HIGHLANDS HIGH SCHOOL
Program of Studies
2019-2020

RAMS FOR LIFE!

1500 Pacific Avenue
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HIGHLANDS HIGH SCHOOL
2019-2020
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, Mathematics, 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. **FUTURE READY PA INDEX:** An important component of Pennsylvania's Every Student Succeeds Act (ESSA) Consolidated State Plan is the creation of the Future Ready PA Index, a comprehensive, public-facing school progress report that includes a wide range of meaningful, evidence-based indicators. The Future Ready PA Index moves beyond a single, summative score to increase transparency around school and student group performance.

CAREER STANDARDS: For the 2018-19 school year and beyond, school entities must demonstrate that students have met the full continuum of career readiness expectations as defined for each grade span. Specifically, evidence shall be collected in a manner that validates that all four strands of the Career Education and Work standards have been meaningfully addressed. Grade span requirements are as follows:

- *By the end of grade 11, the student has produced eight additional pieces of evidence beyond the K-5 and 6-8 grade bands of evidence. At least two of these pieces of evidence must demonstrate implementation of the student's individualized career plan.*

- ***Highlands High School requires that every student completes 2 hours of job shadowing and/or community service per year. A total of 8 hours is required for graduation.***

KEYSTONE EXAMS: All students must take the Algebra 1 and Literature Keystone assessments and achieve a passing score 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 LEA 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.

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 school counselors **after July 19th** are those that are the result of an error made by the school. **Students may not drop Honors, CHS, or AP courses after June 30, 2019. Students may not drop Band, Band Front, or Honors Band once summer Band Camp begins.** All appeals for schedule changes will need to be made in writing and approved by the building principal. Schedule change request forms are available in the High School Counseling Office.

ADDITIONAL PROGRAMS INFORMATION

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.

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 meet income requirements 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 AND TALENTED EDUCATION PROGRAM: The Highlands School District is dedicated to providing opportunities which promote the growth of skills and knowledge necessary for identified gifted students to achieve their potential and to fulfill their future roles in our ever-changing global society. Highlands recognizes the unique abilities, talents, interests and needs of intellectually gifted students which require specially designed instruction.

SPECIAL EDUCATION PROGRAM: It is the policy of the Highlands School District that every child who qualifies for special education services will be provided a free, public, and appropriate education. To the maximum extent possible, children with disabilities will be educated in the least restrictive environment. Student Placement decisions are made via the IEP team that includes the parents.

SCHOOL COUNSELING PROGRAM: Our counseling department provides numerous services for our students and their families. Based on the national standards set forth by the American School Counselor Association's national model and the Pennsylvania Career Standards, the school counselors provide services to all students under the domains of personal/social, academic, and career. Classroom, small group, and individual interventions are the venue through which all students are provided opportunities to grow in each domain.

STUDENT ASSISTANCE PROGRAM (SAP): SAP is Highlands High Schools formal, consistent, and systematic approach to the early identification of student with learning barriers resulting from a variety of stressors. This program provides for both school supports, and when necessary, community resources. SAP is an intervention, not a treatment program, which integrates a process of information gathering, intervention, and follow up through the SAP Team.

FORBES ROAD CAREER AND TECHNOLOGY CENTER: Highlands High School students have the opportunity to attend Forbes Road Career and Technology Center as part of their plan of study at Highlands. Students begin the FRCTC as sophomores and continue through graduation, earning a Highlands diploma, in addition to recognized industry credentials. **To be considered for enrollment, students should earn a 9th grade Mathematics, English, Science, and Social Studies Credit. Also, students should earn two Arts and Humanities electives and satisfy their 9th Grade Physical Education and Health Requirements.** *(Please find Forbes Road CTC Application attached. The application can also be found on our website www.goldenrams.com)*

JUNIOR APPRENTICE ADVANTAGE PROGRAM: The Junior Apprentice Advantage (JAA) program is an educational initiative offered to seniors at Highlands High School. This program is a partnership between Oberg Industries and Highlands School District that offers students a head start in learning the technological skills required to pursue a career in the challenging and lucrative advanced manufacturing industry.

NATIONAL HONOR SOCIETY: The National Honor Society (NHS) is the nation's premier organization established to recognize outstanding high school students. NHS serves to recognize those students who have demonstrated excellence in the areas of scholarship, service, leadership, and character.

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 Career and Technology School. Full-time and part-time HVA students are responsible for meeting all of 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. Read course descriptions and consult with teachers about their course content and the subjects offered in their departments before making selections.
2. After completing grade nine, students should check each year to be sure that all graduation requirements are being met. The school counselors can help students check their credits and required courses.
3. College-bound students are strongly advised to take a minimum of three years of a world language.

ELECTIVES

ENGLISH DEPARTMENT
Journalism/Newspaper Design (10-12)
Multimedia Design I (9-12)
Multimedia Design II (10-12)
Young Adult Literature (9-12)
Graphic Novels (9-12)
Sports 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)
Ethical Dilemmas (9-12)
College and Career Prep (10-11)
Public Speaking (9-12)

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 (10-12)
Constitutional Law (11-12)
Civil Rights (11-12)

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)
Advanced Computer Applications (9-12)
Keystone Algebra Intervention (10-11)

SCIENCE DEPARTMENT
CHS Biology (10-12)
Honors Biology II (11-12)
AP Chemistry (11-12)
AP Physics (12)
Honors Anatomy & Physiology (12)
Earth & Space (11-12)
Natural Resources and Production Technology (12)
CHS Intro to Engineering (12)
Geology and Planetary Science (12)
Natural Disasters and Environmental Issues (12)
Metrology (12)
ACE 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
Fundamentals of Visual Art (9-12)
Independent Art (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)
Mixed Concert Choir (9-10)
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)
Honors 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)
General Music (9-12)
Student Accompanist (9-12)

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

WORLD LANGUAGES
Spanish 1 (9-12)
Spanish 2 (10-12)
Spanish 3 (11-12)
CHS Spanish 4 (12)
German 1 (9-12)
German 2 (10-12)
German 3 (11-12)
Honors German 4 (12)

HEALTH/PE
Wellness I (9)
Wellness II (11-12)
Adapted Physical Education (9-12)
Contract PE (9-12)
Team Sports (10-12)
Yoga (10-12)
Personal Fitness and Weight Training (11-12)
Lifetime Activities (10-12)
Walking for Wellness (10-12)
Aquatics (9-12)
Lifeguarding (9-12)

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:
☒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 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. 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. 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 ☒Keystone Course	*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 and Keystone tests. Students will practice their writing skills by composing paragraphs, essays, and creative writing pieces. 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 ☒Keystone Course	*Credit For:* ☒English
The class is more rigorous 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. 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
This class is designed to prepare students for post-graduate education. Literature covers American authors sampling a variety of poetry, short stories and novels. Students will write in a variety of mediums 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 a more rigorous 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. 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. 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. 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. 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 (9-12)	36	daily	1
Multimedia Design Level II (10-12)	36	daily	1
Sports Literature (10-12)	36	daily	1
College and Career Prep (10-11)	36	daily	1

<table>
<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 the Word Press web platform, Adobe Photoshop, newspaper design, advertising, editing of the written and visual aspects of the website. Students are responsible for producing a 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>
</table>

MULTIMEDIA DESIGN 1		**Credit Value: 1.0**	
Prerequisites: None		*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 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 Multimedia Design 2.			

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.*			

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, and coaching ethics.			

COLLEGE AND CAREER PREPARATION		**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
The purpose of the College and Career Preparation class is to help students explore direction beyond high school in either a career or a college setting. The course will prepare students for college and career searches by addressing topics such as: tuition and fees, acceptance criteria, application procedures, resume creation, letters of recommendation, and college essays. The course will also expose students to career exploration via personality testing and research to then uncover potential paths beyond high school and how best to prepare. Ultimately, the student will leave with a binder of materials that evidence their research and efforts that can serve them in future application processes.			

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
Advanced Drama (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
Public Speaking (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.			

ADVANCED DRAMA		**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 in this performance is mandatory. Other focus areas 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 individually or to meet in small or large groups. Additional activities may include visitation by guest artists, or 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.			

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 will help you 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.			

PUBLIC SPEAKING		**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 ☐Mathematics ☒Elective Course
Public Speaking is designed for students who wish to develop their communication and rhetoric skills, skills which are essential for success in any career path. Students will prepare, research, and present informative, persuasive, demonstrative, and entertaining speeches; students will analyze and evaluate historic speeches as well as works from the present.			

***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 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 focus on US History after the Civil War and Reconstruction. 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. The course will integrate primary and secondary source documents with an emphasis on analysis, writing, and discussion.			

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 examine global and cultural history. Students will investigate the people, events, conflicts, and customs of diverse groups from around the world and analyze both the past and present. Students will participate in discussion, critically read and evaluate primary and secondary sources, compose essays, conduct research, and create projects to demonstrate their comprehension of course topics.			

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 examine global and cultural history at an accelerated pace. Students will investigate the people, events, conflicts, and customs of diverse groups from around the world and analyze both the past and present. Students will participate in discussion, critically read and evaluate primary and secondary sources, compose essays, conduct research, and create projects to demonstrate their comprehension of course topics.			

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 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.			

AP US GOVERNMENT & POLITICS		**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 introduces student to the major American political institutions. Students will study the form and function of the three branches of government. They will also analyze issues related to civil liberties, constitutional rights, conflict between the branches, economic inequality and social issues, the role of political parties, the electoral process, and the political role of propaganda and the media. Both historic and current events will be used as examples of the functions of government. College credit is available for this course.			

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 course will examine theory and policy of Macroeconomics which will include but will not be limited to government spending, taxation, banking, and money. Students will discuss, analyze, and apply their study to 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.			

<table>
<tr><td colspan="2">AP ECONOMICS</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:
☒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 course is a theoretical introduction to supply and demand, consumer behavior, market structures, and pricing. A policy application to government spending and taxation will also be included but will not be part of the CHS aspect of the course. The course will use examples of the Micro concepts as related to personal finance as appropriate. College credit is available for this course.</td></tr>
</table>

SOCIAL STUDIES ELECTIVES: YEAR LONG

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

<table>
<tr><td colspan="2">AP US HISTORY</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:
☒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">The course begins with early American colonization and continues up through the present. The course includes analytical reading and writing assignments to explore change over time and conflict and cooperation in US History. Emphasis is placed on critical thinking skills, evaluative writing, and interpretation of primary sources. College credit is available for this course.</td></tr>
</table>

<table>
<tr><td colspan="2">AP EUROPEAN HISTORY</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:
☒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">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: cultural, economic, political and social ideals. Students will analyze major themes such as poverty and prosperity, institutions of power, Europe's interaction with the world, the rise and fall of states, and how the individual's role in society created Europe as we know it today. Students will also make connections in history across time and place. College credit is available for this course through an AP exam.</td></tr>
</table>

SOCIAL STUDIES ELECTIVES: SEMESTER

ELECTIVE COURSES	WKS	PDS	CR
Civil Rights Movement (11-12)	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 (10-12)	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 course will examine the US Civil Rights Movement in the twentieth century through analysis of primary sources, discussion, and critical reading. 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.			

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
In this course, students will examine the behavior of American citizens and the responsibilities of US Supreme Court Justices as they interact with the judicial branch through 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; students will apply their knowledge of constitutional law to modern day issues and debates. Student role play will be an integral part of the course activities.			

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
The course focuses on the Holocaust and other genocides through modern history including but not limited to Rwanda and Bosnia. Emphasis is placed on critical thinking, analysis, and the study of primary sources. Students will evaluate the significance of these events and the broader phenomenon of genocide in modern times. Students will express their analysis and thinking through writing, discussion, and projects.			

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 course focuses on the United States after WWII. Students will analyze the impact of WWII on subsequent decades, evaluate the United States as a world power, and investigate cultural changes in the United States over time. The course will rely heavily student analysis and evaluation of primary sources.			

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
The course introduces students to the study of psychology and examines many of the theories and perspectives of the field throughout history. 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). There will be an emphasis on developing critical thinking skills and students will demonstrate those skills through written assignments, project design, and classroom discussions.			

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
The course introduces students to the study of psychology in an accelerated setting. 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. College credit is available for this course.			

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
The course introduces students 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. There will be an emphasis on developing critical thinking skills and students will demonstrate those skills through written assignments, project design, and classroom discussions.			

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
The course introduces students to the study of sociology in an accelerated setting. Students will examine the impact of social relationships and groups on people and societies around the world. Through discussions, debates, concept analysis, case studies, extensive research, written composition and project design, students will develop their own opinions and ideas concerning human nature and how people are ultimately influenced by society. College credit is available for this course.			

MATHEMATICS REQUIRED COURSES

One course suggested 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
Academic Geometry (9-11)	36	daily	1
Honors Geometry (9)	36	daily	1
Academic Algebra II (9-12)	36	daily	1
Honors Algebra II (9-11)	36	daily	1
Academic Pre-calculus (11-12)	36	daily	1
Honors Pre-calculus (10-12)	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
Ext 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: 1.0</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.</td></tr>
</table>

ACADEMIC ALGEBRA IB		**Credit Value: 1.0**	
Prerequisites: Algebra IA		*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 ☒Keystone Course
This course is the continuation of Algebra IA. Topics of study include systems of equations, polynomials, factoring, exponents and radicals. Enrollment in this course is dependent on successful completion of Algebra IA. This is a Keystone Exam required course.			

ACADEMIC GEOMETRY		**Credit Value: 1.0**	
Prerequisites: Algebra 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
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 GEOMETRY		**Credit Value: 1.0**	
Prerequisites: Hon Algebra 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
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 ALGEBRA II		**Credit Value: 1.0**	
Prerequisites: Algebra I, 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
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 ALGEBRA II		**Credit Value: 1.0**	
Prerequisites: Hon Algebra I, Hon Geometry 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 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 Academic Algebra II, but are covered at an accelerated pace and in more depth.			

ACADEMIC PRE-CALCULUS		**Credit Value: 1.0**	
Prerequisites: Algebra 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
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.			

HONORS PRE-CALCULUS		**Credit Value: 1.0**	
Prerequisites: Hon Algebra 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
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.			

AP CALCULUS		**Credit Value: 1.0**	
Prerequisites: Hon Pre-calculus 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
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: 1.0**	
Prerequisites: AP Calculus 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
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: 1.0**	
Prerequisites: Hon Pre-calculus 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
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: 1.0**	
Prerequisites: Algebra 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
This course covers topics of Algebra I (Keystone Exam specific) and Algebra II 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 may be completed during this course.			

CHS PROBABILITY & STATISTICS		**Credit Value: 1.0**	
Prerequisites: Pre-calculus, 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	WKS	PDS	CR
Applied Mathematics (12)	36	daily	1
History of Math (10-12)	36	daily	1

APPLIED MATHEMATICS (ACE)		**Credit Value: 1.0**	
Prerequisites: ACE 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 ACE 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; 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: 1.0**	
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
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.			

MATHEMATICS ELECTIVES: SEMESTER

ELECTIVE COURSES	WKS	PDS	CR
Keystone Algebra Intervention	18	daily	0.5
Advanced Computer Applications (9-12)	18	daily	0.5

KEYSTONE ALGEBRA INTERVENTION		**Credit Value: 0.5**	
Prerequisites: Administrative 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
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.			

ADVANCED COMPUTER APPLICATIONS		**Credit Value: 0.5**	
Prerequisites: Comp App		*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
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.			

SCIENCE DEPARTMENT

Course Listing

REQUIRED COURSES (4 CR TOTAL)	GRADE	WKS	PDS	CREDITS
Honors Biology	9	36	6	1
Academic Biology	9	36	6	1
Science 9	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
Honors Biology II	11-12	36	6	1
College in High School Biology	10-12	36	8	1.3
AP Chemistry	11-12	36	8	1.3
AP Physics	12	36	8	1.3
Honors Anatomy and Physiology	12	36	6	1
Earth and Space	11-12	36	6	1
Geology and Planetary Science	12	36	6	1
CHS 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: 1.0</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
☒Keystone Course</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. 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: 1.0**	
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 ☒Keystone Course
A course required for academic-level 10th 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.			

SCIENCE 9		**Credit Value: 1.0**	
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 designed for academic 9th grade students. This course will follow PA State Standards for Natural Resources and Ecology, the Nature of Science, characteristics of living things, and Biochemistry.			

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. The course follows Next Generation Science Standards with an emphasis on PA Chemistry Standards which include incorporating lab experiences, proper analysis of results, cooperative problem-solving skills, atomic structure, molar relationships, thermochemistry, formula writing, reaction prediction, bonding, gas laws, and acids. This course moves at a fast pace and prepares the student for Advanced Placement Chemistry.			

ACADEMIC CHEMISTRY		**Credit Value: 1.3**	
Prerequisites: Academic 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. The course follows Next Generation Science Standards with an emphasis on PA Chemistry Standards which include: Matter classification, atomic theory, periodic table, electron placement, formula writing, identifying reactions, the Mole concept, stoichiometry, acid/base reactions and gas laws.			

CONCEPTS OF CHEMISTRY		**Credit Value: 1.0**	
Prerequisites: Academic 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 Academic Biology 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 with an emphasis on Next Generation Science Standards and PA Chemistry Standards. 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.			

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. 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.			

ENVIRONMENTAL SCIENCE		**Credit Value: 1.0**	
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.			

CHS BIOLOGY		**Credit Value: 1.0**	
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.			

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.			

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.

HONORS ANATOMY AND PHYSIOLOGY		**Credit Value: 1.0**	
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: 1.0**	
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. Earth and Space encompasses the disciplines of Geology, Meteorology and Astronomy.			

GEOLOGY AND PLANETARY SCIENCES		**Credit Value: 1.0**	
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 program or who have departmental approval. The course includes studies in Geology, Climatology, and Astronomy often utilizing math skills up to and including Algebra II.			

CHS INTRODUCTION TO ENGINEERING		**Credit Value: 1.0**	
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: 1.0**	
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. By the completion of the course, students will be able to explain how natural resources are currently being used as a well as articulate informed opinions on how they think they should be managed.			

NATURAL DISASTERS & ENVIRONMENTAL ISSUES		**Credit Value: 1.0**	
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
This course is designed for 12th grade students who have successfully completed Concepts of Environmental Science. 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**.**			

ACE 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 ACE program participants. It is designed to meet the applied basic machining concepts outlined in the Oberg/Highlands Apprentice Career Exploration (ACE) 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 (12)	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: 1.0**	
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 (10-12)	36	6	1
Printmaking and Mixed Media (10-12)	36	6	1
Jewelry and Metal (10-12)	36	6	1
Independent Art (12)	36	6	1

FUNDAMENTALS OF VISUAL ART		**Credit Value: 1.0**	
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, and Glass. **This course is the prerequisite for all other courses in the visual art department must pass with a 75% to advance to upper level art classes.**			

DRAWING & PAINTING		**Credit Value: 1.0**	
Prerequisites: Fundamentals		*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: 1.0**	
Prerequisites: Fundamentals		*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 utilizing a variety of methods for creating clay artworks by handballing, the pottery wheel, and variety of firing methods to finish the pieces.			

SCULPTURE & GLASS		**Credit Value: 1.0**	
Prerequisites: Fundamentals		*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
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: 1.0**	
Prerequisites: Fundamentals		*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 building on learning from Fundamentals utilizing Printmaking and Mixed Media techniques using a variety of materials.			

JEWELRY & METAL		**Credit Value: 1.0**	
Prerequisites: Fundamentals		*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
Jewelry & Metal students will create artworks building on learning from Fundamentals using a variety of materials with a 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.			

INDEPENDENT ART		**Credit Value: 1.0**	
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 student's application This course is designed for highly motivated art students who have demonstrated a 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.			

FINE ARTS COURSE DESCRIPTIONS: MUSIC

Course Listing

ELECTIVES	WKS	PD	CR
Band (9-12 by approval) *	36	daily	1
Honors Band (9-12, Director's approval)	36	daily	1
Band Front (9-12, by audition)	36		0.25
Jazz Ensemble (9-12, by audition)	36	daily	1
Stage Band (9-12, by audition, homeroom only)	36	daily	1
Theory and Harmony I (9-12, Director's approval)	36	daily	1
Honors Music Theory II (10-12 Director's approval)	36	daily	1
Music Technology (9-12, Director's approval)	36	daily	1
Mixed Concert Choir (9-10)	36	daily	1
Concert Choir (11-12) *	36	daily	1
Honors Choir (10-12, by audition)	36	daily	1
Music Appreciation/Musical Theater Production	36 or 18	daily	1 or 0.5
Student Accompanist (9-12, by audition)	36 or 18	daily	1 or 0.5
Vocal Techniques/Intro to Broadway & Beyond	36	daily	1
Broadway and Beyond (9-12)	36	daily	1
General Music (9-12)	36	daily	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. Students are not permitted to drop Band, Band Front, or Honors Band once summer Band Camp Begins.

<table>
<tr><td colspan="2">BAND</td><td colspan="2">Credit Value: 1.0</td></tr>
<tr><td colspan="2">Prerequisites: Director's Approval</td><td colspan="2">Maximum Seats: 90</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">Varsity (HS) Band is a co-curricular study of instrumental repertoire from varied eras and genres. Required performances include football games, community parades, school events and concerts (fall, winter and spring), and 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 fewer 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 elect to take Band and Concert Choir will receive 0.5 credit for 3/6 days and will be required to fulfill all requirements for both courses. Students will not be permitted to drop Band, Band Front, or Honors Band once summer Band Camp begins.</td></tr>
</table>

HONORS BAND		**Credit Value: 1.0**	
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 concurrently with Band Class, this course provides an opportunity for accelerated students to broaden their music education while earning weighted credit for 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 Band Front audition, are required to schedule Band Class. Students must 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: 1.0**	
Prerequisites: Enrollment in Band Class (for Winds and Percussion), Audition and/or 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: 1.0 - Period 9/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: 1.0**	
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 helps to prepare future music majors or minors for college level theory courses, and also services music enthusiasts who would like to know more about musical form. (Grades 9-12)			

HONORS MUSIC THEORY II		**Credit Value: 1.0**	
Prerequisites: Theory and Harmony I (75%) Rec		*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 & Harmony 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. Basic piano keyboarding is incorporated into many elements of this course. (Grades 10-12)			

MUSIC TECHNOLOGY		**Credit Value: 1.0**	
Prerequisites: Music Literacy		*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: 1.0**	
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
Large choral ensemble is open to all students who are interested in developing their singing skills and musical understanding. Concert Choir will be scheduled and structured towards upperclassmen in grades 11 – 12, and any advanced vocalist that is interested in participating in a more advanced music elective. 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 in Concert Choir less than 6 days of the A-F Rotation Schedule only granted due to direct course conflicts, not for study halls. 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 11 – 12) * Students who 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. Students will not be permitted to drop Band, Band Front, or Honors Band once summer Band Camp begins.			

MIXED CONCERT CHOIR		**Credit Value: 1.0**	
Prerequisites: Audition & Choral Director's Approval		*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
Large choral ensemble is open to all students who are interested in developing their singing skills and musical understanding. Mixed Concert Choir will be scheduled and structured towards underclassmen in grades 9 – 10, and any beginner vocalist that is interested in participating in a music elective for the first time. 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 in Concert Choir less than 6 days of the A-F Rotation Schedule only granted due to direct course conflicts, not for study halls. 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 9 – 10)			

HONORS CHOIR		**Credit Value: 1.0**	
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 demonstrate 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: 1.0**	
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 musical material, and perform songs from show productions. Students will also become engaged with musical set design, scene structure, and character analysis. 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: 1.0 (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: 1.0 (Full Year) or 0.5 (semester)**	
Prerequisites:		*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 provide 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: 1.0 (period 9)**	
Prerequisites: Audition based and Choral Director's approval (Independent Study)		*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
Independent Study. 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 Period 9 "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)			

Course Title: GENERAL MUSIC		**Credit Value: 1.0**	
Prerequisites:		*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
This general music course explores a variety of topics that include: music theory, music history, musical theater, musical production, vocal techniques, and choral performance. Each music concept will be adapted and modified to meet the needs of the individual students emphasizing their educational goals. (Grades 9 – 12)			

TECHNOLOGY EDUCATION
Course Listing

COURSE	WKS	PDS	CR
Introduction to Technology Education (9)	36	1	1
Architectural CADD (10-12)	18	1	0.5
Engineering CADD (10-12)	36	1	1
Robotics 1 (10-12)	36	1	1
Robotics 2 (11-12)	36	1	1
Wood Manufacturing 1 (10-12)	36	1	1
Wood Manufacturing 2 (11-12)	36	1	1
Wood Manufacturing 3 (12)	36	1	1
Graphic Design (10-12)	18	1	0.5
ACE - Precision Manufacturing (12)	36	1	1
STEM Integration Lab (11-12)	36	1	1

Technology Education
Course Descriptions

<table>
<tr><td colspan="2">Introduction to Technology Education</td><td colspan="2">Credit Value: 1.0</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: 1.0**	
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: 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
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: 1.0**	
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: 1.0**	
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: 1.0**	
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: 1.0**	
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: 1.0**	
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 DESIGN		**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.			

ACE - PRECISION MANUFACTURING		**Credit Value: 1.0**	
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 Apprentice Career Exploration (ACE) 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 ACE - 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	daily	1
German II (10-12)	36	daily	1
German III (11-12)	36	daily	1
Honors German IV (12)	36	daily	1
Spanish I (9-12)	36	daily	1
Spanish II (10-12)	36	daily	1
Spanish III (11-12)	36	daily	1
CHS Spanish IV (12)	36	daily	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
This is an introductory course that is part of a proficiency-based language program designed to provide maximum opportunities for students to develop functional listening, speaking, reading, and writing skills in beginning German. The goal of the course is the acquisitions of a useful, communicative command of the language at a novice-low to novice-mid level on the national scale, as established by the American Council on the Teaching of Foreign Languages and the Educational Testing Service. This goal will be realized through maximum exposure to authentic target-language input (oral and visual), active oral and written practice of real-life language tasks or functions (e.g., introducing and describing yourself and others, discussing your class schedule, interpreting infographics, etc.), and exploration of cultural subtleties conveyed by language, thought, and customs.			

GERMAN 2		**Credit Value: 1.0**	
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
As a continuation of German I, this course is part of a proficiency-based language program designed to provide maximum opportunities for students to develop functional listening, speaking, reading, and writing skills in beginning German. The goal of the course is the acquisitions of a useful, communicative command of the language at a novice-mid to novice-high level on the national scale, as established by the American Council on the Teaching of Foreign Languages and the Educational Testing Service. This goal will be realized through maximum exposure to authentic target-language input (oral and visual), active oral and written practice of real-life language tasks or functions (e.g., ordering a meal, visiting a doctor's office, shopping in a clothing store, etc.), and exploration of cultural subtleties conveyed by language, thought, and customs.			

GERMAN 3		**Credit Value: 1.0**	
Prerequisites: Teacher Recommendation and 70% or higher in German 2		*Maximum Seats:* 30	
Duration: ☒Full Year ☐One Semester	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☐ Required ☒Elective	*Credit for:* ☒Elective Course ☐World Language
As a continuation of German II, this course is part of a proficiency-based language program designed to provide maximum opportunities for students to develop functional listening, speaking, reading and writing skills in intermediate German. The goal of the course is the acquisition of a useful, communicative command of the language at the novice-high to intermediate-low level on the national scale as established by the American Council on the Teaching of Foreign Languages and the Educational Testing Service. This goal will be realized through maximum exposure to authentic target-language tasks of functions (e.g., making travel arrangements, discussing global concepts of beauty, interpreting children's books, etc.) and exploration of cultural subtleties conveyed by language, thought and customs.			

HONORS GERMAN 4		**Credit Value: 1.0**	
Prerequisites: Teacher Recommendation and 70% or higher in German 3		*Maximum Seats:* 30	
Duration: ☒Full Year ☐One Semester	Grade Level: ☐9th ☐10th ☐11th ☒12th	*Graduation Obligation:* ☐ Required ☒Elective	*Credit for:* ☒Elective Course ☐World Language
As a continuation of German III, this course is part of a proficiency-based language program designed to provide maximum opportunities for students to develop functional listening, speaking, reading, and writing skills in intermediate German. The goal of the course is the acquisition of a useful, communicative command of the language at an intermediate-low to intermediate-mid level on the national scale, as established by the American Council on the Teaching of Foreign Languages and the Education Testing Service. This goal will be realized through maximum exposure to authentic target-language input (oral and visual), active oral and written practice of real-life language tasks or functions (e.g., conversing with an exchange student, discussing current events, analyzing environmental problems, etc.), and exploration of cultural subtleties conveyed by language, thought, and customs.			

SPANISH 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
This is an introductory course that is part of a proficiency-based language program designed to provide maximum opportunities for students to develop functional listening, speaking, reading, and writing skills in beginning Spanish. The goal of the course is the acquisitions of a useful, communicative command of the language at a novice-low to novice-mid level on the national scale, as established by the American Council on the Teaching of Foreign Languages and the Educational Testing Service. This goal will be realized through maximum exposure to authentic target-language input (oral and visual), active oral and written practice of real-life language tasks or functions (e.g., introducing and describing yourself and others, discussing your class schedule, interpreting infographics, etc.), and exploration of cultural subtleties conveyed by language, thought, and customs.			

SPANISH 2		**Credit Value: 1.0**	
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
As a continuation of Spanish I, this course is part of a proficiency-based language program designed to provide maximum opportunities for students to develop functional listening, speaking, reading, and writing skills in beginning Spanish. The goal of the course is the acquisitions of a useful, communicative command of the language at a novice-mid to novice-high level on the national scale, as established by the American Council on the Teaching of Foreign Languages and the Educational Testing Service. This goal will be realized through maximum exposure to authentic target-language input (oral and visual), active oral and written practice of real-life language tasks or functions (e.g., ordering a meal, visiting a doctor's office, shopping in a clothing store, etc.), and exploration of cultural subtleties conveyed by language, thought, and customs.			

SPANISH 3		**Credit Value: 1.0**	
Prerequisites: Teacher Recommendation and 70% or higher in Spanish 2		*Maximum Seats:* 30	
Duration: ☒Full Year ☐One Semester	Grade Level: ☐9th ☐10th ☒11th ☒12th	*Graduation Obligation:* ☐ Required ☒Elective	*Credit for:* ☒Elective Course ☐World Language
As a continuation of Spanish II, this course is part of a proficiency-based language program designed to provide maximum opportunities for students to develop functional listening, speaking, reading and writing skills in intermediate Spanish. The goal of the course is the acquisition of a useful, communicative command of the language at the novice-high to intermediate-low level on the national scale as established by the American Council on the Teaching of Foreign Languages and the Educational Testing Service. This goal will be realized through maximum exposure to authentic target-language tasks of functions (e.g., making travel arrangements, discussing global concepts of beauty, interpreting children's books, etc.) and exploration of cultural subtleties conveyed by language, thought and customs.			

CHS SPANISH 4		**Credit Value: 1.0**	
Prerequisites: Teacher Recommendation and 70% or higher in Spanish 3		*Maximum Seats:* 30	
Duration: ☒Full Year ☐One Semester	Grade Level: ☐9th ☐10th ☐11th ☒12th	*Graduation Obligation:* ☐ Required ☒Elective	*Credit for:* ☒Elective Course ☐World Language
As a continuation of Spanish III, this course is part of a proficiency-based language program designed to provide maximum opportunities for students to develop functional listening, speaking, reading, and writing skills in intermediate Spanish. The goal of the course is the acquisition of a useful, communicative command of the language at an intermediate-low to intermediate-mid level on the national scale, as established by the American Council on the Teaching of Foreign Languages and the Education Testing Service. This goal will be realized through maximum exposure to authentic target-language input (oral and visual), active oral and written practice of real-life language tasks or functions (e.g., conversing with an exchange student, discussing current events, analyzing environmental problems, etc.), and exploration of cultural subtleties conveyed by language, thought, and customs. It is recommended that students enroll in the college in high school Scholar Program through La Roche College to earn college credit.			

***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)— This course is designed for highly motivated German students with the desire to continue their study of German. Students must be able to meet every day of the 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.
Prerequisites: 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 World Language Department Chair and the Principals.

INDEPENDENT German 4 (12)—This course is designed for highly motivated German students with the desire to continue their study of German. Students must be able to meet every day of the 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.
Prerequisites: 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 both level 1 and 2 as well as work ethic demonstrated in prior classes. Also requires the approval of the World Language Department Chair and the Principals.

INDEPENDENT Spanish 3 (11-12)— This course is designed for highly motivated Spanish students with the desire to continue their study of Spanish. Students must be able to meet every day of the 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.
Prerequisites: 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 World Language Department Chair and the Principals.

INDEPENDENT Spanish 4 (12)— This course is designed for highly motivated Spanish students with the desire to continue their study of Spanish. Students must be able to meet every day of the 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.
Prerequisites: 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 and 2 as well as work ethic demonstrated in prior classes. Also requires the approval of the World Language Department Chair and the Principals.

HEALTH/PHYSICAL EDUCATION DEPARTMENT

Course Listing

COURSE	WKS	PDS	CR
Wellness I (9)	36	6	1
Wellness II (11-12)	18	6	0.5
Adapted Physical Education (9-12)	36	6	1
Contract PE (9-12)	18		0.5
Team Sports (10-12)	18	6	0.5
Yoga (10-12)	18	6	0.5
Personal Fitness and Weight Training (11-12)	18	6	0.5
Lifetime Activities (10-12)	18	6	0.5
Walking for Wellness (10-12)	18	6	0.5
Aquatics (9-12)	18	6	0.5
Lifeguarding (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

WELLNESS I (Physical Education & Health)		**Credit Value: 1.0 (0.5 PE / 0.5 Health)**	
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

WELLNESS II		**Credit Value: 0.5**	
Prerequisites: WELLNESS I		*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
This advanced course expands upon the information learned in the Health Education portion in the Wellness I Course. The range of content will include physical fitness, nutrition, diseases, substance abuse, human sexuality and first aid. Projects throughout this course will include a Wellness Newsletter.			

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.*			

TEAM SPORTS		**Credit Value: 0.5**	
Prerequisites: WELLNESS I		*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
Students will learn a variety of rules, skills, fundamentals, and strategies in multiple team activities. Safety and sportsmanship will be emphasized. Activities offered in this class are basketball, volleyball, flag football, soccer, ultimate Frisbee, kickball, and other team sports.			

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.*			

PERSONAL FITNESS & WEIGHT TRAINING		**Credit Value: 0.5**	
Prerequisites: Wellness and PE courses 80% or above		*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 course will give students the opportunity to enhance fitness levels through activities that enhance cardiovascular fitness, muscular strength and endurance, flexibility and body composition. Students will implement a personal fitness plan and participate in competitive team and individual sports.			

YOGA		**Credit Value: 0.5**	
Prerequisites: WELLNESS I		Maximum Seats: 30	
Duration: ☐ Full Year ☒One Semester	*Grade Level*: ☐ 9th ☒10th ☒11th ☒12th	*Graduation Obligation*: ☐ Required ☒Elective	*Credit for:* ☒Elective Courses ☐ Physical Education
This course is intended to encourage lifelong fitness. Students will learn yoga postures, breathing techniques, and relaxation methods that can be utilized to improve health. Students will develop body awareness and correct alignment in a variety of yoga poses including standing, balance, hip-opening, inversions, arm balances, twists, back bending, and core strengthening exercises. Each class will have a specific focus: pose break-down, yoga flows, strength-building routines, or relaxation.			

LIFETIME ACTIVITIES		**Credit Value: 0.5**	
Prerequisites: WELLNESS 1		*Maximum Seats:* 30	
Duration: ☐ Full Year ☒One Semester	Grade Level: ☐9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐ Required ☒Elective	*Credit for:* ☒Elective Courses ☐ Physical Education
This course is designed to give students the opportunity to learn sports and techniques used for obtaining optimal physical fitness. Students will be introduced to various activities that can be played throughout their lifetime. Activities include tennis, badminton, pickle ball, archery, table tennis, corn hole, disc games, and hiking.			

AQUATICS		**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
This course gives students with limited swimming skills and knowledge the opportunity to perform more refined strokes. Students will be introduced to new strokes and techniques including the freestyle, backstroke, breaststroke and butterfly. Personal safety and rescue skills will be introduced. Group games and activities designed to improve fitness components of endurance, strength, and flexibility will be introduced and played.			

LIFEGUARDING		**Credit Value: 0.5**	
Prerequisites: Must pass a pre-course swim test and be recommended by the PE teacher		*Maximum Seats:* 30	
Duration: ☐ Full Year ☒One Semester	Grade Level: ☒9th ☒10th ☒11th ☒12th	*Graduation Obligation:* ☐ Required ☒Elective	*Credit for:* ☐ Elective Course ☒Physical Education
This is an American Red Cross course that certifies students in first aid, CPR and lifeguarding. The purpose of this course is to provide entry-level lifeguard participants with the knowledge and skills to prevent, recognize and respond to aquatic emergencies. It is possible to pass this PE course but not meet the qualifications for the Red Cross Certification. Students may choose this course for a lifeguard recertification.			

<table>
<tr><td colspan="2">WALKING FOR WELLNESS</td><td colspan="2">Credit Value: 0.5</td></tr>
<tr><td colspan="2">Prerequisites: WELLNESS I</td><td colspan="2">Maximum Seats: 30</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 Course
☒Physical Education</td></tr>
<tr><td colspan="4">This course gives students an activity that they can participate in independently throughout their lifetime. Most of the walking activities will take place outdoors so appropriate dress is essential. Students will be expected to be prepared for all types of weather. Some of the activities include walking, hiking, navigation, and scavenger hunts.</td></tr>
</table>

OTHER ELECTIVES

FIRE SERVICE TRAINING (10-12)		**Credit Value: 1.0**	
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
A distance learning elective course offered in collaboration with the Highlands School District, Allegheny County Emergency Services, and the Allegheny County Fire Academy. Staff Instructor Krzeminski will provide entry level training along with 8 hands on sessions throughout the school year at the Allegheny County Fire Academy. This course is possible through the efforts of the Highlands Emergency Services Alliance (HESA) and the Alle-Kiski Health Foundation. The vision is to create highly trained professionals who are dedicated to exceeding the needs of their communities. Course topics will include Fire Training, First Aid, and CPR.			

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 I exam. The evidence-based reading and writing 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 students 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.			

COMMUNITY ENGAGEMENT		**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
Students will learn about different organizations in our area and understand what services they provide to the community. Engaging in community service projects will provide students with the opportunity to become active members of their community and have a lasting, positive impact on society at large. Students will acquire life skills and knowledge, as well as provide a service to those who need it most. Students enrolled in this class will complete the semester with the required 2 hours of community service needed for each school year.			

INTRODUCTION TO COMPUTER SCIENCE		**Credit Value: 1.0**	
Prerequisites: Successful completion of Algebra 1		*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 an interactive, introductory course for student's brand new to programming. The foundations of computer science are taught using the Python language. Students will learn how to think computationally and solve complex problems, skills that are important for every student. This semester or year-long course will prepare students for AP Computer Science A and AP Computer Science Principles.			

Forbes Road Career & Technology Center

607 Beatty Road • Monroeville, PA 15146 • 412-373-8100 • FAX (412) 373-3208

APPLICATION FOR STUDENT ADMISSION 2019-20

Forbes Road Career & Technology Center accepts High School Students in grades 9-12.

High School _____

Resident School District _____

Current Grade
☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 Birth date__/__/__

☐ AM ☐ PM ☐ FD

Sending District Use

☐ IEP OR 504 provided Date__/__/__
☐ Transcript provided Date__/__/__
☐ Keystone Scores provided Date__/__/__
☐ PA Secure ID # _____

_____
Recommending Counselor Date

Last Name_____ First Name_____ Middle Initial _____

Parent or Guardian_____ Email Address _____

Street_____ City_____ ZIP _____

Home Phone (_____)_____ Work Phone (_____)_____ Cell Phone (_____) _____

Permission is given for my child to apply to Forbes Road Career & Technology Center

Parent/Guardian Signature _____

SELECTION OF COURSES *Select 2 programs which interest you.*
Number your choices in the blanks to the left "1" being your first choice and "2" being your second choice.

____ Advertising Design
____ Automotive Technology
____ Building Construction Technology
____ Collision Repair Technology
____ Computer Networking & Security
____ Cosmetology
____ Culinary Arts
____ Diesel Technology
____ Early Childhood Education
____ Electrical Technology
____ Emergency Response Services
____ Health Science Technology
____ Heating, Ventilation & AC
____ Landscape Design
____ Multimedia Design
____ Warehouse Management
____ Exploratory Program (9th Grade)

Student Signature _____ **Date** _____

Forbes Road Career and Technology Center does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to Boy Scouts and other designated youth groups. For information regarding civil rights, grievance procedures or access, contact the Title IX Coordinator/Assistant Director at 607 Beatty Road, Monroeville, PA 15146 or 412-373-8100.

(Revised 3/5/19)

Architecture/Construction

Building Construction Technology .....CIP 46.9999
Building Construction Technology students gain technical knowledge as well as practical hands-on training in the trade which includes carpentry, plumbing, electrical, masonry and blueprint reading. Individuals learn to apply technical knowledge and skills in the maintenance and repair of residential and commercial buildings.

Heating, Ventilation & Air Conditioning.....CIP 47.0201
The program trains students to become qualified HVAC technicians and mechanics. A major portion of the instruction focuses on how to install, diagnose, service and maintain residential and commercial control wiring of HVAC systems.

Electrical Technology .....CIP 46.0399
Electrical Technology prepares students for entry level electrical and electronics careers. Their technical applications include green technology instruction within this state-of-the-art electrical laboratory. Computerized training equipment is utilized to prepare the students for careers in the "high-tech" electrical field.

Landscape Design .....CIP 01.0601
Landscape Design prepares students to be employees of nurseries, greenhouses, florists or landscape businesses. The curriculum includes turf management, landscape design and safety, pest and disease management and irrigation. Students obtain practical skills on our 42 acre campus and in the new greenhouse.

Arts/Communications

Advertising Design .....CIP 50.0402
The field of advertising and commercial art requires a person who possesses a wide range of creative skills. The curriculum includes the foundation for all creative/design fields. Students apply the design principles to create a variety of products and printed materials - to reach and compel the target audience to purchase products and services.

Health Careers/Law Enforcement

Emergency Response Services .....CIP 43.9999
This program is for students interested in pursuing a career, volunteer service or post-secondary education in emergency medical, law enforcement, fire or emergency management services. ERS provides training in a fully equipped lab including a fire tower and fire truck.

Health Science Technology .....CIP 51.0899
This program provides students with the hands-on training necessary to offer care to patients while working alongside other qualified health care professionals. Students will be taught basic nursing skills, Anatomy & Physiology and care of the patient with common diseases. CPR, First Aid, Bloodborne Pathogens and Direct Care Staff Worker are certifications that the students may obtain.

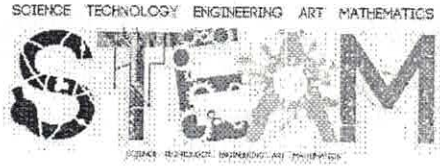
Information Technology

Computer Networking & Security.....CIP 11.0901
This exciting technical course prepares students to design, maintain and secure today's Information Technology (IT) Systems. Network Security Specialists acting as Ethical Hackers prevent data loss from cyber-attacks protecting valuable data. Network Security Specialists are in demand in Law Enforcement, corporations and government.

Multimedia Design.....CIP 11.0801
This program allows students to be creative with design presentations for entertainment, industrial and commercial applications. This curriculum utilizes digital/video cameras and projectors in conjunction with computers. Students create animations, manipulate photographs, create presentations and web pages.

We are

SCIENCE TECHNOLOGY ENGINEERING ART MATHEMATICS



Service Occupations

Cosmetology .....CIP 12.0401
This program builds skills for a variety of careers within the cosmetology industry. The course includes skills in hair, skin and nail care as well as salon procedures. Upon completion of the required hours, students will be eligible to take the PA State Boards.

Culinary Arts.....CIP 12.0508
The Culinary Arts course offers instruction in the commercial restaurant industry including: gourmet and fine dining, customer service, menu planning, cost-control, sanitation and hygiene. The curriculum encompasses the complete food cycle including nutrition, ordering processes, menu design and presentation skills.

Early Childhood Education .....CIP 19.0708
The course encompasses all phases of early childhood development including physical, social, emotional and intellectual. The curriculum also includes nutrition, guidance, discipline, the value of play and the science of child development.

Transportation

Automotive Technology.....CIP 47.0604
Automotive Technology provides instruction covering a wide range of skills for the high-tech automotive industry. This includes engines, computer diagnostics, maintenance, repair and the opportunity to earn a PA State Inspection and Emissions Certification.

Collision Repair Technology .....CIP 47.0603
The program provides the skills necessary to transform a wrecked vehicle into a masterpiece. Students receive instruction with state-of-the-art equipment for replacing or repairing auto body parts. Students learn to customize vehicles with painting techniques.

Diesel Technology .....CIP 47.0613
This program provides training on biodiesel, diesel, and gasoline powered medium/heavy trucks and equipment. This equipment is part of today's transportation, construction and manufacturing industries. Students can earn a PA State Inspection and Emissions Certification.

Warehouse Management .....CIP 52.0203
This program will actively engage students in the process of receiving, storing, shipping, controlling and distributing products. Students will use conveyors, hand trucks and carts to transport materials/supplies. They will work in the Forbes shipping and receiving department.

Ninth Grade Exploratory Program

Ninth Grade Exploratory program begins with a two week session in Career Exploration. Students will then participate in four programs including safety, theory and lab areas.