include William Shakespeare, James Joyce, T.S. Eliot and others. Using the texts by these authors, students will complete multiple writing assignments throughout the year including essays, research papers, and other creative writing projects. Becoming successful critical readers and writers will afford students the opportunity to "see" the world from a different and exciting vantage point. All papers are required to be submitted to the turnitin.com system. (See Research Requirement)*

AP ENGLISH LITERATURE AND COMPOSITION 12		**Credit Value: 1.0**	
Prerequisites: English 11		*Maximum Seats:* 20	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☐11th ☒12th	*Graduation Obligation:* ☒Required ☒Elective	*Credit For:* ☒English ☐Elective Courses

The course engages students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style, and themes as well as such small-scale elements as the use of figurative language, imagery, symbolism, and tone. Students will also be responsible for a senior research paper as well as frequent timed writings on poetry, prose, and novels. Open to 12th grade students only. Course will follow the AP College Board national syllabus. The reading list can be accessed at: http://www.collegeboard.com/student/testing/ap/sub_englit.html?englit. All papers are required to be submitted to the turnitin.com system. (See Research Requirement)*

ENGLISH ELECTIVE COURSES: YEAR LONG

ELECTIVE COURSES	WKS	PDS	CR
Journalism/Newspaper Design (10-12)	36	daily	1
Multimedia Design Level I (10-12)	36	daily	1
Multimedia Design Level II (10-12)	36	daily	1
SAT Prep (with mathematics dept) 10, 11	36	daily	1
Sports in Literature (10-12)	36	daily	1
Yearbook Design (10-12)	36	daily	1

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<tr><td colspan="2">JOURNALISM/NEWSPAPER DESIGN</td><td colspan="2">Credit Value: 1.0</td></tr>
<tr><td colspan="2">Prerequisites: None</td><td colspan="2">Maximum Seats: 23</td></tr>
<tr><td>Duration:
☒Full Year
☐One Semester
☐Lab Course</td><td>Grade Level:
☐9th
☒10th
☒11th
☒12th</td><td>Graduation Obligation:
☐Required
☒Elective</td><td>Credit For:
☐English
☒Elective Course</td></tr>
<tr><td colspan="4">This course introduces students to all the facets of producing an online newspaper. Students study and implement reporting techniques and editorial skills using timely stories in an active and group oriented atmosphere. Students will become proficient with Word Press web platform, Adobe Photoshop, newspaper design, advertising, editing of written and visual aspects of the website. Students are responsible for producing a daily website that is a showcase for the entire district. Basics of newspaper style/writing/production will be taught and implemented with the production of the Highlands Rampages newspaper.</td></tr>
<tr><td colspan="2">MULTIMEDIA DESIGN 1</td><td colspan="2">Credit Value: 1.0</td></tr>
<tr><td colspan="2">Prerequisites: None</td><td colspan="2">Maximum Seats: 23</td></tr>
<tr><td>Duration:
☒Full Year
☐One Semester
☐Lab Course</td><td>Grade Level:
☒9th
☒10th
☒11th
☒12th</td><td>Graduation Obligation:
☐Required
☒Elective</td><td>Credit For:
☐English
☒Elective Course</td></tr>
<tr><td colspan="4">This course is an introductory course that works on the basic foundations of digital and multimedia design principals. Students will be introduced to the Adobe Creative Suite in order to work with various media. Students will work with Adobe Photoshop, Adobe Premier Pro, and Adobe After Effects. Students will work digital images as well as video media. By the end of the course, students will have a foundation in digital imagery as well as video production and editing. Some projects students will create include Photoshop images, original commercials, movie trailers, and original short movies. After completing the course, students can progress to the upper level Multimedia Design course.</td></tr>
</table>

MULTIMEDIA DESIGN 2		**Credit Value: 1.0**	
Prerequisite: Multimedia Design 1		*Maximum Seats:* 23	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐English ☒Elective Course
This course will teach students advanced photography, camera functions, video editing, media analysis, and filmmaking. Students will work in groups to write, shoot, and edit their own movie projects. Sample student projects during the year include PSAs, commercials, short films, and music videos. Selected films and/or clips are screened during class throughout the year to enhance discussions and projects. ***Prerequisite****: This is a follow up course for students who have taken Multimedia Design Level 1 or Communication Technology or have knowledge/familiarity with Adobe After-Effects and/or Adobe Premiere Pro.*			
SAT PREP		**Credit Value: 0.5 English and 0.5 Math**	
Prerequisites: None		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☒10th ☒11th ☐12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐English ☐Mathematics ☒Elective Course
The purpose of the SAT preparation class is to ready students to take the SAT exam. The verbal portion of the class will focus on familiarizing the students with the test composition, review relevant content to build skills along with strategies to assist student choosing between similar answers. This course includes initial and final testing to benchmark and establish growth and potential success on the test. The verbal portion of the course will review reading comprehension, rhetorical elements and usage and mechanics in writing. The mathematics portion of the course will study algebra, geometry, trigonometry, data, problem solving, and other advanced mathematics topics. Periodic testing will occur to monitor the understanding and development of skills. Additionally, the course will address college searches along with practice and preparation for essay writing and application. This portion of the course focuses more on awareness and investigation, and not as much assessment. The student will emerge prepared to take the SAT be ready to embark on the college application process.			

SPORTS LITERATURE		**Credit Value: 1.0**	
Prerequisites: None		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐English ☒Elective Course
This course will focus on the use of sports in literature. Students will read various short stories, novels and magazine/ news articles, as well as write their opinions, about several themes. Themes studied will include leadership and character, current trends, rivalries, definitions of success and failure, jinxes and fate, heroes, coaching ethics, etc.			

YEARBOOK PRODUCTION		**Credit Value: 1.0**	
Prerequisites: Teacher approval required		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐English ☒ Elective Course
Students interested in photography, journalism, and public relations will benefit from taking the yearbook production course. The *Aries* Yearbook is produced by this staff annually, and relies on students' dedication and promotion in order to be completed. Yearbook class is a production class that requires are small group of highly motivated and dedicated students. Students who work on the yearbook must be skilled in one or more of the following areas: graphic design, art, writing, sales, editing and photography. In addition to creating yearbook pages, staff members will also be required to attend after school activities and work on yearbook pages outside of class. Students interested in Yearbook are required to complete an application, take a writing and design skills test and provide three teacher recommendations. Additionally, students must be approved by the yearbook advisor and sign a work contract before joining the yearbook staff. Only students who a genuinely interested in the rigorous task of creating a yearbook should apply.			

ENGLISH ELECTIVE COURSES: SEMESTER LONG

COURSES	WKS	PDS	CR
Creative Writers at Work (9-12)	18	daily	0.5
Drama I (9-12)	18	daily	0.5
Drama II, III, IV (9-12)	18	daily	0.5
Ethical Dilemmas (9-12)	18	daily	0.5
Etymology I (Greek) (9-12)	18	daily	0.5
Etymology II (Latin) (9-12)	18	daily	0.5
Graphic Novels (10-12)	18	daily	0.5
Greatest Stories of All Time (9-12)	18	daily	0.5
Young Adult Literature (10-12)	18	daily	0.5

<table>
<tr><td colspan="2">CREATIVE WRITERS AT WORK</td><td colspan="2">Credit Value: 0.5</td></tr>
<tr><td colspan="2">Prerequisites: None</td><td colspan="2">Maximum Seats: 28</td></tr>
<tr><td>Duration:
☐Full Year
☒One Semester
☐Lab Course</td><td>Grade Level:
☒9th
☒10th
☒11th
☒12th</td><td>Graduation Obligation:
☐Required
☒Elective</td><td>Credit For:
☐English
☒Elective Course</td></tr>
<tr><td colspan="4">Do you like to write creatively but can’t find the time or the right inspiration to make your ideas come to life on the page? This introduction to creative writing gives you the chance to write something incredible. You will be encouraged to write both prose and poetry through a variety of stimulating in-class exercises and assignments. In addition, you will read excerpts from the best contemporary writing available and be taught how to imitate the key elements of style that make those words create an image on the page. Increase the power of your imagination and join Creative Writers at Work.</td></tr>
</table>

DRAMA I (Intro to theatre and acting)		**Credit Value: 0.5**	
Prerequisites: None		*Maximum Seats:* 28	
Duration: ☐Full Year ☒One Semester ☐Lab Course	Grade Level: ☒9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐English ☒ Elective Course
This semester-long course is designed to introduce the basics of acting and stage. This course is a performance-based class that will incorporate spatial awareness, parts of a stage, emotional and sensory recall, characterization, voice, theatre etiquette, and improvisation. It includes accent monologues, basic scene writing and performance, basic improvisation techniques, and voice and articulation studies. For the fall semester, a one-act play will be introduced, rehearsed, and presented in parts. Students will also have the opportunity to perform in FALL FOLLIES. Class time will be dedicated to honing individual and group acts and performances. This course will be supplemented with the DRAMA CLUB.			
ADVANCED DRAMA (Intro to theatre and acting)		**Credit Value: 0.5**	
Prerequisites: (prerequisite of DRAMA 1 & student demonstration/audition or instructor approval)		*Maximum Seats:* 28	
Duration: ☐Full Year ☒One Semester ☐Lab Course	Grade Level: ☒9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒ Elective	*Credit For:* ☐English ☒Elective Course
This semester-long course is designed to build upon the skills students were introduced to and developed in the basics of acting and stage. This course is a performance-based class designed to encourage active participation in the arts. Throughout the semester, students will combine performance, technical and management skills to create group productions. This semester will be devoted to theater production with advanced instruction in drama, music and movement. A public performance will be presented by all members of the class. Attendance is this performance is mandatory. Other focuses of the semester will be devoted to planning, selection, and technical aspects of a production and other theatre arts skills. The teaching approach provides opportunities for the students to work individual or to meet in small or large groups. Additional activities may include visitation by guest artists, participation in field trips to professional venues. Before registering for the course, students must demonstrate for an instructor their abilities with dialogue skills, voice or dance, along with a recommendation from a language arts or music teacher. A recommendation for registration will then be made. This course will be supplemented with the DRAMA CLUB.			

ETHICAL DILEMMAS		**Credit Value: 0.5**	
Prerequisites: None		*Maximum Seats:* 28	
Duration: ☐Full Year ☒One Semester ☐Lab Course	Grade Level: ☒9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐English ☒Elective Course
Do you like to debate? Do you think about the problems we face in our world and wonder what you would do if you were in someone else's shoes? This course gives you the chance to analyze and discuss all sides of various ethical dilemmas to help you consider your own beliefs on issues happening around the globe and on topics that affect all of us as human beings. You will get a "first steps" introduction to philosophy and the ideas that drive our morals in society, as well as to psychology and sociology to better understand what makes us tick as a species. Not only will we be working on improving our reading and writing skills through the various ethical dilemmas, we will be working on our critical thinking and argumentative skills as well.			
ETYMOLOGY 1 (GREEK)		**Credit Value: 0.5**	
Prerequisites: May be required for incoming 9th graders		*Maximum Seats:* 28	
Duration: ☐Full Year ☒One Semester ☐Lab Course	Grade Level: ☒9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐ Required ☒ Elective	*Credit For:* ☐ English ☒ Elective Course
Etymology is a language arts course studying the derivation of English words and word families from their roots in ancient and modern languages. This semester-long course is designed for students who wish to improve their vocabulary skills through an intense study of **Greek** roots and affixes and their association to the words and literature of today. Students will analyze the connotative and denotative meanings of words in a variety of contexts and exercises. Students will write about word history, patterns of language change, and word evolution through reports and presentations. Course work also includes question and vocabulary preparation that enables the student to prepare for state and national examinations, such as the ACT and the SAT and KEYSTONE.			

ETYMOLOGY 2 (LATIN)		**Credit Value: 0.5**	
Prerequisites: (prerequisite of passing ETYMOLOGY 1 with C or better)		*Maximum Seats:* 28	
Duration: ☐Full Year ☒One Semester ☐Lab Course	Grade Level: ☒9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐English ☒Elective Course
Etymology is a language arts course studying the derivation of English words and word families from their roots in ancient and modern languages. This semester-long course is designed for students who wish to improve their vocabulary skills through an intense study of **Latin** roots and affixes and their association to the words and literature of today. Students will analyze the connotative and denotative meanings of words in a variety of contexts and exercises. Students will write about word history, patterns of language change, and word evolution through reports and presentations. Course work also includes question and vocabulary preparation that enables the student to prepare for state and national examinations, such as the ACT and the SAT and KEYSTONE.			
GRAPHIC NOVELS		**Credit Value: 0.5**	
Prerequisites: None		*Maximum Seats:* 28	
Duration: ☐Full Year ☒One Semester ☐Lab Course	Grade Level: ☒9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐English ☒Elective Course
This semester-long course is designed to bring reading to life in an unconventional way through the use of graphic novels in the context of a standard English literature class. Students will study and practice reading and interpreting both the text and images of the graphic novels. The additional visual component, as compared to text-only novels, requires students to develop their skills in multiple literacies so that they can "read" and understand concepts presented in multiple mediums simultaneously. The course is designed using the Pennsylvania Academic and Common Core Standards. Students will read, analyze, interpret, respond to, evaluate and compare graphic novels orally, in writing and in presentations. Students will read texts such as *Persepolis* (living in the Islamic Revolution), *Maus* (WWII and Holocaust survivors) and *American-Born Chinese* (Chinese folktales and the lives of second-generation immigrants.) These graphic novels have cross-curricular connections to Art, Art History, World Cultures, Psychology, Sociology and World Languages, and also add to the multicultural diversity of the English curriculum. The course will encourage and increase student reading, creativity and analysis in challenging ways through easily-accessed texts relevant to students' interests.			

GREATEST STORIES OF ALL TIME		**Credit Value: 0.5**	
Prerequisites: None		*Maximum Seats:* 28	
Duration: ☐Full Year ☒One Semester ☐Lab Course	Grade Level: ☒9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐English ☒Elective Course
Do you like to be entertained? Do you love a good story but can't find the time to read every classic in the library? This course centers on popular stories of revenge, love, madness, and redemption from a variety of time periods that have withstood the test of time. This class is intended to make available a way to understand those classic stories in a way that will not have you sitting with your nose in a book for hours on end. Want to be familiar with the classics without spending the time to read every single one? This class is for you.			

YOUNG ADULT LITERATURE		**Credit Value: 0.5**	
Prerequisites: None		*Maximum Seats:* 28	
Duration: ☐Full Year ☒One Semester ☐Lab Course	Grade Level: ☒9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐English ☒Elective Course
This semester-long course is designed to increase the level of student reading, engagement with reading and in-depth analysis through the use of worthy Young Adult Literature (YA) works in the context of a standard English classroom. Students will closely examine YA novels to study and consider the important literary concepts found in works of the standard English curriculum. Research suggests that reading and analyzing YA literature serves as an excellent gateway to understanding and analyzing more difficult literary works. Students will read, analyze, interpret, respond to, evaluate and compare literary concepts in the novels orally, in writing and in presentations. Texts such as The *Absolutely True Diary of a Part-Time Indian*, *The Hunger Games*, *The Perks of Being a Wallflower* and *Chains* have cross-curricular connections to World Cultures, American History, Psychology and Sociology.			

***Research Requirement** **for All English Classes:** *All students in every English class / level will be responsible for completing the district's required research paper. This assignment is intended to help students continue to advance skills in all areas necessary to writing exemplary research papers, such as research, note taking, outlining, documentation and writing.*

SOCIAL STUDIES REQUIRED COURSES

One course per grade level

REQUIRED COURSES (4.0 CR TOTAL)	**WKS**	**PDS**	**CR**
Aca/Hon United States History (9)	36	daily	1
Aca/Hon World Cultures (10)	36	daily	1
Aca/AP US Government & Politics (11, 12)	18/36	daily	0.5/1
Aca/AP Economics (11, 12)	18/36	daily	0.5/1

UNITED STATES HISTORY 9		**Credit Value: 1.0**	
Prerequisites: None		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☒9th ☐10th ☐11th ☐12th	*Graduation Obligation:* ☒Required ☐Elective	*Credit For:* ☒Social Studies ☐Elective Courses
This one credit required course will focus on US History after the Civil War and Reconstruction. Students will examine the political, cultural, social, and economic history of the nation up through and including WWII. The course will integrate primary and secondary source documents with an emphasis on analysis, writing, and discussion.			

HONORS US HISTORY 9		**Credit Value: 1.0**	
Prerequisites: None		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☒9th ☐10th ☐11th ☐12th	*Graduation Obligation:* ☒Required ☐Elective	*Credit For:* ☒Social Studies ☐Elective Courses
This course will satisfy the United States History requirement. The course will focus on US History after the Civil War and Reconstruction and serve as a continuation of themes from United States History, grade 8. Students will utilize primary source documents, critical thinking skills, and evaluative writing at an accelerated pace with more in depth coverage to examine the political, cultural, social, and economic history of the nation up through and including WWII.			

WORLD CULTURES		**Credit Value: 1.0**	
Prerequisites: None		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☒10th ☐11th ☐12th	*Graduation Obligation:* ☒Required ☐Elective	*Credit For:* ☒Social Studies ☐Elective Courses
The World Cultures course is a required course that examines the diverse planet that we call home. Through an in depth investigation and analysis of many of the cultures around the globe, students will be able to learn about different groups, learn to respect and appreciate diversity, and draw conclusions about our future. Students will specifically investigate the people, events, conflicts, and customs of these diverse groups, past and present, and will be able to actively participate in discussions and debates concerning many universal topics. Students will also have the opportunity to critically read and evaluate, compose essays, conduct research for further analysis and research papers, and create projects to further enhance their learning and comprehension of the topics discussed in class. The students will truly gain a better understanding and appreciation for people who are not only different from them or grew up in a different culture, but their work will also help to foster in them an appreciation for diversity and the tolerance of people with a different perspective than their own.			
HONORS WORLD CULTURES		**Credit Value: 1.0**	
Prerequisites: None		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☒10th ☐11th ☐12th	*Graduation Obligation:* ☒Required ☐Elective	*Credit For:* ☒Social Studies ☐Elective Courses
This course will satisfy the World Cultures requirement. The Honors World Cultures course examines many different cultures from across the globe over the past few hundred years. Through an in depth investigation of the people, events, conflicts, and customs of these diverse groups, past and present, students are able to learn more about different groups, learn to respect and appreciate diversity, and draw conclusions and make assumptions about the future of our vast world. Students will have opportunities to critically read, evaluate, and compose written assessments that allow them to truly discover the differences that exist across the planet. They will also be able to discuss, debate, create projects, conduct research, and write papers that further enhance their study of these numerous cultures. Only through these many forms of analysis will the students be able to truly grasp the cultures, their influences, and what the future may hold for themselves and for their peers around the world.			

ACADEMIC US GOVERNMENT		**Credit Value: 0 .5**	
Prerequisites: None		*Maximum Seats:* 28	
Duration: ☐Full Year ☒One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☒Required ☐Elective	*Credit For:* ☒Social Studies ☐Elective Courses
This semester course is a requirement for graduation and will count as a half credit towards the four required Social Studies credits. The course will provide an overview of the structure of the US government and the function of the branches of government. Special emphasis will be placed on founding documents such as the Constitution. Both historic and current events will be used as examples of the functions of government. (Grades 11 and 12 only)			
AP US GOVNT & POLITICS		**Credit Value: 1**	
Prerequisites: None		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☒Required ☐Elective	*Credit For:* ☒Social Studies ☐Elective Courses
This course introduces the student to the major American political institutions, the way in which the houses of Congress function to create legislation, and the Presidency while also analyzing civil liberties, constitutional rights, the policy making powers of Congress, foreign policy both historically and currently, economic inequality and social issues, the role of political parties, the electoral process and the political role of propaganda and the media. (Grades 11 and 12 only)			
ACADEMIC ECONOMICS		**Credit Value: 0 .5**	
Prerequisites: None		*Maximum Seats:* 28	
Duration: ☐Full Year ☒One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☒Required ☐Elective	*Credit For:* ☒Social Studies ☐Elective Courses
This semester course is a requirement for graduation and will count as a half credit towards the four required Social Studies credits. This course will take a theoretical and policy look at the Macro economy which will include but will not be limited to government spending, taxation, banking, and money as well as discuss contemporary issues through the use of periodicals and other primary sources. The course will use examples of the Macro concepts as related to personal finance as appropriate. (Grades 11 and 12 only)			

<table>
<tr><td colspan="2">AP ECONOMICS</td><td colspan="2">Credit Value: 1</td></tr>
<tr><td colspan="2">Prerequisites: None</td><td colspan="2">Maximum Seats: 28</td></tr>
<tr><td>Duration:
☒Full Year
☐One Semester
☐Lab Course</td><td>Grade Level:
☐9th
☐10th
☒11th
☒12th</td><td>Graduation Obligation:
☒Required
☐Elective</td><td>Credit For:
☒Social Studies
☐Elective Courses</td></tr>
<tr><td colspan="4">This year course is taught on a college level and is intended for motivated students with an extreme interest in the economy and how it works in the United States. Students need to possess strong analytical skills in order to apply acquired knowledge to different situations. A theoretical introduction to supply and demand, consumer behavior, market structures, and pricing will be offered. A policy application to government spending and taxation will also be included but will not be part of the CIHS aspect the course. The course will use examples of the Micro concepts as related to personal finance as appropriate. Students may opt to earn 3 college credits through Robert Morris University. This course will count as a full credit towards the four required Social Studies credits and may replace Contemporary Problems / Academic Economics as a graduation requirement. (Grades 11 and 12 only)</td></tr>
</table>

SOCIAL STUDIES ELECTIVES: YEAR LONG

ELECTIVE COURSES (YEAR)	WKS	PDS	CR
AP United States History (10-12)	36	daily	1
CHS European History (Grades 11-12)	36	daily	1

<table>
<tr><td colspan="2">AP US HISTORY</td><td colspan="2">Credit Value: 1</td></tr>
<tr><td colspan="2">Prerequisites: None</td><td colspan="2">Maximum Seats: 28</td></tr>
<tr><td>Duration:
☒Full Year
☐One Semester
☐Lab Course</td><td>Grade Level:
☐9th
☒10th
☒11th
☒12th</td><td>Graduation Obligation:
☐Required
☒Elective</td><td>Credit For:
☒Social Studies
☐Elective Courses</td></tr>
<tr><td colspan="4">This year long course fulfills the US History requirement. The course begins with early American colonization and continues up through the present. Strong reading and writing skills, along with a willingness to devote considerable time to homework and study are necessary to succeed. Emphasis is placed on critical thinking skills, evaluative writing and interpretation of primary sources. (Grades 10-12)</td></tr>
<tr><td colspan="2">AP EUROPEAN HISTORY</td><td colspan="2">Credit Value: 1</td></tr>
<tr><td colspan="2">Prerequisites: None</td><td colspan="2">Maximum Seats: 28</td></tr>
<tr><td>Duration:
☒Full Year
☐One Semester
☐Lab Course</td><td>Grade Level:
☐9th
☐10th
☒11th
☒12th</td><td>Graduation Obligation:
☐Required
☒Elective</td><td>Credit For:
☒Social Studies
☐Elective Courses</td></tr>
<tr><td colspan="4">This year long course fulfills one the required four Social Studies credits and explores European history. Students will investigate the history of Europe from 1450 to the present and delve into the four major areas of development in the European world including: cultural, economic, political and social ideals. We will analyze in a chronological concept how major themes such as poverty and prosperity, institutions of power, Europe's interaction with the world, the rise and fall of states, and the individual's role in society created Europe as we know it today while making connections in history across time and place. (Grades 11 and 12 only)</td></tr>
</table>

SOCIAL STUDIES ELECTIVES: SEMESTER

ELECTIVE COURSES (SEMESTER)	WKS	PDS	CR
Civil Rights Movement	18	daily	0.5
Constitutional Law (11-12)	18	daily	0.5
Holocaust and Genocide Studies (11-12)	18	daily	0.5
Modern American History (11-12)	18	daily	0.5
Introduction to Psychology (11-12)	18	daily	0.5
CHS Introduction to Psychology (11-12)	18	daily	0.5
Introduction to Sociology (11-12)	18	daily	0.5
CHS Introduction to Sociology (11-12)	18	daily	0.5

CIVIL RIGHTS MOVEMENT		**Credit Value: 0.5**	
Prerequisites: None		*Maximum Seats:* 28	
Duration: ☐Full Year ☒One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☒Social Studies ☒Elective Courses
This semester course fulfills a half credit of the required four Social Studies credits. The course will examine the US Civil Rights Movement in the twentieth century. The course begins by exploring the origins of the movement during the Progressive Era and then tracing the movement through WWI, the New Deal, WWII, and the post war era. The course will give particular attention to the Movement in the 1950s and 1960s, including how the Movement fit into the larger context of American society and politics and its intersection with other mid-20th century movements. (Grades 11 and 12 only)			
CONSTITUTIONAL LAW		**Credit Value: 0.5**	
Prerequisites: None		*Maximum Seats:* 28	
Duration: ☐Full Year ☒One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☒Social Studies ☒Elective Courses
This semester course fulfills a half credit of the required four Social Studies credits. Throughout this semester course, we will examine the behavior of American citizens and the responsibilities of US Supreme Court Justices as we interact with the judicial branch throughout a series of case studies. These studies include, but are not limited to, famous cases impacting the Bill of Rights and the other 17 Amendments. Current events will also play a major role in the course as our Constitution continues to grow and mold itself to reflect the culture of "modern day" America. Students will write and report their own opinions on cases and act as Justices would behave. Their ability to role play will be an integral part of the course as they will all have the opportunity to listen to and rule on a Supreme Court case presented by their classmates. (Grades 11 and 12 only)			

HOLOCAUST & GENOCIDE		**Credit Value: 0.5**	
Prerequisites: None		*Maximum Seats:* 28	
Duration: ☐Full Year ☒One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☒Social Studies ☒Electives Course
Holocaust and Genocide Studies course is a semester long elective course that fulfills a half credit of the required Social Studies credits. The course focuses on the Holocaust, its contemporary significance, and the broader phenomenon of genocide in modern times. Emphasis is placed on critical thinking, analysis, and the study of primary sources. Students will be required to read outside of class as well as express their analysis and thinking through writing and discussion. Parent permission is required due to the nature of course materials. (Grades 11 and 12 only).			
MODERN AMERICAN HISTORY		**Credit Value: 0.5**	
Prerequisites: None		*Maximum Seats:* 28	
Duration: ☐Full Year ☒One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☒Social Studies ☒Electives Course
This semester course fulfills a half credit of the required four Social Studies credits and focuses on the United States after WWII. The course will examine the Cold War and the rise of the United States as a global superpower, including major conflicts such as the Korean War, Vietnam War, and Desert Storm and domestic and foreign issues faced by the United States after 1945. (Grades 11 and 12 only)			

INTRO TO PSYCHOLOGY		**Credit Value: 0.5**	
Prerequisites: None		*Maximum Seats:* 28	
Duration: ☐Full Year ☒One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☒Social Studies ☒Electives Course
This course is a semester course that fulfills a half credit of the required four Social Studies credits. The course is designed to provide an introduction to the study of Psychology and examines many of the theories and perspectives of the field throughout history. Through a study of human behavior and choices, we will take a look at how individual differences and the association of others affect the lives of people. Students will specifically examine psychological concepts such as methods of observation, cognitive factors of learning, stages of memory, influences and measuring intelligence, human development, psychological disorders, types of personalities, and many various perspectives (theories and theorists). Finally, there will be an extra emphasis placed on developing critical thinking skills, developing a critical position and students will be expected to gain these skills through written assignments, project design, and classroom discussions. (Grades 11 and 12 only)			
CHS INTRO TO PSYCHOLOGY		**Credit Value: 0.5**	
Prerequisites: None		*Maximum Seats:* 28	
Duration: ☐Full Year ☒One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☒Social Studies ☒Electives Course
This course is a semester course that fulfills a half credit of the required four Social Studies credits. It also is a course that students may choose to take for 3 college credits through Seton Hill University. The course is designed to provide an introduction to the study of Psychology. Through the study of human behavior, we will take a look at how individual differences, abilities, preference and choices affect people. Through discussions, debates, concept analysis, case studies, extensive research, written composition and project design, students will be able to develop their own opinions and ideas concerning human nature. Students will also examine and be able to explain several different perspectives and theories throughout the semester. (Grades 11 and 12 only)			

INTRO TO SOCIOLOGY		**Credit Value: 0.5**	
Prerequisites: None		*Maximum Seats:* 28	
Duration: ☐Full Year ☒One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☒Social Studies ☒Electives Course
This course is a semester course that fulfills a half credit of the required four Social Studies credits. The course is designed to provide an introduction to the study of Sociology and examines many of the theories and perspectives of the field throughout history. Students will analyze sociological concepts such as cultural diversity, social change and control, agents of socialization, social stratification, social institutions, urban development, deviance, and crime. Finally, there will be an extra emphasis placed on developing critical thinking skills, developing a critical position and students will be expected to gain these skills through written assignments, project design, and classroom discussions. (Grades 11 and 12 only)			

CHS INTRO TO SOCIOLOGY		**Credit Value: 0.5**	
Prerequisites: None		*Maximum Seats:* 28	
Duration: ☐Full Year ☒One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☒Social Studies ☒Electives Course
This course is a semester course that fulfills a half credit of the required four Social Studies credits. It also is a course that students may choose to take for 3 college credits through Seton Hill University. The course is designed to provide an introduction to the study of Sociology. Students will take a look at how social relationships and group associations affect people and different societies around the world. Through discussions, debates, concept analysis, case studies, extensive research, written composition and project design, students will be able to develop their own opinions and ideas concerning human nature and how people are ultimately influenced by the people around them and society at large. (Grades 11 and 12 only)			

MATHEMATICS REQUIRED COURSES

One course per grade level

REQUIRED COURSES (4 CR TOTAL)	WKS	PDS	CR
Academic Algebra IA (9)	36	daily	1
Academic Algebra IB (9)	36	daily	1
Honors Geometry (9)	36	daily	1
Academic Geometry A (10)	36	daily	1
Academic Geometry (9-11)	36	daily	1
Honors Algebra II (9-11)	36	daily	1
Academic Algebra II (9-12)	36	daily	1
Honors Pre-calculus (10-12)	36	daily	1
Academic Pre-calculus (11-12)	36	daily	1
AP/CHS Calculus (10-12)	36	daily	1
CHS Calculus 2 (11-12)	36	daily	1
CHS Business Calculus (11-12)	36	daily	1
Extd Elem of Algebra & Basic Prob & Stats (12)	36	daily	1
CHS Probability and Statistics (11-12)	36	daily	1

<table>
<tr><td colspan="2">ACADEMIC ALGEBRA IA</td><td colspan="2">Credit Value: 1</td></tr>
<tr><td colspan="2">Prerequisites: None</td><td colspan="2">Maximum Seats: 28</td></tr>
<tr><td>Duration:
☒Full Year
☐One Semester
☐Lab Course</td><td>Grade Level:
☒9th
☐10th
☐11th
☐12th</td><td>Graduation Obligation:
☒Required
☐Elective</td><td>Credit For:
☒Mathematics
☐Elective Courses</td></tr>
<tr><td colspan="4">This course emphasizes algebraic language, structure, concepts and skills. Major topics include algebraic properties and the real number system, functions and their graphs, linear equations and inequalities, linear modeling, systems of linear equations and inequalities, and real world applications. This is a Keystone Exam required course.</td></tr>
</table>

ACADEMIC ALGEBRA IB		**Credit Value: 1**	
Prerequisites: Alg IA at 70%		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☒9th ☒10th ☐11th ☐12th	*Graduation Obligation:* ☒Required ☐Elective	*Credit For:* ☒Mathematics ☐Elective Courses
This course is the continuation of Algebra IA which is taught in Grades 8 and 9. Topics of study include systems of equations, polynomials, factoring, exponents and radicals. Enrollment in this course is dependent on successful completion of Algebra IA with a 70% or greater or teacher recommendation. This is a Keystone Exam required course.			
HONORS GEOMETRY		**Credit Value: 1**	
Prerequisites: Hon Alg I, 70%		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☒9th ☒10th ☐11th ☐12th	*Graduation Obligation:* ☒Required ☐Elective	*Credit For:* ☒Mathematics ☐Elective Courses
Prerequisite completion of Honors Algebra I with a 70% or greater or teacher recommendation. This course is designed to develop and promote student reasoning and problem solving involving geometric concepts and properties. Topics of study will include deductive reasoning using points, lines, and planes; segments, angles, and triangles; quadrilaterals; polygons; polyhedrons and circles. Algebraic concepts are integrated with the geometric concepts throughout the course. Topics are similar to Academic Geometry, but are covered at an accelerated pace and in more depth.			
ACADEMIC GEOMETRY A		**Credit Value: 1**	
Prerequisites: Alg IB		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☒9th ☒10th ☐11th ☐12th	*Graduation Obligation:* ☒Required ☐Elective	*Credit For:* ☒Mathematics ☐Elective Courses
Prerequisite completion of Academic Algebra IB and teacher recommendation. This course is designed to develop and promote student reasoning and problem solving involving geometric concepts and properties. Topics of study include deductive reasoning using points, lines, and planes; segments, angles, and triangles. Algebraic concepts are integrated with the geometric concepts throughout the course.			

ACADEMIC GEOMETRY		**Credit Value: 1**	
Prerequisites: Alg IB at 70%		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☒9th ☒10th ☐11th ☐12th	*Graduation Obligation:* ☒Required ☐Elective	*Credit For:* ☒Mathematics ☐Elective Courses
Prerequisite completion of Academic Algebra IB with an average of 70% or higher or teacher recommendation. This course is designed to develop and promote student reasoning and problem solving involving geometric concepts and properties. Topics of study include deductive reasoning using points, lines and planes; segments, angles and triangles; quadrilaterals; polygons; polyhedrons and circles. Algebraic concepts are integrated with the geometric concepts throughout the course.			

HONORS ALGEBRA II		**Credit Value: 1**	
Prerequisites: Hon Alg I, Hon Geo at 70%,		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☒Required ☐Elective	*Credit For:* ☒Mathematics ☐Elective Courses
Prerequisite completion of Honors Algebra I and Honors Geometry with an average of 70% or higher or teacher recommendation. This course will focus on the extension of the number system to a complex field, elementary functions using multiple representations (graphical, numerical, algebraic and verbal) including linear, quadratic, polynomial, rational, exponential, and logarithmic functions, linear systems and matrices, probability and sequences and series. Problem solving will be emphasized throughout the course. Topics are similar to Aca Algebra II, but are covered at an accelerated pace and in more depth.			

ACADEMIC ALGEBRA II		**Credit Value: 1**	
Prerequisites: Aca Alg I, Aca Geo at 70%, rec		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☒Required ☐Elective	*Credit For:* ☒Mathematics ☐Elective Courses
Prerequisite completion of Academic Algebra I and Academic Geometry with an average of 70% or higher or teacher recommendation. This course will focus on the extension of the number system to a complex field, elementary functions using multiple representations (graphical, numerical, algebraic and verbal) including linear, quadratic, polynomial, rational, exponential, and logarithmic functions, linear systems and matrices, probability and sequences and series. Problem solving will be emphasized throughout the course.			
HONORS PRE-CALCULUS		**Credit Value: 1**	
Prerequisites: Hon Alg II at 75%, rec		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☒Required ☐Elective	*Credit For:* ☒Mathematics ☐Elective Courses
Prerequisite completion of Honors Algebra II with an average of 75% or higher or teacher recommendation. This course covers selected topics in Advanced Algebra, Trigonometry and Analytical Geometry in depth. Students must be willing to spend additional preparation time for this course. Topics are similar to Academic Pre-calculus, but are covered at an accelerated pace and in more depth.			
ACADEMIC PRE-CALCULUS		**Credit Value: 1**	
Prerequisites: Aca Alg II		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☒Required ☐Elective	*Credit For:* ☒Mathematics ☐Elective Courses
Prerequisite completion of Academic Algebra II. This course covers topics in Advanced Algebra, Trigonometry and Analytical Geometry. Completion of this course provides a solid base to continue with Calculus at the college level.			

AP CALCULUS		**Credit Value: 1**	
Prerequisites: Hon Pre-calc at 75%, rec		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☒Required ☐Elective	*Credit For:* ☒Mathematics ☐Elective Courses
Prerequisite completion of Honors Pre-calculus with an average of 75% or higher or teacher recommendation. This course covers theorems on limits, derivatives, integrals, applications of integration, transcendental functions and parametric equations. This course also requires extra preparation times. It is recommended that students enroll in the 'College in High School' program through the University of Pittsburgh to earn college credit that may be applied to most colleges or universities, or that students take the AP Calculus exam offered by the National College Board. **Note:** Students must take an online placement test and meet University of Pittsburgh required scores to enroll and be eligible to earn college credit.			
CHS CALCULUS II		**Credit Value: 1**	
Prerequisites: AP Calc at 75%, rec		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☒Required ☐Elective	*Credit For:* ☒Mathematics ☐Elective Courses
Prerequisite: Successful completion of Advanced Placement Calculus with an average of 75% or higher or teacher recommendation. This course continues the study of integration (substitution rules, partial fractions, improper integrals, areas between curves, applications to physics), vectors, parametric & polar curves, sequences and series, and differential equations. This course requires extra preparation time. It is recommended that students enroll in the 'College in High School' program through the University of Pittsburgh to earn college credit that may be applied to most colleges or universities, or that students take the National College Board's AP Calculus exam. **Note:** Students must take an online placement test and meet University of Pittsburgh required scores to enroll and be eligible to earn college credit.			

CHS BUSINESS CALCULUS		**Credit Value: 1**	
Prerequisites: Hon Pre-calc at 75%, rec		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☒Required ☐Elective	*Credit For:* ☒Mathematics ☐Elective Courses
Prerequisite completion of Honors Pre-calculus with an average of 75% or higher or teacher recommendation. This course is an introduction to calculus for students interested in business, economics and other social sciences. Topics covered include derivatives, applications of derivatives, exponential and logarithmic functions and integration. Application of concepts is stressed throughout the course. It is recommended that students enroll in the 'College in High School' program through the University of Pittsburgh to earn college credit. **Note:** Students must take an online placement test and meet University of Pittsburgh required scores to enroll and be eligible to earn credit.			
EXTENDED ELEMENTS OF ALGEBRA & BASIC PROBABILITY AND STATISTICS		**Credit Value: 1**	
Prerequisites: Aca Alg IB		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☐ 11th ☒12th	*Graduation Obligation:* ☒Required ☐Elective	*Credit For:* ☒Mathematics ☐Elective Courses
Prerequisite completion of Academic Algebra IB. This course covers topics of Algebra 1 (Keystone Exam specific) and Algebra 2 for review and reinforcement as well as methods of descriptive statistics and basic inferential statistics. Topics will include data collection, displaying and summarizing data, probability rules, confidence intervals, and fundamentals of hypothesis testing. Part of the Keystone senior mathematics project will be completed during this course.			

CHS PROBABILITY & STATISTICS		**Credit Value: 1**	
Prerequisites: Pre-calc, rec		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☒Required ☐Elective	*Credit For:* ☒Mathematics ☐Elective Courses
Prerequisite: Completion of or concurrent enrollment in Academic or Honors Pre-calculus or teacher recommendation. This elective course covers methods of descriptive and inferential statistics. Topics include data collection and description, hypothesis testing, correlation and regression, and the analysis of variance and contingency tables. Through the University of Pittsburgh's 'College in High School' program, students may choose to earn college credit that may be applied to most colleges or universities.			

MATHEMATICS ELECTIVE COURSES: YEAR LONG

ELECTIVE COURSES (YEAR)	**WKS**	**PDS**	**CR**
Applied Mathematics (12)	36	daily	1
History of Math (10-12)	36	daily	1
CHS Intro to Programming (10-12)	36	daily	1
Game Making (10-12)	36	daily	1
SAT Prep Class (Shared with ELA) (10, 11)	36	daily	0.5

APPLIED MATHEMATICS (Oberg course)		**Credit Value: 1**	
Prerequisites: JAA only		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☒Required ☐Elective	*Credit For:* ☒Mathematics ☐Elective Courses
This course is exclusive to JAA program participants. This course is designed to apply principals of algebra, geometry and trigonometry. Topics of study will include algebraic expressions, equations, systems of equations, problem solving techniques for word problems; geometric principles, solution of triangles; polygons, angle relationships in circles; and trigonometric functions, inverse trigonometric functions, half and double angle formulas. Completion of this course provides a solid base to continue in the fields of metalworking and drafting trades.			

HISTORY OF MATH		**Credit Value: 1**	
Prerequisites: Geometry		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☒Mathematics ☐Elective Courses
Prerequisite: Completion of Geometry. This course covers the development of numbers and mathematical areas of study through time, along with the men and women who shaped these accepted ideas of today's mathematics. While an elective credit is awarded for successful completion of this course, it does NOT replace a mathematics class as a required credit for graduation.			
CHS INTRODUCTION TO PROGRAMMING		**Credit Value: 1**	
Prerequisites: Game Making		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☒Mathematics ☐Elective Courses
Prerequisite completion of Algebra 1B with an average of 75% or above or teacher recommendation. This is a first course in computer science. The objectives of this course are to use the computer in an interactive environment to analyze problems, to develop algorithms, to learn the Java language, to design code and to document programs using techniques of good programming. The following are some of the topics covered in this course: programming styles, variables and constants, decision statements, loops, arrays, strings, simple sorting, form design, event-driven paradigm, reading and writing files. It is recommended that students enroll in the 'College in High School' program through the University of Pittsburgh to earn college credit.			

GAME MAKING		**Credit Value: 1**	
Prerequisites: None		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☒9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☒Mathematics ☐Elective Courses
Students will learn the basics of programming without the tedious process of writing code. Students will use the combination of tutorials and direct instruction to produce games. Class will be centered on four educational software environments: Scratch, Alice, Greenfoot, and YoYo Game's GameMaker Studio. This class acts as the prerequisite to CHS INTRODUCTION TO PROGRAMMING.			
SAT PREP		**Credit Value: 0.5 English and 0.5 Math**	
Prerequisites: None		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☒10th ☒11th ☐12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐English ☐Mathematics ☒Elective Course
The purpose of the SAT preparation class is to ready students to take the SAT exam. The verbal portion of the class will focus on familiarizing the students with the test composition, review relevant content to build skills along with strategies to assist student choosing between similar answers. This course includes initial and final testing to benchmark and establish growth and potential success on the test. The verbal portion of the course will review reading comprehension, rhetorical elements and usage and mechanics in writing. The mathematics portion of the course will study algebra, geometry, trigonometry, data, problem solving, and other advanced mathematics topics. Periodic testing will occur to monitor the understanding and development of skills. Additionally, the course will address college searches along with practice and preparation for essay writing and application. This portion of the course focuses more on awareness and investigation, and not as much assessment. The student will emerge prepared to take the SAT be ready to embark on the college application process.			

MATHEMATICS ELECTIVES: SEMESTER

ELECTIVE COURSES (SEMESTER)	WKS	PDS	CR
Math Study Skills	18	daily	0.5
Computer Applications (9-12)	18	daily	0.5
Advanced Computer Applications (9-12)	18	daily	0.5

<table>
<tr><td colspan="2">MATH STUDY SKILLS</td><td colspan="2">Credit Value: 0.5</td></tr>
<tr><td colspan="2">Prerequisites: Administrative rec</td><td colspan="2">Maximum Seats: 28</td></tr>
<tr><td>Duration:
☐Full Year
☒One Semester
☐Lab Course</td><td>Grade Level:
☐9th
☐10th
☒11th
☒12th</td><td>Graduation Obligation:
☐Required
☒Elective</td><td>Credit For:
☒Mathematics
☐Elective Courses</td></tr>
<tr><td colspan="4">By administrative placement, students will be provided standardized test preparation as well as additional support for the content taught in their current mathematics course. While an elective credit is awarded for successful completion of this course, it does NOT replace a mathematics class as one of the mathematics credits required for graduation. Students may be identified and placed in this course based on State/District assessments and teacher recommendations.</td></tr>
<tr><td colspan="2">COMPUTER APPLICATIONS</td><td colspan="2">Credit Value: 0.5</td></tr>
<tr><td colspan="2">Prerequisites: Teacher rec</td><td colspan="2">Maximum Seats: 28</td></tr>
<tr><td>Duration:
☐Full Year
☒One Semester
☐Lab Course</td><td>Grade Level:
☒9th
☒10th
☒11th
☒12th</td><td>Graduation Obligation:
☐Required
☒Elective</td><td>Credit For:
☐English
☐Social Studies
☒Mathematics
☐Science
☐Physical Education
☐Elective Courses
☐Arts/Humanities</td></tr>
<tr><td colspan="4">In this semester long course, students will explore concepts and applications of Microsoft Word, Excel and PowerPoint. Word applications will include preparing and formatting letters and research papers, performing mail merge, tabulations, tables, and other features as time allows. Excel applications include using formulas and functions for calculations, creating data displays, and using multi-worksheet workbooks. PowerPoint topics will include embedding objects from other applications, creating continuous run presentations, and cross-curricular exploration. Students will be required to prepare performance projects incorporating the concepts learned as well as using data from other Microsoft Office applications. Google Apps, Cloud Storage, and other helpful educational software, apps, and websites as well as Digital citizenship will also be covered in this course.</td></tr>
</table>

<table>
<tr><td colspan="2">ADVANCED COMPUTER APPLICATIONS</td><td colspan="2">Credit Value: 0.5</td></tr>
<tr><td colspan="2">Prerequisites: Comp App</td><td colspan="2">Maximum Seats: 28</td></tr>
<tr><td>Duration:
☐Full Year
☒One Semester
☐Lab Course</td><td>Grade Level:
☒9th
☒10th
☒11th
☒12th</td><td>Graduation Obligation:
☐Required
☒Elective</td><td>Credit For:
☒Mathematics
☐Elective Courses</td></tr>
<tr><td colspan="4">In this semester long course, students will explore the advanced features of Excel such as complex formulas, Pivot tables, Pivot charts, and embedding and linking objects. Students will also be introduced to the components of a Microsoft Access database. Topics included are designing and creating tables, using existing databases to find and display data, using queries effectively, designing forms and reports.</td></tr>
</table>

SCIENCE DEPARTMENT

Course Listing

REQUIRED COURSES (4 CR TOTAL)	GRADE	WKS	PDS	CREDITS
Honors Biology	9	36	8	1.3
Academic Biology	9	36	6	1
Concepts of Biology	9	36	6	1
Honors Chemistry	10	36	8	1.3
Academic Chemistry	10	36	8	1.3
Concepts of Chemistry	10	36	6	1
Honors Physics	11-12	36	8	1.3
Academic Physics	11-12	36	8	1.3
Environmental Science	11	36	6	1
Concepts of Environmental Science	11	36	6	1
Honors Biology II	11-12	36	6	1
College in High School Biology	11-12	36	8	1.3
AP Chemistry	11-12	36	8	1.3
College in High School/AP Physics	12	36	8	1.3
Anatomy and Physiology	12	36	6	1
Earth and Space	11-12	36	6	1
Geology and Planetary Science	12	36	6	1
Introduction to Engineering	12	36	6	1
Natural Res and Pro Technology	12	36	6	1
Natural Disasters & Env Issues	12	36	6	1
Metrology	12	36	6	1
JAA Introduction to Machining Lab	12	36	2	0.3

SCIENCE DEPARTMENT REQUIRED COURSES

One course per grade level

<table>
<tr><td colspan="2">HONORS BIOLOGY</td><td colspan="2">Credit Value: 1</td></tr>
<tr><td colspan="2">Prerequisites:</td><td colspan="2">Maximum Seats: 24</td></tr>
<tr><td>Duration:
☒Full Year
☐One Semester
☐Lab Course</td><td>Grade Level:
☒9th
☐10th
☐11th
☐12th</td><td>Graduation Obligation:
☒Required
☐Elective</td><td>Credit For:
☒Science
☐Elective Courses</td></tr>
<tr><td colspan="4">A course required for all 9th grade students who are enrolled in both the honors science and math programs. These students are chosen during the 2nd semester of 8th grade on the basis of their 8th grade teacher recommendations, grade point average, and standardized test scores. Students must be in the honors math program. The course will focus on ecology, cellular biology, molecular genetics, Mendelian genetics, photosynthesis and cellular respiration, energy and enzymes, evolution, taxonomy, microbiology (bacteria and viruses) and comparative anatomy and physiology. Class instruction will be based on lecture, lab and individual or group projects/presentations. Students are required to keep a three-ring notebook. This course will be taught at a faster pace, more in-depth, and requires two additional lab periods per week than Academic Biology.</td></tr>
</table>

ACADEMIC BIOLOGY		**Credit Value: 1**	
Prerequisites:		Maximum Seats: 24	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☒9th ☒10th ☐11th ☐12th	Graduation Obligation: ☒Required ☐Elective	Credit For: ☒Science ☐Elective Courses
A course required for academic-level 9th grade students or students who excelled in Applied Science. The course will focus on ecology, cellular biology, molecular genetics, Mendelian genetics, photosynthesis and cellular respiration, energy and enzymes, evolution, taxonomy, and comparative anatomy and physiology. Class instruction will be based on lecture, labs and individual or group projects/presentations. Students are required to keep a three-ring notebook.			

CONCEPTS OF BIOLOGY		**Credit Value: 1**	
Prerequisites: Applied Science		Maximum Seats: 20	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☒10th ☐11th ☐12th	Graduation Obligation: ☒Required ☐Elective	Credit For: ☒Science ☐Elective Courses
A course designed for 10th grade students who had Applied Science in 9th grade. This course will have a maximum of 15 students to encourage academic growth in a small group environment. The curriculum and classwork will be modified and adapted from the Academic Biology Class. Course focus will focus on ecology, cellular biology, molecular genetics, Mendelian genetics, photosynthesis and cellular respiration, energy, enzymes, evolution, taxonomy, and comparative anatomy and physiology.			

HONORS CHEMISTRY		**Credit Value: 1.3**	
Prerequisites: Honors Biology, Geometry		Maximum Seats: 24	
Duration: ☐Full Year ☐One Semester ☒Lab Course	Grade Level: ☐9th ☒10th ☒11th ☐12th	Graduation Obligation: ☒Required ☐Elective	Credit For: ☒Science ☐Elective Courses
A course required for all students who have successfully completed geometry and Honors Biology. This course will be taught at a faster and more in-depth pace than Academic Chemistry. Emphasis is on lab experiences, proper analysis of results, cooperative problem solving skills, atomic structure, molar relationships, thermochemistry, formula writing, reaction prediction, bonding, gas laws, and acids. Students are expected to maintain a three-ring notebook and provide both a scientific calculator and department approved safety glasses.			

ACADEMIC CHEMISTRY		**Credit Value: 1.3**	
Prerequisites: Biology		Maximum Seats: 24	
Duration: ☐Full Year ☐One Semester ☒Lab Course	Grade Level: ☐9th ☒10th ☒11th ☒12th	Graduation Obligation: ☒Required ☐Elective	Credit For: ☒Science ☐Elective Courses
A required course for students in the academic program who have successfully completed Academic Biology. Lab experiences are a significant part of this class but less intense than Honors Chemistry. Topics covered are: Matter classification, atomic theory, periodic table, electron placement, formula writing, identifying reactions, the Mole concept, stoichiometry, acid/base reactions and gas laws. Students are required to keep a three-ring notebook and provide department approved safety glasses.			

CONCEPTS OF CHEMISTRY		**Credit Value: 1**	
Prerequisites: Biology/Concepts of Biology		Maximum Seats: 24	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☒10th ☒11th ☒12th	Graduation Obligation: ☒Required ☐Elective	Credit For: ☒Science ☐Elective Courses
A required chemistry course for students who have successfully completed a Biology course and have scheduling constrictions or who have academic needs based on teacher recommendation. The presentation of the content is fluid and dictated by student needs. Topics covered are: matter classification, atomic theory, periodic table, electron placement, formula writing, identifying reactions, the mole concept, stoichiometry, acid/base reactions and gas laws. Students are required to keep a three-ring notebook and provide department approved safety glasses.			

HONORS PHYSICS		**Credit Value: 1.3**	
Prerequisites: Honors Chemistry		Maximum Seats: 24	
Duration: ☐Full Year ☐One Semester ☒Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	Graduation Obligation: ☒Required ☐Elective	Credit For: ☒Science ☐Elective Courses
A course required for all 11th grade students who are in both the honors science and math programs. Students must have successfully completed Honors Chemistry. Emphasizes extensive lab experiences, proper interpretation and presentation of results, quantitative problem-solving skills, mechanics and dynamics, energy and heat, waves and sound, optics, electricity and magnetism. Students must keep a three-ring notebook and lab notebook. A TI-83 plus graphing calculator is highly recommended. This course moves at a faster pace and at a more in-depth level than Academic Physics.			

ACADEMIC PHYSICS		**Credit Value: 1.3**	
Prerequisites: Chemistry		Maximum Seats: 24	
Duration: ☐Full Year ☐One Semester ☒Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	Graduation Obligation: ☐Required ☒Elective	Credit For: ☒Science ☐Elective Courses
An elective course for 11th-12th grade students in the academic program who have successfully completed Academic Biology and Academic/Honors Chemistry. Emphasis is on extensive lab experiences, proper interpretation and presentation of results, quantitative problem-solving skills, mechanics and dynamics, energy and heat, waves and sound, optics and electricity. Students are required to keep a three-ring notebook and a lab notebook. A TI-83 plus graphing calculator would be helpful.			
ENVIRONMENTAL SCIENCE		**Credit Value: 1**	
Prerequisites: Chemistry		Maximum Seats: 24	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	Graduation Obligation: ☐Required ☒Elective	Credit For: ☒Science ☐Elective Courses
An elective course for students who are interested in the environment and have successfully completed the Chemistry graduation requirement. This course focuses on the branch of science concerned with the physical, chemical, and biological conditions of the environment, relations between organisms, and environmental effects (on organisms). This class integrates the biology and environmental standards. Students will be expected to complete in class work, problem solve, research, debate, complete projects, and tests.			
CONCEPTS OF ENVIRONMENTAL SCIENCE		**Credit Value: 1**	
Prerequisites: Concepts of Biology		Maximum Seats: 20	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☐12th	Graduation Obligation: ☐Required ☒Elective	Credit For: ☒Science ☐Elective Courses
An adaptive course specifically designed for 11th grade students who have successfully completed Concepts of Biology but require more preparation for Concepts of Chemistry. The curriculum and classwork will be modified and adapted from the Academic Environmental Science course. This course focuses on the branch of science concerned with the physical, chemical, and biological conditions of the environment, relations between organisms, and environmental effects on organisms. This class integrates the biology and environmental standards. Students will be expected to complete in class work, problem solve, research, debate, complete projects, and tests.			

HONORS BIOLOGY II		**Credit Value: 1**	
Prerequisites: Biology, Chemistry		Maximum Seats: 24	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	Graduation Obligation: ☐Required ☒Elective	Credit For: ☒Science ☐Elective Courses

This is an elective course for all 11th – 12th grade students who have successfully completed Honors/Academic Biology and Honors/Academic Chemistry. This course is designed for students who do not have the prerequisites for CHS Biology, but who wish to continue studies in the biological/medical-related sciences. The course begins by reviewing basic cell and biochemistry concepts. It continues into taxonomy, surveying the characteristics of each group of living organisms (bacteria, protists, plants, invertebrates, and vertebrates). This includes comparative anatomy studies. Although, emphasis is placed on viral and bacterial studies. Finally, genetics and genetic technology will be discussed. Entry into the course requires written approval from the student's Biology AND Chemistry teachers.

CHS BIOLOGY		**Credit Value: 1**	
Prerequisites: Honors Biology		Maximum Seats: 24	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☒10th ☒11th ☒12th	Graduation Obligation: ☐Required ☒Elective	Credit For: ☒Science ☐Elective Courses

This elective course reflects the first semester of an introduction to general biology course taught in college. This course deals with life on the cellular, organismal, and population levels. It begins with in-depth concepts of cellular biology with an overview of biochemistry specific for cellular activity. The course continues into taxonomy, while introducing the fundamental phylogenetic relationships among major groups of living organisms. Morphology, anatomy, phylogeny and reproduction is discussed pertinent to each group of living organisms (bacteria, protists, plants, invertebrates, and vertebrates). Finally, biological communities and ecosystems, exploring complex interactions between organisms and the living & non-living components of their environment will be discussed (well beyond what was taught in 9th grade biology). Emphasis is placed on population genetics and population ecology. This course is lab-intensive (including AP Biology labs and dissection). This course is for 10th, 11th and 12th graders who have successfully completed Honors Biology and are concurrently enrolled in Honors Chemistry. Entry into the course requires written approval from the student's Honors Biology and Honors Chemistry teachers. Those students who are enrolled will have the opportunity to receive college credits through Seton Hill University.

AP CHEMISTRY		**Credit Value: 1.3**	
Prerequisites: Honors Chemistry, Geometry		Maximum Seats: 24	
Duration: ☐Full Year ☐One Semester ☒Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	Graduation Obligation: ☐Required ☒Elective	Credit For: ☒Science ☐Elective Courses

An elective course for students who have successfully completed Honors Chemistry or Academic Chemistry with a teacher recommendation. Students must exhibit in-depth problem solving skills as well as a strong work ethic. The in-depth studies and college level lab experiments will prepare students for college chemistry. Additional studies outside of class time are required to perform well on the AP exam. Content focuses on the six big ideas: Structure of Matter, Properties of Matter – Characteristics, States, and Forces of Attraction, Chemical Reactions, Rates of Chemical Reactions, Thermodynamics, and Equilibrium. Students are recommended to have a graphing calculator. Tests and coursework will coordinate with Highland's approved College Board's Advanced Placement Chemistry course of study.

AP PHYSICS		**Credit Value: 1.3**	
Prerequisites: Honors Physics		Maximum Seats: 24	
Duration: ☐Full Year ☐One Semester ☒Lab Course	Grade Level: ☐9th ☐10th ☐11th ☒12th	Graduation Obligation: ☐Required ☒Elective	Credit For: ☒Science ☐Elective Courses

This is an elective course for 12th grade students who are enrolled in the honors program and demonstrate an interest or ability in Physics. Students must have successfully completed Honors Physics or Academic Physics with teacher approval. In addition, concurrent enrollment in or successful completion of AP Calculus is required. The in-depth studies and college-level lab experiments will prepare students for college physics. It is recommended that students enroll in the *College in High School* program through the University of Pittsburgh to earn 4 college credits that may be applied to most colleges or universities, or that students take the AP Physics C exam offered by the National College Board. This course serves as the foundation in physics for students majoring in the physical sciences or engineering at college. Content focuses on mechanics, dynamics, energy, rotational inertia, gravitation, oscillations, mechanical waves, the kinetic theory of gases, electricity and magnetism. A TI-83 plus graphing calculator is highly recommended. Students may be required to complete course work during the summer which may include readings, experiments and problem sets. Students must exhibit in-depth problem solving skills as well as a strong work ethic because strong emphasis is placed on solving a variety of challenging problems, some requiring the use of calculus.

ANATOMY AND PHYSIOLOGY		**Credit Value: 1**	
Prerequisites: CHS Biology/Biology II		Maximum Seats: 24	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☐11th ☒12th	Graduation Obligation: ☐Required ☒Elective	Credit For: ☒Science ☐Elective Courses
An elective course for any 12th grade student who has successfully completed Biology II or College in High School Biology. This course incorporates elements of human anatomy and physiology. Content focuses on anatomical terminology, tissues, the integumentary system, skeletal system, muscular system, cardiovascular system, urinary system, human development, blood and articulations of the body. This course is highly recommended for students who plan to pursue medical careers.			

EARTH AND SPACE		**Credit Value: 1**	
Prerequisites: Chemistry		Maximum Seats: 24	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	Graduation Obligation: ☐Required ☒Elective	Credit For: ☒Science ☐Elective Courses
A course for students who have successfully completed Concepts of Chemistry or an elective course for 11th - 12th grade students. This course is an appropriate choice for excelling, 12th grade students with individualized education plans. Earth and Space encompasses the disciplines of Geology, Meteorology and Astronomy. In geology, students complete an overview of Earth's materials and processes. In doing so, students learn about rocks and minerals, and Earth's internal structure through a study of plate tectonics. Meteorology involves a study of the atmosphere and weather forecasting. Activities include reading weather maps and instruments to make weather forecasts similar to one's professional meteorologists make. In astronomy, students survey objects in space and learn how to find, classify and analyze them. In doing so, students will utilize Highlands' mobile planetarium, learn how to use a telescope and Starry Night Pro astronomy software.			

GEOLOGY AND PLANETARY SCIENCES		**Credit Value: 1**	
Prerequisites: Chemistry		Maximum Seats: 24	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☐11th ☒12th	Graduation Obligation: ☐Required ☒Elective	Credit For: ☒Science ☐Elective Courses
A rigorous elective course for 12th grade students in the honors track or who have departmental approval. The course includes studies in Geology, Climatology, and Astronomy. The essential question that drives the framework of the course is, 'What makes Earth habitable?' That is, what are the qualities of Earth that make it suitable for more than 7 billion people to thrive as a species? Furthermore, students will learn that it is not only Earth itself we rely on, but a specific place in space and time.			

INTRODUCTION TO ENGINEERING		**Credit Value: 1**	
Prerequisites: Honors/Academic Physics		Maximum Seats: 24	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	Graduation Obligation: ☐Required ☒Elective	Credit For: ☒Science ☐English ☐Social Studies ☐Elective Courses
An elective course for 12th grade students who have successfully completed or are enrolled in either Honors or Academic Physics. This course is designed to introduce students to the technical applications of physics and mathematics concepts. Learning through project-based activities is emphasized. Major topics include: land surveying, mechanical design, fluid dynamics, basic electronics and mechanical systems. Students will also design and fabricate a radio-controlled robot to compete in the Western Pennsylvania Battle Bots Competition. The course includes 3 lab sessions at Robert Morris University. It is recommended that students enroll in the course to earn 3 college credits through Robert Morris University which may be transferred to most colleges or universities.			

NATURAL RESOURCES AND PRODUCTION TECHNOLOGY		**Credit Value: 1**	
Prerequisites: Chemistry		Maximum Seats: 24	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	Graduation Obligation: ☐Required ☒Elective	Credit For: ☒Science ☐Elective Courses
An elective course recommended for students who have completed Academic Chemistry. The overall goal of the course is to understand the value that natural resources have for each person on the planet and the need to conserve them for future use. Throughout the class, students will work toward identifying a variety of natural resources on which humans depend for survival and maintaining progress as a species. Students will take a scientific approach to understanding how biotic and abiotic natural resources are used and the consequences of using them unwisely. This process will involve completing studies that develop practical skills such as reading maps, building models, and laboratory testing, for the purpose of creating awareness of the need for natural resource conservation. By the completion of the course, students will be able to explain how natural resources are currently being utilized as a well as articulate informed opinions on how they think they should be managed.			
NATURAL DISASTERS & ENVIRONMENTAL ISSUES		**Credit Value: 1**	
Prerequisites: Concepts of Environmental Science		Maximum Seats: 24	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☐11th ☒12th	Graduation Obligation: ☐Required ☒Elective	Credit For: ☒Science ☐Elective Courses
An adaptive course designed for 12th grade students who have successfully completed Concepts of Environmental Science but require more preparation for Earth and Space or Concepts of Chemistry. This class focuses on the impacts of Natural Disasters and the Environmental Issues that are a result of the disasters. The students will be expected to research, study, problem solve, create plans and solutions for the various issues**.**			

METROLOGY		**Credit Value: 1**	
Prerequisites: Accepted into JAA Program		Maximum Seats: 24	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☐11th ☒12th	Graduation Obligation: ☒Required ☐Elective	Credit For: ☒Science ☐Elective Courses
This course is exclusive to JAA program participants. This course is designed to meet the precision measurement competencies outlined in the Oberg/Highlands Junior Apprenticeship Advantage (JAA) program. Students will utilize advanced measurement techniques and instrumentation to record geometric tolerances, critical dimensions, and quality control parameters using manual and automated gauges, checking fixtures, non-destructive testing, and coordinate measuring systems. Students will also apply statistical process control and quality assurance methods to model production variances in manufacturing. This is a required science course for students in the JAA program.			
JAA INTRODUCTION TO MACHINING LAB		**Credit Value: 0.3**	
Prerequisites: Accepted into JAA Program		Maximum Seats: 24	
Duration: ☐Full Year ☐One Semester ☒Lab Course	Grade Level: ☐9th ☐10th ☐11th ☒12th	Graduation Obligation: ☒Required ☐Elective	Credit For: ☒Science ☐Elective Courses
This course is exclusive to JAA program participants. It is designed to meet the applied basic machining concepts outlined in the Oberg/Highlands Junior Apprenticeship Advantage (JAA) program. Students will utilize the Computer Numerically Controlled (CNC) vertical milling machine, horizontal lathe, CNC router, production band saw, metal break, and industrial grinder. In addition to basic machining principles, tool maintenance, shop procedures, and industrial safety with OSHA compliance will be stressed.			

DISTRIBUTIVE EDUCATION DEPARTMENT

Course Listing

ELECTIVE COURSES	WKS	PDS	CR
Marketing & Sales (9-12)	36	6	1
Retailing Principles (10-12)	36	6	1
International Business (11-12)	36	6	1
Accounting I (11-12)	36	6	1
Cooperative Work Experience	36	6	1

MARKETING & SALES		**Credit Value: 1.0**	
Prerequisites: None		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☒9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐Elective Courses ☒Arts/Humanities
Marketing & Sales is the introductory course offering in the Distributive Education Program. Students are presented with topics of marketing and sales including economics, marketing and business, marketing functions, pricing merchandise, marketing strategies, and goods and services. The second semester examines the selling process, the steps of a sale, closing the sale, customer-buying decisions, why customers buy, feature benefit selling and selling and product demonstrations. Students reinforce their marketing and sales skills by having the option of competing in DECA: An Association of Marketing Students.			

RETAILING PRINCIPLES		**Credit Value: 1.0**	
Prerequisites: Marketing & Sales		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐Elective Courses ☒Arts/Humanities
Students will study the dynamics of retailing, the free enterprise system, principles of promotion and advertising, types of retailing businesses, career opportunities in retailing and marketing businesses, and proper customer service and selling techniques in retailing.			

INTERNATIONAL BUSINESS		**Credit Value: 1.0**	
Prerequisites:		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐Elective Courses ☒Arts/Humanities
This course studies the world as the marketplace. Students will be presented academic skill exercises that include what is international business, cultural and social influences, international communications, importing, exporting, and international trade, currency and risk management affecting world trade, international career planning, and technology and the future global economy. The class will incorporate case studies to provide real-world learning opportunities. Tech trends highlights current and emerging applications of technology and the Internet used in international business. International business careers profile a variety of interesting careers in the world of international business and details skills and training needed to succeed in the global economy.			
ACCOUNTING		**Credit Value: 1.0**	
Prerequisites:		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐Elective Courses ☒Arts/Humanities
This course is designed to provide students with a strong foundation in accounting principles. Students will learn what business transactions are and how accountants use a double-entry system (debits and credits) to keep track of these transactions. Next students will study the complete accounting cycle of recording transactions, preparing financial statements, and "closing the books" for small, single-owner service and merchandising businesses. This course prepares students for post-secondary accounting courses.			
COOP WORK EXPERIENCE		**Credit Value: 1**	
Prerequisites: teacher rec		*Maximum Seats:* 28	
Duration: ☒Full Year ☐One Semester ☐ Lab Course	Grade Level: ☐9th ☐10th ☐11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐Elective Courses ☒Arts/Humanities
Must be approved by coordinator. One (1) credit will be earned for 120 hours of co-op experience.			

FINE ARTS COURSE DESCRIPTIONS: VISUAL ART

Course Listing

ELECTIVES	WKS	PDS	CR
Fundamentals of Visual Art (9-12)	36	6	1
Drawing and Painting (10-12)	36	6	1
Ceramics (10-12)	36	6	1
Sculpture and Glass Fusing (10-12)	36	6	1
Printmaking and Mixed Media (10-12)	36	6	1
Jewelry and Metal (10-12)	36	6	1
Independent Study	36	6	1
CHS Art History (11-12)	36	6	1
(6 college credits from Seton Hill Univ.)			

FUNDAMENTALS OF VISUAL ART		**Credit Value: 1**	
Prerequisites: None		*Maximum Seats:* 24	
Duration: ☒Full Year ☐One Semester ☐ Lab Course	Grade Level: ☒9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐Elective Courses ☒Arts/Humanities
Students in Fundamentals of Visual Art will learn and apply the Elements and Principles of Design in Drawing Printmaking, Painting, Sculpture, Ceramics, Jewelry, Glass, and Fiber. **This course is the perquisite for all other courses in the visual art department must pass with a 75% to advance to other classes.**			

DRAWING & PAINTING		**Credit Value: 1**	
Prerequisites: Fundamentals 75% or higher		*Maximum Seats:* 24	
Duration: ☒Full Year ☐One Semester ☐ Lab Course	Grade Level: ☐9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐Elective Courses ☒Arts/Humanities
Drawing & Painting students will build on learning from Fundamentals and utilize a variety of Drawing & Painting media such as pencil, marker, pastel, ink, pencil, acrylic paint, watercolor, oil paint, charcoal to create individualized artworks.			

Ceramics		**Credit Value: 1**	
Prerequisites: Fundamentals 75% or higher		*Maximum Seats:* 24	
Duration: ☒Full Year ☐One Semester ☐ Lab Course	Grade Level: ☐9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐Elective Courses ☒Arts/Humanities
Ceramics students will build on learning from Fundamentals and utilize a variety of methods for creating artworks with clay. Students will work with both hand-building techniques as well as the pottery wheel to create both functional and sculptural pieces of art. A variety of firing methods will also be taught/ and used to finish the pieces.			

SCULPTURE & GLASS FUSING		**Credit Value: 1**	
Prerequisites: Fundamentals 75% or higher		*Maximum Seats:* 24	
Duration: ☒Full Year ☐One Semester ☐ Lab Course	Grade Level: ☐9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐Elective Courses ☒Arts/Humanities
Sculpture & Glass students will build on learning from Fundamentals specifically focusing on creating 3 dimensional artworks using a variety of materials			

PRINTMAKING & MIXED MEDIA		**Credit Value: 1**	
Prerequisites: Fundamentals 75% or higher		*Maximum Seats:* 24	
Duration: ☒Full Year ☐One Semester ☐ Lab Course	Grade Level: ☐9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐Elective Courses ☒Arts/Humanities
Students in this class will create artworks utilizing Printmaking techniques including mono-printing, block-printing, surface decoration, bookbinding and fine art applications of stenciling & silk-screening.			

JEWELRY & METAL		**Credit Value: 1**	
Prerequisites: Fundamentals 75% or higher		*Maximum Seats:* 24	
Duration: ☒Full Year ☐One Semester ☐ Lab Course	Grade Level: ☐9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐Elective Courses ☒Arts/Humanities
Jewelry & Metal students will focus on creating wearable works of art and other works of art that are created using metal working techniques and a variety of other media. Glass bead-making will be covered in this course as a part of the study of jewelry.			

LSS ART		**Credit Value: 1**	
Prerequisites: Students in LSS classes		*Maximum Seats:* 24	
Duration: ☒Full Year ☐One Semester ☐ Lab Course	Grade Level: ☒9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐Elective Courses ☒Arts/Humanities
This course is offered for students in the Life Skills Support & Autistic Support programs. This visual art course explores a variety of media and techniques in both two and three dimensions including drawing, painting, sculpture, ceramics, printmaking and mixed media. Each project will be adapted and modified to meet the needs of the individual students emphasizing the goals in their IEP.			

INDEPENDENT ART		**Credit Value: 1**	
Prerequisites: FUND. & 3 STUDIO CLASSES WITH ACCEPTED APPLICATION		*Maximum Seats:* 6	
Duration: ☒Full Year ☐One Semester ☐ Lab Course	Grade Level: ☐9th ☐10th ☐11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐Elective Courses ☒Arts/Humanities
Requires teacher approval following a juried review of portfolio artwork and work ethic demonstrated in prior Art Department classes. This course is designed for highly motivated art students with the desire to design and create their own individualized course of visual art study. Students must be able to meet 5 times a week for a full class period. Students will design their own projects, and be graded based on completion of contract established with the teacher. An exhibition of artwork created in the course will function as the final assessment.			

CREATIVITY, IMAGINATION, & INNOVATION		**Credit Value: 1 (6 CIHS CREDITS-SETON HILL)**	
Prerequisites:		*Maximum Seats:* 24	
Duration: ☒Full Year ☐One Semester ☐ Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐Elective Courses ☒Arts/Humanities
Students in this course will explore how Art has developed and evolved throughout human history by studying the architecture, sculpture, painting and other forms of visual art created by a variety of cultures and time periods. Six college credits can be earned for this course through Seton Hill University's College in High School Program. (Requires additional fees for tuition)			

Partners Program		**Credit Value: 1**	
Prerequisites: Application		*Maximum Seats:* 7	
Duration: ☒Full Year ☐One Semester ☐ Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐Elective Courses ☒Arts/Humanities
The Partners program is designed to help give real world experience to students considering a future in education, nursing, therapy, or other professions where interaction with persons with disabilities is beneficial. Students will be trained as a partner and assigned to a student in the Life Skills and/or Autistic Support classroom. Partners will work with their assigned student during their elective classes. The classroom teacher will work the Partners to determine individual plans in order to help their assigned student be successful. To be considered for the program, students interested in being a Partner will need to complete an application and be approved by the classroom teacher.			

FINE ARTS COURSE DESCRIPTIONS: MUSIC

Course Listing

ELECTIVES	WKS	PDS	CR
Concert Choir (9-12)	36	6	1
Honors Choir (10-12, by audition)	36	6	1.05
Band (9-12 by approval)	36	6	1
Honors Band (9-12, Director's approval)	36	6	1.05
Band Front (9-12, by audition)	36		0.25
Stage Band (9-12, by audition, homeroom only)	36	6	1
Jazz Ensemble (9-12, by audition)	36	6	1
Theory and Harmony I (9-12, Director's approval)	36	6	1
AP Music Theory (10-12 Director's approval)	36	6	1.05
Music Appreciation/Musical Theater Production	36	6	1
Music Technology (9-12, Director's approval)	36	6	1
Student Accompanist (9-12, by audition)	36	6	1
Vocal Techniques/Intro to Broadway & Beyond	36	6	1
Broadway and Beyond (9-12)	36	6	1

* Students may enroll in both Band and Concert Choir for 0.5 credit each (3 of 6 days for each ensemble), but are required to fulfill all requirements for both courses.

<table>
<tr><td colspan="2">BAND</td><td colspan="2">Credit Value: 1.00</td></tr>
<tr><td colspan="2">Prerequisites: Director's Approval</td><td colspan="2">Maximum Seats: 85</td></tr>
<tr><td>Duration:
☒Full Year
☐One Semester
☐Lab Course</td><td>Grade Level:
☒9th
☒10th
☒11th
☒12th</td><td>Graduation Obligation:
☐Required
☒Elective</td><td>Credit For:
☐Elective Courses
☒Arts/Humanities</td></tr>
<tr><td colspan="4">The Varsity Band performs at all football games, various community parades, school events and concerts (fall, winter and spring), as well as Commencement. Members of the band will study units in both the Marching and Concert Band settings (year-long course) and are required to attend all summer (Band Camp) and after-school rehearsals throughout the year. All Students are also required to attend lessons as scheduled by the Band Director. This is a 6 day/rotation class. Enrollment less than 6 days/rotation is only granted for direct course conflicts, NOT for study halls. NO extra-curricular membership is granted. Students will not be permitted to drop once summer Band Camp begins. (Grades 9-12)

* Students who also elect to take Band and Concert Choir will receive .5 credit for 3/6 days and will be required to fulfill all requirements for both courses.</td></tr>
</table>

HONORS BAND		**Credit Value: 1.05**	
Prerequisites: Director's Approval		*Maximum Seats:* 12	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐Elective Courses ☒Arts/Humanities
Scheduled simultaneously to Band Class, this course provides an opportunity for accelerated students to broaden their music education while earning weighted credit for their supplemental work. ALL prerequisites and course requirements for Band Class will apply to Honors Band. Students must be enrolled 6 days/rotation to fully benefit from any additional weight/credit. Supplemental coursework will include, but not be limited to auditioning for Alle-Kiski Honors Band and PMEA Honors Band; research projects based on the students' primary instruments, composers and performers; attendance at "outside" concerts, playing assessments, peer teaching (MS/Elem) and a student recital. Students will not be permitted to drop once summer Band Camp begins. (Grades 9-12)			

BANDFRONT		**Credit Value: .25**	
Prerequisites: Audition & Director's Approval		*Maximum Seats:* n/a	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☒9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐Elective Courses ☒Arts/Humanities
This course is intended for members who have met the audition requirements for the band-front squads (Drill Team, Colorguard, Majorettes, Honorguard), AND do not know how to play an instrument. In order to maintain balanced enrollment between the marching and concert band ensembles, students currently enrolled in band (play an instrument), and pass the Bandfront audition, are expected to schedule Band Class. Students are required to meet all year-long marching requirements as stated for the "Band" class. NO extra-curricular / non-graded membership is granted. Students will not be permitted to drop once summer Band Camp begins. (Grades 9-12)			

JAZZ ENSEMBLE		**Credit Value: 1.00**	
Prerequisites: Enrollment in Band class, Audition & Director's Approval		*Maximum Seats:* 30	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☒9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐Elective Courses ☒Arts/Humanities
All instrumental sections will be limited in a manner yielding a full and balanced ensemble. Students are required to perform at all scheduled concerts and festivals. In addition to class time, attendance is also required at all before / after school rehearsals as scheduled by the Director. Topics include jazz history, scales (blues and various other modes), theory, jazz and jazz combo literature and improvisation. Students are permitted to enroll in both Jazz Ensemble and Stage Band if they meet the prerequisites and have room in their schedule. (Grades 9-12)			

STAGE BAND		**Credit Value: 1.00 - Homeroom**	
Prerequisites: Enrollment in Band class, Audition & Director's Approval		*Maximum Seats:* 50	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☒9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐Elective Courses ☒Arts/Humanities
All instrumental sections will be limited in a manner yielding a full and balanced ensemble. Students are required to perform at all scheduled concerts and festivals. In addition to class time, attendance is also required at all after school rehearsals as scheduled by the Director. Topics include jazz history, scales (blues and various other modes), theory, big band literature and improvisation. Students are permitted to enroll in both Stage Band and Jazz Ensemble if they meet the prerequisites and have room in their schedule. (Grades 9-12)			

THEORY AND HARMONY I		**Credit Value: 1.00**	
Prerequisites: Director's Approval		*Maximum Seats:* 10	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☒9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐Elective Courses ☒Arts/Humanities
Students must have prior knowledge of music and be able to demonstrate musical literacy through instrumental or vocal performance, or ensemble participation. Current enrollment in choir or band is encouraged. Students must be able to apply the skills learned here via an instrument or voice. Basic piano skills are a plus. The class will involve a study of the mechanics of music, key signatures, scales, intervals and chords both in written and aural form. This class prepares future music majors or minors for theory entrance exams and also services music enthusiasts who would like to know more about musical form. (Grades 9-12)			

AP MUSIC THEORY		**Credit Value: 1.00**	
Prerequisites: Completion of Theory and Harmony I and Director's Approval		*Maximum Seats:* 10	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐Elective Courses ☒Arts/Humanities
This class is designed to expand upon the fundamental skills of Theory I, taking students to a deeper understanding of musical form and structure. Greater emphasis will be placed on aural training, solfeggio, and application. Students will explore arranging and composition based on standard and current literature, with projects involving performance of student work. Elements of recording, sequencing, pre- and post-production will also be included, pending the availability of MIDI lab space and equipment. (Grades 10-12)			

MUSIC TECHNOLOGY		**Credit Value: 1.00**	
Prerequisites: Instructor Approval		*Maximum Seats:* 10	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☒9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐Elective Courses ☒Arts/Humanities
Prior to this course, students must have a strong and applied understanding of basic music theory (rhythm, melody, harmony & form). Here we will utilize electronically produced sound as a medium for creating and performing musical projects and compositions. Topics of study may include the physics of sound, signal flow, stereo systems, multi-track recording, digital synthesizers, sequencers, computers, and Musical Instrumental Digital Interface (MIDI). An emphasis will be placed on digital audio workstations, various software programs, and studio & field recording. Attendance at school performances outside of class may be required, as scheduled by the instructor. (Grades 9-12)			

CONCERT CHOIR		**Credit Value: 1.00**	
Prerequisites: N/A		*Maximum Seats:* 70	
Duration: ☒ Full Year ☐ One Semester ☐ Lab Course	Grade Level: ☒ 9th ☒10th ☒ 11th ☒ 12th	*Graduation Obligation:* ☐ Required ☒ Elective	*Credit For:* ☐ Elective Courses ☒ Arts/Humanities
Concert Choir is a large choral ensemble open to all students who are interested in developing their singing skills and musical understanding. Fundamental vocal techniques and music reading skills will be emphasized through rehearsal and performance. Three – four-part choral literature of various styles and periods will be performed. Enrollment less than 6 days/rotation is only granted for direct course conflicts, NOT for study halls. Students are expected and required to perform in all performances scheduled for the ensemble, both during and outside of the school day. Fall semester will consist of three major concerts plus multiple school and community performances. Spring semester will consist of one major concert plus multiple school and community performances. (Grades 9 – 12) * Students who also elect to take Concert Choir and Band will receive 0.5 credit for 3/6 days and will be required to fulfill all requirements for both courses.			

HONORS CHOIR		**Credit Value: 1.00**	
Prerequisites: Audition & Choral Director's Approval		*Maximum Seats:* 30	
Duration: ☒ Full Year ☐ One Semester ☐ Lab Course	Grade Level: ☐ 9th ☒ 10th ☒ 11th ☒ 12th	*Graduation Obligation:* ☐ Required ☒ Elective	*Credit For:* ☐ Elective Courses ☒ Arts/Humanities
The Highlands Honors Choir is a weighted course that is designed for the advanced choral students who demonstrated mastery of individual and choral vocal techniques as well as music reading skills. Four – eight-part choral literature of various styles and periods will be performed. Total enrollment in the ensemble is determined by the necessary balance of voice parts. Due to the challenging, advanced repertoire, and multiple public performances, students are required to enroll in this course 6 days of the A-F Rotation Schedule. Honors Choir will perform frequently at school and community events. Students enrolled are expected and required to perform in all performances scheduled for the ensemble, both during and outside of the school day. Fall semester will consist of three major concerts plus multiple school and community performances. Spring semester will consist of one major concert plus multiple school and community performances. (Grades 10 – 12; auditions may be opened to 9th grade if required to balance voice parts.)			

BROADWAY AND BEYOND		**Credit Value: 1.00**	
Prerequisites: N/A		*Maximum Seats:* 15	
Duration: ☒ Full Year ☐ One Semester ☐ Lab Course	Grade Level: ☒ 9th ☒ 10th ☒ 11th ☒ 12th	*Graduation Obligation:* ☐ Required ☒ Elective	*Credit For:* ☐ Elective Courses ☒ Arts/Humanities
Students will research historical composition and performance techniques of musicals, explore musical plots in the context of social trends or influences, reenact scripted material, and perform songs from show productions. Broadway and Beyond is recommended for students involved in one of the choral performance ensembles (Honors Choir, Concert Choir, Variations Show Choir, or Musical). Enrollment in Broadway and Beyond less than 6 days of the A-F Rotation Schedule only granted due to direct course conflicts. (Grade 9 – 12)			

VOCAL TECHNIQUES / INTRO TO BROADWAY AND BEYOND		**Credit Value: 1.00 (Full Year) or 0.5 (semester)**	
Prerequisites: Concert Choir, Honors Choir, Variations Show Choir, or Musical		*Maximum Seats:* 15	
Duration: ☒ Full Year ☒ One Semester ☐ Lab Course	Grade Level: ☒ 9th ☒ 10th ☒ 11th ☒ 12th	*Graduation Obligation:* ☐ Required ☒ Elective	*Credit For:* ☐ Elective Courses ☒ Arts/Humanities
Through this course, students will continue to develop and improve six fundamental vocal techniques: Expression, Diction, Embouchure, Breathing, Posture, and Relaxation. Individual singing for assessment and peer review will be required. During the second semester, students will research historical composition and performance techniques of musicals, explore musical plots in the context of social trends or influences, reenact scripted material and perform songs from show productions. It is encouraged that students are in one of the four choral ensembles (Honors Choir, Concert Choir, Variations Show Choir or Musical) but not required. Enrollment in Vocal Techniques/Intro to Broadway and Beyond less than 6 days of the A-F Rotation Schedule only granted due to direct course conflicts, not study halls. (Grades 9 – 12)			

MUSIC APPRECIATION / MUSICAL THEATER PRODUCTION		**Credit Value: 1.00**	
Prerequisites: NONE		*Maximum Seats:* 15	
Duration: ☒ Full Year ☐ One Semester ☐ Lab Course	Grade Level: ☒ 9th ☒ 10th ☒ 11th ☒ 12th	*Graduation Obligation:* ☐ Required ☒ Elective	*Credit For:* ☐ Elective Courses ☒ Arts/Humanities
This course covers the basic elements of sound and music theory, as well as an exploration of music through various historical time periods. Utilizing a multitude of listening examples and provided text, students will study connections and contrasts in the evolution of music from the Middle Ages to present day. In addition, students will learn the fundamental playing techniques of selected instruments. In the second semester, students will help to design and develop important production and performance experiences through musical theater. Students will develop an appreciation for understanding various responsibilities of creating a musical production. Enrollment in Music Appreciation / Musical Theater Production less than 6 days of the A-F Rotation Schedule only granted due to direct course conflicts, not study halls. (Grades 9 – 12)			

Course Title: STUDENT ACCOMPANIST		**Credit Value: 1.00**	
Prerequisites: Directors approval		*Maximum Seats:* 4	
Duration: ☒ Full Year ☐ One Semester ☐ Lab Course	Grade Level: ☒ 9th ☒ 10th ☒ 11th ☒ 12th	*Graduation Obligation:* ☐ Required ☒ Elective	*Credit For:* ☐ Elective Courses ☒ Arts/Humanities
A student accompanist will need to demonstrate mastery of music reading skills and piano performance for choral ensembles. No more than five students will be allowed to enroll in this Independent Study. Student accompanists are expected and required to perform in all dress rehearsals and performances scheduled for the ensemble, both during and outside of the school day. Fall semester will consist of three major concerts plus multiple school and community performances. Spring semester will consist of one major concert plus multiple school and community performances. (Grades 9 – 12)			

TECHNOLOGY EDUCATION
Course Listing

COURSE
Introduction to Technology Education
Architectural CADD
Engineering CADD
Robotics 1
Robotics 2
Wood Manufacturing 1
Wood Manufacturing 2
Wood Manufacturing 3
Graphic Communications
JAA - Precision Manufacturing
STEM Lab

Technology Education
Course Descriptions

<table>
<tr><td colspan="2">Introduction to Technology Education</td><td colspan="2">Credit Value: 1</td></tr>
<tr><td colspan="2">Prerequisites: None</td><td colspan="2">Maximum Seats: 24</td></tr>
<tr><td>Duration:
☒Full Year
☐One Semester
☐Lab Course</td><td>Grade Level:
☒9th
☐10th
☐11th
☐12th</td><td>Graduation Obligation:
☐Required
☒Elective</td><td>Credit For:
☒Elective Courses
☐Arts/Humanities</td></tr>
<tr><td colspan="4">This course focuses on developing a basic understanding of technological sub-systems; construction, energy and power, graphic design, and transportation. Students will engage in problem-solving activities to design, develop, produce, test and analyze solutions for unique problems. Students will use several computer aided drawing programs using the Autodesk platform to communicate their ideas using technical illustrations. The student will gain an understanding of land, water, air, and space transportation systems. This is a laboratory-based course; most coursework is hands-on and will require individual and/or group work.</td></tr>
</table>

Engineering CADD		**Credit Value: 1**	
Prerequisites: NONE		*Maximum Seats:* 24	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☒Elective Courses ☐Arts/Humanities
This course focuses on 3-dimensional computer aided drawing & design (CADD). Students will use computer software to design and/or recreate virtual 3D-models of mechanical objects. Using the Autodesk Inventor software platform, the students become the engineers as they design objects such as 3-dimensional dice, chess pieces, geared machines, automobile wheels, and small board games. The culminating activity deals with Reverse Engineering, in which the students disassemble a complex object and recreate a virtual model of the object.			

ARCHITECTURAL CADD		**Credit Value: 1**	
Prerequisites: NONE		*Maximum Seats:* 24	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☒Elective Courses ☐Arts/Humanities
This continuation of the introductory course focuses on architectural blueprints and construction methods. The course starts with a general review of drafting and CAD, and then takes off in the direction of floor plan layouts and home design. Students will explore the roots of different types of architecture throughout history, while creating digital and physical models for homes in that time period. The final project is problem-based, and requires that each student creates and designs a floor plan for a business. The entire class' designs will be put together for city planning of a plot of land.			

ROBOTICS I		**Credit Value: 1**	
Prerequisites: None		*Maximum Seats:* 22	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☒Elective Courses ☐Arts/Humanities
This course is designed to provide students with a basic understanding of robotic systems such as control, guidance, propulsion, suspension, power, and autonomous programming. Students will create small robots (using VEX Robotics kits) designed for specific tasks such as sorting mail, stacking blocks, pouring a glass of water, etc. This course also integrates Science, Math, and Engineering principles as well as the use of computer software (Autodesk *Inventor*) as it applies robotic design. Students will have the opportunity to compete in Robotics competitions against other high schools within the region. Robotics 1 is also designed to prepare students for the Introduction to Engineering (*College in High School* -3 cr.) course offered through Robert Morris University.			

ROBOTICS 2		**Credit Value: 1**	
Prerequisites: Robotics I		*Maximum Seats:* 22	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☒Elective Courses ☐Arts/Humanities
This course is a continuation of Robotics 1, and students will gain an in depth understanding of robotic systems such as control, guidance, propulsion, suspension, power, and autonomous programming. Emphasis of the second level course is on computer programming as it relates to autonomous functions and robotic control. Students will have the opportunity to compete in Robotics competitions against other high schools within the region. Robotics 2 is also designed to prepare students for the Introduction to Engineering (*College in High School* -3 cr.) course offered through Robert Morris University.			
WOOD MANUFACTURING 1		**Credit Value: 1**	
Prerequisites: Introduction to Tech Ed		*Maximum Seats:* 24	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☒Elective Courses ☐Arts/Humanities
This course is an introduction to hand and power tool operations as related to the woodworking industry. Students will be able to read and interpret a set of drawings in order to create physical projects such as a Cutting Board, Dresser-top Box, a Rustic Tote, Wall-Mount Hat Rack, Birdfeeder, Video Game Shelf, Mission-style Lamp, and Mantle Clock. Projects for the first semester are introductory in nature and will be assembled using fasteners such as screws and nails. Throughout the second semester students will use basic joinery techniques to assemble more complex projects. In addition, students will have the opportunity to utilize specialty machines and computer software such as a Laser Engraver and CNC Router to personalize each project.			

WOOD MANUFACTURING 2		**Credit Value: 1**	
Prerequisites: Wood Manufacturing 1		*Maximum Seats:* 24	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☒Elective Courses ☐Arts/Humanities
This course is a continuation of Wood Manufacturing 1. Students will explore advanced woodworking techniques to produce larger scale projects such as a stool, wall cabinet, and table. Throughout the course, students will explore advanced design & planning, production, joinery and assembly, as well as finishing techniques. The culminating project requires students to design plans and fabricate a project of their choosing from scratch. NOTE: due to the open-ended nature of the final project, additional materials (such as project-specific hardware) may need to be supplied by the student.			

WOOD MANUFACTURING 3		**Credit Value: 1**	
Prerequisites: Wood Manufacturing 1 & 2		*Maximum Seats:* 24	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☐11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☐ ☒Elective Courses ☐Arts/Humanities
This course is a continuation of Wood Manufacturing 2. Students will explore advanced woodworking techniques to produce more in-depth projects. Throughout the course, students will explore advanced design & planning, production, joinery and assembly, as well as finishing techniques. The culminating project requires students to design plans and fabricate a project of their choosing from scratch. NOTE: due to the open-ended nature of the final project, additional materials (such as project-specific hardware) may need to be supplied by the student.			

GRAPHIC COMMUNICATIONS		**Credit Value: 0.5**	
Prerequisites: None		*Maximum Seats:* 24	
Duration: ☐Full Year ☒One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☒Elective Courses ☐Arts/Humanities
The course is an introductory course into the broad field of Graphic and Visual Communications. In this lab based course, students will explore four fields of graphic design: Graphic Design and Desktop Publishing, Vinyl Stickers and Posters, Textile Design, and Laser Engraving Technology. Throughout the year, broad concepts will be unified into individual projects. Most of the course work is hands on and requires the student to use creative and analytical thinking to complete projects.			

STEM INTEGRATION LAB PERIOD		**Credit Value: *Variable***	
Prerequisites: Instructor Approval		*Maximum Seats:* 24	
Duration: ☐Full Year ☐One Semester ☒Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☒Elective Courses ☐Arts/Humanities
This course is designed for students who want to explore a specific area of technology education, but due to scheduling limitations cannot sign up for a full credit course. Upon Teacher recommendation and approval, students will have the opportunity to advance their studies in a chosen specific area such as CADD, 3D printing, Robotics, CNC milling/routing, Laser Engraving, Graphic design, Wood manufacturing, and/or Textile (t-shirt) production. Students will need to be pre-approved by means of conferencing with one of the Tech Ed instructors.			
JAA - PRECISION MANUFACTURING		**Credit Value: 1**	
Prerequisites: Instructor Approval		*Maximum Seats:* 15	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☐11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☒Elective Courses ☐Arts/Humanities
This course divulges students into the exciting and lucrative career paths in the field of Precision Manufacturing. Designed for students in the Junior Apprentice Advantage (JAA) Program, content covered in this class include job planning, blueprint reading and GD&T, precision measurement, turning, milling, and grinding, as well as an introduction to Computer Numeric Control (CNC) milling and routing. Students enrolled in JAA - Precision Manufacturing will also prepare to take the National Tooling and Machining Association (NTMA) aptitude test, and help to get placed in a career within the community.			

WORLD LANGUAGES DEPARTMENT
Course Listing

COURSE	WKS	PDS	CR
German I (9-12)	36	6	1
German II (10-12)	36	6	1
German III (11-12)	36	6	1
Honors German IV (12)	36	6	1
Spanish I (9-12)	36	6	1
Spanish II (10-12)	36	6	1
Spanish III (11-12)	36	6	1
Honors Spanish IV (12)	36	6	1

GERMAN 1		**Credit Value: 1.0**	
Prerequisites: NONE		*Maximum Seats:* 30	
Duration: ☒Full Year ☐One Semester	Grade Level: ☒9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐ Required ☒Elective	*Credit For:* ☒Elective Course ☐World Language
The first year emphasizes pronunciation, conversation, and comprehension; introduces the principles of grammar, and aspects of German culture.			

GERMAN 2		**Credit Value: 1**	
Prerequisites: Teacher Recommendation		*Maximum Seats:* 30	
Duration: ☒Full Year ☐One Semester	Grade Level: ☐9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐ Required ☒Elective	*Credit For:* ☒Elective Course ☐World Language
Includes oral communicative activities and the development of reading and writing skills; the study of German culture is continued.			

GERMAN 3		**Credit Value: 1**	
Prerequisites: Teacher Recommendation		*Maximum Seats:* 30	
Duration: ☒Full Year ☐One Semester	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☐ Required ☒Elective	*Credit For:* ☒Elective Course ☐World Language
Includes advanced grammatical constructions, as well as oral and written comprehension. In addition, spontaneous conversation is encouraged. The study of German culture is continued.			

HONORS GERMAN 4		**Credit Value: 1**	
Prerequisites: Teacher Recommendation		*Maximum Seats:* 30	
Duration: ☒Full Year ☐One Semester	Grade Level: ☐9th ☐10th ☐11th ☒12th	*Graduation Obligation:* ☐ Required ☒Elective	*Credit For:* ☒Elective Course ☐World Language
Includes an emphasis on oral and written communication. Students are expected to use the German language daily. German cultures, including their lifestyles, history, traditions, and literature are the basis of many activities.			

SPANISH 1		**Credit Value: 1**	
Prerequisites: Teacher Recommendation		*Maximum Seats:* 30	
Duration: ☒Full Year ☐One Semester	Grade Level: ☒9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐ Required ☒Elective	*Credit For:* ☒Elective Course ☐World Language
The first year emphasizes pronunciation, conversation, and comprehension; introduces the principles of grammar, and aspects of Hispanic cultures.			

SPANISH 2		**Credit Value: 1**	
Prerequisites: Teacher Recommendation		*Maximum Seats:* 30	
Duration: ☒Full Year ☐One Semester	Grade Level: ☐9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐ Required ☒Elective	*Credit For:* ☒Elective Course ☐World Language
Includes oral communicative activities and the development of reading and writing skills; the study of Hispanic cultures is continued.			

SPANISH 3		**Credit Value: 1**	
Prerequisites: Teacher Recommendation		*Maximum Seats:* 30	
Duration: ☒Full Year ☐One Semester	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☐ Required ☒Elective	*Credit For:* ☒Elective Course ☐World Language
Includes advanced grammatical constructions, as well as oral and written comprehension. In addition, spontaneous conversation is encouraged. The study of Hispanic culture is continued.			

HONORS SPANISH 4		**Credit Value: 1**	
Prerequisites: Teacher Recommendation		*Maximum Seats:* 30	
Duration: ☒Full Year ☐One Semester	Grade Level: ☐9th ☐10th ☐11th ☒12th	*Graduation Obligation:* ☐ Required ☒Elective	*Credit For:* ☒Elective Course ☐World Language
Includes an emphasis on oral and written communication. Students are expected to use the Spanish language daily. Spanish cultures, including their lifestyles, history, traditions, and literature are the basis of many activities.			

***If HVA German 3,4 or Spanish 3,4 are not being offered, the following independent study courses could be possible options.**

INDEPENDENT German 3 (11-12)—Prerequisite: Must have taken and passed levels 1 and 2 German with a minimum percent of 95%. **Requires teacher approval following review of grades in both level 1 and 2 as well as work ethic demonstrated in prior classes**. **Also requires the approval of the Foreign Language Department Chair and the Principals.** This course is designed for highly motivated German students with the desire to continue their study of German. Students must be able to meet 6 times a week for a full class period. This must consist of 4 days with the German 3 class as scheduled and 2 other days in a study hall setting with the Teacher of record. Students will complete all assigned classwork that is given in the regular class and be graded based on completion of contract established with the teacher.

INDEPENDENT German 4 (12)—Prerequisite: Must have taken and passed levels 1, 2 and 3 German with a minimum percent of 95%. **Requires teacher approval following review of grades in level 1,2 and 3 as well as work ethic demonstrated in prior classes**. **Also requires the approval of the Foreign Language Department Chair and the Principals.** This course is designed for highly motivated German students with the desire to continue their study of German. Students must be able to meet 6 times a week for a full class period. This must consist of 4 days with the German 4 class as scheduled and 2 other days in a study hall setting with the Teacher of record. Students will complete all assigned classwork that is given in the regular class and be graded based on completion of contract established with the teacher.

INDEPENDENT Spanish 3 (11-12)—Prerequisite: Must have taken and passed levels 1 and 2 Spanish with a minimum percent of 95%. **Requires teacher approval following review of grades in both level 1 and 2 as well as work ethic demonstrated in prior classes**. **Also requires the approval of the Foreign Language Department Chair and the Principals.** This course is designed for highly motivated Spanish students with the desire to continue their study of Spanish. Students must be able to meet 6 times a week for a full class period. This must consist of 4 days with the Spanish 3 class as scheduled and 2 other days in a study hall setting with the Teacher of record. Students will complete all assigned classwork that is given in the regular class and be graded based on completion of contract established with the teacher.

INDEPENDENT Spanish 4 (12)—Prerequisite: Must have taken and passed levels 1, 2 and 3 Spanish with a minimum percent of 95%. **Requires teacher approval following review of grades in both level 1, 2 and 3 as well as work ethic demonstrated in prior classes**. **Also requires the approval of the Foreign Language Department Chair and the Principals.** This course is designed for highly motivated Spanish students with the desire to continue their study of Spanish. Students must be able to meet 6 times a week for a full class period. This must consist of 4 days with the Spanish 4 class as scheduled and 2 other days in a study hall setting with the Teacher of record. Students will complete all assigned classwork that is given in the regular class and be graded based on completion of contract established with the teacher.

NOTE: Teacher approval or 70% is the minimum required grade to move to the next level.

HEALTH/PHYSICAL EDUCATION DEPARTMENT

Course Listing

COURSE	WKS	PDS	CR
Physical Education (9-12)			
Health (9, 11)	18	6	0.5
Adapted Physical Education (9-12)	36	6	1
Recreational Physical Education (10-12)	18	6	0.5
Contract PE (9-12)	36		0.5
Strength and Conditioning (10-12)	18	6	0.5
Wellness Through Yoga (10-12)	18	6	0.5
Lifetime Sports (9-12)	18	6	0.5
Swimming (Beginners) (9-12)	18	6	0.5
Swimming (Advanced) (9-12)	18	6	0.5
Women's Advanced Physical Conditioning (9-12)	18	6	0.5

PHYSICAL EDUCATION CLOTHING and JEWELRY REQUIREMENTS

1. Students ARE REQUIRED to change to participate in Physical Education

2. Students are not permitted to wear Jewelry while participating in Physical Education unless deemed appropriate by instructor.

Health/Physical Education Department
Course Descriptions

<table>
<tr><td colspan="2">PHYSICAL EDUCATION</td><td colspan="2">Credit Value: 0.5</td></tr>
<tr><td colspan="2">Prerequisites: NONE</td><td colspan="2">Maximum Seats: n/a</td></tr>
<tr><td>Duration:
☐ Full Year
☒ One Semester</td><td>Grade Level:
☒9th
☒ 10th
☒ 11th
☒12th</td><td>Graduation Obligation:
☒Required
☐ Elective</td><td>Credit For:
☐ Elective Courses
☒Physical Education</td></tr>
<tr><td colspan="4">This program emphasizes physical fitness, conditioning, team and individual performance activities and aquatics. Presidential Fitness tests are administered to all students. A broad spectrum of activities is available for selection by the instructor. The curriculum is adjusted yearly to provide students with a well-rounded experience.
Note: Students must make up missed classes within two weeks of returning to school. Students who do not dress for PE will be assigned detention.</td></tr>
</table>

HEALTH		**Credit Value: 0.5**	
Prerequisites: NONE		*Maximum Seats:* n/a	
Duration: ☐ Full Year ☒One Semester	Grade Level: ☒9th ☐ 10th ☐11th ☐ 12th	*Graduation Obligation:* ☒Required ☐ Elective	*Credit For:* ☐ Elective Courses ☒Physical Education
An in-depth study of areas including: personality and mental health; alcohol, drug and tobacco abuse; the structure, functions and systems of the body; a unit on human sexuality and sexually transmitted diseases.			

ADAPTED PHYSICAL EDUCATION		**Credit Value: 1.0**	
Prerequisites: Teacher Recommendation		*Maximum Seats:* n/a	
Duration: ☒Full Year ☐ One Semester	Grade Level: ☒9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☒Required ☐ Elective	*Credit For:* ☐ Elective Courses ☐Physical Education
Adaptive Physical Education is similar to regular physical education classes except that class size is smaller to permit concentrated development in coordination, strength, flexibility, and improved physical fitness. Skills for individual and team sports will be adjusted to individual needs. *Teacher and/or administrative recommendation is required.*			

RECREATIONAL PHYSICAL EDUCATION		**Credit Value: 0.5**	
Prerequisites: Teacher Recommendation		*Maximum Seats:* n/a	
Duration: ☐ Full Year ☒One Semester	Grade Level: ☐ 9th ☒10th ☒ 11th ☒12th	*Graduation Obligation:* ☐ Required ☒Elective	*Credit For:* ☒Elective Course ☐ Physical Education
Recreational Leadership is designed for students planning on entering the field of education or wanting to work with children in recreation and sports settings. Students should possess a willingness to learn and lead a variety of outdoor activities and sports. Activities will center on the idea of directing team and group activities. Students will learn to design activities, identify risks, and modify for special needs to ensure a safe successful experience. Students will also examine the world of youth sports. Students will work with the regular as well as the adaptive Phys. Ed. classes or be expected to log volunteer hours within a recreational setting.			

CONTRACT PHYSICAL EDUCATION		**Credit Value: 0.5**	
Prerequisites:		*Maximum Seats:* n/a	
Duration: ☐ Full Year ☒One Semester	Grade Level: ☒9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐ Required ☒Elective	*Credit For:* ☐ Elective Courses ☒Physical Education
After school course designed for students who cannot schedule regular PE due to extenuating circumstances. *Teacher and/or administrative recommendation is required.*			

STRENGTH AND CONDITIONING		**Credit Value: 0.5**	
Prerequisites: Teacher Recommendation		*Maximum Seats:* n/a	
Duration: ☐Full Year ☒One Semester	Grade Level: ☐9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☒Elective Course ☐Physical Education
This elective combines classroom, weight training, and cardiovascular fitness activities. Improving students' health-related components of fitness through introduction to fitness concepts and their application are primary goals of the course. Students will participate in activities to enhance cardiovascular fitness, muscular strength and endurance, flexibility and body composition. The benefits of exercise and its effect on the systems of the body will be introduced. *PE teacher recommendation is required*			

WELLNESS THROUGH YOGA		**Credit Value: 0.5**	
Prerequisites: None		*Maximum Seats:* 30	
Duration: ☐Full Year ☒One Semester	Grade Level: ☐9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☒Elective Courses ☐Physical Education
Provides an introduction to the art of yoga, with an opportunity to explore fitness through the physical practice of yoga. Students will improve stress management skills, physical fitness, and emotional wellness using various techniques learned throughout the class. Physical skills to strengthen, align, and balance their body will be utilized daily. The philosophy, history, movement concepts, mental awareness, and stress relieving techniques of Yoga will be understood, demonstrated, and analyzed by the students. Self-analysis, self-reflections, stress tests, fitness tests, and various other tools will be used to assess student progress, goals, and will be utilized for grading purposes. Yoga mats will be provided, however the purchase of one's own yoga mat is allowed, and it may be stored in the gym, in a safe, locked facility, for the student's own personal use.			

LIFETIME SPORTS		**Credit Value: 0.5**	
Prerequisites:		*Maximum Seats:* 30	
Duration: ☐Full Year ☒One Semester	Grade Level: ☒9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐Required ☒Elective	*Credit For:* ☒Elective Courses ☐Physical Education
Emphasis is placed on learning skills and strategies in lifetime sports/activities. Students will be introduced to various activities that they will be able to incorporate into their life. Sports included: adventure/cooperative games, resistance training, hiking, archery, table tennis, ultimate frisbee, Frisbee golf, badminton, orienteering, rock climbing, martial arts (Brazilian Jui Jitsu), aerobics (Zumba, pilates, yoga), racquetball and tennis. (There may be fees for field trips).			

SWIMMING (Beginners)		**Credit Value: 0.5**	
Prerequisites:		*Maximum Seats:* 30	
Duration: ☐ Full Year ☒One Semester	Grade Level: ☒9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐ Required ☒Elective	*Credit For:* ☒Elective Courses ☐ Physical Education
The course is for students who are unable to swim one length of the pool. Emphasis is placed on water safety, stroke techniques, floats, adaptation to water and basic rescues.			

SWIMMING (Advanced)		**Credit Value: 0.5**	
Prerequisites: Teacher Recommendation		*Maximum Seats:* 30	
Duration: ☐ Full Year ☒One Semester	Grade Level: ☒9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐ Required ☒Elective	*Credit For:* ☐ Elective Course ☒Physical Education
Emphasis is placed on techniques for perfecting all 4 competitive swimming strokes. Students will work on endurance, basic rescues, water safety, diving, and survival skills. Water polo and diving will be introduced and taught during this course. *PE teacher recommendation is required.*			

WOMEN'S ADVANCED PHYSICAL CONDITIONING		**Credit Value: 0.5**	
Prerequisites: Teacher Recommendation		*Maximum Seats:* 30	
Duration: ☐ Full Year ☒One Semester ☐Lab Course	Grade Level: ☒9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐ Required ☒Elective	*Credit For:* ☐ Elective Course ☒Physical Education
This course is for the female student/athlete who is looking to improve their core, strength, speed, agility, coordination and flexibility. Students will be taught the importance of understanding the biomechanics, nutrition and fitness terminology. Weight training program is designed to fit any and all types of athletes regardless of their sport. *Teacher and/or administrative recommendation is required.*			

OTHER ELECTIVES

FIRE SERVICE TRAINING (10-12)		**Credit Value: 1**	
Prerequisites: Teacher Recommendation		*Maximum Seats:* 30	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐ Required ☒Elective	*Credit For:* ☒Elective Course
An elective course offered at the High School during the school day, the Emergency Services Training Curriculum is offered to students who are currently members (or prospective members) of Volunteer Fire Companies or may be considering these fields as future careers. The course will provide the students with some basic introductory information about emergency services and the information and skills necessary to successfully complete tests toward state and national certification, such as Firefighter 1. The course will include research on the history of the fire service, important milestones and changes that have occurred in the emergency services and a review of the equipment and basic entry level skills of a firefighter. ***Students will be enrolled in this course based upon instructor approval.***			

FIRE SERVICE TRAINING (11-12)		**Credit Value: 1**	
Prerequisites: Teacher Recommendation		*Maximum Seats:* 30	
Duration: ☒Full Year ☐One Semester ☐Lab Course	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☐ Required ☒Elective	*Credit For:* ☒Elective Course
This course is offered to those juniors and seniors who have completed the prerequisite Level 1. Topics covered include Exterior Firefighter, Hazardous Materials Operations and ICS 200—Management of a Single Unit Response. In addition to the course PA State Fire Academy curriculum, students will be required to complete a research project on a landmark incident that had a major impact on fire service, become certified in CPR and First-Aid and conduct fire prevention presentations in the community. ***Students will be enrolled in this course based upon instructor approval***.			