



# Hughesville High School

Program of Studies 2026 – 2027

Grades 9 – 12

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## MISSION

The mission of the Hughesville Junior-Senior High School is to inspire and empower all students to reach academic success and live with integrity. Our vision is to provide high-quality learning experiences for all students. In short, Every Student: Inspired, Engaged and Learning Today for Tomorrow.

In order to achieve this mission, our curriculum is divided into three areas of concentration: honors, college prep, and careers. These areas are not exclusive of each other, i.e., a student in one preparatory area may take courses from any other preparatory area. Students receive a basic foundation in English, history, math, science, and physical education/health in the core subjects. The electives are to allow students to work in specific areas to broaden experience and knowledge over a shorter period of time.

## ELSD CORE VALUES

The East Lycoming School District has five core values that serve as a cornerstone in helping us achieve our mission.

We believe...

**Wellness** before academics and **Community** before consequences.

Every students' **Learning** is my responsibility.

**Effectiveness** is determined by my character, relationships. and competence.

Positive transparent **Communication** builds trust and determines the outcome.

**Passion** drives learning; find yours and share it.

## PENNSYLVANIA ACT 158 GRADUATION REQUIREMENTS

Beginning with the Class 2023, Act 158 of 2018 (Act 158 requires students to take the Keystone Exams for federal accountability purposes, but may meet state graduation requirements through any one of the options below.

### Option 1: Keystone Proficiency Pathway

Student must earn a Proficient or Advanced score on all three Keystone Exams: Algebra I, Literature, and Biology.

### Option 2: Keystone Composite Pathway

Student must earn a composite score of 4452 on the Algebra I, Literature, and Biology Keystone Exams. Students must also earn a Proficient or Advanced score on at least one of the three exams. The student may not earn a Below Basic score on either of the other two exams.

### Option 3: CTE Pathway

Students, who are Career and Technical Education (CTE) Concentrators, must earn a passing grade in the course(s) associated with each Keystone Exam on which a Proficient or Advanced

score was not earned. These courses include: Algebra I, Grade 10 English, and Biology I. Student must also attain an industry-based competency certification related to the CTE Concentrator's program of study or demonstration of a high likelihood of success on an approved industry-based competency assessment or readiness for continued meaningful engagement in the CTE Concentrator's program of study. For further explanation of the CTE Pathway, please see PDE's Act 6 Guidance.

#### **Option 4: Alternate Assessment Pathway**

Student must earn a passing grade in the course(s) associated with each Keystone Exam on which the student did not earn a Proficient or Advanced score. These courses include: Algebra I, Grade 10 English, and Biology I. Student must also achieve one of the following:

- Attainment of an established score on an approved alternate assessment (SAT, PSAT, ACT, ASVAB):
  - SAT: 1010
  - PSAT: 970
  - ACT: 12
  - ASVAB: 31 (the minimum score required for admittance to the armed services branch during the year the student graduates)
- Gold Level on the ACT WorkKeys Assessment;
- Attainment of at least a '3' score on an Advanced Placement Program exam in an academic content area associated with each Keystone Exam on which the student did not achieve a Proficient or Advanced score;
- Successful completion of a concurrent enrollment course (ex. College-in-high school course) in an academic content area associated with each Keystone Exam in which the student did not achieve at least a Proficient score;
- Successful completion of a pre-apprenticeship program; or
- Acceptance in an accredited 4-year nonprofit institution of higher education and evidence of the ability to enroll in college-level coursework.

#### **Option 5: Evidence Based Pathway**

Student must earn a passing grade in the course(s) associated with each Keystone Exam that a Proficient or Advanced score was not earned. These courses include: Algebra I, Grade 10 English, and Biology I. Student must also demonstrate three pieces of evidence consistent with the student's goals and career plans, including:

- One of the following:
  - Attainment of an established score on the ACT WorkKeys assessment (Silver Level), a SAT subject test (score of at least 630), an Advanced Placement Program Exam (score of 3):
  - Acceptance to an accredited nonprofit institution of higher education other than a 4-year institution and evidence of the ability to enroll in college-level coursework;
  - Attainment of an industry-recognized credential; or
  - Successful completion of a concurrent enrollment or postsecondary course; and
- Two additional pieces of evidence, including one or more of the options listed above, or: satisfactory completion of a service-learning project, attainment of a score of proficient or advanced on a Keystone Exam; a letter guaranteeing full-time employment; a certificate

of successful completion of an internship or cooperative education program; or satisfactory compliance with the NCAA's core courses for college-bound student athletes with a minimum grade point average (GPA) of 2.0.

**In addition to Pennsylvania's Act 158 requirements, to be eligible for graduation**, by the end of their senior year, a student must have successfully completed a minimum of **25 credits** consisting of:

- English - 4 credits, at least one each year grades 9-12
- Math - 4 credits, at least 1 each year grades 9-12
- Science - 4 credits, at least 1 each year grades 9-12
- Social Studies - 4 credits, at least 1 each year grades 9-12
- Health and Physical Education - 1.5 credits
- Elective courses

Every senior must schedule at least one of each of the core courses during his/her senior year.

## **SCHEDULING INFORMATION**

Students will receive a course schedule in the summer. This schedule should be considered final. Sometimes a student's requested courses cannot be honored, nor are they appropriate. In these circumstances, changes may be made to the schedule to better meet the needs of the student. If a student chooses to request a schedule change, he or she will follow these guidelines:

- All schedule changes are handled through the Counseling Office.
- Not all requests will be granted due to certain variables with the schedule.
- All requests to change a course must be made within the first six days of the course. Any student requests after the first six days, which result in a course being dropped, could be noted on the student's report card and final transcript as a W (Withdraw).
- After the first six days of the course, no changes to courses will be permitted unless deemed necessary by the administration.
- There will be no dropping of courses between the end of the fourth marking period and finals.
- All course changes, regardless of the time when they take place, are subject to review by the counselor, faculty member, parent and administration.
- No high school student will be permitted more than eight (8) class periods per day.

To assist the student during this period of planning, this booklet of course offerings has been prepared. It contains a listing and brief description of all course offerings for students in grades 9 through 12. Students will note if the course is mandatory or an elective by looking at the sample course selection sheet for each grade. Attention must further be given to planning an adequate schedule, which will satisfy graduation requirements.

**\*Please Note:** A minimum number of students in a section may need to be established. For example; class sizes under 15 may be subject to administrative approval.

## Core Course Sequence (by Grade Level) and Educational Requirements

Grade 9	Grade 10	Grade 11	Grade 12
<b>English (1.0 Credit)</b>	<b>English (1.0 Credit)</b>	<b>English (1.0 Credit)</b>	<b>English (1.0 Credit)</b>
<ul style="list-style-type: none"> <li>• English 9 OR</li> <li>• English 9 Honors</li> </ul>	<ul style="list-style-type: none"> <li>• English 10 OR</li> <li>• English 10 Honors</li> <li>• <b>Keystone Exam Required</b></li> </ul>	<ul style="list-style-type: none"> <li>• English 11 OR</li> <li>• English 11 Honors OR</li> <li>• Literature and Film</li> </ul>	<ul style="list-style-type: none"> <li>• English 12 OR</li> <li>• English 12 Honors OR</li> <li>• Literature and Film OR</li> <li>• AP English Literature &amp; Composition</li> </ul>
<b>Mathematics (1.0 Credit)</b>	<b>Mathematics (1.0 Credit)</b>	<b>Mathematics (1.0 Credit)</b>	<b>Mathematics (1.0 Credit)</b>
<ul style="list-style-type: none"> <li>• Algebra I (<b>Keystone Exam Required</b>) OR</li> <li>• Geometry Honors</li> </ul>	<ul style="list-style-type: none"> <li>• Algebra 2 Honors OR</li> <li>• Mathematics for Health Careers OR</li> <li>• Applied Mathematics</li> </ul>	<ul style="list-style-type: none"> <li>• Applied Math OR</li> <li>• Algebra 2 OR</li> <li>• Trigonometry / Elementary Function OR</li> <li>• Mathematics for Health Careers OR</li> <li>• AP Statistics OR</li> <li>• Intro to Basic Statistics</li> </ul>	<ul style="list-style-type: none"> <li>• Mathematics for Health Careers OR</li> <li>• Applied Mathematics OR</li> <li>• Trigonometry / Elementary Functions OR</li> <li>• Intro to Basic Statistics</li> <li>• Statistics OR</li> <li>• AP Statistics OR</li> <li>• AP Calculus AB</li> </ul>
<b>Social Studies (1.0 Credit)</b>	<b>Social Studies (1.0 Credit)</b>	<b>Social Studies (1.0 Credit)</b>	<b>Social Studies (1.0 Credit)</b>
<ul style="list-style-type: none"> <li>• Civics and Government OR</li> <li>• Civics and Government Honors</li> </ul>	<ul style="list-style-type: none"> <li>• American History OR</li> <li>• American History Honors</li> </ul>	<ul style="list-style-type: none"> <li>• Local History / Sociology OR</li> <li>• Economics OR</li> <li>• Economics Honors OR</li> <li>• Psychology OR</li> <li>• Early World History OR</li> <li>• AP US History (Odd Years Only) OR</li> <li>• AP Government and Politics</li> </ul>	<ul style="list-style-type: none"> <li>• Local History / Sociology OR</li> <li>• Economics OR</li> <li>• Economics Honors OR</li> <li>• Psychology OR</li> <li>• OR Early World History OR</li> <li>• AP US History (Odd Years Only) OR</li> <li>• AP Government and Politics</li> </ul>

		(Even Years Only) OR • AP Psychology	(Even Years Only) OR • AP Psychology
<b>Science (1.0 Credit)</b>	<b>Science (1.0 Credit)</b>	<b>Science (1.0 Credit)</b>	<b>Science (1.0 Credit)</b>
<ul style="list-style-type: none"> <li>• Foundations of Biology OR</li> <li>• Biology Honors</li> <li>• <b>Keystone Exam Required</b></li> </ul>	<ul style="list-style-type: none"> <li>• Biology OR</li> <li>• Biology Honors OR</li> <li>• Intro to Earth / Space Science OR</li> <li>• Chemistry Honors OR</li> <li>• Physics OR</li> <li>• Chemistry OR</li> </ul>	<ul style="list-style-type: none"> <li>• Intro to Earth Science / Space Science OR</li> <li>• Anatomy and Physiology OR</li> <li>• Chemistry Honors OR</li> <li>• Physics OR</li> <li>• Physics 1 Honors OR</li> <li>• Physics 2 Honors OR</li> <li>• Chemistry OR</li> <li>• Organic Chemistry OR</li> <li>• AP Biology OR</li> <li>• AP Chemistry OR</li> <li>• AP Environmental Science OR Wave and Fluid Science</li> </ul>	<ul style="list-style-type: none"> <li>• Intro to Earth / Space Science OR</li> <li>• Anatomy and Physiology OR</li> <li>• Chemistry Honors OR</li> <li>• Physics OR</li> <li>• Physics 1 Honors OR</li> <li>• Physics 2 Honors OR Chemistry OR</li> <li>• Wave and Fluid Science</li> <li>• Organic Chemistry OR</li> <li>• AP Biology OR</li> <li>• AP Chemistry OR</li> <li>• AP Environmental Science OR</li> <li>• AP Physics C</li> </ul>
<p align="center"><b>Physical Education &amp; Health – (1.5 Credits for Graduation; CTC Students are exempt and must only take .5 credits) – Physical Education &amp; Health is .5 credits. Weight Training (.5 credit) can be substituted for any Physical Education &amp; Health class. Personal Finance will be added to all 9<sup>th</sup> grade schedules.</b></p>			

## GPA / AP COURSES / DUAL ENROLLMENT COURSES

### Grade Point Average

Grade point average is computed on a 100% weighted scale. All courses starting in grade 9 are computed to determine GPA and Class Rank. Grades are calculated according to the following scale:

A	95 to 100+
B	85 to 94
C	75 to 84
D	70 to 74

Coursework is ranked and weighted by the level of difficulty according to the following multipliers:

AP Coursework	1.2 weight
Honors/Dual Enrollment Coursework	1.2 weight
Core College Prep Coursework	1.1 weight

To allow for the wide variance of semester grades/credits' effect on GPA and class ranking, a student's GPA and class ranking will be printed on the report card according to the following schedule:

Grade 9	At the end of the year
Grade 10	At the end of each semester
Grade 11	At the end of each quarter
Grade 12	At the end of each quarter

### **Advanced Placement Courses**

Advanced Placement courses are challenging, and the workload is demanding. Students are expected to read and write extensively and independently. All students are expected to work seriously toward the preparation of the AP Exams in May.

### **Dual Enrollment/Concurrent Enrollment Courses**

Hughesville High School partners with several institutions of higher learning to provide students the opportunity to receive both college and high school credit. Listed below are guidelines for participation in the various programs.

**\*Please Note: College affiliations are subject to change.**

#### **Luzerne County Community College (LCCC), Lackawanna College**

The following high school classes are offered as dual enrollment courses through LCCC and Lackawanna College. These courses are taught at the high school by HHS teachers and are part of the student's daily schedule. Upon successful completion of the course, students will receive credit from HHS and the College (if all requirements listed below are met). To receive College credit a student must do the following:

1. Be enrolled and successfully complete the course at the High School
2. Be enrolled in the College and obtain a grade of C or better
3. Pay all fees associated with the course to the College (note: cost per credit hour is offered at a reduced rate)

Grades in these courses are counted toward class rank.

Grade 12 English – Honors (LCCC)  
AP US History (Lackawanna CC)  
AP Psychology (Lackawanna CC)  
AP Environmental Science (Lackawanna CC)  
AP English Literature and Composition (Lackawanna CC)  
AP Government and Politics (Lackawanna CC)  
AP Biology (Lackawanna CC)  
AP Calculus AB (Lackawanna CC)  
AP Chemistry (Lackawanna CC)  
AP Physics C (Lackawanna CC)  
AP Statistics (Lackawanna CC)  
Accounting 2(Lackawanna CC)  
Trigonometry and Elementary functions (Lackawanna CC)

**Commonwealth University of Pennsylvania Early College and online programs are available. Details are available through the school counseling office.**

#### **Online Courses**

The University and college listed above offer several online courses for HHS students. Students take these courses during their senior and/or junior year and are given time throughout the school day as part of their schedule to complete. Students are limited to 1 period of online study per school term.

1. Students must contact the Counseling Office prior to scheduling independent study courses and must be in good academic standing to participate.
2. The Counseling Office will help coordinate registration
3. It is the responsibility of the student to communicate with the Professor of the course with any subject related questions
4. All fees associated with the course are paid directly to the University/College.
5. Grades must be reported to the Counseling Office at the end of each semester.
6. Dual enrollment online courses in English, Math, Science or Social studies may count toward HHS academic requirements in these courses.
7. Each semester course will receive 0.5 credits towards graduation

#### **On Campus Courses**

The University and College listed above offer on campus face to face instruction for HHS students. Students must seek approval from the Administration for participation in this program and must be in good academic standing. Guidelines are listed below:

1. Only seniors are eligible to participate in on campus courses
2. The district is not responsible for transportation
3. Students must meet all HHS academic requirements
4. Students are required to meet with their School Counselor to coordinate HHS schedules
5. Courses are coordinated with the University and HHS
6. Dual enrollment online courses in English, Math, Science or Social studies may count toward HHS academic requirements in these courses.
7. Each semester course will receive credits towards graduation

8. Grades must be reported to the Counseling Office at the end of each semester.
9. Students are encouraged to discuss with the Athletic Director any eligibility requirements for participation in athletics.

## ACADEMIC DEPARTMENTS / COURSE DESCRIPTIONS

### English

Course Title	Weight	Open to Grades	Credits
English 9	1.1	9	1
English 9 – Honors	1.2	9	1
English 10	1.1	10	1
English 10 – Honors	1.2	10	1
English 11	1.1	11	1
English 11 – Honors	1.2	11	1
English 12 – Honors	1.2	12	1
English 12	1.1	12	1
Literature and Film	1.1	11,12	1
AP English Literature and Composition	1.2	12	1

#### Grade 9 English #120

**Credit = 1      Weighted = 1.1      Grade 9**

The ninth grade academic English course is designed to develop reading, writing, thinking and speaking skills. The students will experience a wide variety of literature including fiction, non-fiction, poetic and dramatic selections, speaking/ writing fundamentals and strategies will be emphasized for future education. Traditional grammar, mechanics, usage skills, vocabulary and reading comprehension strategies will be continued as part of the writing process in collaboration with research skills that will be explored and developed.

#### Grade 9 English – Honors #125

**Credit = 1      Weighted = 1.2      Grade 9**

The ninth-grade honors English course is designed for the student who has excelled in English and reading. The emphasis of the course is placed on preparation for the Advanced Placement (AP) Program. The course is designed to cover English grammar and mechanics with an intense practice in various writing forms and assignments. The following literary genres, with intense literary analysis, such as the novel, the short story, poetry and drama will be considered, analyzed and compared. The course will demand a great deal of reading, writing, working independently and meeting deadlines. The students will be expected to work at an accelerated pace.

### **Grade 10 English (Keystone Literature Exam required) #130**

**Credit = 1      Weighted = 1.1      Grade 10**

Semester one of 10th grade English will be divided into two nine-week segments. The first nine-week segment will focus exclusively on preparation for formal assessments such as the PSAT, the SAT and the ACT. Vocabulary, grammar, sentence completion, and reading comprehension strategies will be employed. The second nine weeks of semester one will emphasize the fundamentals of writing. Students will practice forms and styles of writings that will include; problem/solution, literature interpretation, persuasion, research essay, and profiles.

In semester two this course will provide an overview of the literary genres such as: short story, drama, poetry, and the novel. Composition, (creative writing, expository, personal essays, and journal writing), literature based, vocabulary, and literary analysis will be emphasized. Literature will be approached through a thematic structure. The purpose of the class is to introduce the students to different themes often encountered in literature.

### **Grade 10 English – Honors (Keystone Literature Exam required) #135**

**Credit = 1      Weighted = 1.2      Grade 10**

This course is a continuation of the Honors curriculum. The first nine-week segment will focus on preparation for formal assessments. such as the PSAT, the SAT, and the ACT. During the second nine weeks, writing forms and styles such as problem/solution, literature interpretation, persuasion, research, and profiles will be explored and expanded. During the second semester, this accelerated course will provide an overview of literary genres such as the short story, drama poetry, and the novel. Composition, literature-based vocabulary, and literary analysis will be emphasized. Literature will be approached through a thematic structure. Independent reading and writing will be required. The purpose of this course is to introduce students to different themes often encountered in literature.

### **Grade 11 English #138**

**Credit = 1      Weighted = 1.1      Grade 11**

Students will apply a wide range of reading strategies to comprehend, interpret, evaluate, and analyze reading passages and develop successful writing strategies. Materials for the course will include both fiction and non-fiction. Juniors will develop reading and writing skills, namely critical analysis and research writing, and independent reading skills needed in post high school education.

### **Grade 11 English – Honors #140**

**Credit = 1      Weighted = 1.2      Grade 11**

This accelerated course is designed for juniors with emphasis placed on preparation for the Advanced Placement Exam in English Literature and the 12th grade AP English course. Extensive writing, especially literary analysis, is required. Emphasis is placed on developing literary analysis skills, grammar skills, writing skills, SAT practice, and vocabulary building. Much independent reading is required.

### **Grade 12 English – Honors #148**

***Dual Credit Option Available***

**Credit = 1      Weighted = 1.2      Grade 12**

The students in this class will practice close reading techniques and textual analysis. They will learn to identify and evaluate themes and literary devices as well as to gather multiple interpretations from a single text. The students will read and analyze different literary genres: novels, short stories, poetry, plays, mythology, autobiographies and memoir. In addition, students will learn proper note-taking techniques and will be capable of annotating any text as well as identify main ideas and pertinent information. The note-taking abilities will be strong enough to enrich the students' understanding of a piece of literature, prepare them for upcoming writing assignments and be able to organize and prioritize information. The students will be able to produce well-developed high school essays and college-level writing. Students will be able to plan and outline a text before writing and discern between, and compose, expository, analytical, personal narrative and argumentative essays. Students will be able to peer edit one another's papers and incorporate feedback to improve work. Furthermore, the students will be able to conduct research for an essay, evaluate the research material and properly incorporate and cite the research using MLA and APA.

**Grade 12 English #149**

**Credit = 1      Weighted = 1.1      Grade 12**

The students in 12th grade Academic English will practice close reading techniques, textual analysis and the identification of theme and literary devices. The reading portion of the class will place emphasis on the sophistication of what students read and the skill with which they read. The writing portion of the course will practice skills such as the ability to plan, revise, edit and publish. The students will focus on the importance of the writing-reading connection by drawing upon and writing about evidence from literary and informational texts. The language/speaking portion of the class will focus on the rules of standard written and spoken English.

**Literature and Film #153**

**Credit = 1      Weighted = 1.1      Grades 11, 12**

The course is designed to show students how film is a form of literature and to explore major contributions to the development of motion pictures. This will be accomplished by studying a wide range of film and literary texts. Students will learn that good film, like good literature, has certain elements in common. Students will use their knowledge of the various elements to analyze and critique films studied in class. This will be accomplished through discussions, compositions, and projects. Students will use a variety of writing forms that include: note taking, paragraph analysis, and formal essays. Students will also read literature that corresponds with selected films.

**Advanced Placement English Literature and Composition #160**

***Dual Credit Option Available***

**Credit = 1      Weighted = 1.2      Grade 12**

This college-level literature course is designed to challenge students and prepare them for the AP Literature and Composition Exam in May or for credit through an approved dual-enrollment program. Students will engage in in-depth analysis of a wide range of literary genres and forms—including poetry, short fiction, drama, and novels – through discussion, activities, assignments, exams, timed essays, and projects. The daily workload and expectations reflect those of a college literature course.

## Social Studies

Course Title	Weight	Open to Grades	Credits
Civics and Government	1.1	9	1
Civics and Government – Honors	1.2	9	1
American History	1.1	10	1
American History – Honors	1.2	10	1
Local History/ Sociology	1.1	11,12	1
Economics	1.1	11,12	1
Economics – Honors	1.2	11,12	1
Psychology	1.1	11,12	1
AP US History	1.2	11,12	1
AP Government and Politics	1.2	11,12	1
AP Psychology	1.2	11,12	1
Early World History	1.1	11,12	1

### **Civics and Government #220**

**Credit = 1    Weighted = 1.1    Grade 9**

This course covers US history from 1763 to 1877. Topics include the American Revolution (1776–1783) and nation building (1783-1812) through the conflict of the Civil War and Reconstruction (1860 to 1877). Further units of study will explore the foundations of our federal, state, and local governments. This course aspires to instill patriotism and respect for law while making it relevant to today’s current affairs.

### **Civics and Government – Honors #221**

**Credit = 1    Weighted = 1.2    Grade 9**

Research and writing, as well as independent reading assignments will be given to students. This course is designed for those students who would like to excel in their class work. This course covers US history from 1763 to 1877. Topics include the American Revolution (1776–1783) and nation building (1783-1812) through the conflict of the Civil War and Reconstruction (1860 to 1877). Further units of study will explore the foundations of our federal, state, and local governments. This course aspires to instill patriotism and respect for law while making it relevant to today’s current affairs.

### **American History #230**

**Credit = 1    Weighted = 1.1    Grade 10**

This course continues a student's path through US history, from the Gilded Age to the modern era. Among the topics included are: the Gilded Age, industrialization and unionism, World War I, the Roaring Twenties, the Great Depression, World War II, the Cold War, the 50's and 60's, the Vietnam War, and the post-Cold War world. Requirements of the course include written explanations, class participation, and topical classroom projects.

### **American History – Honors #235**

**Credit = 1      Weighted = 1.2      Grade 10**

This course continues a student's path through US history, from the Gilded Age to the modern era. Among the topics included are: the Gilded Age, industrialization and unionism, World War I, the Roaring Twenties, the Great Depression, World War II, the Cold War, the 50's and 60's, the Vietnam War, and the post-Cold War world. Students at this level will be responsible for independent reading and assignments including written explanations, class participation, and topical classroom projects.

### **Local History/Sociology #246**

**Credit = 1      Weighted = 1.1      Grades 11, 12**

This course explores a variety of topics related to the sociology of diverse cultures combined with studies in the local history of Lycoming County and the East Lycoming School District. In Local History studies, students will learn the history of our area through oral histories, guest speakers, and field trips. Areas of study in Sociology include the nature of culture, conformity and deviance, role-relationships, and group interaction within society. Students will examine our social institutions such as family, education, marriage, and our changing communities in America. Specific topics will include Native Americans, Women's Rights, World Religions, Immigration, and the Holocaust. Students will discuss stereotypes and multicultural issues in our society, achieving a better understanding, appreciation and tolerance of people from various backgrounds.

### **Economics #248**

**Credit = 1      Weighted = 1.1      Grades 11, 12**

This course is the study of microeconomics and macroeconomics. Microeconomics focuses upon how firms operate in various market structures. Macroeconomics is the study of economy wide problems such as growth, unemployment, and inflation. It includes the study of fiscal and monetary tools the government uses to stabilize the economy.

### **Economics – Honors #249**

**Credit = 1      Weighted = 1.2      Grades 11, 12**

This course is intended for students looking to challenge themselves at the collegiate level in developing their theoretical understanding of both microeconomics and macroeconomics. Microeconomics focuses upon how firms operate in various market structures. Macroeconomics is the study of economy wide problems such as growth, unemployment, and inflation. It includes the study of fiscal and monetary tools the government uses to stabilize the economy.

### **Psychology #254**

**Credit = 1      Weighted = 1.1      Grades 11, 12**

Psychology introduces and discusses all aspects of human behavior including physiological, developmental, emotional and pathological behaviors. Topics discussed throughout the year are

the history of psychology, altered states of consciousness, personality development, stress, conflict, disturbance and breakdown, treatment, motivation and emotion, testing and intelligence, and the life cycle.

**Advanced Placement US History #260**

*Offered in the Odd Years Only – Dual Credit Option Available*

**Credit = 1      Weighted = 1.2      Grades 11, 12**

The AP History course is designed to prepare students to take the College Board Advanced Placement U.S. History examination. Topics discussed are: political institutions, public policy and behavior, social and economic change, diplomacy, and international relations. Historical periods range from Colonial Times to present. The development of analytical thinking, reading, and writing skills is stressed throughout the year. Students are encouraged to take the advanced placement test in US History at the end of the year.

**Advanced Placement Government and Politics #261**

*Offered in the Even Years Only – Dual Credit Option Available*

**Credit = 1      Weighted = 1.2      Grades 11, 12**

AP US Government and Politics is an intensive study of the formal and informal structures of government and the process of the American political system, with an emphasis on policy-making and implementation. This course is designed to prepare students for the Advanced Placement exam.

**Advanced Placement Psychology #262**

*Dual Credit Option Available*

**Credit = 1      Weighted = 1.2      Grades 11, 12**

The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Students also learn about the ethics and methods psychologists use in their science and practice.

**Early World History #263**

**Credit =1      Weighted = 1.1      Grade 11, 12**

Early World History concentrates on the study of world history beginning with the Stone Age and ending with 1500 C.E. The course will progress through the various eras of Europe, Asia, and Africa focusing on global connections. By studying the history and geography of major world civilizations and nations, students will develop a better understanding of the ideals, conflicts, and complexities that constitute today’s global society.

**Science**

Course Title	Weight	Open to Grades	Credits
Foundations of Biology	1.1	9	1

Biology	1.1	10	1
Biology – Honors	1.2	9,10	1
Anatomy and Physiology – Honors	1.2	11,12	1
Chemistry – Honors	1.2	10,11,12	1
Physics 1 – Honors	1.2	11,12	1
Physics 2 – Honors	1.2	11,12	1
Physics	1.1	10,11,12	1
Chemistry	1.1	10,11,12	1
Organic Chemistry	1.2	11,12	1
Introduction to Earth and Space Science	1.1	10,11,12	1
Wave and Fluid Science	1.1	11,12	1
AP Biology	1.2	11,12	1
AP Chemistry	1.2	11,12	1
AP Physics C	1.2	12	1
AP Environmental Science	1.2	10,11,12	1

### **Foundations of Biology #324**

**Credit = 1    Weighted = 1.1    Grade 9**

This academic course for 9th grade students covers life science standards as part of a 2-course sequence to prepare students for the Keystone Biology Exam taken at the end of 10th grade. This course includes the following topics: Energy flow, Matter cycling, Ecosystem dynamics, Natural selection, and Biodiversity.

### **Biology (Keystone Biology Exam required) #325**

**Credit = 1    Weighted = 1.1    Grade 10**

This course introduces students to the basic concepts of biology. The objective of this course is to provide students with the basic principles of biology, which include: cell structure, macromolecules, photosynthesis and cellular respiration, evolution, and genetics. This course is designed to complete the Keystone Biology exam in May of sophomore year. **This course is required for all sophomores who have not taken Biology Honors in either 9th or 10<sup>th</sup> grade.**

### **Biology – Honors (Keystone Biology Exam required) #331**

**Credit = 1    Weighted = 1.2    Grade 9, 10**

The objective of this course is to provide students with the basic principles of biology, which include: ecology, cell structure, macromolecules, photosynthesis and cellular respiration,

evolution, and genetics. Honors Biology is a course designed for students who have a sincere interest in, and anticipate further study of, the sciences. The course is designed to complete the Keystone Biology exam in May of freshman year.

### **Honors Anatomy and Physiology #337**

**Credit = 1      Weighted = 1.2      Grades 11, 12**

This is a course of intensive study of the anatomy and physiology of the human body. Emphasis is placed on lab work, and complete dissection of a pig is an integral part of the program. It is highly recommended that students successively complete a chemistry course, prior to taking anatomy.

### **Chemistry – Honors #338**

**Credit = 1      Weighted = 1.2      Grades 10, 11, 12**

The objective of this course is to provide students with both a breadth and depth of knowledge in chemistry topics, which include, but are not limited to: periodicity, unit analysis, calorimetry, atomic structures, molecular formulas, stoichiometry, nomenclature, gas laws, acids and bases, and oxidation-reduction reactions. This is an accelerated chemistry course meant to prepare students for the Advanced Placement Chemistry course.

### **Physics 1 – Honors #339**

**Credit = 1      Weighted = 1.2      Grades 11, 12**

This course will give students a thorough understanding of algebra-based physics concepts. This course will investigate the motion of objects through an analytical lens and compare observed motions to mathematical prediction. Students will study motion in multiple dimensions both linear and rotational, movement as a result of work and energy. Students will also be introduced to energy movement through waves and thermodynamics. As a lab scientist, students will participate in several hands-on experiments where they will practice setting up and running lab equipment, validating hypotheses, evaluating the experiments and communicating their results. It is highly recommended that students have successfully completed geometry before taking Honors Physics.

### **Physics 2 – Honors #339B**

**Credit = 1      Weighted = 1.2      Grades 11, 12**

Matter and Energy is a continuation of Honors Physics - Principles of Motion. This course will focus on fundamental properties of matter and energy. Students will investigate topics such as electricity, magnetism, optics and be introduced to modern physics and special theory of relative motion. As a lab science, students will participate in several hands-on experiments where they will practice setting up and running lab equipment, validating hypotheses, evaluating the experiments and communicating their results. Students should complete Honors Physics - Principles of Motion before taking this course.

### **Physics #340C**

**Credit = 1      Weighted = 1.1      Grades 10, 11, 12**

This course is designed for students who want to learn how physics applies to everyday life. This class is designed for students who would like to learn how the world moves around them without a large emphasis on math. Included topics will be speed & acceleration, Newton's laws, force, work, power, energy, impulse, momentum, and simple harmonic motion. Students will learn by

using probes, building devices and experimenting to make observations about the way things move. Students will need to know basic algebra skills to solve problems.

### **Chemistry #341**

**Credit = 1      Weighted = 1.1      Grades 10,11, 12**

This course will give students a basic overview of the concepts of chemistry. Students will be given an introduction to matter and energy, including topics such as atomic structure, matter classification, chemical naming rules, formulas, as well as practical applications for everyday life. This course is a good introduction for all students to learn and apply chemical knowledge to other sciences.

### **Organic Chemistry #348**

**Credit = 1      Weighted = 1.2      Grades 11, 12**

This course is an elective after successful completion of either Chemistry or AP Chemistry courses. Organic chemistry includes the study of aromatics, conformations, synthesis, and reaction mechanisms. In addition, large biomolecules, such as proteins, lipids, carbohydrates, and vitamins are discussed in the nutritional section of the course. Laboratory work focuses on an introduction to advanced techniques found in STEM-related careers.

### **Introduction to Earth and Space Science #356**

**Credit = 1      Weighted = 1.1      Grades 10, 11, 12**

This course will focus on the planetary systems of Earth. General topics of astronomy will cover galaxies, stars, and the solar system. Topics regarding earth science will include general concepts such as volcanoes, earthquakes, tectonic activity, climatology, and oceanic systems. Regional and local topics relevant to Pennsylvania will be covered as well, including weather, climate, groundwater, topography, rocks and mineralogy, mountain formations, and basic soil science. Certain topics of interest including surface water systems, agricultural impacts, polar ice cores, and petroleum science may also be explored.

### **Wave and Fluid Science #357**

**Credit = 1      Weighted = 1.1      Grades 11, 12**

This course is designed for students who want to learn about the science of materials (solid, liquid & gas) and the way sound and light interact with our universe. This class is designed for students who would like to learn how matter interacts with our universe without a large emphasis on math. The topics covered include: Nature of Atoms, Phases of Matter, Heat, Waves, Sound and Light. Students will learn by using probes, completing experiments and watching demonstrations to make observations about matter in our universe. Students will need to know basic algebra skills to solve problems.

### **Advanced Placement Biology #360**

***Dual Credit Option Available***

**Credit = 1      Weighted = 1.2      Grades 11, 12**

This course follows the AP Biology curriculum and is designed to prepare students for college level biology. Students are encouraged to take the advanced placement test in Biology at the end of the year. It is recommended that students successfully complete chemistry, or are

concurrently enrolled.

### **Advanced Placement Chemistry #361**

#### ***Dual Credit Option Available***

**Credit = 1      Weighted = 1.2      Grades 11, 12**

This course is a second-year chemistry class to meet the requirements of the national curriculum. As it mirrors first-year collegiate chemistry, a more in-depth analysis of topics covered in introductory chemistry are done. Extensive work in kinetics, equilibrium, electrochemistry, and reaction mechanisms are included in this course. Lab work for this course is more technical and rigorous as well. Students are strongly encouraged to take the AP Chemistry test in May. It is recommended that students successfully complete Chemistry and Trigonometry prior to taking this course.

### **Advanced Placement Physics C #362**

#### ***Dual Credit Option Available***

**Credit = 1      Weighted = 1.2      Grade 12**

This is a calculus-based physics course that is designed for the student interested in pursuing a degree in engineering and furthering their education as an engineering student at the college level. There is a strong emphasis on mechanics including the use of calculus to derive and evaluate some expressions. Students are encouraged to take the advanced placement test in Physics C at the end of the year. Concurrently taking AP Calculus AB is highly recommended.

### **Advanced Placement Environmental Science #363**

#### ***Dual Credit Option Available***

**Credit = 1      Weighted = 1.2      Grades 10, 11, 12**

This course is designed to be the equivalent of a one-semester, introductory college course in environmental science. It is intended to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. A rigorous multidisciplinary study of chemistry, biology, geology and geography as it relates to the environment will also include labs and field studies.

## **Mathematics**

<b>Course Title</b>	<b>Weight</b>	<b>Open to Grades</b>	<b>Credits</b>
Algebra I	1.1	9	1
Algebra 2 – Honors	1.2	10,11	1
Algebra 2	1.1	11	1
Geometry – Honors	1.2	9	1
Geometry	1.1	10	1

Applied Math	1.1	11,12	1
Introduction to Basic Statistics	1.1	12	1
Mathematics for Health Careers	1.1	10,11,12	1
Trigonometry / Elementary Functions	1.2	11,12	1
Statistics	1.1	12	1
AP Calculus AB	1.2	12	1
AP Statistics	1.2	11,12	1
Mathematics in Sports	1.1	11,12	1

### **Algebra 1 (Keystone Algebra I Exam required) #420**

**Credit = 1      Weighted = 1.1      Grade 9**

The Keystone Algebra 1 course will focus on building on the skills learned in Fundamentals of Algebra 1 and extend these concepts into more advanced Algebraic standards. The Algebra 1 course will include the following units: Patterns and Sequences, Linear Equations and Inequalities, describing data, describing functions, Systems of Linear Equations and Inequalities, Exponents and Exponential Functions, Quadratic Functions, and Quadratic Equations. Students will gain a solid foundation in algebraic concepts that will prepare them to be successful in other high school mathematics courses. At the end of this course, students will be required to take the Algebra 1 Keystone exam.

### **Algebra 2 – Honors #432**

**Credit = 1      Weighted = 1.2      Grade 10, 11**

*Prerequisite: successful completion of Algebra 1 and Geometry; can take Geometry concurrently.*

This course will be an extension of the material learned in the Algebra 1 course. Some of the topics included in this course are operations with complex numbers, non-linear expressions, non-linear equations, patterns, relations, and functions, applications of functions, and data analysis. The functions in this course include quadratic, polynomial, rational, logarithmic, and exponential.

### **Algebra 2 #434**

**Credit = 1      Weighted = 1.1      Grade 11**

*Prerequisite: Successful completion of Algebra 1 and Geometry*

This course will be an extension of the material learned in the Algebra 1 course. Some of the topics included in this course are operations with complex numbers, non-linear expressions, non-linear equations, patterns, relations, and functions, applications of functions, and data analysis. The functions in this course include quadratic, polynomial, rational, logarithmic, and exponential.

### **Geometry – Honors #442**

**Credit = 1      Weighted = 1.2      Grade 9**

*Prerequisite: Successful completion of Algebra 1*

In this course topics from algebra, geometry, and trigonometry are interwoven. Topics covered in this course may include angles, geometric proofs, coordinate geometry, properties of lines, properties of triangles, congruency, similarity, properties of polygons, trigonometry, area, perimeter, surface area and volume, and properties of circles. Emphasis will be placed on student writing, critical thinking, and individual projects.

### **Geometry #444**

**Credit = 1    Weighted = 1.1    Grade 10**

*Prerequisite: Successful completion of Algebra 1*

In this course topics from algebra, geometry, and trigonometry are interwoven. Topics covered in this course may include angles, geometric proofs, coordinate geometry, properties of lines, properties of triangles, congruency, similarity, properties of polygons, trigonometry, area, perimeter, surface area and volume, and properties of circles.

### **Applied Math #445**

**Credit = 1    Weighted = 1.1    Grade 11, 12**

This teacher recommended course is designed to provide students with basic math skills such as percentages, fractions, proportions, measurements, conversions, budgeting, and loan calculations that can be applied to real-life situations. Emphasis will be on project-based learning and applications where students use mathematical methods to model and solve problems.

### **Trigonometry / Elementary Functions #450**

***Dual Credit Option Available***

**Credit = 1    Weighted = 1.2    Grades 11, 12**

*Prerequisite: successful completion of Algebra 2*

This course is intended for the student who is interested in pursuing a career in Mathematics or Engineering. This course begins with a review of the mathematical skills and concepts required for AP Calculus. Emphasis is placed on intuitive thinking, mastery of the graphing calculator, and problem solving. Topics covered in this course include graphs, polynomial and rational functions, trigonometric functions, exponential and logarithmic functions, limits, and basic derivatives.

### **Introduction to Basic Statistics #454**

**Credit = 1    Weighted = 1.1    Grade 11, 12**

An introductory course in statistics beginning with descriptive statistics, probability, inferential statistics, and making predictions. Binomial distributions, normal distributions, linear regression and correlation are applied to real life situations. A graphing calculator will be used in this course.

### **Statistics #455**

**Credit = 1    Weighted = 1.1    Grade 12**

This course is the study of descriptive and inferential statistics. Students will learn how to describe current or past situations by displaying data using frequency distributions including tables and graphs; measures of central tendency including mean, median and mode; measures of dispersion including variance and standard deviation. Students will learn to predict future outcomes using sampling, estimation, hypothesis testing, and correlation and regression analysis. This course will extensively use the graphing calculator.

### **Mathematics for Health Careers #456**

**Credit = 1      Weighted = 1.1      Grade 10, 11 ,12**

This course will introduce the students to the logic of mathematics and measurement, the role of mathematics in the health professions, and the application of mathematics to problems encountered by the health care professional. Emphasis will be placed on topics such as basic computations, fractions, decimals, percentages, ratios, proportions, and dimensional analysis. The metric system with specific applications to dosages, reading and interpreting medication labels, determining medication orders, filling syringes, and other areas of health care will be stressed. Students will be assessed on classwork practice, group activities, quizzes, and projects.

### **Mathematics in Sports #458**

**Credit = 1      Weighted = 1.1      Grade 10, 11, 12**

This course is intended for the student who is interested in sports and mathematics. Students will explore and analyze mathematical concepts that are seen in various athletic areas. Students will complete classwork and projects based on athletic contests. Emphasis is placed on statistical analysis, performance mechanics, and communication of mathematical connections. This course will include topics from basic statistics, algebra, Euclidean geometry, and trigonometry. Students must have successfully completed Algebra 1 to take this course.

### **Advanced Placement Calculus AB #460**

***Dual Credit Option Available***

**Credit = 1      Weighted = 1.2      Grade 12**

*Prerequisite: successful completion of Trigonometry/Elementary Functions*

This class is a College Board accredited AP course. Topics include functions, graphs, limits, derivatives, and integrals. The course examines several applications of differentiation and integration such as slope, motion, area, and volume. A college-level textbook and graphing calculators are used extensively. Teachers will relate the concepts to the *AP Calculus Curriculum Guide* and will review previously released AP Exam material as preparation for the exam. Students are encouraged to take the advanced placement test in Calculus at the end of the year.

### **Advanced Placement Statistics #461**

***Dual Credit Option Available***

**Credit = 1      Weighted = 1.2      Grades 11, 12**

This teacher recommended course is designed for the highly motivated and competent math student who truly enjoys mathematics. The purpose of this course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: Exploring Data, Planning a Study, Anticipating Patterns, and Statistical Inference. Students are encouraged to take the advanced placement test in Statistics at the end of the year.

## **Physical, Health, and Safety Education**

Course Title	Weight	Open to Grades	Credits
Physical Education		9,10,11,12	.5

Weight Training		9,10,11,12	.5
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**Physical Education 9-12 #519**

**Credit = .5    Grades 9,10,11,12**

Students will be required to change their clothes to participate in a variety of activities. The activities will involve team sports focusing on skill development, drills and game play. An appreciation of teamwork and an understanding that every student has different skill levels and talents will be gained. Individual sports will also be covered along with lifetime fitness lessons. **Students in 9<sup>th</sup> Grade** will receive health topic lessons and Drivers Education in the classroom during the semester.

**Students in 10<sup>th</sup> Grade** will receive Drivers Education in the classroom during the semester.

**Students in 11<sup>th</sup> Grade** will receive Health topic lessons and will also be trained in first aid and CPR training during the semester. This First Aid and CPR training will result in an American Red Cross Certification that will last for 2 years. A fee of \$31.00 will be required to receive certification.

**Students in 12<sup>th</sup> Grade** will receive Health topic lessons and will also be trained in first aid and CPR training during the semester. The 12<sup>th</sup> grade students will attain First Aid and CPR Certification.

**Weight Training 9-12 #530**

**Credit = .5    Grades 9,10,11,12**

Personal Wellness class is for the student that wants to find and design workouts that will be tailored to their needs. The students will establish physical goals that they wish to meet by the end of the semester. The instructor and the student will plan workouts in order to meet those goals. Nutrition will also be a topic that will be covered in order to reach those goals. Personal Wellness will count as a .5 Physical Education credit. 10<sup>th</sup> Grade students will **not** receive Driver's Education during this semester course.

**Foreign Language**

Course Title	Weight	Open to Grades	Credits
Spanish 1	1.1	9,10,11,12	1
Spanish 2	1.2	10,11,12	1
Spanish 3	1.2	11,12	1
Spanish 4	1.2	12	1
French 1	1.1	9,10,11,12	1
French 2	1.2	10,11,12	1

**Spanish 1 #621**

**Credit = 1    Weighted = 1.1    Grades 9, 10, 11, 12**

The main objective of this course is communication within the target language of Spanish. Throughout the course students use all four communicative skills: reading, writing, listening, and speaking. Students will be taught the foundations of the language, including grammar structures, thematic vocabulary and sentence structure. They will develop an awareness of the various differences in culture among the Spanish-speaking countries including Spain, Central America, South America, Caribbean Islands, United States and Mexico. Throughout the year, the students will work individually and cooperatively while they make cross-cultural connections.

**Spanish 2 #622**

**Credit = 1    Weighted = 1.2    Grades 10, 11, 12**

Spanish II is a continuation of Spanish I. Students will begin to learn more complex grammar structures and continue to build vocabulary. Students will continue to build their reading, writing, listening, and speaking skills. We will make connections between vocabulary and real-life scenarios. This course is beneficial for students planning to attend college.

**Spanish 3 #623**

**Credit = 1    Weighted = 1.2    Grades 11, 12**

Spanish III further continues the study of Spanish grammar, vocabulary and culture. This course builds on the fundamentals established in Spanish II and I. A greater emphasis will be placed on the development of speaking, reading, writing, and listening skills. Students will be expected to occasionally read short stories in Spanish as well as produce written compositions in Spanish. We will also focus on speaking skills, by creating videos and skits for various units throughout the year.

**Spanish 4 #625**

**Credit = 1    Weighted = 1.2    Grade 12**

Spanish IV is the final level Spanish at the high school level. This course builds on the fundamentals established in Spanish I, II, and III. Students will be taught the remaining grammatical concepts as well as building on the former vocabulary units. The focus of this class is primarily on students' communication skills. As a result, the majority of class discussion will be in Spanish. Students will be required to read, write and speak in Spanish during this class.

**French 1 #626**

**Credit = 1    Weighted = 1.1    Grade 9-12**

This is an introductory course to learn the basics fundamentals of the French language.

**French 2 #627**

**Credit = 1    Weighted = 1.2    Grade 10-12**

French 2 is a continuation of French 1. Students will learn more complex grammar mechanics, build vocabulary, and continue to speak the language using real life scenarios.

**Computers / Technology**

Course Title	Weight	Open to Grades	Credits
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Computer Graphic Design		9,10,11,12	.5
Multimedia		9,10,11,12	.5
Video Production		9,10,11,12	.5
Web Page Design		10,11,12	.5
Python Programming		9,10,11,12	.5
Animation		9,10,11,12	.5
AP Computer Science	1.2	10,11,12	1
Technology and Social Media		9,10,11,12	.5
Introduction to Computers and Programming Concepts		9,10,11,12	.5

**Computer Graphic Design #671**

**Offered in the Even Years Only**

**Credit = .5      Grades 9, 10, 11, 12**

Graphic Design introduces and emphasizes the development of professional design skills in visual communication, graphic design and layout in Adobe Creative Suite (InDesign, Illustrator and Photoshop) on a computer. Designers will use sophisticated layouts, design and graphic creation processes in the production of a wide variety of real-world print, web, and digital/print media applications. Other Apps will be considered for remote learning, such as Pixlr, Paint, Jamboard, etc. The class has assisted with graphics for media posts for the Athletic Department and the Video Production as well as numerous clubs and school events. The course may also assist in putting together the Yearbook for HHS. This course is offered for one (1) semester only.

**Information Technology and Social Media #672**

**Offered in the Even Years Only**

**Credit = .5      Grades 9, 10, 11, 12**

This course offers an introduction to the basic concepts of computer and software applications and Internet-related information technology and its impact on individual users, businesses, groups, organizations and society. Students will explore Microsoft Office and Google Suite applications to understand the importance of file management skills with Windows O/S and Chrome, web browser. Students will learn how to protect PII (Personable Identifiable Information) to keep them safe, while they learn basics of networking, using social media responsibly and cybersecurity, computer ethics. A goal is to understand communications, promote life-long learning with professional employment skills and understanding of soft skills for etiquette and proper netiquette.

**Multimedia #674**

**Offered in the Odd Years Only**

**Credit = .5      Grades 9, 10, 11, 12**

The goal of this class is making movies or short videos and understanding the production process of video editing and filming. We will learn the basics of lighting, script writing, storyboarding and

video-editing. Students will use camcorders to record their videos to create a story. The basics of film editing will be covered. We will use Adobe Premiere Pro and After Effects and possibly other video editing applications. The work may be used in conjunction with entering the PA Media and Communication Fair and or the Spartan news.

### **Animation #676**

**Offered in the Even Years Only**

**Credit = .5      Grades 9, 10, 11, 12**

The programs used for Animation include Adobe Creative Suites: Animate, Character Animate and Fuse. The basics of design and steps involved in creating and publishing their own designs. Students will learn how to design their own animations, including the walk cycle, classic tweens, motion tweens and nested animations. The students will learn to work with layers, action script, buttons, symbols, music for creating their own authentic work. This course is typically offered for one (1) semester.

### **Video Production #677**

**Credit = .5      Grades 9, 10, 11, 12**

The basic goal of this class is to make, record and edit and publish the announcements. We will be responsible for live-streaming school events (after-school hours), setting up the equipment to broadcast LIVE in the gym, football or soccer fields, auditorium, etc... Students that are not on-air will be responsible for producing videos to be viewed during the news by the student body, administrators, parents, faculty and the community. This course is offered for one (1) period each semester. A knowledge of recording and editing videos will be very helpful.

### **Web Page Design #682**

**Credit = .5      Grades 10, 11, 12**

Students will learn the basics of HTML and CSS through a web page development program with code-writing applications, such as Visual Studio Code. Web design is a process of conceptualizing, planning and building a collection of electronic files that determine the layout, colors, text styles, structure, graphics, images and use interactive features that deliver pages to any visitors to the web site. We may also use Adobe Dreamweaver, Code Academy, Google Sites or other applications and course materials.

### **Python Programming #683**

**Offered in the Odd Years Only**

**Credit = .5      Grades 9, 10, 11, 12**

Python is a general-purpose programming language that can be used on any modern computer operating system. It can be used for processing text, numbers, images, scientific data and just about anything else you might save on a computer. It is used daily in the operations of the Google search engine, the video-sharing website YouTube, NASA and the New York Stock Exchange, etc. The class will work toward understanding Python to develop games, apps, web pages, databases, etc.

### **AP Computer Science #685**

**Credit = 1      Weighted = 1.2      Grades 10, 11, 12**

AP Computer Science Principles is an introductory college-level computing course. Computers use program coding as an integral part of their function. Students will become familiar with the many different ways that computers lead the drive to find new innovations. Students will discover the benefits and harmful effects of computing as well as the influence of innovative computer usage for economic, social and cultural landscapes. There will be an overview of various computing languages but the focus is more about theory and computer principles. Students will gain a better understanding of how computers think and how programmers look to solve problems of end-users of computers.

**Introduction to Computers and Programming Concepts #690**

**Offered in the Odd Years Only**

**Credit = .5            Grades 9, 10, 11, 12**

This course is designed to introduce students to the principles of computers and how they communicate via programming languages and protocols. We will explore the nuts and bolts of hardware the computer uses to process, store, interpret and calculate all the data humans input. We will explore data communications, Internet, networking concepts, software applications, database, file management in addition to computer ethics, security protecting personal identifiable information (PII). We all are familiar with using computing devices from mobile phones to iPads/tablets, this course will assist with making you more familiar with planning and managing your comfort level to become a more efficient end-user as well as beginning programmer.

**Business and Technology Education**

Course Title	Weight	Open to Grades	Credits
Personal Finance		9	.5
Foundations of Business and Entrepreneurship		9,10,11,12	.5
Management and Marketing		9,10,11,12	.5
Business communication		9,10,11,12	.5
Accounting 1	1.1	9,10,11,12	1
Accounting 2	1.2	10,11,12	1
Business Law		9,10,11,12	.5
Business Leadership and Skills		9,10,11,12	.5
AP Business with Personal Finance	1.2	10,11,12	1
Robotics Programming		9,10,11,12	.5

**Personal Finance #721**

**Credit = .5            Grades 9, 10, 11, 12**

This course covers in depth topics about personal finance. This course is intended to teach students skills and knowledge that they will certainly use throughout their lifetime. The important topics include but are not limited to: mortgages, student loans, college and major choice, career options, mutual funds, stocks, IRA's, 401Ks, 403Bs, company benefits, different types of debt, and more.

### **Management and Marketing #722**

**Offered in the Odd Years Only**

**Credit = .5      Grades 9, 10, 11, 12**

This course is designed to teach students about business management responsibilities pertaining to financial management, human resource management, and production management. Students will explore marketing topics such as planning, pricing, distribution, advertising and selling of goods and services. This course will be facilitated through projects, individual and group presentations, guest speakers, and simulations.

### **Foundations of Business and Entrepreneurship #726**

**Credit = .5      Grades 9, 10, 11, 12**

This course introduces students to business and entrepreneurship by exploring how businesses are created, developed, and sustained. Through hands-on, project-based learning and design thinking, students will develop an idea into a complete business plan and business model. Key topics include marketing, pricing, distribution, advertising, sales, and introductory accounting concepts such as balance sheets, cash flow, and income statements. The course emphasizes creativity, problem-solving, teamwork, communication, and technology, and culminates in a comprehensive business plan.

### **Accounting 1 #730**

**Credit = 1      Weighted = 1.1      Grades 9, 10, 11, 12**

This course includes the basic principles of financial accounting for business and non-business students so they can learn to make rational, reasoned, and intelligent decisions in a business environment. Accounting is the backbone of any business structure and highly recommended for any student considering a career in the business field. Accounting is one of the fastest growing business fields today.

### **Accounting 2 #737**

***Dual Credit Option Available for students in grades 11, and 12***

**Credit = .5      Weighted = 1.2      Grades 10, 11, 12**

This course is recommended for students with a strong background in accounting. Students will be trained in preparing financial statements for merchandising businesses organized as a corporation as well as learning about depreciation, financing, and company valuation. This course is strongly recommended for any student considering a career in the business field or accounting field.

### **Business Communication #739**

**Credit = .5      Grades 9, 10, 11, 12**

Business Communication will provide students with communication principles, concepts, and techniques which are essential components for effective organizational behavior in oral and

written communication situations. Emphasis is placed on the planning, organizing, composing, and revising of business documents such as letters, memos, reports, and emails. Presentation skills, professional behavior in the workplace, and current communication technologies are included with an emphasis on real world problem solving. Digital communication topics include presentation software, emails, business-relevant social media, and mobile technologies.

### **Business Law #740**

**Credit = .5    Grades 9, 10, 11, 12**

This course is designed to offer an introductory view of how the legal system and its laws apply to business practices and business ethics. It examines topics such as: Constitutional Law for Business and E-Commerce, Intellectual Property and Cyber Privacy, Internet Law, Domestic and International Sales, Business Ethics, Personal and Real Property, as well as International and World Trade Law.

### **Business Leadership and Skills (BLAST) #742**

**Credit = .5    Grades 9, 10, 11, 12**

This course is designed to develop foundational business knowledge and leadership abilities in students through a combination of group instruction and self-directed learning. The course integrates practical business concepts and project-based learning. In addition, students who are also in F.B.L.A. will be able to use the practical business concepts and project-based learning to prepare for F.B.L.A. competitive events. Students will gain experience in areas such as communication, entrepreneurship, networking, and professional presentation skills while fostering leadership and teamwork abilities. The course emphasizes both collaborative work and independent study to prepare students for success in academic and professional settings.

### **AP Business with Personal Finance #746**

**Credit = 1    Weighted = 1.2    Grades 10, 11, 12**

AP Business with Personal Finance is an introductory, college-level business and personal finance course. Students explore the business disciplines of entrepreneurship, marketing, finance, accounting, and management through real-world business applications, case studies, and project-based learning. In addition, students learn and apply all the National Standards for Personal Financial Education created by the Council for Economic Education and the Jumpstart Coalition for Personal Financial Literacy. This is a year-long course.

### **Robotics Programming #912**

**Credit = .5    Grades 9, 10, 11, 12**

This course teaches students robotic technology from a beginning level to advanced level. The class is designed to provide a framework for learning anything from math and computer science to life skills such as teamwork, project management, problem solving, and critical thinking. Students will have the opportunity to build and program a variety of robots and possibly compete in competitions.

## **Fine Arts**

Course Title	Weight	Open to Grades	Credits
Spartan Concert Band / Spartan Chorus		9,10,11,12	.5
Spartan Concert Band		9,10,11,12	.5
Senior High Spartan Chorus / Contemporary Chorus		9,10,11,12	.5
Music Theory 1	1.1	9,10,11,12	1
Music Appreciation		9,10,11,12	.5
Music Media Arts		9,10,11,12	.5
Modern Band		9,10,11,12	.5
Fine Art Drawing		9,10,11,12	.5
Fine Art Painting		9,10,11,12	.5
Sculpture and Mosaic		9,10,11,12	.5
Photography		9,10,11,12	.5
Jewelry Making		9,10,11,12	.5
Pottery		9,10,11,12	.5
Advanced Studio Art	1.2	11,12	1

**Spartan Concert Band/Spartan Chorus A and B #808**

**Credit = .5    Grades 9, 10, 11, 12**

This course is designated for students who participate in both band and chorus for the entire year.

**Spartan Concert Band A and B #811**

**Credit = .5    Grades 9, 10, 11, 12**

The Spartan Concert Band is the most advanced instrumental group offered at Hughesville High School. Students will perform repertoire ranging from pop tunes, to classic band literature to Broadway show tunes in order to develop technique, musicianship and listening skills. As an instrumentalist, you will learn to perform advanced skills, maintain stage presence, critique performances and much more. The Concert Band typically performs two concerts with the potential to perform on field trips and provide membership in other “audition only” bands around the country. Anyone who plays a band instrument is welcome

**Senior High Spartan Chorus/Contemporary Chorus A and B #812**

**Credit = .5    Grades 9, 10, 11, 12**

*Students are encouraged to take both semesters of chorus.*

Sr. High Spartan Chorus offers a fun and dynamic approach to singing a wide variety of music,

including current musical selections. This course offers a contemporary and upbeat approach to choral singing utilizing the most up-to-date choral arrangements. Students will gain confidence through a better understanding of their vocal range and vocal technique. Sr. High Chorus also offers the opportunity for students to create memorable experiences. These experiences may include special performances and traveling to exciting destinations to perform.

### **Music Theory 1 #820**

**Credit = 1    Weighted = 1.1    Grades 9,10, 11, 12**

This course will provide students with an understanding of basic music theory. It introduces students to the fundamentals of music, including notation, scales, chords, and rhythm. Some key topics that are covered in this course include: fundamentals of notation: staff, notes, rests, clefs, accidentals, and key signatures, scales and keys: major and minor scales, modes, and the relationships between them, Harmony and chords: Intervals, triads, seventh chords, inversions, and basic chord progressions, rhythm and meter: Simple and compound time signatures, note and rest values, form: understanding the structure and organization of musical pieces. Ear training: Developing skills to identify and transcribe pitches and rhythms by ear through dictation, sight-singing, and listening exercises. Being in the Spartan Concert Band and/or Spartan Chorus is recommended.

### **Music Appreciation #825**

**Credit = .5    Grades 9, 10, 11, 12**

This course will provide a high school level appreciation of music by exploring music in two main phases. The first half of the semester focuses on how music is structured, written and performed. The second half focuses on using this new found understanding to interpret music, explore different genres and study music history. Students will learn to read music, listen to musical examples, critique performances, study famous artists and develop a critical understanding of music's role in society.

### **Music Media Arts #826**

**Credit = .5    Grades 9, 10, 11, 12**

The Music Media Arts course will introduce students to many forms of music media. This includes music production, digital tools, and methodology. This program will be project based. Students will create and produce a finished music project. Students will master and record music tracks for production to apps such as Spotify. No prior music training is needed to take this course.

### **Modern Band A and B #827**

**Credit = .5    Grades 9, 10, 11, 12**

Modern Rock Band will introduce the skills necessary to perform on guitar, electric bass, keyboard, drums, vocals, in a modern band ensemble. Students do not need formal training to take this course, this course is intended for all students regardless of music experience. Students will form modern bands / rock bands. School equipment will be provided for performances. Students will perform rock band performances as scheduled.

### **Fine Art Drawing #831**

**Credit = .5    Grades 9, 10, 11, 12**

A course in drawing and design focusing on drawing techniques, methods, materials, conceptual

development, and the use of the elements of design for creative expression.

### **Fine Art Painting #832**

**Credit = .5    Grades 9, 10, 11, 12**

A course in painting and printmaking focusing on painting and printmaking techniques, methods, materials, conceptual development, and the use of the elements of design for creative expression.

### **Sculpture/Mosaic #834**

**Offered in the Odd Years Only**

**Credit = .5    Grades 9, 10, 11, 12**

By viewing the work of traditional and modern sculptors, students will begin to see the broad range of work done in three dimensions. During the first quarter, our studies will focus on representational and abstract three-dimensional art, most likely in the mediums of soap, clay, plaster, and even repurposed items. During the quarter, students will experiment with contextual sculpture. In contextual works of sculpture, the artist (or artists) addresses social issues and creates a work of art (often composed of found objects) that communicates aspects of the issue that go beyond traditional discourse. During the second quarter, students will explore the art of mosaic, gaining an overview of the historical and social contexts of this ancient art. They will produce several works of mosaic art, using primarily glass. However, other materials like broken dinnerware or tile, and even recycled items are available for enrichment activities.

### **Photography #840**

**Credit = .5    Grades 9, 10, 11, 12**

Dealing solely with digital photography, students will study photography as it exists in the realm of fine art, photojournalism, and commercial advertising. Students will survey a variety of modern and historical photographers whose impact on the field has been significant and critically analyze their work, while considering the impact on their own work in photography. Students will learn the basic mechanics of photography, including using adjustments in the manual mode of their phone (through apps if needed) or a DSL camera. Additionally, students will understand how the basic elements of art and principles of design work together to create exceptional photography, and students will use Adobe Photoshop software to edit and enhance their photos. A final portfolio of student work is required, and all students are expected to utilize their phone or a classroom camera for work in this course.

### **Jewelry Making #850**

**Offered in the Even Years Only**

**Credit = .5    Grades 9, 10, 11, 12**

This studio course will allow students to create a wide variety of jewelry using beads, rivets, brass, copper, silver plated nickel, and bare or craft wire. At the end of the semester, students will transfer their skills into a work of art that exemplifies their notions of beauty through balance, motion, and suspension by studying the work of Alexander Calder and creating a mobile.

### **Pottery #859**

**Credit = .5    Grades 9, 10, 11, 12**

This is a course in pottery and ceramics focusing on methods of construction and glazing

techniques, materials, and creativity. Conceptual development, craftsmanship and creative expression will be emphasized.

**Advanced Studio Art #862**

***Dual Credit Option Available***

**Credit = 1      Weighted = 1.2      Grades 11, 12**

This challenging studio course offers the potential to earn dual enrollment credit. Students in this yearlong course will survey relevant historical art movements, experiment with a variety of art techniques, explore contemporary artists, practice a variety of approaches to art analysis, and respond to art prompts. Student sketchbooks will become a powerful resource for idea development, progress monitoring, and experimentation. The sketchbook will be used as a “final exam”. In the second half of the year, students will pursue a self-directed series of 5 artworks around a theme (3D ceramic artists may adjust this total to accommodate schedules). Students will participate in formal and informal critiques. Instructor permission is required to select this course.



### Program Offerings

Automotive Technology	Diesel Technology
Construction Technology	Early Childhood Education
Culinary Arts	Pre-Nursing & Health Sciences
Computer Systems Technology	Welding Technology
Criminal Justice (Law Enforcement)	

### Special Programs

Capstone Cooperative Education	College Credit Options
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### Course Descriptions 2026-2027

#### Automotive Technology – (2.0 hours/day)

If you are interested in cars and want to repair high tech vehicles, take a closer look at the Auto Tech program. This program, designed for students who would like to work in the automotive service industry, is certified by Automotive Service Excellence (ASE.) The LycoCTC Automotive Technology Program follows the National Automotive Technicians Education Foundation (NATEF) guidelines. When you enroll in the program, you will learn about performance, computer electronics, engine and chassis diagnoses and repair. Through this program students may acquire a Pennsylvania Automotive State Inspection License, prepare for the Automotive Service Excellence (ASE) Certification, and complete SNAP-ON DVOM Training.

9 College Credits currently available through Luzerne County Community College Articulation Agreement

\*See page 43 for more information about all the ways to earn college credits at Lyco CTC.

#### Computer Systems Technology – (2.0 hours/day)

As a CST student you'll dive deep into the fascinating realms of computer hardware, network technology, cybersecurity, and programming. You'll get your hands dirty building and repairing computers, setting up and securing networks, writing code, and protecting digital landscapes. But that's not all! We're not just teaching tech; we're empowering you for the future. This program offers you the opportunity to earn valuable CompTIA certifications like A+, Network+, Security+, and IT Fundamentals. These certifications will open doors to a wide range of career opportunities in IT. So, let's embark on this incredible learning adventure together, where we'll equip you with the skills and knowledge needed to thrive in the dynamic tech world. Get ready to shape your future in technology with us!

7 College credits are currently available through Penn College Dual Enrollment

\*See page 43 for more information about all the ways to earn college credits at Lyco CTC

### **Construction Technology – (2.0 hours/day)**

This program provides students the opportunity to learn skills in the construction field such as: carpentry, masonry, electricity, plumbing, heating, and air conditioning. Students learn safety practices as they relate to using hand tools, power tools and performing tasks in the construction industry.

9 College credits currently available through Thaddeus Stevens College of Technology Articulation Agreement

3 College credits are currently available through Penn College Dual Enrollment

\*See page 43 for more information about all the ways to earn college credits at Lyco CTC

### **Criminal Justice – (2.0 hours/day)**

The Criminal Justice program is available to high school students who are interested in law enforcement, corrections or the military. Through a combination of academic-based instruction and “hands-on” experience, students will acquire the basic skills needed to succeed in a related career field. Some of the areas studied include the criminal justice system, use of force, communication and report writing, patrol functions, crimes code and vehicle code, crime scene investigation, and physical education. The Criminal Justice program helps to prepare you for a career in private security, law enforcement, corrections, military, or to continue your post-high school education.

15 College credits currently available through Commonwealth University Articulation Agreement

12 College credits currently available through Penn College Articulation Agreement

\*See page 43 for more information about all the ways to earn college credits at Lyco

### **Culinary Arts – (2.0 hours/day)**

Did you ever wonder what it would be like being a chef working in a 5-star restaurant? What about being an executive chef working for a Food Service Corporation? Our program prepares you for higher education and gets you ready to attain your goals you have set for yourself. Our instructor will give you a jump-start on your career goals and help you receive your ServSafe certification.

10 College credits currently available through Luzerne County Community College Articulation Agreement

\*See page 43 for more information about all the ways to earn college credits at Lyco CTC

### **Diesel Technology – (2.0 hours/day)**

If you are interested in diesel engines and want to work on powerful, high-torque vehicles, explore the Diesel Technology program. This program is designed for students who want to pursue careers in the diesel service and repair industry and is aligned with industry standards to ensure quality training. The Diesel Technology program follows guidelines set by the National Institute for Automotive Service Excellence (ASE). When you join this program, you will gain hands-on experience with diesel engine performance, fuel systems, electronic controls, diagnostics, and heavy-duty vehicle repair.

### **Early Childhood Education – (2.0 hours/day)**

This program prepares students for careers and further study in early childhood education by teaching child development from conception to adolescence. Students will also learn the practical skills needed to work in licensed child-care settings. Coursework covers planning and guiding developmentally appropriate activities, guidance and discipline practices, basic health and safety, management and operation of childcare facilities, employability skills, and child behavior. Students will gain hands-on experience through observation and participation in an actual on-site preschool. This course provides a solid base for students planning to enter the fields of Occupational Child Care, Para-educator, or Elementary Education. *This program is located at the Ashkar Elementary School in Hughesville.*

6 College credits currently available through Commonwealth University Articulation Agreement

9 College credits currently available through Luzerne County Community College Articulation Agreement

\*See page 43 for more information about all the ways to earn college credits at Lyco CTC

### **Pre-Nursing & Health Sciences – (2.0 hours/day)**

*Pre-Nursing & Health Sciences* introduces students to the scientific principles and practical skills that form the basis of healthcare and nursing practice. Students will explore human anatomy and physiology, medical terminology, and basic health assessments through hands-on labs and clinical simulations. Emphasis is placed on developing critical thinking, communication, and teamwork skills essential for success in healthcare professions.

Students gain exposure to real-world healthcare environments through classroom experiences and optional cooperative education placements during the senior year. This course prepares students for postsecondary study in nursing and allied health fields and offers dual enrollment credit and articulation credits through partner colleges.

7 College credits currently available through Commonwealth University Articulation Agreement

3 College credits currently available through Penn College Articulation Agreement

3 College credits currently available through Penn College Dual Enrollment

\*See page 43 for more information about all the ways to earn college credits at Lyco CTC

### **Welding Technology – (2.0 hours/day)**

If you are interested in working with metal and creating strong, precise welds, consider the Welding Technology program. This program is designed for students who want to build careers in welding, fabrication, and metalworking industries. It follows industry standards to provide comprehensive, hands-on training. When you enroll in the program, you will learn various welding processes, blueprint reading, metallurgy, and safety practices. Students will gain experience with advanced welding equipment and techniques, preparing them for industry certifications such as those offered by the American Welding Society (AWS).

## **Special Programs**

### **Capstone Cooperative Education**

This opportunity allows eligible seniors to get on the job training at a co-op or internship placement directly related to their program of study at Lycoming CTC. Students must have their program instructor's recommendation to participate in this program.

### **Earning College Credit in High School**

Career and Technical Education (CTE) students have several ways to get a head start on a college certificate or degree while still in high school. They can earn credit for the courses and skills they complete in their LycoCTC programs, which saves both time and money. These opportunities are listed with our programs and more general information is below.

**Dual Enrollment** means taking a real college class while you're at LycoCTC. You earn both a high school and college credit at the same time, at no cost to you. LycoCTC partners with Pennsylvania College of Technology for dual enrollment. Students earn credits on a Penn College transcript, and these credits sometimes transfer to other colleges.

**Articulation** means that LycoCTC and a particular college have an agreement, so that the college gives you credit when you complete a particular program of study at LycoCTC. Articulation is noted under each program description and is only between the listed college and LycoCTC (not transferrable to another college).

**SOAR (Students Occupationally and Academically Ready)** is a statewide program in Pennsylvania that connects LycoCTC programs to partner colleges who opt in. SOAR credits recognize the skills you learn at LycoCTC and translate them into credits at participating colleges in PA, which gives you a head start toward your degree or certificate.

## **NON-DISCRIMINATION POLICY**

The East Lycoming School District does not discriminate on the basis of age, sex, handicap, race, religion, creed, national origin, veteran status or political affiliation. Inquiries concerning Title VI, IX Section 504, American Disabilities Act compliance should be directed to: Mrs. Cori Cotner, Director of Curriculum and Instruction, 349 Cemetery Street, Hughesville, Pennsylvania 17737-1009, (570-584-2131).