Highlands High School


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## How to use this document

The intent of this document is to ensure that all families have the necessary information to make informed course selections for the upcoming school year. We encourage families to spend time reading through this document together and discussing student course selections for the 2022-2023 school year.

When making course selections, students should consider their goals for future education and the career path they plan to pursue using the Graduation Planning Template provided below will ensure that all graduation requirements are met prior to the student's anticipated graduation date. Teacher recommendations will be available in Power-School on Friday, February 4, 2022. Teachers will use student performance data to recommend the appropriate courses for students. While students may be recommended for numerous Honors/AP/CHS level courses, we strongly encourage students to take into consideration their extracurricular and personal schedules as well as their willingness to spend time outside of school, working on assignments. Once courses are scheduled, the master schedule may not allow for students to change their selections.

Note: Each section heading in the table of contents is a link to that specific section. If you want to jump directly to a department's course offering, simply click on the name of the department in the Table of Contents.

## Building Administration

| Shawn Bennis | Co-Principal | ext. 4610 |
| :--- | :--- | ---: |
| Laura Burns | Co- Principal | ext. 4605 |
| Jefrie Funtal | Dean of Students | ext. 4615 |
| Brittany Barch | Office Secretary | ext. 4601 |
| Patty Sirota | Office Secretary (Attendance) | ext. 4600 |
| Drew Karpan | Athletic Director/Director of Transportation | ext. 5670 |
| Carmen Corna | District Attendance Officer | ext. 3007 |

## School Counseling Department

| Beth Carrarini | School Counselor | ext. 4651 |
| :--- | :--- | ---: |
| Susie Gurrera | School Counselor | ext. 4653 |
| Marilyn Skwortz | School Counselor | ext. 4652 |
| Kim Hines | School Counseling/Transportation Secretary | ext. 4650 |

## 2022-2023 Scheduling Timeline

The following timeline will be followed in regards to student course selections and the distribution of student schedules for the 2022-2023 school year:

| Date | Scheduling Event |
| :--- | :--- |
| January 28, 2022 | Class Scheduling Meetings |
| January 31, 2022 | Elective Fair |
| Week of February 7, 2022 | Teacher Scheduling Conversations/ <br> PowerSchool Opens for Student Selections |
| February 9, 2022 @ 7:00 PM | Parent Scheduling Informational Meeting |
| February 22, 2022 | Student Course Selections Due |
| February 28 - March 4, 2022 | Counselor Verification Meetings |
| March 11, 2022 | Parent Course Verification Sign-off Due |
| June 2, 2022 | Student Schedules Distributed/Step-up Day |
| July 1, 2022 | Course Add/Drop Period Ends |

## Graduation Requirements

To be eligible for graduation, students must earn 24 credits. The table below shows the required distribution of credits for graduation.

| Subject Area | Required Number of Credits |
| :--- | :---: |
| English | 4 |
| Mathematics | 3 |
| Science | 3 |
| Social Studies | 3 |
| Health and Physical <br> Education | 2 |
| Humanities | 2 |
| Electives | 7 |

## Graduation Planning Template

Below is a template to help students plan their course selections and ensure that they are meeting all graduation requirements by the end of their senior year. School Counselors will meet with students each year to discuss future plans and to update a copy of this form to officially track all graduation requirements.

| Subject | Credits Required | Grade | Courses | Year | Credit Earned |
| :---: | :---: | :---: | :---: | :---: | :---: |
| English | 4 | 9 |  |  |  |
|  |  | 10 |  |  |  |
|  |  | 11 |  |  |  |
|  |  | 12 |  |  |  |
| Mathematics | 3 | 9 |  |  |  |
|  |  | 10 |  |  |  |
|  |  | 11 |  |  |  |
|  |  | 12 |  |  |  |
| Science | 3 | 9 |  |  |  |
|  |  | 10 |  |  |  |
|  |  | 11 |  |  |  |
|  |  | 12 |  |  |  |
| Social Studies | 3 | 9 |  |  |  |
|  |  | 10 |  |  |  |
|  |  | 11 |  |  |  |
|  |  | 12 |  |  |  |
| Health and Physical Education | 2 | 9 |  |  |  |
|  |  | 10 |  |  |  |
|  |  | 11 |  |  |  |
|  |  | 12 |  |  |  |
| Humanities | 2 |  |  |  |  |
|  |  |  |  |  |  |
| Electives | 7 |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
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|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Keystone <br> Exam <br> Verification | NA |  | Algebra I |  |  |
|  |  |  | Literature |  |  |
|  |  |  | Biology |  |  |

## Keystone and Act 158 Requirements

The Pennsylvania Department of Education requires that all students participate in Keystone Exams in Algebra, Biology and Literature as part of graduation requirements. Each exam is associated with a trigger course at the end of which, Highlands High School administers the Keystone Exam. These courses are noted in the course descriptions below. Students must earn a score of 1500 or above on each assessment in order to achieve a proficient score. Students may retake the exams as many times as necessary, prior to their senior year, in order to achieve proficiency.

Beginning with the Class of 2023, Act 158 of 2018 (Act 158) provides alternative paths to graduation for students who do not achieve proficiency on all three Keystone Exams. Students have the opportunity to demonstrate postsecondary preparedness through one of four additional pathways:

1. Keystone Composite
2. Career and Technical Education (CTE) Concentrator
3. Alternative Assessment
4. Evidence Based

For additional information, and a detailed explanation of each pathway, please visit the district or SAS websites.

## Grade Promotion

Promotion to the next grade is based solely on credits earned each school year. Students can earn 7 credits each year. Students must earn the following credits for promotion.

| Grade Level | Minimum Credits <br> Earned |
| :--- | :---: |
| $10^{\text {th }}$ Grade | 5 |
| $11^{\text {th }}$ Grade | 11 |
| $12^{\text {th }}$ Grade | 17 |
| Graduation | 24 |

## Percentage Grading System

Percentage grades are used for each nine-week grading period as well as semester and final averages. The percentage grade that the student earns in class is what will appear on the report card. The percentage grade earned in all classes will be calculated into a student's grade point average. The current percentage scale (90, $80,70,60$ ) will be used.

## GPA Calculations

The computation of a student's grade point average for a course is the product of the grade earned, the credit value and the multiplier. Courses taught at the Advanced Placement (AP) or College in High School (CHS) levels have a multiplier of 1.10. Honors courses have a multiplier of 1.05. Each quarter grade contributes $22.5 \%$ of the final grade and the final exam contributes $10 \%$ of the final grade. The weighted average of these five values is the percentage recorded on the student's official transcript.

## Course Add/Drop Process

The deadline to request a schedule change is July 1, 2022. The required Google form, found on the district website and School Counselor's Google Classrooms, must be submitted no later than July 1, 2022.

Requests to change schedules beyond July 1, 2022 must be approved by the teacher and principal. Requests to change schedules beyond the first 10 days of a year-long course and beyond the first 5 days of a semester course will result in a grade of WF (withdraw failing) which will be recorded on the student's transcript.

NOTE: Requests to change schedules, at any time, may be denied based on teacher availability and class size.

## Global Scholars Program

The Global Scholars Program is an interdisciplinary program that helps cultivate globally minded students who, upon graduation, will be better prepared to negotiate our increasingly international society. This program develops students' global competence and broadens their post-secondary opportunities, including university acceptance and scholarships, as well as career and workforce options. The Global Scholars Program is sponsored by the Pennsylvania State Modern Language Association (PSMLA) in collaboration with the World Language Department at Highlands High School.

Students must meet all the graduation requirements as mandated by Highlands School District. In addition, students who wish to receive the Global Scholars Certificate upon graduation and wear the Global Scholars honor cords during the graduation ceremony, must also satisfy the following requirements within the course of their high school career:

1. 8 Global academic courses (including 4 consecutive years of the same language)
2. 4 Global extracurricular activities
3. 20 Global service hours
4. 8 Global literature or media reviews

For more information, visit the website or contact the Global Scholars Program Advisor Laura Fleischer Proano at lproano@goldenrams.com.

## Resource/Keystone Preparation or Intervention Period

To ensure that all students receive the support necessary to find academic success, HHS implemented a daily resource period. Each student will register for seven academic courses and then have a period of Resource, Keystone Prep or Keystone Intervention. The description of each is listed below.

## ACADEMIC RESOURCE

The Academic Resource period is designed to empower all students to learn through systematic schoolwide academic support, during the school day, through ongoing collaboration involving teachers, administrators, and families.

## KEYSTONE PREP

The Keystone Prep course is an additional 2 days of academic support and enrichment for students enrolled in a Keystone trigger course. ( $9^{\text {th }}$ Grade - Algebra, $10^{\text {th }}$ Grade - Biology, English 10)

## KEYSTONE INTERVENTION

The Keystone Intervention course is designed for students who have not achieved Proficiency on the Keystone assessments. These students will be enrolled in an online Keystone Preparation Course through our Highlands Virtual Academy.

## Highlands Virtual Academy (HVA)

Students may choose to enroll in the Highlands Virtual Academy to earn credits toward graduation. This program utilizes the Edgenuity Platform to present course content to students. The program provides students the flexibility to earn Highlands credits while working from home. Enrollment in this program is a privilege for students, and students failing to meet program requirements may be directed to return to in-person learning at the discretion of building administration.

To register for HVA, interested students must notify their school counselor and participate in an orientation, along with their parent/guardian. Students enrolled in HVA may also attend Forbes Road Career and Technology Center. Full-time and part-time HVA students are responsible for meeting all of Highlands School District graduation requirements in order to earn a diploma.

## Xello College and Career Preparation Program

This online tool provides students a platform to explore post-secondary opportunities. In alignment with the Highlands School District 339 Plan, students use Xello each year to complete activities that explore post-secondary career and/or educational options. The goal of this program is to provide students with resources to help them plan their path after high school. Xello is also used during the college application process to store teacher/staff recommendation letters. All students at HHS have access to this program.

## Additional Program Information

ADVANCED PLACEMENT: AP courses require college level thinking and learning. Colleges may grant credit based on scores on advanced placement tests administered in May. Please consult individual colleges/universities for their AP procedures. Students enrolled in Advanced Placement courses have the option take the AP exams for those subject areas. Highlands High School strongly recommends participating in the AP exams. 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.

COLLEGE IN HIGH SCHOOL (CHS) COURSES: College in High School courses align to course curriculum from local universities including the University of Pittsburgh and Seton Hill University. When enrolled in a CHS course, students may earn college credit through the associated university. Fees differ by university and are the student's responsibility. Students should contact the associated university when transferring these credits to their selected post-secondary institution.

GIFTED AND TALENTED EDUCATION PROGRAM: The Highlands School District provides opportunities that 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 and programming, and provides enrichment opportunities in math, ELA and other areas to help students in the GATE program continue to develop their advanced skills.

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. Qualified students will be invited to apply for induction during their sophomore year. Students selected for membership will participate in an induction ceremony in May.

SPECIAL EDUCATION PROGRAM: It is the policy of the Highlands School District that every child who qualifies for special education services will receive 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: The school counseling department provides numerous services for students and families. Based on the standards set forth by the American School Counselor Association's 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 have the opportunities to grow in each domain.

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

WORK RELEASE: Limited to seniors; students who apply for a release time/co-op program must provide copies of pay-stubs monthly, be a student in good standing and on-track for graduation. Interested rising-seniors should notify their school counselor during their course verification meeting. All work release will be scheduled at the end of the academic day.

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

## English Department Course Descriptions


#### Abstract

ACADEMIC ENGLISH 9 Grade Level: 9 Fulfills Graduation Requirement: English Credit Value: 1.0

Prerequisites: None Course Description: This course will develop the student's ability to analyze and write about literature. Aligned to the PA Core ELA Standards, students will be exposed to various literary devices while exploring the following major texts: Romeo and Juliet, Great Expectations, and Of Mice and Men. In addition, students will be expected to construct grammatically and structurally sound compositions, as well as prepare for the Keystone English Literature Exam. Students will also begin to prepare for the SAT/ACT exams. Students will increase vocabulary skills through various reading, writing, and speaking activities. Students will complete an in-depth guided research paper. Students will submit all required papers to the turnitin.com system as well. (See Research Requirement)*


| HONORS ENGLISH 9 | Credit Value: 1.0 |  |
| :--- | :--- | :--- | :--- |
| Grade Level: 9 | Fulfills Graduation Requirement: English | Duration: Full-Year |

Prerequisites: An A in Honors English 8 or Academic English 8 with teacher recommendation and writing submission
Course Description: This course is an intensive reading and writing class designed for students intending to continue in the Honors/AP programs throughout their academic career. Students need to be self-motivated and independent learners. Students will cover major readings Lord of the Flies, Romeo and Juliet, Great Expectations, and Of Mice and Men. Aligned to the PA Core ELA Standards, students will read and critically analyze various works of literature, write several analytical compositions, and prepare for the Keystone English Literature Exam. Students will complete a guided research paper. Students will submit all required papers to the turnitin.com system as well. (See Research Requirement)*

Note: A summer reading and writing assignment is required for this class.

| ACADEMIC ENGLISH 10 |
| :--- |
| Grade Level: 10 Fulfills Graduation Requirement: English Duration: Full-Year <br> Prerequisites: English 9/Honors English 9   <br> Course Description: Aligned to the PA Core ELA Standards, this course is designed to develop the   <br> student's ability to analyze and write about literature. Students will study the writings of Greek   <br> Literature including selected Mythology, The Iliad, The Odyssey, and Shakespeare's Julius Caesar. In   <br> addition, students will read To Kill A Mockingbird that will incorporate a research paper on Social   <br> Issues. Through literary analysis, grammar instruction, analytical/research writing, public speaking,   <br> presentations, and preparation for the Keystone English Literature Exam, students will address   <br> essential questions that are thematically integrated. Classroom learning activities will include, but are   <br> not limited to: class discussions, presentations, varied research and writing opportunities, and   <br> project-based learning experiences. Students will submit all required papers to the turnitin.com   <br> system as well. (See Research Requirement)*   |
| Note: The Keystone Literature Exam will be administered at the conclusion of this course. |


#### Abstract

HONORS ENGLISH 10 Grade Level: 10 Fulfills Graduation Requirement: English Credit Value: 1.0

Prerequisites: Grade of an "A" in Honors English 9 or a " B " with a recommendation from the Honors English 9 teacher. Students not enrolled in Honors English 9 must receive an " $A$ " in Academic English 9 and have a recommendation from the Academic English 9 teacher along with the submission of multiple writing samples. Course Description: This course is an intensive reading and writing course designed for students intending to continue in the Honors/AP programs throughout their academic career. Aligned to the PA Core ELA Standards, students will read and critically analyze various works of literature, write several analytical compositions, as well as prepare for the Keystone English Literature Exam. Students will study the writings of Greek Literature including selected Mythology, The lliad, The Odyssey, and Shakespeare's Julius Caesar. In addition, students will read To Kill A Mockingbird and A Brave New World that will incorporate a research paper on Social Issues.

Note: A summer reading and writing assignment is required for this class. The Keystone Literature Exam will be administered at the conclusion of this course.


| ACADEMIC ENGLISH 11 |
| :--- |
| Grade Level: $11 \quad$ Fulfills Graduation Requirement: English |
| Prerequisites: English 10 |
| Course Description: This course emphasizes two areas: the survey of American Literature and the |
| process of composition. The historical development of American Literature is traced from the Colonial |
| to contemporary times, linking the development of American Literature to the philosophical and |
| historical events occurring during various periods. Students will approach this literature through |
| novels, short stories, drama, poetry, essays, various analytical compositions, and a research paper on |
| an American author and/or influential American. Students will explore American texts: The Crucible, |
| Death of a Salesman, and The Great Gatsby. Aligned to the PA Core ELA Standards, students will read |
| closely to determine what the text says explicitly and implicitly, citing specific evidence to support |
| conclusions. When writing, students will carefully consider task, purpose, and audience while |
| choosing words, information, structures, and format deliberately. Students will take part in a variety |
| of productive, structured conversations-as part of a whole class, small groups, or with a partner- |
| building on others' ideas and expressing their own clearly and persuasively. Students will submit all |
| required papers to the turnitin.com system as well. (See Research Requirement)* |


#### Abstract

HONORS ENGLISH 11 Credit Value: 1.0 Grade Level: 11 Fulfills Graduation Requirement: English Duration: Full-Year Prerequisites: Grade of an " A " in Honors English 10 or a " B " with a recommendation from the Honors English 10 teacher. Students not enrolled in Honors English 10 must receive an " $A$ " in Academic English 10 and have a recommendation from the Academic English 10 teacher, along with submission of a writing sample. Course Description: This course focuses on a thorough treatment of American Literature with emphasis placed upon reading comprehension, vocabulary in context, and development of compositional skills. . Students will explore American texts: The Crucible, Death of a Salesman, and The Great Gatsby as well as two independent novels. In adherence to the PA ELA Core Standards, students will read closely to determine what the text says explicitly and implicitly, citing specific evidence to support conclusions. When writing, students will carefully consider task, purpose, and audience while choosing words, information, structures, and format deliberately. Students will take part in class discussions, building on others' ideas and expressing their own ideas clearly and persuasively. Students will submit all required papers to the turnitin.com system as well. (See Research Requirement)*


Note: Summer reading and writing will be required.

| AP ENGLISH LANGUAGE AND COMPOSITION 11 |
| :--- |
| Grade Level: $11 \quad$ Fulfills Graduation Requirement: English |
| Prerequisites: Grade of an "A" in Honors English 10 or a "B" with a recommend Full-Year 1.0 |
| English and submission of a writing sample. Students not enrolled in Honors English 10 must receive |
| an "A" in Academic English 10 and have a recommendation from the Academic English 10 teacher, |
| along with submission of a writing sample. |

Course Description: The AP English Language and Composition program is a course for eleventh grade students. Aligned to the PA Core ELA Standards, students will read closely to determine what the text says explicitly and implicitly, citing specific evidence to support conclusions. When writing, students will carefully consider task, purpose, and audience while choosing words, information, structures, and format deliberately. Students will analyze voice, diction, detail, imagery, syntax, and tone to gain a deeper understanding of language and literature. Through reading and writing, students will become aware of the interaction between a writer's purpose, audience expectations, and subjects, as well as the way conventions and rhetorical devices contribute to effective writing. Students will take part in a variety of productive, structured conversations - as part of a whole class, small groups, or with a partner - building on others' ideas and expressing their own clearly and persuasively. This is an intensive writing course that will prepare college- bound students for freshman English and college composition courses. Additionally, advanced vocabulary study and mastery of rhetorical strategies and devices will be developed.

Note: To participate in this course, successful completion of summer reading and writing assignments are required.

The 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. Students will submit all required papers to the turnitin.com system as well. (See Research Requirement)*


#### Abstract

ACADEMIC ENGLISH 12 Grade Level: 12 Fulfills Graduation Requirement: English Credit Value: 1.0

Prerequisites: English 11 Course Description: Aligned to the PA Core ELA Standards, this course will analyze classic literature components from varying genres, time periods, and origins; and an emphasis will be dedicated to British literature, linking the development of British Literature to philosophical and historical events. Students will read British texts: Beowulf, The Canterbury Tales, The Stranger, and Hamlet. The students will approach literature through a study of fiction, non-fiction, poetry, drama, various analytical compositions, and an in-depth independent novel research paper. Becoming successful critical readers and writers will afford students the opportunity to "see" the world from a different and exciting vantage point. Students will submit all required papers to the turnitin.com system as well. (See Research Requirement)*


> | Duration: Full-Year |
| :--- |
| Prerequisites: Grade of an "A" in AP Language/Composition or a "B" with a recommendation from the |
| AP Language teacher. For Honors English 11 students, placement will be contingent upon an "A," a |
| recommendation from the Honors 11 English teacher, along with submission of multiple writing |
| samples for review. |
| Course Description: This intensive reading and writing course examines the recognized classics of |
| World Literature. In adherence to the PA ELA Core Standards, students will read the works of authors |
| ranging from Sophocles to Shakespeare to Sartre and critically analyze aspects of these works in |
| detailed written assignments, as well as Socratic Seminar discussions. An examination of vocabulary |
| through literature, figurative language, and literary techniques will remain a focus throughout the |
| course. This course will prepare college-bound students for freshman English, college composition, |
| and literature courses. |

Note: To participate in this course, successful completion of summer reading and writing assignments is required.

The 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. Please submit all required papers to the turnitin.com system (See Research Requirement)*

## MULTIMEDIA DESIGN 1

## Prerequisites: None

Course Description: This course on the foundations of digital and multimedia design principles. Students will engage with Adobe Creative Suite to work with various media including Photoshop, Premier Pro, and After Effects. Students will explore 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. This course requires a strong foundation with basic computer skills. In addition, the course is a fast-paced, project-based course that requires in class participation and working with peers and groups to complete projects outside of the school day. After completing the course, students can progress to Multimedia Design 2.


#### Abstract

MULTIMEDIA DESIGN $2 \quad$ Credit Value: 1.0 Grade Level: $11 \quad$ Fulfills Graduation Requirement: Elective $\quad$ Duration: Full-Year and 12

\section*{Prerequisites: Multimedia Design 1}

Course Description: 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. Students screen selected films and/or clips during class throughout the year to enhance discussions and projects.


#### Abstract

SPORTS LITERATURE Grade Level: 10, Fulfills Graduation Requirement: Elective Credit Value: 0.5 11 and 12 Prerequisites: None Course Description: Sports in Popular Culture is a project-based, student-driven course designed for those who enjoy competition and athletics either as a participant or spectator, and want to take a look at this topic through videos, movies, reading, and writing. Sports have shaped many modes of media and is a popular topic for journalism and media broadcast. This elective course provides student- choice, and may include themes such as leadership, character, rivalries, successes versus failures, jinxes and fate, heroism, identity and pride. Literature will be analyzed using both fiction and non-fiction, and may include examples of music, poetry, newspapers, journals, TV broadcasts, and movies. Students will be required to be active participants and grades will be based on class participation as well as project-based learning.


| COLLEGE AND CAREER PREPARATION | Credit Value: 0.5 |  |
| :--- | :--- | :--- |
| Grade Level: 10 <br> and 11 | Fulfills Graduation Requirement: Elective | Duration: Semester |
| Prerequisites: None |  |  |
| Course Description: This course assists students to explore direction beyond high school in either a <br> career or a college setting by addressing topics such as tuition and fees, acceptance criteria, <br> application procedures, resume creation, letters of recommendation, and college essays. The course <br> will also expose students to career exploration via personality testing and research to uncover <br> potential paths beyond high school and how best to prepare. Ultimately, the student will work to <br> complete a binder of materials that evidence their research for their future application processes. |  |  |


| CREATIVE WRITERS AT WORK | Credit Value: 0.5 |
| :--- | :--- |
| Grade Level: 9,10, <br> 11 and 12 | Fulfills Graduation Requirement: Elective |
| Duration: Semester |  |
| Prerequisites: None | Course Description: This course is an introduction to creative writing. Students will be encouraged to <br> write both prose and poetry through a variety of stimulating in-class exercises and assignments. In <br> addition, students will read excerpts from the best contemporary writing available and be taught how <br> to imitate the key elements of style that make those words create an image on the page. |


| ETHICAL DILEMMAS |  | Credit Value: 0.5 |
| :---: | :---: | :---: |
| Grade Level: 9, 10, 11 and 12 | Fulfills Graduation Requirement: Elective | Duration: Semester |
| Prerequisites: None |  |  |
| Course Description: This course gives students the chance to analyze and discuss various ethical dilemmas to help them consider their own beliefs on issues happening around the globe and on topics that affect us as human beings. Students will get an introduction to philosophy and the ideas that drive our morals in society, as well as to psychology and sociology. Students will be working on improving reading and writing skills through the various ethical dilemmas and be working on critical thinking and argumentative skills as well. |  |  |


| DRAMA I (Intro to theatre and acting) |  | Credit Value: 0.5 |
| :---: | :---: | :---: |
| Grade Level: 9, 10, 11 and 12 | Fulfills Graduation Requirement: Elective | Duration: Semester |
| Prerequisites: None |  |  |
| Course Description: This course introduces the basics of acting and stage. It 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, the students will introduce, rehearse, and present in parts, a one-act play. Students will also have the opportunity to perform in FALL FOLLIES. Dedicated class time will allow students to hone individual and group acts and performances. |  |  |


#### Abstract

ADVANCED DRAMA Grade Level: 9, 10, Fulfills Graduation Requirement: Elective $\quad$ Duration: Semester 11 and 12 Prerequisites: DRAMA 1 \& student demonstration/audition or instructor approval Course Description: This course builds upon the skills previously 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. The semester will be devoted to theater production with advanced instruction in drama, music and movement. Members of the class will present a public performance and 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. Students that qualify will receive recommendations for student registration.


## GRAPHIC NOVELS Grade Level: 9, 10, <br> Fulfills Graduation Requirement: Elective <br> Credit Value: 0.5 <br> 11 and 12 <br> Prerequisites: None

Course Description: This course brings reading to life in an unconventional way, using graphic novels. 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. 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. The graphic novels 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
Grade Level: 9, 10, Fulfills Graduation Requirement: Elective
Credit Value: 0.5
Duration: Semester
11 and }1
Prerequisites: None
Course Description: 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 course will help
students understand those classic stories without spending the time to read every single one.
```


#### Abstract

YOUNG ADULT LITERATURE Grade Level: 9, 10, Fulfills Graduation Requirement: Elective 11 and 12

\section*{Prerequisites: None}

Course Description: This course increases the level of student reading through engagement with reading and in-depth analysis 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 rigorous literary works. Students will read, analyze, interpret, respond to, evaluate and compare literary concepts in the novels orally, in writing and in presentations. Texts such as The Absolutely True Diary of a Part-Time Indian, The Hunger Games, The Perks of Being a Wallflower and Chains have cross-curricular connections to World Cultures, American History, Psychology and Sociology.




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

## Mathematics Department Course Descriptions

| ACADEMIC ALGEBRA I | Credit Value: 1.0 |
| :--- | :--- |
| Grade Level: None | Fulfills Graduation Requirement: <br> Mathematics | | Duration: Full-Year |
| :--- |
| Prerequisites: None | | Course Description: This course expects that students will formalize and expand on Algebraic |
| :--- |
| concepts established in previous coursework. Students will deepen and extend their understanding |
| of linear and exponential relationships by contrasting them with each other and by applying linear |
| models to data that exhibit a linear trend. Students will engage in methods for analyzing and using |
| functions. Students will fluently move between multiple representations of functions including but |
| not limited to linear, exponential and quadratics. |


| ACADEMIC GEOMETRY | Credit Value: 1.0 |  |
| :--- | :--- | :--- |
| Grade Level: 9, 10 <br> and 11 | Fulfills Graduation Requirement: <br> Mathematics | Duration: Full-Year |
| Prerequisites: Algebra I |  |  |
| Course Description: This course design develops and promotes student reasoning and problem <br> solving involving geometric concepts and properties. Topics of study include deductive reasoning <br> using points, lines and planes, segments, angles and triangles, quadrilaterals, polygons, polyhedrons, <br> and circles. Integration of algebraic and geometric concepts assist in designing the rigor of the <br> course. |  |  |


| HONORS GEOMETRY |  | Credit Value: 1.0 |
| :---: | :---: | :---: |
| Grade Level: 9 and 10 | Fulfills Graduation Requirement: Mathematics | Duration: Full-Year |
| Prerequisites: Hon Algebra I, 70\% |  |  |
| Course Description: This course develops and promotes 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. Integration of algebraic and geometric concepts assist in designing the rigor of 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 |
| :--- | :--- | :--- |
| Grade Level: All $\quad$Fulfills Graduation Requirement: <br> Mathematics | Duration: Full-Year |
| Prerequisites: Algebra I, Geometry |  |
| Course Description: This course will focus on the extension of the number system to a complex field, <br> elementary functions using multiple representations (graphical, numerical, algebraic and verbal) <br> including linear, quadratic, polynomial, rational, exponential, and logarithmic functions, linear <br> systems and matrices, probability and sequences and series. Problem solving mathematical practices <br> influence the learning throughout the course. Students will use descriptive statistics and probability <br> as tools to make inferences. |  |


| HONORS ALGEBRA II |
| :--- | | Credit Value: 1.0 |
| :--- |
| Grade Level: 9,10 <br> and 11 |
| Fulfills Graduation Requirement: <br> Mathematics |
| Prerequisites: Hon Algebra I, Hon Geometry at 70\%, or teacher recommendation |
| Course Description: This course will focus on the extension of the number system to a complex field, <br> elementary functions using multiple representations (graphical, numerical, algebraic and verbal) <br> including linear, quadratic, polynomial, rational, exponential, and logarithmic functions, linear <br> systems and matrices, probability and sequences and series. Problem solving mathematical practices <br> influence the learning throughout the course. Topics are similar to Academic Algebra II but are <br> covered at an accelerated pace and in more depth. |


| ACADEMIC PRE-CALCULUS | Credit Value: 1.0 |  |
| :--- | :--- | :--- |
| Grade Level: 11 <br> and 12 | Fulfills Graduation Requirement: <br> Mathematics | Duration: Full-Year |
| Prerequisites: Algebra II |  |  |
| Course Description: This course will cover selected topics in Advanced Algebra (Polynomials of Higher <br> Degree, Rational Functions, Exponential Functions, Logarithmic Functions), Trigonometry (The Unit <br> Circle, Trigonometric Functions of Any Angle, Inverse Trigonometric functions, Trigonometric <br> Identities, Solving Trigonometric Equations) and Analytical Geometry (Circles, Parabolas) in depth. |  |  |


| HONORS PRE-CALCULUS | Credit Value: 1.0 |
| :--- | :--- |
| Grade Level: NoneFulfills Graduation Requirement: <br> Mathematics | Duration: Full-Year |
| Prerequisites: Hon Algebra II at 75\%, |  |
| Course Description: This course will cover selected topics in Advanced Algebra (Polynomials of <br> Higher Degree, Rational Functions, Exponential Functions, Logarithmic Functions), Trigonometry (The <br> Unit Circle, Trigonometric Functions of Any Angle, Inverse Trigonometric Functions, Trigonometric <br> Identities, Solving Trigonometric Equations) and Analytical Geometry (Circles, Parabolas, Ellipses, <br> Hyperbolas, Parametric Equations) in depth. Students must be willing to spend additional <br> preparation time for this course. Topics are similar to Academic Pre-calculus, but are covered at an <br> accelerated pace and in more depth. |  |


| AP CALCULUS | Credit Value: 1.0 |  |
| :--- | :--- | :--- |
| Grade Level: 11 <br> and 12 | Fulfills Graduation Requirement: <br> Mathematics | Duration: Full-Year |
| Prerequisites: Hon Pre-calculus at 75\% or teacher recommendation |  |  |
| Course Description: This course covers theorems on limits, derivatives, integrals, applications of <br> integration, transcendental functions and parametric equations. This course also requires extra <br> preparation time. |  |  |
| Note on the CHS option: While listed as an AP course, students may enroll with a CHS option. <br> Students selecting the CHS option must take an online placement test and meet University of <br> Pittsburgh required scores to enroll and be eligible to earn college credit. |  |  |


| CHS CALCULUS II | Credit Value: 1.0 |  |
| :--- | :--- | :--- |
| Grade Level: 12 | Fulfills Graduation Requirement: <br> Mathematics | Duration: Full-Year |
| Prerequisites: AP Calculus at 75\% or teacher recommendation |  |  |
| Course Description: This course continues the study of integration (substitution rules, partial <br>  <br> polar curves, sequences and series, and differential equations. This course requires extra <br> preparation time. |  |  |
| Note on the CHS option: Students must take an online placement test and meet University of <br> Pittsburgh required scores to enroll and be eligible to earn college credit. |  |  |


| CHS BUSINESS CALCULUS | Credit Value: 1.0 |
| :--- | :--- |
| Grade Level: 11 <br> and 12 | Fulfills Graduation Requirement: <br> Mathematics | | Duration: Full-Year |
| :--- |
| Prerequisites: Hon Pre-calculus at 75\% or teacher recommendation |
| Course Description: This course is an introduction to calculus for students interested in business, <br> economics and other social sciences. Topics covered include derivatives, applications of derivatives, <br> exponential and logarithmic functions and integration. Focus on the application of real-life concepts <br> provides rigor to the course. |
| Note on the CHS option: Students must take an online placement test and meet University of <br> Pittsburgh required scores to enroll and be eligible to earn college credit. |


| PROB \& STATS / ELEM ALGEBRA | Credit Value: 1.0 |  |
| :--- | :--- | :--- |
| Grade Level: 12 | Fulfills Graduation Requirement: <br> Mathematics | Duration: Full-Year |
| Prerequisites: Algebra I |  |  |
| Course Description: This course covers topics of Algebra I (Keystone Exam specific) for review and <br> reinforcement, methods of descriptive statistics and basic inferential statistics, and elements of <br> personal finance. Students will also explore data collection, displaying and summarizing data, <br> probability rules, confidence intervals, and fundamentals of hypothesis testing. Additionally, <br> elements of Personal Finance topics such as banking basics, budgeting, and managing credit and debt <br> will be explored. Students will work to demonstrate proficiency on their Keystone senior <br> mathematics project during this course. |  |  |


| CHS PROBABILITY \& STATISTICS | Credit Value: 1.0 |  |
| :--- | :--- | :--- |
| Grade Level: <br> and 11 | Fulfills Graduation Requirement: <br> Mathematics | Duration: Full-Year |
| Prerequisites: Pre-calculus, Teacher Recommendation |  |  |

Course Description: This 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.

Note on the CHS option: Students must take an online placement test and meet University of Pittsburgh required scores to enroll and be eligible to earn college credit.

| INTRODUCTION TO COMPUTER SCIENCE - PYTHON |
| :--- | Credit Value: 1.0


| AP COMPUTER SCIENCE A - JAVA | Credit Value: 1.0 |
| :--- | :--- |
| Grade Level: 11 <br> and 12 | Fulfills Graduation Requirement: <br> Mathematics | | Duration: Full-Year |
| :--- |
| Prerequisites: Intro. to Comp. Sci. or Teacher Recommendation |
| Course Description: This course is designed for 11-12 grade students who are serious about <br> programming. Java requires a good mathematical background and strong problem-solving skills. The <br> course will prepare students for the AP Computer Science exam. Students will learn to design and <br> implement computer programs that solve problems relevant to today's society, including art, media, <br> and engineering. AP Computer Science A teaches object-oriented programming using the Java <br> language and is meant to be the equivalent of a first semester, college-level course in computer <br> science. It will emphasize problem-solving and algorithm development and use hands-on experiences <br> and examples so that students can apply programming tools and solve complex problems. |

ADVANCED COMPUTER APPLICATIONS $\quad$ Credit Value: $\mathbf{0 . 5}$ Grade Level: 9, 10, $\quad$ Fulfills Graduation Requirement: Elective $\begin{aligned} & \text { Duration: Semester }\end{aligned}$ 11 and 12
Prerequisites: Computer Applications
Course Description: This course explores the advanced features of Excel such as complex formulas, Pivot tables, Pivot charts, and embedding and linking objects. This course introduces 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.

## Social Studies Department Course Descriptions

| UNITED STATES HISTORY 9 | Credit Value: 1.0 |  |
| :--- | :--- | :--- |
| Grade Level: 9 | Fulfills Graduation Requirement: Social <br> Studies | Duration: Full-Year |
| Prerequisites: None |  |  | | Course Description: This course will focus on US History beginning with post-Civil War and |
| :--- |
| Reconstruction. Students will examine the political, cultural, social, and economic history of the <br> nation up through and including WWII. The course will integrate primary and secondary source <br> documents with an emphasis on analysis, writing, and discussion. |


| HONORS US HISTORY 9 | Credit Value: 1.0 |  |
| :--- | :--- | :--- |
| Grade Level: 9 | Fulfills Graduation Requirement: Social <br> Studies | Duration: Full-Year |
| Prerequisites: None |  |  |
| Course Description: This course will focus on US History beginning with post-Civil War and <br> Reconstruction. Students will utilize primary source documents, critical thinking skills, and evaluative <br> writing at an accelerated pace with more in-depth coverage to examine the political, cultural, social, <br> and economic history of the nation up through and including WWII. The course will integrate primary <br> and secondary source documents with an emphasis on analysis, writing, and discussion. |  |  |


| WORLD CULTURES | Credit Value: 1.0 |  |
| :--- | :--- | :--- |
| Grade Level: 10 | Fulfills Graduation Requirement: Social <br> Studies | Duration: Full-Year |
| Prerequisites: None | Course Description: This course will examine global and cultural history. Students will investigate the <br> people, events, conflicts, and customs of diverse groups from around the world, while analyzing both <br> the past, and present. Students will participate in discussion, critically read and evaluate primary and <br> secondary sources, compose essays, conduct research, and create projects to demonstrate their <br> somprehension of course topics. |  |


| HONORS WORLD CULTURES | Credit Value: 1.0 |  |
| :--- | :--- | :--- |
| Grade Level: 10 | Fulfills Graduation Requirement: Social <br> Studies | Duration: Full-Year |
| Prerequisites: None |  |  |
| Course Description: This course will examine global and cultural history at an accelerated <br> pace. Students will investigate the people, events, conflicts, and customs of diverse groups from <br> around the world, while analyzing both the past, and present. Students will participate in discussion, <br> critically read and evaluate primary and secondary sources, compose essays, conduct research, and <br> create projects to demonstrate their comprehension of course topics. |  |  |


| ACADEMIC US GOVERNMENT | Credit Value: 0.5 |  |
| :--- | :--- | :--- |
| Grade Level: 11 <br> and 12 | Fulfills Graduation Requirement: Social <br> Studies | Duration: Semester |
| Prerequisites: None |  |  |
| Course Description: This course will provide an overview of the structure of the US government and <br> the function of the branches of government. Special emphasis on founding documents such as the <br> Constitution will drive course content. Students will examine both historical and current events as <br> examples of the functions of government. |  |  |

## AP US GOVERNMENT \& POLITICS

| Grade Level: None | Fulfills Graduation Requirement: Social <br> Studies |
| :--- | :--- |

Credit Value: 1.0

## Prerequisites: None

Course Description: This course will introduce students 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. Students will examine historical and current events as examples of the functions of government. Students will assignments outside of class time.

| ACADEMIC ECONOMICS | Credit Value: 0.5 |  |
| :--- | :--- | :--- |
| Grade Level: 11 <br> and 12 | Fulfills Graduation Requirement: Social <br> Studies | Duration: Semester |
| Prerequisites: None |  |  |
| Course Description: This course will examine theory and policy of Macroeconomics, which will <br> include, but will not be limited to government spending, taxation, banking, and money. Students will <br> discuss, analyze, and apply their study to contemporary issues by using periodicals and other primary <br> sources as reference. The course will use examples of the Macro concepts as related to personal <br> finance. |  |  |


| AP ECONOMICS | Credit Value: 1.0 |  |
| :--- | :--- | :--- |
| Grade Level: 11 <br> and 12 | Fulfills Graduation Requirement: Social <br> Studies | Duration: Full-Year |
| Prerequisites: None |  |  |
| Course Description: This course is an introduction to supply and demand, consumer behavior, market <br> structures, and pricing. A policy application to government spending and taxation will also be <br> included. The course will use examples of the Micro concepts as related to personal finance. Students <br> will discuss, analyze, and apply their study to contemporary issues through relevant examples. |  |  |


| AP US HISTORY | Credit Value: 1.0 |  |
| :--- | :--- | :--- |
| Grade Level: 10, <br> 11 and 12 | Fulfills Graduation Requirement: Elective | Duration: Full-Year |
| Prerequisites: None |  |  |
| Course Description: This course begins with early American colonization and continues up to the <br> present. Students will engage in analytical reading and writing assignments to explore change over <br> time and conflict and cooperation in US History. Emphasis on critical thinking skills, evaluative <br> writing, and interpretation of primary sources is imperative for success. Students should expect to <br> complete assignments independently outside of class time. |  |  |


| AP EUROPEAN HISTORY |
| :--- |
| Grade Level: 11 Fulfills Graduation Requirement: Elective Credit Value: 1.0 <br> and 12   |
| Prerequisites: None |


| CIVIL RIGHTS MOVEMENT | Credit Value: $\mathbf{0 . 5}$ |  |
| :--- | :--- | :--- |
| Grade Level: <br> and 12 | Fulfills Graduation Requirement: Elective | Duration: Semester |
| Prerequisites: None |  |  |

Course Description: This course will examine the US Civil Rights Movement in the twentieth century through analysis of primary sources, discussion, and critical reading. Student will begin by exploring the origins of the movement during the Progressive Era and then trace the movement through WWI, the New Deal, WWII, and the Post War Era. Students will spend the majority of the course exploring 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 |
| :---: | :---: | :---: |
| Grade Level: 11 and 12 | Fulfills Graduation Requirement: Elective | Duration: Semester |
| Prerequisites: None |  |  |
| Course Description: This course will examine the behavior of American citizens and the responsibilities of US Supreme Court Justices. Students will interact with the judicial branch through a series of case studies. These studies include, but are not limited to, famous cases influencing the Bill of Rights and the other 17 Amendments. Students will apply their knowledge of constitutional law to modern day issues and debates through current events. Student role-play will be an integral part of the course activities. |  |  |

## HOLOCAUST \& GENOCIDE $\quad$ Credit Value: 0.5 <br> Grade Level: 11 <br> Fulfills Graduation Requirement: Elective <br> Duration: Semester and 12 <br> Prerequisites: None <br> Course Description: This course focuses on the Holocaust and other genocides through modern history including, but not limited to Rwanda and Bosnia. Students will engage through 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
Grade Level: 9, 10, $\quad$ Fulfills Graduation Requirement: Elective
11 and 12
Prerequisites: None
Course Description: 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 on student analysis and evaluation of primary sources.

INTRO TO PSYCHOLOGY
Grade Level: 10, $\quad$ Fulfills Graduation Requirement Elective
11 and 12
Prerequisites: None
Course Description: This 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

| Grade Level: 11 | Fulfills Graduation Requirement: Elective |
| :--- | :--- |

and 12
Prerequisites: None
Course Description: This 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 develop their own opinions and ideas concerning human nature. Students will also examine and be able to explain different perspectives and theories throughout the semester. Students will complete assignments independently outside of class time.

| INTRO TO SOCIOLOGY | Credit Value: 0.5 |  |
| :--- | :--- | :--- |
| Grade Level: 10, <br> 11 and 12 | Fulfills Graduation Requirement: Elective | Duration: Semester |
| Prerequisites: None |  |  |
| Course Description: This course introduces students to the study of sociology and examines many of <br> the theories and perspectives of the field throughout history. Students will analyze sociological <br> concepts such as cultural diversity, social change and control, agents of socialization, social <br> stratification, social institutions, urban development, deviance, and crime. There will be an emphasis <br> on developing critical thinking skills and students will demonstrate those skills through written <br> assignments, project design, and classroom discussions. |  |  |


#### Abstract

CHS INTRO TO SOCIOLOGY | Grade Level: 11 | Fulfills Graduation Requirement: Elective |
| :--- | :--- |

Credit Value: 0.5 Duration: Semester and 12 Prerequisites: None Course Description: This 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 society influences these people. Students will complete assignments independently outside of class time.


## Science Department Course Descriptions


#### Abstract

SCIENCE 9 Grade Level: 9 Fulfills Graduation Requirement: Science Credit Value: 1.0 Prerequisites: None Course Description: This course is designed for academic $9^{\text {th }}$ grade students and will focus on the nature of science and inquiry methods, biochemistry, enzyme function in chemical reactions, characteristics of living things, cellular biology, and Ecology. Class instruction will include lecture, labs, projects, presentations, and a choice to dissect a preserved specimen. This is a preparatory course for the Biology Keystone.


## ACADEMIC BIOLOGY <br> Grade Level: 10 Fulfills Graduation Requirement: Science <br> Credit Value: 1.0 <br> Duration: Full-Year

Prerequisites: Science 9
Course Description: This course is required for academic level $10^{\text {th }}$ grade students who successfully completed Science 9. The course will focus on cellular biology, molecular genetics, Mendelian genetics, bioenergetics, photosynthesis and cellular respiration, evolution, taxonomy, and comparative anatomy and physiology. Class instruction will include lecture, labs, projects, presentations, and a choice to dissect a preserved specimen.

Note: The Keystone Biology Exam will be administered at the conclusion of this course.

| HONORS BIOLOGY | Credit Value: 1.0 |
| :--- | :--- |
| Grade Level: 9 | Fulfills Graduation Requirement: Science |
| Prerequisites: Teacher Recommendation |  |
| Course Description: The course will focus on ecology, cellular biology, molecular genetics, Mendelian <br> genetics, photosynthesis and cellular respiration, energy and enzymes, evolution, taxonomy, <br> microbiology (bacteria and viruses) and comparative anatomy and physiology. Class instruction will <br> include lecture, labs, projects, presentations, and a choice to dissect a preserved specimen. This <br> course moves quickly, digs deeper into the curriculum standards, and requires additional lab periods. <br> This course will require time outside the classroom to complete all required work and studies. <br> Note: This course is recommended for 9 |  |
| th grade students who are enrolled in both the honors science |  |
| and math programs; students must be in the honors math program. The Keystone Biology Exam will |  |
| be administered at the conclusion of this course. |  |


| CONCEPTS OF CHEMISTRY | Credit Value: 1.0 |
| :--- | :--- |
| Grade Level: 11 <br> and 12 | Fulfills Graduation Requirement: Science | Duration: Full-Year | Prerequisites: Biology |
| :--- |
| Course Description: This course is required for students who have successfully completed Biology and <br> have scheduling limitations or who have academic needs based on teacher recommendation. The <br> presentation of the content is fluid and dictated by student needs with an emphasis on Next <br> Generation Science Standards and PA Science Standards. Topics covered are matter classification, <br> atomic theory, periodic table, electron placement, formula writing, identifying reactions, the mole <br> concept, stoichiometry, and gas laws. This course is presented at a slower pace and does not have an <br> additional laboratory period. Chemistry is a required course for Highlands graduation. |


| ACADEMIC CHEMISTRY | Credit Value: 1.5 |
| :--- | :--- |
| Grade Level: 10, 11 <br> and 12 | Fulfills Graduation Requirement: Science |
| Duration: Full-Year with lab every <br> other day |  |
| Coursequisites: Biology <br> 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 Science Standards, <br> which include matter classification, atomic theory, the periodic table, electron placement, formula <br> writing, identifying reactions, the Mole concept, stoichiometry, acid/base reactions and gas laws. <br> Chemistry is a required course for Highlands graduation. |  |


| HONORS CHEMISTRY |
| :--- | | Credit Value: 1.5 |
| :--- |
| Grade Level: 10 <br> and 11 |
| Prerequisites: Biolls Graduation Requirement: Geometry | | Duration: Full-Year with lab every |
| :--- |
| other day |$|$| Course Description: This course is suggested for all students who have successfully completed |
| :--- |
| Geometry and Honors Biology. The course follows Next Generation Science Standards with an |
| emphasis on PA Science Standards, which include incorporating lab experiences, proper analysis of |
| results, cooperative problem-solving skills. The curriculum topics mirror the Advanced Placement |
| curriculum: atomic structure, molar relationships, thermochemistry, formula writing, reaction |
| prediction, bonding, gas laws, and acids. This course moves quickly, digs deeper into the curriculum |
| standards, and requires additional lab periods. This course will require time outside the classroom to |
| complete all required work with a strong emphasis on group work. Chemistry is a required course for |
| Highlands graduation. |


| ACADEMIC PHYSICS | Credit Value: 1.5 |  |
| :--- | :--- | :--- |
| Grade Level: 11 <br> and 12 | Fulfills Graduation Requirement: Science | Duration: Full-Year with lab every <br> other day |
| Prerequisites: Chemistry |  |  |
| Course Description: Academic Physics has an emphasis on extensive lab experiences, proper <br> interpretation and presentation of results, quantitative problem-solving skills, mechanics and <br> dynamics, energy and heat, waves and sound, optics and electricity. This course is taught at a slower <br> pace with a stronger emphasis on application of concepts than Honors Physics. |  |  |


| HONORS PHYSICS | Credit Value: 1.5 |  |
| :--- | :--- | :--- |
| Grade Level: 11 <br> and12 | Fulfills Graduation Requirement: Science | Duration: Full-Year with lab every <br> other day |
| Prerequisites: Honors Chemistry | Course Description: Honors Physics emphasizes extensive lab experiences, proper interpretation and <br> presentation of results, and quantitative problem-solving skills. The topics of focus include mechanics <br> and dynamics, energy and heat, waves and sound, optics, electricity and magnetism. This course <br> moves at a faster pace and more in-depth level than Academic Physics. It requires a significant <br> dedication to studies outside of the classroom. |  |


| CHS BIOLOGY |  | Cr |
| :---: | :---: | :---: |
| Grade Level: 11 and 12 | Fulfills Graduation Requirement: Elective | Duration: Full-Yea |
| Prerequisites: Honors Biology |  |  |
| Course Description: This course is an elective course that 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. Discussion points on morphology, anatomy, phylogeny and reproduction are 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. (Emphasis is on population genetics and population ecology. This course is lab-intensive (including AP Biology labs and dissection) and is taught at the college level. |  |  |
| Note: Those students who enroll will have the opportunity to receive college credits through Seton Hill University at their own expense. |  |  |


| AP CHEMISTRY | Credit Value: 1.5 |
| :--- | :--- |
| Grade Level: 11 <br> and 12 | Fulfills Graduation Requirement: Elective | | Duration: Full-Year with lab every |
| :--- |
| other day |$|$| Prerequisites: Honors Chemistry, Geometry, teacher recommendation |
| :--- |
| Course Description: The is course introduces students to college level chemistry concepts and lab <br> experiments. Students must exhibit in-depth problem-solving skills as well as a strong work ethic. <br> Extensive studies outside of class time are required to perform well on the AP exam and in the course. <br> Content focuses on the four big ideas: Scale Proportion and Quantity, Structure and Properties, <br> Transformations, and Energy. Graphing calculators assist students with their learning. Tests and <br> coursework will strictly follow the approved College Board's Advanced Placement Chemistry course of <br> study. |
| Note: Students will be required to complete coursework during the summer, which includes problem <br> sets and writing an experimental theory. There will be an exam within the first week of class to review <br> the content of Honors Chemistry. |


| AP PHYSICS | Credit Value: 1.5 |  |
| :--- | :--- | :--- |
| Grade Level: 12 | Fulfills Graduation Requirement: Elective | Duration: Full-Year with lab every <br> other day |
| Prerequisites: Physics, AP Calculus, Teacher Recommendation |  |  |

Note: Students may be required to complete coursework during the summer, which may include readings, experiments and problem sets.

| HONORS ANATOMY AND PHYSIOLOGY |  | Credit Value: 1.0 |
| :---: | :---: | :---: |
| Grade Level: 11 and 12 | Fulfills Graduation Requirement: Elective | Duration: Full-Year |
| Prerequisites: CHS Biology |  |  |
| Course Description: The course is designed to give students a general introduction to Human anatomy and physiology. Content focuses on anatomical terminology, tissues, the integumentary system, the skeletal system, the muscular system, the cardiovascular system, human development, blood and articulations of the body. Students enrolled in this course will be expected to participate in daily class lessons, complete models and projects outside the classroom setting and participate in multiple dissections within the classroom. Dissection is mandatory and alternative assignments to dissection will not be provided. This course is highly recommended for students who plan to pursue careers in the medical field. |  |  |

## EARTH AND SPACE $\quad$ Credit Value: 1.0 <br> Grade Level: 11 <br> Fulfills Graduation Requirement: Elective Duration: Full-Year <br> and 12

## Prerequisites: Concepts of Chemistry/Chemistry

Course Description: This course is an elective course for students who have successfully completed three science courses, one of which must be Concepts of Chemistry. Earth and Space Science encompasses disciplines of Geology, Meteorology and Astronomy. Students will engage in studies of earth's mineral resources and natural history, as well as the modeling of weather and climate. Finally, students will understand how the universe is structured and learn how to explore objects in it using complex, but user-friendly astronomy simulation software.

| HONORS GEOLOGY AND PLANETARY SCIENCES |  | Value: 1.0 |
| :---: | :---: | :---: |
| Grade Level: 12 | Fulfills Graduation Requirem | Dur |
| Prerequisites: Chemistry, Teacher Recommendation |  |  |
| Course Description: This course is an elective course for $12^{\text {th }}$ 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. Students are expected to complete complex laboratory activities, a scientific research paper, regular homework assignments, and make regular group presentations. |  |  |

NATURAL RESOURCES AND PRODUCTION TECHNOLOGY $\quad$ Credit Value: 1.0
Grade Level: 11 Fulfills Graduation Requirement: Elective Duration: Full-Year
and 12

## Prerequisites: Chemistry

Course Description: This course is 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 urgent need to conserve them for future use. By the completion of the course, students will be able to articulate how natural resources are extracted and utilized, as well as articulate informed opinions on how they could be managed more sustainably.

## Business and Technology

## PERSONAL FINANCE <br> Grade Level: All <br> Fulfills Graduation Requirement: Elective <br> Credit Value: 0.5

Course Description: This course will present students with the skills to successfully manage their finances. Aligned to the PA Academic Standards students will explore the concepts of money management, earning income, borrowing money, financial services and risk management as well as saving and investment. Upon completion of the course, students will understand how to make financial decisions that support their future goals.

\section*{MARKETING \& SALES <br> | Grade Level: All | Fulfills Graduation Requirement: Elective | Duration: Full-Year |
| :--- | :--- | :--- |}

Prerequisites: None
Course Description: This course will present students with topics of marketing, economics, business, marketing functions, pricing, marketing strategies, and goods and services. This course includes the core functions of marketing, as well as up-to-date trends in marketing which are essential in the operation of a business. Students will have an opportunity to apply the marketing concepts through interactive enrichment activities. Students will also improve their skills in communications and interpersonal relations. In addition, students will also examine 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.

Note: 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

| Grade Level: 10, | Fulfills Graduation Requirement: Elective | Duration: Full-Year |
| :--- | :--- | :--- |

11 and 12
Prerequisites: Marketing \& Sales
Course Description: This course will focus on the evolving retailing field. 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. Additional topics covered will be types of retailers, multichannel retailing, consumer buying behavior, retail marketing strategies, supply chain management, store management, retail pricing and store layout/design. Students will also learn proper customer service and selling techniques in retailing. When exiting the class, students will have the skills necessary to research job leads, complete employment applications, and successfully interview for a job, and will have a working resume in hand.

> | INTERNATIONAL BUSINESS |
| :--- |
| Grade Level: 11 Fulfills Graduation Requirement: Elective <br> and 12  |
| Duration: Full-Year |
| Prerequisites: Retailing |

## Fine Arts Department Course Descriptions

Music

## BAND <br> Grade Level: All <br> Fulfills Graduation Requirement: Elective Credit Value: 1.0 <br> Prerequisites: Director's Approval <br> Duration: Full-Year

Course Description: Band is a curricular study of instrumental repertoire from varied eras and genres. Required performances include football games, marching band festivals, community parades (i.e. Winter \& Memorial Day), school events, pep rallies, Music Performance Assessments (adjudications), and concerts (fall, winter and spring), and Commencement. Members of the band will study units in both the Marching and Concert Band settings 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, or 5 day/week class. Enrollment in fewer days 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.
*Students may enroll in both Band and Concert Choir for 0.5 credit each ( 3 of 6 days for each ensemble in 6 day rotation, or 3 Band / 2 Choir in 5 day rotation), 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.

| HONORS BAND | Credit Value: 1.0 |
| :--- | :--- | :--- |
| Grade Level: All $\quad$ Fulfills Graduation Requirement: Elective | Duration: Full-Year |
| Prerequisites: Director's Approval |  |
| Course Description: course (scheduled concurrently with Band Class) provides an opportunity for <br> accelerated students to broaden their music education while earning weighted credit for supplemental <br> work. ALL prerequisites and course requirements for Band apply to Honors Band. Students must be <br> enrolled 6 days/rotation to fully benefit from any additional weight/credit. Coursework includes, but <br> is not limited to auditioning for Alle-Kiski Honors Band and PMEA Honors Band; research projects based <br> on the students' primary instruments, composers and performers; attendance at "outside" concerts, <br> playing assessments, peer teaching (MS/Elem) and a student recital. Students will not be permitted to <br> drop once summer Band Camp begins. (Grades 9-12) |  |


| BANDFRONT | Credit Value: 0.25 |  |
| :--- | :--- | :--- |
| Grade Level: All | Fulfills Graduation Requirement: Elective | Duration: Full-Year |
| Prerequisites: Audition \& Director's Approval |  |  |
| Course Description: 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 who pass the audition and do not know how |  |  |
| to play an instrument are to schedule Bandfront Class. Students must meet all year-long marching |  |  |
| requirements as stated for the "Band" class. Required performances include football games, |  |  |
| marching band festivals, community parades (i.e. Winter \& Memorial Day), school events and pep |  |  |
| rallies. Students are also required to attend all summer (Band Camp) and after-school rehearsals |  |  |
| throughout the year. Fundamentals of choreography, prop usage and marching are the key |  |  |
| components of study and student performance. NO extra-curricular / non-graded membership is |  |  |
| granted. Students will not be permitted to drop once summer Band Camp begins. |  |  |


| JAZZ ENSEMBLE | Credit Value: 1.0 |
| :--- | :--- | :--- |
| Grade Level: All Fulfills Graduation Requirement: Elective | Duration: Full-Year |
| Prerequisites: Enrollment in Band Class (for Winds and Percussion), Audition and/or Director's |  |
| Approval |  |
| Course Description: This course is designed around the study of jazz history, scales (blues and various <br> other modes), theory, jazz band and jazz combo literature, and improvisation. All instrumental <br> sections will be limited in a manner yielding a full and balanced ensemble. Auditions may be required <br> to fill limited positions, with preference given to students currently enrolled in Band Class. Students <br> are required to perform at all scheduled concerts and festivals. In addition to class time, attendance <br> is also required at all before / after school rehearsals as scheduled by the Director. Students are <br> permitted to enroll in both Jazz Ensemble and Stage Band if they meet the prerequisites and have <br> room in their schedule. |  |


| STAGE BAND |  | Credit Value: 1.0 |
| :--- | :--- | :--- |
| Grade Level: All | Fulfills Graduation Requirement: Elective | Duration: Full-Year |
| Prerequisites: Enrollment in Band class, Audition \& Director's Approval |  |  |
| Course Description: This course is designed around the study of jazz history, scales (blues and various |  |  |
| other modes), theory, big band literature and improvisation. All instrumental sections will be limited |  |  |
| in a manner yielding a full and balanced ensemble. Auditions may be required to fill limited positions, |  |  |
| with preference given to students currently enrolled in Band Class. Ensemble may also be split into |  |  |
| two groups, pending enrollment and auditions. 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. Students are permitted to enroll in both Stage Band and Jazz |  |  |
| Ensemble if they meet the prerequisites and have room in their schedule. |  |  |

## CONCERT CHOIR

Grade Level: All
Fulfills Graduation Requirement: Elective
Credit Value: 1.0
Prerequisites: None
Course Description: This course is a large choral ensemble open to all students who are interested in developing their singing skills and musical understanding. Concert Choir is structured for students in grades $9-12$, for any beginner or experienced vocalist that is interested in participating in a more mature 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. Students enrolled are expected and required to perform in all performances scheduled for the ensemble, both during and outside of the school day. The fall semester will consist of one major winter themed concert, plus two additional community performances/concerts. The spring semester will consist of one major spring themed concert.
*Students may enroll in both Band and Concert Choir for 0.5 credit each (3 of 6 days for each ensemble in 6 day rotation), 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.

| HONORS CHOIR | Credit Value: 1.0 |  |
| :--- | :--- | :--- |
| Grade Level: 10, <br> 11 and 12 | Fulfills Graduation Requirement: Elective | Duration: Full-Year |
| Prerequisites: Audition \& Choral Director's Approval |  |  |
| Course Description: The Highlands Honors Choir is a weighted course that is designed for the <br> advanced choral student who demonstrate mastery of individual and choral vocal techniques, as well <br> as music reading skills. Four, eight-part choral literature of various styles and periods will be <br> performed. Total enrollment in the ensemble is determined by the necessary balance of vocal parts. <br> Due to the challenging, advanced repertoire, multiple public performances, and "on tour" experience, <br> students are required to enroll in this course 6 days of the A-F Rotation Schedule. Honors Choir will <br> perform frequently at school and community events. Students enrolled are expected and required to <br> perform in all performances scheduled for the ensemble, both during and outside of the school day. <br> Fall semester will consist of one major winter themed concert, plus at least five additional community <br> performances/concerts. Spring semester will consist of one major spring themed concert, plus at <br> least three additional community performances/concerts. (Grades $10-12 ;$ auditions may be opened <br> to 9th grade if required to balance voice parts.) |  |  |


| STUDENT ACCOMPANIST |  | Credit Value: 1.0 |
| :---: | :---: | :---: |
| Grade Level: All | Fulfills Grad | Duration: |
| Prerequisites: Audition based and Choral Director's approval. |  |  |
| Course Description: This course requires a student accompanist to demonstrate mastery of music reading skills and piano performance for choral ensembles. Students are participating in private lessons with a piano instructor, outside of the school day. Student accompanists are required to perform in all dress rehearsals and performances scheduled for the ensemble, both during and outside of the school day. The fall semester will consist of one major winter themed concert, plus at least five additional community performances/concerts. The spring semester will consist of one major spring themed concert, plus at least three additional community performances/concerts. |  |  |


#### Abstract

MUSIC THEORY I Grade Level: All Fulfills Graduation Requirement: Elective Credit Value: 1.0 Prerequisites: Director's Approval Course Description: This course will involve a study of the mechanics of music, key signatures, scales, intervals and chords in written and aural form. This course will help 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. 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.


| HONORS MUSIC THEORY II |  | Credit Value: 1.0 |
| :---: | :---: | :---: |
| Grade Level: 10, 11 and 12 | Fulfills Graduation Requirement: Electiv | Duration: Full-Year |
| Prerequisites: Theory and Harmony I (75\%), Teacher Recommendation |  |  |
| Course Description: This course is designed to expand upon the fundamental skills of Theory \& Harmony I, taking students to a deeper understanding of musical form and structure. Honors Music Theory II offers an emphasis on aural training, solfeggio, and application. Students will explore arrangement or composing based on standard and current literature, with projects involving performance of student work. Basic piano keyboarding is incorporated into many elements of this course. |  |  |

## MUSIC RECORDING \& PRODUCTION <br> Grade Level: All Fulfills Graduation Requirement: Elective <br> Credit Value: 1.0

Prerequisites: None
Course Description: This course includes the study of the physics of sound, signal flow, stereo systems, multi-track recording, digital synthesizers, sequencers, computers, and Musical Instrumental Digital Interface (MIDI). M.R.P utilizes digital audio workstations (DAW), various software programs including GarageBand, ProTools and Soundtrap, as well as studio \& field recording equipment. Prior to this course, students must have a strong and applied understanding of basic music theory (rhythm, melody, harmony \& form). Electronically produced sound (loops, beats, etc.) and recordings will be used as a medium for creating and performing musical projects and compositions. Attendance at school performances outside of class may be required, as scheduled by the instructor.

| GENERAL MUSIC | Credit Value: 0.5 |  |
| :--- | :--- | :--- |
| Grade Level: All | Fulfills Graduation Requirement: Elective | Duration: Semester |
| Prerequisites: Choral Director and School Counselor Recommendation/Placement |  |  |
| Course Description: This course explores a variety of topics that include: music theory, music history, <br> musical theater, musical production, vocal techniques, and choral performance. Each music concept <br> will be adapted and modified to meet the needs of the individual students emphasizing their <br> educational goals. |  |  |

Course Description: Students will research historical composition and performance techniques of musicals, explore musical plots in the context of social trends or influences, re-enact scripted musical material, and perform songs from show productions. Students will become engaged with musical set design, scene structure, and character analysis. Typically, at least six different musical scripts are able to be explored and analyzed within the class during a semester. As a project-based learning assignment during musical season, students will design, create, and construct the current set of the musical production in collaboration with the art department. This course will also help students 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 with solo performances. It is encouraged that students are in one of the four vocal music ensembles (Honors Choir, Concert Choir, Variations Show Choir or Musical Production) but not required.

## MUSIC AND MAGIC Credit Value: 0.5 Grade Level: All Fulfills Graduation Requirement: Elective Duration: Full-Year

 Prerequisites: NoneCourse Description: This course will parallel concepts and structures in Broadway and Beyond music elective. However, Music and Magic is specifically geared toward exploring only Disney musicals, the philosophy of magical moments, and researching musicals released by www.mtishows.com for high schools to license. Music and Magic will be taught by a former Disney Cast Member of 10 years, sharing a performer's "four keys to success." Students will research historical composition and performance techniques of Disney musicals, explore musical plots in the context of social trends or influences, re-enact scripted musical material, and perform songs from show productions. Students will become engaged with musical set design, scene structure, and character analysis. Typically, at least six different musical scripts are able to be explored and analyzed within the class during a semester. As a project-based learning assignment during musical season, students will design, create, and construct the current set of the musical production in collaboration with the art department. This course will also help students 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 with solo performances. It is encouraged that students are in one of the four vocal music ensembles (Honors Choir, Concert Choir, Variations Show Choir or Musical Production) but not required.

## Visual Arts

FUNDAMENTALS OF VISUAL ART
Grade Level: All $\quad$ Fulfills Graduation Requirement: Elective $\quad$ Duration: Full-Year
Prerequisites: None
Course Description: This course introduces students to a variety of art media and sets the foundation for further study in the HHS Art department. Throughout the year, students will 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 and students must pass with a $75 \%$ to advance to upper level art classes.

| DRAWING \& PAINTING |
| :--- |
| Grade Level: 10, <br> 11 and 12 |
| Prerequifills Graduation Requirement: Elective | Duration: Full-Year 1.0

Course Description: This course teaches students to build on their learning from Fundamentals and utilize a variety of drawing \& painting media such as pencil, marker, pastel, ink, pencil, acrylic paint, watercolor, oil paint, and charcoal to create individualized artworks. This is a studio course, so students are expected to work during class on the assigned projects.

| CERAMICS |  | Credit Value: 1.0 |
| :---: | :---: | :---: |
| Grade Level: 10, 11 and 12 | Fulfills Graduation Requirement: Elective | Duration: Full-Year |
| Prerequisites: Fundamentals |  |  |
| Course Description: This course teaches students to build on their learning from Fundamentals utilizing a variety of methods for creating clay artworks by handbuilding, throwing on the pottery wheel, and using a variety of firing methods to finish the pieces. |  |  |
| This is a studio course, so students are expected to work during class on the assigned projects. |  |  |

## SCULPTURE \& GLASS

Grade Level: 10,
Fulfills Graduation Requirement: Elective

Credit Value: 1.0
Duration: Full-Year

11 and 12
Prerequisites: Fundamentals
Course Description: This course teaches students to build on their learning from Fundamentals specifically focusing on creating 3 dimensional artworks using a variety of materials. Students will work in both fused glass in the kiln and various sculpture materials. This is a studio course, so students are expected to work during class on the assigned projects.

| PRINTMAKING \& MIXED MEDIA | Credit Value: 1.0 |
| :--- | :--- |
| Grade Level: 10, <br> 11 and 12 | Fulfills Graduation Requirement: Elective |
| Duration: Full-Year |  |
| Prerequisites: Fundamentals |  |
| Course Description: <br> Fundamentals course teaches students to create artworks building on learning from <br> studio course, so students are expected to work during class on the assigned projects. |  |

## JEWELRY \& METAL <br> Grade Level: All <br> Fulfills Graduation Requirement: Elective <br> Credit Value: 1.0

Prerequisites: Fundamentals
Course Description: This course teaches students to create artworks building on learning from Fundamentals using a variety of materials, the focus is on creating wearable works of art and other works of art that are created using metal working techniques and a variety of other media. This is a studio course, so students are expected to work during class on the assigned projects.

| INDEPENDENT ART | Credit Value: 1.0 |  |
| :--- | :--- | :--- |
| Grade Level: 12 | Fulfills Graduation Requirement: Elective | Duration: Full-Year |
| Prerequisites: FUND. \& 3 STUDIO CLASSES WITH ACCEPTED APPLICATION |  |  |

Course Description: This course requires teacher approval following a juried review of student's application It 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.

## Technology Education Department Course Descriptions


#### Abstract

ARCHITECTURAL CADD Grade Level: All Fulfills Graduation Requirement: Elective Credit Value: 0.5 Prerequisites: None Course Description: This course is a computer aided drafting class that is recommended for students who have an interest in home design and/or civil engineering. Student will learn about different types of residential homes, what establishes home values, open floor plans vs. traditional floor plans, and design trade-offs and considerations that Architects contemplate when working on any given project. A heavy emphasis is placed on good design techniques such as establishing appropriate room sizes, traffic patterns throughout the home, bath and kitchen layouts. Student will also design and build a scale model home using standard framing construction techniques. Plot plans, elevations, construction details, floor plans, three-dimensional building design, and model construction will all be explored. Students will use the latest version of the AutoCAD and Revit software programs.


## ENGINEERING ESSENTIALS

Grade Level: All Fulfills Graduation Requirement: Elective
Credit Value: 0.5
Prerequisites: None
Duration: Semester

Course Description: Engineering Essentials offers a STEM approach to teaching and learning foundational concepts of engineering practice, providing students opportunities to explore the breadth of engineering career opportunities. Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, simple and complex machines, and communicating technical designs through engineering graphics. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation.

## EVOLUTION OF GAMES

Credit Value: 0.5

| Grade Level: All | Fulfills Graduation Requirement: Elective | Duration: Semester |
| :--- | :--- | :--- |

Prerequisites: None
Course Description: Evolution of Games is a course that focuses on board game design. Today's professional game designers understand and implement dynamics from many different types of games in their blockbuster hits. In this course, students will learn that core game dynamics are what makes up the pillars of a game, such as "race to the end" (Candyland) or "territorial acquisition" (Risk). Students will learn that ancient cultures designed games such as Mancala, the Game of Ur, and Othello using available technology and resources. In addition to experiencing the benefits game playing has within a society, students will prototype and play games. Students will also work in a team to design and create their own original game using graphic design software (Adobe Illustrator) to create the play area, laser engraver technology to cut out wooden parts and pieces, and 3d Modeling software (TinkerCAD) to design items that can be 3d printed. Additional competencies include using and managing a shared Google Drive, and basic skills in Google Docs, Slides, and Sheets.


#### Abstract

GRAPHIC DESIGN Credit Value: 0.5 Grade Level: All Fulfills Graduation Requirement: Elective Duration: Semester Prerequisites: None Course Description: This course introduces students to the broad field of Graphic and Visual Communications. In this lab-based course, students will explore four fields of graphic design: Desktop Publishing, Vinyl Stickers and Posters, T-shirt Design, and Laser Engraving Technology. Throughout the course, broad concepts such as color theory, the elements of design, layout, and principles of design will be unified into individual projects using Adobe Illustrator, a state-of-theindustry graphic design program. Students will also complete a final project in which they will create a fictitious company and design all of the elements that will make up its brand, including a logo, website, promotional flyers, advertisements, and other unconventional advertising items.


#### Abstract

HOME MAINTENANCE Grade Level: All Fulfills Graduation Requirement: Elective Credit Value: 0.5

Prerequisites: None Course Description: Home Maintenance is designed for students who show interest in the care and upkeep of mechanical systems inside of residential homes. Students will learn about basic appliance maintenance and upkeep. Home Maintenance also covers basic house construction; students will use basic hand and portable power tools to complete tasks used for normal repairs. Additionally, students will complete activities in the fields of framing, residential plumbing systems, residential electrical systems, drywall hanging/finishing, architectural coatings (paint), flooring, and finish trim work. Classroom instruction is combined with hands-on experiences in performing tasks like those required in the home. Students will also complete career exploration in the fields of carpentry, plumbing, electrical, drywall hanging/finishing, painting, and flooring.


| ROBOTICS I | Credit Value: 0.5 |  |
| :--- | :--- | :--- |
| Grade Level: All | Fulfills Graduation Requirement: Elective | Duration: Semester |
| Prerequisites: None |  |  |
| Course Description: 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. |  |  |

## WOOD MANUFACTURING 1 Credit Value: 0.5 <br> Grade Level: All Fulfills Graduation Requirement: Elective <br> Duration: Semester

Prerequisites: None
Course Description: 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. Projects are introductory in nature and will be assembled using fasteners such as screws and nails. 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.


#### Abstract

HONORS ENGINEERING CADD Credit Value: 1.0 Grade Level: 10, Fulfills Graduation Requirement: Elective Duration: Full-Year 11 and 12 Prerequisites: None Course Description: 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 program, the students become the engineers as they design objects such as 3 -dimensional dice, chess pieces, geared machines, automobile wheels, and small board games. Blueprint reading and Geometric Dimension and Tolerancing (GD \& T) will be taught concurrently with each new 3D model that students create. The culminating activity deals with Reverse Engineering, in which the students disassemble a complex object and recreate a virtual model of the object.


| HONORS ROBOTIC |  | Credit Value: 1.0 |
| :---: | :---: | :---: |
| Grade Level: 10, 11 and 12 | Fulfills Graduation Requirement: Elective | Duration: |
| Prerequisites: None |  |  |
| Course Description: 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 2 | Credit Value: 1.0 |
| :--- | :--- |
| Grade Level: $10, \quad$ Fulfills Graduation Requirement: Elective <br> 11 and 12 | Duration: Full-Year |
| Prerequisites: Wood Manufacturing 1 |  |
| Course Description: This course is a continuation of Wood Manufacturing 1. Students will explore <br> advanced woodworking techniques to produce larger scale projects such as a stool, wall cabinet, and <br> table. Throughout the course, students will explore advanced design \& planning, production, joinery <br> and assembly, as well as finishing techniques. The culminating project requires students to design <br> plans and fabricate a project of their choosing from scratch. NOTE: Due to the open-ended nature of <br> the final project, additional materials (such as project-specific hardware) may need to be supplied by <br> the student. |  |

WOOD MANURFACTURING 3
Grade Level: 11
Fulfills Graduation Requirement: Elective

Credit Value: 1.0
Duration: Full-Year
and 12
Prerequisites: None
Course Description: 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.

## World Languages Department Course Descriptions


#### Abstract

GERMAN 1 Grade Level: 9, 10, $\quad$ Fulfills Graduation Requirement: Elective Credit Value: 1.0 11 and 12 Prerequisites: None Course Description: 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 acquisition 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.


#### Abstract

GERMAN 2 Grade Level: 10, 11 Fulfills Graduation Requirement: Elective Credit Value: 1.0 and 12 Prerequisites: German 1, Teacher Recommendation Course Description: 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 acquisition 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 |  |
| :--- | :--- | :--- |
| Grade Level: 11 <br> and 12 | Fulfills Graduation Requirement: Elective | Duration: Full-Year |
| Prerequisites: Teacher Recommendation and 70\% or higher in German 2 |  |  |
| Course Description: This course is part of a proficiency-based language program designed to provide <br> maximum opportunities for students to develop functional listening, speaking, reading and writing <br> skills in intermediate German. The goal of the course is the acquisition of a useful, communicative <br> command of the language at the novice-high to intermediate-low level on the national scale as <br> established by the American Council on the Teaching of Foreign Languages and the Educational <br> Testing Service. This goal will be realized through maximum exposure to authentic target-language <br> tasks of functions (e.g., making travel arrangements, discussing global concepts of beauty, <br> interpreting children's books, etc.) and exploration of cultural subtleties conveyed by language, <br> thought and customs. |  |  |

## HONORS GERMAN 4 <br> Credit Value: 1.0 <br> Grade Level: 12 <br> Fulfills Graduation Requirement: Elective <br> Duration: Full-Year <br> Prerequisites: Teacher Recommendation and 70\% or higher in German 3

Course Description: 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.

\section*{| SPANISH 1 | Credit Value: 1.0 |
| :--- | :--- | :--- | <br> Grade Level: 9, 10, $\quad$ Fulfills Graduation Requirement: Elective $\quad$ Duration: Full-Year <br> 11 and 12 <br> Prerequisites: None}

Course Description: 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 acquisition 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 |  |
| :--- | :--- | :--- |
| Grade Level: 10, <br> 11 and 12 | Fulfills Graduation Requirement: Elective | Duration: Full-Year |
| Prerequisites: Spanish 1, Teacher Recommendation |  |  |
| Course Description: This course is part of a proficiency-based language program designed to provide <br> maximum opportunities for students to develop functional listening, speaking, reading, and writing <br> skills in beginning Spanish. The goal of the course is the acquisition of a useful, communicative <br> command of the language at a novice-mid to novice-high level on the national scale, as established by <br> the American Council on the Teaching of Foreign Languages and the Educational Testing Service. This <br> goal will be realized through maximum exposure to authentic target-language input (oral and visual), <br> active oral and written practice of real-life language tasks or functions (e.g., ordering a meal, visiting a <br> doctor's office, shopping in a clothing store, etc.), and exploration of cultural subtleties conveyed by <br> language, thought, and customs |  |  |

## SPANISH 3 <br> Grade Level: 11 <br> Fulfills Graduation Requirement: Elective <br> and 12

Prerequisites: Teacher Recommendation and 70\% or higher in Spanish 2
Course Description: 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.


#### Abstract

| CHS SPANISH 4 | Credit Value: 1.0 |
| :--- | :--- | Grade Level: Fulfills Graduation Requirement: Duration: Prerequisites: Course Description: 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.

Course Description: Students may enroll in the College in High School program through the La Roche University to earn 3 college credits applicable to most colleges or universities.


## Health and Physical Education Department Course Descriptions

## WELLNESS (Health \& Physical Education) <br> Grade Level: $9 \quad$ Fulfills Graduation Requirement: <br> Health/PE

## Prerequisites: None

Course Description: The Wellness course is designed to provide students with an opportunity to learn about the physical, mental/emotional, and social aspects of health. An emphasis is placed on the importance of making healthy decisions that will lead to a higher quality of life. Course information is presented in a practical manner incorporating current health trends and concerns. Content areas include: Personality, Stress, Mental Disorders, Relationships, Wellness, Nutrition, Non-infectious Disease, Human Growth and Development, STD'S, Alcohol, Drugs, and Personal Safety.

The Physical Education portion of this course is designed to improve physical fitness levels while focusing on the tactile learner. It introduces the student to a variety of concepts which include motor learning, exercise physiology and kinesiology. The course has been developed to meet the increasingly diverse physical needs of the intermediate level student, focusing not only on the development of physical skills, but on concepts essential to building self-esteem, group problem solving, and the importance of team work to accomplish success.

| PHYSICAL EDUCATION 10-12 |  | Credit Value: 0.5 |
| :---: | :---: | :---: |
| Grade Level: 10, 11 and 12 | Fulfills Graduation Requirement: Health/PE | Duration: Semester |
| Prerequisites: Wellness |  |  |
| Course Description: The course is set up to engage all students in a physical plan that is developmentally/individually appropriate and supports achievement of personal fitness and activity goals. It also aims to promote life-long health and fitness by introducing students to activities that can be engaged in at any stage in life. It stresses activities that help the student develop socially and emotionally as well as physically. |  |  |


| BEGINNER YOGA | Credit Value: 0.5 |  |
| :--- | :--- | :--- |
| Grade Level: 10, <br> 11 and 12 | Fulfills Graduation Requirement: <br> Health/PE | Duration: Semester |
| Prerequisites: Wellness |  |  | | Course Description: Yoga 1 encourages lifelong fitness. Students will learn yoga postures, breathing |
| :--- |
| techniques, and relaxation methods to improve health and mindfulness. 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. |


| ADVANCED YOGA | Credit Value: 0.5 |  |
| :--- | :--- | :--- |
| Grade Level: <br> 11 <br> 11 <br> and 12 | Fulfills Graduation Requirement: <br> Health/PE | Duration: Semester |
| Prerequisites: Beginner Yoga \& must be recommended by the PE teacher |  |  |
| Course Description: Advanced Yoga builds upon the skills and knowledge acquired in the first yoga <br> course. After reviewing basic sequences, students will have the opportunity to create sequences of <br> their own to add variety. There will be an emphasis on identifying weakness in muscular strength and <br> endurance and then developing strategies to improve. In addition to group practice, students will <br> personalize their practice by locating and utilizing resources for skills they personally want to <br> improve. Students will have the opportunity to practice more advanced skills like floating, binding, <br> arm balances, inversions, and Chaturanga variations. Various breath techniques, different styles of <br> yoga, mindfulness practices, and self-reflection will be incorporated. |  |  |

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WALKING FOR WELLNESS Credit Value: 0.5
Grade Level: 10, Fulfills Graduation Requirement: 
11 and 12 Health/PE
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Prerequisites: Wellness
Course Description: 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 need to prepare for all types of weather and dress accordingly. Some of the activities include walking, hiking, navigation, and scavenger hunts.

| LIFEGUARDING | Credit Value: 0.5 |  |
| :--- | :--- | :--- |
| Grade Level: <br> 11 and 12 | Fulfills Graduation Requirement: <br> Health/PE | Duration: Semester |
| Prerequisites: Must pass a pre-course swim test and be recommended by the PE teacher |  |  |
| Course Description: This course is an American Red Cross that certifies students in first aid, CPR and <br> lifeguarding. The purpose of this course is to provide entry-level lifeguard participants with the <br> knowledge and skills to prevent, recognize and respond to aquatic emergencies. It is possible to pass <br> this PE course but not meet the qualifications for the Red Cross Certification. Students may choose <br> this course for a lifeguard recertification. |  |  |

## Fire Service Training

FIRE SERVICE TRAINING (10-12)
Grade Level: 10, Fulfills Graduation Requirement: Elective
Credit Value: 1.0
11 and 12

## Prerequisites: Must pass a pre-course swim test and be recommended by the PE teacher

Course Description: This course is a distance learning elective that is 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.

## Forbes Road Career and Technical Center

Forbes Road CTC provides many educational courses and programs that can help you obtain the certification and skills you need to move forward in today's competitive job market. Credits earned at Forbes road count toward elective credits on a student's graduation plan. The table below summarizes the courses offered at Forbes. For additional information, visit the Forbes Road CTC website.

| ARCHITECTURE/CONSTRUCTION |  |
| :--- | :--- |
| Building Construction <br> Technology | Building Construction Technology students gain technical knowledge as well as <br> practical hands-on training in the trade which includes carpentry, plumbing, <br> electrical, masonry and blueprint reading. Individuals learn to apply technical <br> knowledge and skills in the maintenance and repair of residential and commercial <br> buildings. |
|  <br> Air Conditioning | The program trains students to become qualified HVAC technicians and <br> mechanics. A major portion of the instruction focuses on how to install, diagnose, <br> service and maintain residential and commercial control wiring of HVAC systems. |
| Electrical Technology | Electrical Technology prepares students for entry level electrical and electronics <br> careers. Their technical applications include green technology instruction within <br> this state-of-the-art electrical laboratory. Computerized training equipment is <br> utilized to prepare the students for careers in the "high-tech" electrical field. |
| Landscape Design | Landscape Design prepares students to be employees of nurseries, greenhouses, <br> florists or landscape businesses. The curriculum includes turf management, <br> landscape design and safety, pest and disease management and irrigation. <br> Students obtain practical skills on our 42 acre campus and in the new <br> greenhouse. |
| Advertising Design | The field of advertising and commercial art requires a person who possesses a <br> wide range of creative skills. The curriculum includes the foundation for all <br> creative/design fields. Students apply the design principles to create a variety of <br> products and printed materials - to reach and compel the target audience to <br> purchase products and services. |


| SERVICE OCCUPATIONS |  |
| :---: | :---: |
| Cosmetology | 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 | The Culinary Arts course offers instruction in the commercial restaurant industry including: gourmet and fine dining, customer service, menu planning, costcontrol, sanitation and hygiene. The curriculum encompasses the complete food cycle including nutrition, ordering processes, menu design and presentation skills. |
| Early Childhood Education | 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. |
| HEALTH CAREERS/LAW ENFORCEMENT |  |
| Emergency Response Services | 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 | 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. |
| Veterinary Sciences | Veterinary Sciences prepares students to assist veterinarians during animal examinations and provide treatment and monitoring. Students will learn about maintaining medical and business records, charting and scheduling activities and a wide range of practice related duties as applied to animal health care, the biomedical field and the pet industry. |
| TRANSPORTATION |  |
| Auto Body Repair Technology | 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. |
| Automotive Technology. | 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. |
| Diesel Technology | 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. |
| Logistics \& Supply Chain Management | 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. |

## INFORMATION TECHNOLOGY

| Computer Networking <br> \& Security | This exciting technical course prepares students to design, maintain and secure <br> today's Information Technology (IT) Systems. Network Security Specialists acting <br> as Ethical Hackers prevent data loss from cyber-attacks protecting valuable data. <br> Network Security Specialists are in demand in Law Enforcement, corporations <br> and government. |
| :--- | :--- |
| Multimedia Design | This program allows students to be creative with design presentations for <br> entertainment, industrial and commercial applications. This curriculum utilizes <br> digital/video cameras and projectors in conjunction with computers. Students <br> create animations, manipulate photographs, create presentations and web <br> pages. |

