

# Hughesville High School



Spartan P.R.I.D.E.

Program of Studies

Grades 9 – 12

2018-2019

## TABLE OF CONTENTS

I.	PHILOSOPHY .....	2
II.	COUNSELING SERVICES .....	2
III.	SCHEDULING INFORMATION .....	3
IV.	CAREER PATHWAYS.....	4
V.	PRIVATE TUTORING AND ORIGINAL CREDIT .....	6
VI.	GPA / AP COURSES / DUAL ENROLLMENT COURSES .....	7
VII.	THE DEPARTMENTS/COURSE DESCRIPTIONS .....	8
	ENGLISH.....	9
	SOCIAL STUDIES .....	12
	SCIENCE .....	15
	MATHEMATICS.....	19
	WELLNESS / SAFETY EDUCATION .....	22
	FOREIGN LANGUAGE .....	22
	COMPUTERS / TECHNOLOGY .....	24
	BUSINESS .....	26
	FINE ARTS.....	27
	CAREER AND TECHNICAL EDUCATION.....	30
	ON-LINE DUAL ENROLLMENT OPPORTUNITIES .....	32
	LYCOMING CAREER AND TECHNOLOGY CENTER .....	32
	PARENT INFORMATION .....	37

## ***I. PHILOSOPHY***

The mission of the Hughesville Junior-Senior High School is to ensure that each student acquires and effectively uses the knowledge, skills, and behaviors necessary to be a productive member of our society both today and in the future.

The Hughesville High School must prepare our students to be successful in two or four year college programs, in the work place, or in the military. When our students graduate, they will go on to one of these areas, and it is our mission to prepare them to succeed.

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.

## ***II. COUNSELING SERVICES***

The counseling staff at Hughesville High School provides basic counseling services to students within the junior and senior high school.

- A. A Personal Counseling Service finds the counselor using his or her psychological training to help students cope with their individual personal, social, and educational concerns. Parents, teachers, administrators, and students are consulted in individual cases. Strict confidentiality is held between student and counselor at all times.
- B. A Referral Service is offered by the counselor who uses the help of other professionals in the field such as psychiatrists, social workers, and juvenile probation officials to aid with a particularly difficult problem.
- C. An Assessment Service aids counseling personnel in collecting student data through testing and interpreting this data for teachers, parents, and students to aid students in making educational and career decisions.
- D. A Records Maintenance Service with a cumulative folder is kept on each student from the time he or she begins school in kindergarten until graduation. The counseling personnel handle requests for transmission of student records. The records are maintained in the high school vault. Records are available in the Counseling Office for view by parents.
- E. A Placement Service is broken down into two categories: Educational and Occupational. Educational placement pertains to assisting students in moving from high school to higher education. Occupational placement involves helping students with job availability.
- F. An Information Service is maintained by the counselor to provide students with current educational, personal-social, and occupational information, which may be of help to them. Career resources are available to assist students.
- G. A Career Coordinator is available for career planning and goal setting. The Career Coordinator also coordinates scholarship information.

### **III. SCHEDULING INFORMATION**

All students of Hughesville High School have the responsibility of planning a yearly program of studies. This responsibility should not be taken lightly. While no amount of planning and/or doing assures a future, serious concern at this time may well provide the direction of the future. It is anticipated that as the individual schedule is prepared for its final submission, the student will have considered:

1. Past performances, current grades, abilities and interests.
2. The advice and counsel of parents, teachers, and counselors

Students will receive a course schedule in the summer. This schedule should be considered final for all intents and purposes. 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:

Students will attend the first two days of school without any schedule changes except for those deemed necessary by administration. Beginning on day 3, students may come to the Counseling Office to request a schedule change bearing in mind that not all requests can be honored due to certain variables. If a student requests to change a semester course, he or she must make that request within the first two weeks of the course. The request will be honored if feasible. After the two-week mark, no changes to elective courses will be permitted unless deemed necessary by the administration.

If a student requests to change a year-long, core course (Mathematics, Language Arts, Science, or Social Studies) or move from one level to another (AP to Academic, for example) the student must first discuss this with the teacher of the present course. In some cases, the student must also meet with the teacher of the requested course for approval and then secure parent permission. Verification of these permissions may occur via a phone conversation, an email, written document, and/or in person. A student must make his or her request within the first four weeks of the academic school year. After the week four, no course changes will be permitted unless deemed necessary by the administration.

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.

**To be eligible for graduation**, by the end of the senior year, a student must have successfully completed a minimum of **25 credits** consisting of:

- \* English- 4 credits, at least 1 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- 2 credits, .5 credit each year grades 9-12
- \* Driver Education classroom theory
- \* Elective courses

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

**\*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.

#### **IV. CAREER PATHWAYS**

##### ***What are Career Pathways?***

Each Career Pathway is a broad grouping of careers that share similar characteristics and have common employment requirements. A chosen Pathway focuses a student's courses toward preparing for a specific career goal area. Personal and Career Awareness is part of the Junior High experience. Career Pathway planning is an educational approach to course scheduling, which helps students focus their education toward career development. The five career pathways identified within this Course Planning and Course Description Guide are clusters of occupations or careers that are based on the national career clusters.

##### ***Why should I choose a career pathway?***

- To create career awareness and encourage planning for post-secondary education and opportunities
- To provide knowledge that relates your high school education to the world after graduation
- To help focus on a career area that matches interests in high school
- To help set goals and discover classes necessary to achieve those goals

In a Career Pathway system, students choose a pathway that will prepare them for employment in the cluster that best fits their interests and abilities. Each career pathway represents a group of related occupations and industries represented in today's economy.

##### ***How should I use the Career Pathways information?***

When scheduling, compare your course selections to your intended pathway to help you determine whether your choices meet your post high school goals. Get advice and help on your course selections from your parents, counselors, principal, and teachers.

### **Arts and Communications**

Designed to develop students' awareness, interpretation, application, and production of visual, verbal, and written work. Careers in this pathway are linked to the humanities and include performing, visual, and literary arts as well as the communication media. Some occupations include those in creative writing, dance, editing, film, fine arts, graphic arts, journalism, modeling, music, photography, radio, telecommunications, theatre, and translating.

Possible Career Areas:

Performing Arts	Visual/Graphic Arts
Publishing Arts	Journalism
Media	Telecommunication

### **Business/Information Management and Marketing**

Designed to prepare students for careers in the world of business, finance, and information services. Careers in this pathway are in the fields of business and marketing. Some occupations include those in accounting, administrative support staff, advertising, computer science, distribution, finance, insurance, international business, management, marketing research, merchandising, personnel, purchasing, real estate, sales and tourism.

Possible Career Areas:

Marketing Sales and Service	Accounting/Finance
Information Technology	Business Management
Merchandising	Marketing

### **Engineering/Industrial and Technological Sciences**

Designed to develop students' interests, awareness, and application to areas related to technologies necessary for design, development, installation, and maintenance of physical systems. Careers in this pathway are related to engineering, science, technology, construction, manufacturing, and transportation. Some occupations include airline pilots, archeologists, architects, assemblers, carpenters, drafters, engineers of all types, machinists, mechanics, scientists, tool and die makers, and truck drivers.

Possible Career Areas:

Engineering and Engineering Technology	Drafting and Design
Manufacturing--Machining	Architecture--Construction
Information Technology	Transportation, Distribution and Logistics

### **Health and Natural Resource Sciences**

Designed to develop students' interests in the life, physical and behavioral sciences. In addition, the planning, managing and providing of therapeutic services, diagnostic services, health information and biochemistry research development. Careers in this pathway are part of the health services field. They include occupations in hospital services, medical technology, medicine, nursing, optometry, pharmacy, psychiatry, psychology, therapy and others. Careers in this pathway are related to the environment and natural resources and include occupations in agribusiness, agriculture, animal science, veterinarian, forestry, horticulture, and wildlife management.

Possible Career Areas:

Health Science-Health Careers	Science and Technology
Manufacturing--Machining	Architecture--Construction
Hospital Services—Medical Technology	Agriculture, Food & Natural Resources

### **Human and Family Services**

Designed to develop students' interests, skills, and experiences for employment in careers related to familiar and human needs. Careers in this pathway are linked to family/consumer, economic, political and social systems. Some occupations in this career focus area include those in hospitality and recreation, public and community service, and the broad field of social services. Careers such as those in childcare, cosmetology, economics, education, fire protection, food service, government, history, hotel and restaurant services, law, law enforcement, the military, and recreation may be found in this career pathway.

Possible Career Areas:

Counseling and Personal Care	Education
Law, Public Safety and Government	Hospitality and Tourism
Social Services	Public and Community Service

## **V. PRIVATE TUTORING and ORIGINAL CREDIT**

- A. Original credit may be earned by taking courses at Penn College, Williamsport High School, or at Hughesville High School (if offered) at parents' expense. All such courses must have administrative approval prior to the student's enrollment. The following hourly requirements must be met:
1. 120 hours for full year, 1 credit course
  2. 60 hours for a semester, .5 credit course
- B. Remediation by private tutoring is available at parent's expense. The tutor must be certified in the subject taught and must be approved by the administration. The following hourly requirements must be met:
1. 45 hours for a full year, 1 credit course
  2. 22.5 hours for a semester, .5 credit course
  3. 30 hours for a Driver Safety Education course
  4. 27 hours for a grade 11 Health course
  5. 18 hours for a Physical Education course

## **VI. GPA / AP COURSES / DUAL ENROLLMENT COURSES**

**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
- F – 0 to 69

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 Courses**

Hughesville High School offers several opportunities for students to earn college credit while attending high school. The courses are specified in the Program of Studies as dual enrollment courses. There are several benefits to earning college credit while attending high school with the cost and time saving topping the list. The courses are offered through The Pennsylvania College of Technology, Keystone College, and also online courses through Luzerne County Community College. Students enrolled in the dual enrollment courses must pass the course with a "C" or better to earn the college credits.

The *Pennsylvania College of Technology* courses offered in 2018-2019 are:

- Grade 12 English – Honors
- AP US History
- AP Psychology
- Anatomy and Physiology – Honors
- Chemistry – Honors (Pending Approval)
- Technical Algebra and Trigonometry
- Technology and Social Media
- Web Page Design (Pending Approval)
- Plastics

There is no fee to take these courses to earn college credit. Students must pass the College's Entrance Exams to be eligible for the college credit.

The courses approved for college credit through *Keystone College* are:

- Speech and Debate
- AP Environmental Science (Final Approval is needed by Keystone College)
- AP English Literature and Composition
- AP Government and Politics
- AP Biology
- AP Chemistry
- AP Physics C
- AP Calculus AB
- AP Statistics
- AP Spanish
- Accounting I.

\$100 per credit fee. (2017-2018 rates)

All online courses through the *Luzerne County Community College Early College Program* are approved for our school. Juniors and Seniors may enroll in the college's courses at LCCC. Courses are accessible through LCCC website (<http://www.luzerne.edu/admissions/earlycollege/>). There is currently a \$64.00/credit fee, a \$15.00 Early College fee, and a \$40.00 online fee (2017-2018 rates). Students are also responsible for textbooks, supplies, and/or access code fees required for the course(s).

Students may opt to take multiple dual enrolment courses, from any approved institution as their schedules permit, based on graduation requirements and prerequisites. Please meet with your counselor if you have any questions.

## **VII. THE DEPARTMENTS / COURSE DESCRIPTIONS**

At the end of each course description is the Pathway that best aligns with that particular course. The following key identifies the specific pathway:

- |             |   |
|-------------|---|
| <b>AC</b>   | Arts and Communications                       |
| <b>BMM</b>  | Business Management and Marketing             |
| <b>EITS</b> | Engineering Industrial Technological Sciences |
| <b>HNRS</b> | Health, Natural Resource Sciences             |
| <b>HFS</b>  | Human and Family Services                     |

## ENGLISH

---

### **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.

*Pathway: AC, BMM, EITS, HNRS, HFS*

---

### **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.

*Pathway: AC, BMM, EITS, HNRS, HFS*

---

### **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.

*Pathway: AC, BMM, EITS, HNRS, HFS*

**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.

*Pathway: AC, BMM, EITS, HNRS, HFS*

**Principles of Literature & Composition #136**

**Credit = 1      Weighted 1.1      Grade 11**

*Students are recommended and placed in this course by administration based on their results of the student's PSSA Reading Scores and/or the Keystone Exams.*

This course is designed to provide students with an understanding of grammar and usage integrated with composition. Forms of writing include descriptive, narrative, and persuasive. Literature units include fiction, poetry, and contemporary non-fiction. Emphasis is placed on the reading and writing skills present in the Keystone Exams. The second semester will concentrate on the completion of the Literature Project Based Assessment if necessary to meet the state requirement for a diploma.

**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.

*Pathway: AC, BMM, EITS, HNRS, HFS*

**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.

*Pathway: AC, BMM, EITS, HNRS, HFS*

---

**Grade 12 English - Honors** #148**Credit = 1**      **Weighted 1.2**      Grade 12***Penn College Dual Enrollment Course***

This course will focus on the reading, writing and communications skills necessary for success on a career path or college major. Students will learn to express their ideas, interests, and strengths specific to post high school plans by utilizing both oral and written communication formats. Emphasis will be placed on reading and writing skills and strategies that will help ease the transition from high school to college or a career path. Writing assignments will require preparing research and applying writing techniques, including MLA and APA documentation styles.

*Pathway: AC, BMM, EITS, HNRS, HFS*

---

**Grade 12 English** #149**Credit = 1**      **Weighted 1.1**      Grade 12

This course is designed to enhance students' reading, writing, and communication skills. Students will practice reading and writing reports, manuals, e-mails, and other communications required in college and/or the work place.

*Pathway: AC, BMM, EITS, HNRS, HFS*

---

**Speech and Debate** #150**Credit = .5**      **Weighted 1.2**      Grades 11, 12***Keystone College Dual Enrollment Course***

*This is an elective course for juniors and seniors.*

This semester course is designed for students who want the opportunity to specialize in public speaking and formal debate. Students should expect to learn the fundamentals of drafting and delivering formal speeches and less-formal discussions. They will study the history of debate and oration and learn how to organize, moderate, and participate in a formal debate.

*Pathway: AC, BMM, EITS, HNRS, HFS*

---

**Creative Writing** #151**Credit = .5**      **Weighted 1.1**      Grades 11, 12

*This is an elective course for juniors and seniors.*

This semester course is designed to provide students with guided instruction for students wishing to further develop their writing skills in genre writing. Students will learn the art and craft of writing fiction, poetry, drama, and/or non-fiction.

*Pathway: AC, BMM, EITS, HNRS, HFS*

---

**Advanced Placement English Literature and Composition** #160**Credit = 1**      **Weighted 1.2**      Grade 12***Keystone College Dual Enrollment Course***

A major focus of this class is preparation for the Advanced Placement Exam in English Literature. Students will expand, through practice, literary analysis skills and AP Practice tests are utilized to determine strengths and needs. Timed writing, especially literary analysis, is required. The curriculum consists of British and

World literature. Much independent reading is required. Students have the option to take the Advanced Placement test in English Literature at the end of the year. Students must complete a summer reading assignment before entering the class.  
*Pathway: AC, BMM, EITS, HNRS, HFS*

## **SOCIAL STUDIES**

---

### **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.

*Pathway: AC, BMM, EITS, HNRS, HFS*

---

### **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.

*Pathway: AC, BMM, EITS, HNRS, HFS*

---

### **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.

*Pathway: AC, BMM, EITS, HNRS, HFS*

---

### **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.

*Pathway: AC, BMM, EITS, HNRS, HFS*

---

**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.

*Pathway: AC, BMM, EITS, HNRS, HFS*

---

**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 government uses to stabilize the economy. This course is intended for students interested in developing their theoretical understanding of economics, for students looking to challenge themselves at the collegiate level. Included in the course are field trips to local firms and participation in the Economics Challenge competition sponsored by Economics Pennsylvania.

*Pathway: AC, BMM, EITS, HNRS, HFS*

---

**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.

*Pathway: AC, BMM, EITS, HNRS, HFS*

**You and the Law**

#255

**Credit = 1      Weighted 1.1**

Grades 11, 12

This course is designed for students interested in the career fields of law and/or criminal justice. Topics include the adversary system, the Bill of Rights, the death penalty, the insanity defense, the history and structure of the police, the FBI, CIA, tort law, and the juvenile justice system. Visits to the Lycoming County Courthouse to view trails are a regular part of the course.

*Pathway: BMM, HFS*

**Advanced Placement US History**

#260

***Penn College Dual Enrollment Course*****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.

*Pathway: BMM, HFS*

**Advanced Placement Government and Politics**

#261

**Credit = 1      Weighted 1.2**

Grades 11, 12

***Keystone College Dual Enrollment Course***

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 Advance Placement exam.

*Pathway: BMM, HFS*

**Advanced Placement Psychology**

#262

***Keystone College Dual Enrollment Course*****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. They also learn about the ethics and methods psychologists use in their science and practice.

*Pathway: BMM, HFS*

## SCIENCE

### Biology #325

**Credit = 1      Weighted 1.1** Grade 9

This course is a sequential preparatory course that introduces students to the basic concepts of biology. The objective of this course is to provide the student with the basic principles of biology to include ecology, cell structure, genetics, classification, and an introduction to the anatomy and physiology of invertebrate and vertebrate animals.

*Pathway: AC, BMM, EITS, HNRS, HFS*

### Keystone Biology **(Keystone Biology Exam required)** #330

**Credit = 1      Weighted 1.1** Grade 10

A detailed course which challenges students with advanced biological concepts, and prepares them for the Keystone Biology Exam in May of the sophomore year.

*Pathway: AC, BMM, EITS, HNRS, HFS*

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

**Credit = 1      Weighted 1.2** Grade 9

Honors Biology is a rigorous course designed for those students who have a sincere interest in and anticipate further study of the sciences. Integration of technology in appropriate areas will be included. The course is designed to complete the Keystone Biology exam in May of the freshman year.

*Pathway: AC, BMM, EITS, HNRS, HFS*

### Principles of Biology #334

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

*Students are recommended and placed in this course by administration based on their results of the student's Keystone Biology Exam.*

Emphasis is placed on the PA Core Standards emphasized in the Keystone Biology Exam. The second semester will concentrate on the completion of the Biology Project Based Assessment if necessary to meet the state requirement for a diploma

### Anatomy and Physiology - Honors #337

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

***Penn College Dual Enrollment Course for Students in Grades 11 and 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 the cat is an integral part of the program. Students will be considered for Anatomy and Physiology after successful completion of or concurrently taking Chemistry.

*Pathway: HNRS, HFS*

---

**Chemistry – Honors** **#338****Credit = 1      Weighted 1.2** Grades 10, 11, 12***Penn College Dual Enrollment Course***

Students will be considered for Chemistry Honors after they have completed Biology Honors. Students must have completed or be enrolled in Algebra 2 to take this course. This is an accelerated academic chemistry course with greater, in-depth coverage of those topics required for the Advanced Placement Chemistry course and examination.

*Pathway: EITS, HNRS*

---

**Physics - Honors** **#339****Credit = 1      Weighted 1.2** Grades 11, 12

This course will give students a thorough understanding in the basic concepts of physics. Students will study the motion of objects and the related concepts of force and energy; a field of physics called mechanics. Included topics will be kinematics, dynamics, Newton's Laws, Force, Work, Energy Conservation, Impulse, Momentum, and Simple Harmonic Motion. Students will be assigned projects such as Water Bottle Rockets, Knex Roller Coasters, and Mousetrap Cars to demonstrate the physics concepts discussed in this course. Students must have completed Algebra 2 prior to taking this course.

*Pathway: EITS, HNRS*

---

**Project Based Physics** **#340****Credit = 1      Weighted 1.1** Grades 11, 12

This course is designed for students who want to learn how physics applies to everyday life. Included topics will be kinematics, dynamics, Newton's laws, force, work, energy conservation, impulse, momentum, and simple harmonic motion. Students will be assigned projects such as water bottle rockets, Knex roller coasters, and mousetrap cars to demonstrate the physics concepts discussed in this course. Students will need fundamental algebra skills in order to solve problems.

*Pathway: EITS, HNRS*

---

**Chemistry** **#341****Credit = 1      Weighted 1.1** Grades 11, 12

This course will give students a thorough yet basic understanding of the concepts of chemistry. Students will study matter and energy including topics in atomic structure, classification of matter, naming compounds and writing chemical formulas as well as balancing chemical equations and gas laws. This course will give a good background in chemistry careers.

*Pathway: EITS, HNRS*

---

**Environmental Science** **#345****Credit = 1      Weighted 1.1** Grade 10, 11, 12

This course is the study of patterns and processes in the natural world and their modification by human activity. This is an introductory course for students who wish to study topics relating to ecology and the environment, its resources, quality and ethical issues. Topics covered include Environmental law and health,

biodiversity and conservation, endangered and invasive species, and population dynamics. Topics will be explored using current events and research projects.

*Pathway: EITS, HNRS, HFS*

---

**Alternative Energies** **#347**

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

This is an exploratory course dealing with the exciting and growing field of alternative energies and green technologies. Students will explore all the major areas of alternative energy including heating and cooling systems, solar power, biomass, biodiesel, biogas, hydropower, wind power, wave power, geothermal energy, and hydrogen and fuel cells. Career and job opportunities in green technologies will also be covered. The class will combine theory with hands on learning experiences including the design, construction and testing of experimental projects.

*Pathway: BMM, EITS, HNRS, HFS*

---

**Organic Chemistry** **#348**

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

This course is a science elective taken after a student passes Chemistry. Organic Chemistry includes the study of aliphatics, aromatics, and their conformations; syntheses; properties; and reaction mechanisms. Lab work will focus on techniques, synthesis, and reactions.

*Pathway: EITS, HNRS*

---

**Plant Biology** **#349**

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

This course teaches students the basics of the arts and sciences of plant life, plant production, greenhouse management, landscape design, and floriculture. Students will participate in various hands on activities including composting, hydroponics, and raised bed gardening and will work together to grow seedlings for the annual plant sale.

*Pathway: AC, BMM, EITS, HNRS, HFS*

---

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

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

***Keystone College Dual Enrollment Course***

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 students successfully complete Anatomy and Physiology prior to taking AP Biology. It is also recommended that a student has successfully completed chemistry or is concurrently enrolled.

*Pathway: EITS, HNRS*

---

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



molding, and thermoforming. With successful completion, students will receive 3 credits for the PPT118 course through Pennsylvania College of Technology.

*Pathway: EITS*

## **MATHEMATICS**

Mathematics is a sequential field. There are definite prerequisites for many courses. The current math teacher will recommend a student's math course for the following year. The administration has a requirement from the State to place students who are not proficient on the Keystone Algebra 1 exam into a remediation class.

Academic Sequenced Courses:

Grade 9 – Algebra 1

Grade 10 – Geometry

Grade 11 – Algebra 2, or

Intro to College Algebra

Grade 12 – Statistics, or Tech. Alg.,  
or Tech. Alg. and Trig.

Honors Sequenced Courses:

Grade 9 – Geometry Honors

Grade 10 – Algebra 2 Honors

Grade 11 – Trigonometry/Elementary Funct.

Grade 12 – AP Calculus, or Statistics, or AP  
Statistics, or Trig./Elem. Functions

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

**#420**

**Credit = 1**

**Weighted 1.1**

Grade 9

This course will be an extension of 8<sup>th</sup> grade math (pre-algebra). Some of the topics included in this course are numbers and operations, solving equations and inequalities, proportions, similar figures, probability, data analysis, graphing lines, writing equations of lines, matching tables with graphs and equations, direct variation, exponent rules, systems of linear equations, and operations of polynomials. Teachers will relate concepts to eligible content on the Keystone exam.

*Pathway: AC, BMM, EITS, HNRS, HFS*

**Principles of Algebra 1**

**#425**

**Credit = 1**

**Weighted 1.1**

Grades 10, 11

*Students are placed in this course by administration based on their results of the student's Keystone Algebra I Exam.*

This course is designed to give students more time for understanding the foundations of Algebra 1. Topics include the Common Core Standards of the Keystone Exam in Algebra 1. The second semester will concentrate on the completion of the Algebra Project Based Assessment if necessary to meet the state requirement for a diploma.

*Pathway: AC, BMM, EITS, HNRS, HFS*

**Introduction to College Algebra**

**#427**

**Credit = 1      Weighted 1.1      Grade 11**  
This course is designed to strengthen math foundations in elementary and intermediate algebra topics. Reinforced math skills will lead to improved conceptual understanding. Real world applications will enrich the content to prepare students for future placement exams for college. Technology such as TI-84 plus CE graphing calculators will be integrated into the curriculum. Students enrolled in a Lyco CTC course will be recommended into this math course.  
*Pathway: AC, BMM, EITS, HNRS, HFS*

---

**Algebra 2 - Honors** **#432**

**Credit = 1      Weighted 1.2      Grade 10**  
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. Teachers will relate concepts to the eligible content on the Keystone exam.  
*Pathway: AC, BMM, EITS, HNRS, HFS*

---

**Algebra 2** **#434**

**Credit = 1      Weighted 1.1      Grade 11**  
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. Teachers will relate concepts to the Pennsylvania State Standards, Assessment Anchors, and eligible content on the Keystone exam  
*Pathway: AC, BMM, EITS, HNRS, HFS*

---

**Geometry - Honors** **#442**

**Credit = 1      Weighted 1.2      Grade 9**  
In this course topics from algebra, geometry, and trigonometry are interwoven. Topics covered in this course may include properties of circles, spheres, cylinders, polygons, and polyhedral, congruence, similarity, proofs, coordinate geometry, triangles, angles, and surface area and volume. All topics will be related to the Keystone exams.  
*Pathway: AC, BMM, EITS, HNRS, HFS*

---

**Geometry** **#444**

**Credit = 1      Weighted 1.1      Grade 10**  
In this course topics from algebra, geometry, and trigonometry are interwoven. Topics covered in this course may include properties of circles, spheres, cylinders, polygons, and polyhedral, congruence, similarity, proofs, coordinate geometry, triangles, angles, and surface area and volume.  
*Pathway: AC, BMM, EITS, HNRS, HFS*

---

**Technical Algebra** **#446**

**Credit = 1      Weighted 1.1      Grade 12**  
This course is intended for the student who is interested in entering a technical career after high school. The course will study intermediate algebra and trigonometry, designed to prepare students for course work in their technical majors. Topics include algebraic expressions, linear equations, systems of equations, right triangle trigonometry, functions, graphs, geometry, ratio and proportion, and variation. There is an emphasis on problem solving and technical application as well as the use of technology.  
*Pathway: AC, BMM, EITS, HNRS, HFS*

---

**Technical Algebra and Trigonometry 1 and 2      #448**

**Credit = 1      Weighted 1.2      Grade 12**  
*Penn College Dual Enrollment Course*  
Students must meet Penn College's admission requirements to be admitted into these courses. These courses are designed to prepare students for a career in a technical field. Semester 1 (MTH124) is the study of intermediate algebra and trigonometry. Topics include algebraic operations, ratios, proportions, geometry, right triangle trigonometry, trigonometric functions and equations and their graphs. Semester 2 (MTH125) consists of factoring, algebraic equations, quadratic equations and inequalities, exponents, radicals, complex numbers, oblique triangles, graphing trigonometric functions, logarithms and systems of quadratic equations. With successful completion, students will earn 3 credits, (6 total) for each semester through Pennsylvania College of Technology. Students who completed Introduction to College Algebra will be recommended into this course.  
*Pathway: AC, BMM, EITS, HNRS, HFS*

---

**Trigonometry / Elementary Functions      #450**

**Credit = 1      Weighted 1.2      Grades 11, 12**  
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.  
*Pathway: AC, BMM, EITS, HNRS, HFS*

---

**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.  
*Pathway: AC, BMM, EITS, HNRS, HFS*

---

**Advanced Placement Calculus AB      #460**

**Credit = 1      Weighted 1.2      Grade 12**

***Keystone College Dual Enrollment Course***

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.

*Pathway: AC, BMM, EITS, HNRS, HFS*

**Advanced Placement Statistics #461**

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

***Keystone College Dual Enrollment Course***

This 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.

*Pathway: AC, BMM, EITS, HNRS, HFS*

**WELLNESS / SAFETY EDUCATION**

For students to meet the graduation requirement in Health and Physical Education, they must successfully complete four years of courses offered in wellness and safety education. The traditional track in Wellness / Safety Education is as follows:

Grade 9	PE / Health 9
Grade 10	PE / Dr. Ed.
Grade 11	PE / Health 11
Grade 12	PE / First Aid-CPR

**Physical Education 9-10 #509**

**Credit = .5      Grades 9, 10**

Students are offered a choice of activities designed to improve overall health and well-being. Activities are rotated seasonally. Activities are designed to increase skill development, cardio vascular fitness, muscular strength and endurance, and flexibility.

**Students in grade 9** explore topics in Health. Examples: living with feelings and handling stress, developing decision making skills, protecting oneself and others from tobacco, alcohol and other drugs, and respecting healthy sexuality.

**Students in grade 10** receive Driver Education Theory, which provides students an opportunity to learn the physical, mental, and emotional factors needed to become a safe and responsible driver.

**Physical Education 11-12****#511****Credit = .5**

Grades 11, 12

Students are offered a choice of activities designed to improve overall health and well-being. Activities are rotated seasonally. Activities are designed to increase skill development, cardio vascular fitness, muscular strength and endurance, and flexibility.

**Students in grade 11** explore topics in Health including preventive education in current health problems that are designed to aid each student in acquiring good health habits. Current topics in health are discussed and help students understand the conditions necessary for maintaining physical and emotional well-being.

**Students in grade 12** learn First Aid – CPR. The class enables the student to become certified in Red Cross First Aid and CPR training for an adult, child, and infant. This course will be beneficial for developing lifelong skills necessary for emergency care situations. First Aid / CPR fee: \$27. (2017-2018 rates)

**FOREIGN LANGUAGE**

*\*\* Students who took German 1 in 2017-18 will be given the opportunity to take an on-line German 2 course in 2018-19.*

*\*\*In the classroom, Spanish is offered in a four-year sequence, beginning in 9th grade. Upper-classmen may elect to begin a foreign language in any year. All Spanish courses (I-IV) place an emphasis on speaking and all levels will be orally assessed using ACTFL scoring guides dependent on the level of study. Group work, to accommodate oral assessment, is required at all levels.*

**Spanish 1****#621****Credit = 1**

Grades 9, 10, 11

An introductory course to *Castilian*--the Spanish of Spain--that teaches students the foundations of the language: grammar, vocabulary, and sentence structure. Students will learn the language through reading, writing, listening, and speaking activities. Cultural topics (a study of Latin America and an introduction to the culture of Spain) will also be part of this course. Students must be passing their core courses with at least a "C" average to be considered eligible to begin learning a foreign language.

*Pathway: AC, BMM, EITS, HNRS, HFS*

**Spanish 2****#622****Credit = 1**

Grades 10, 11, 12

Spanish II is a continuation of Spanish I. Students will learn more complex grammar mechanics, build vocabulary, and continue to speak the language using real life scenarios. A cultural study of the ancient civilizations of Latin America is included in this course.

*Pathway: AC, BMM, EITS, HNRS, HFS*

**Spanish 3** **#623**

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

This course is for students who have successfully completed Spanish II, as it is required that level three students will only speak Spanish in class. A much stronger emphasis is placed on speaking, writing, and reading in Spanish. Students will learn more complex grammar structures and continue to build vocabulary. This course includes a study of Spanish history and an introduction to Spanish art.

*Pathway: AC, BMM, EITS, HNRS, HFS*

**Advanced Placement Spanish** **#624**

**Credit = 1      Weighted 1.2** Grade 12

***Keystone College Dual Enrollment Course***

This course is taught almost entirely in Spanish and students are required to speak only in Spanish. Spanish IV builds on the skills learned in Spanish I-III. Students are required to keep weekly journals of assigned topics that are written only in Spanish and are graded each quarter. Spanish IV completes the study of the history of Spain and of Spanish art. Students are encouraged to take the advanced placement test in Spanish at the end of the year.

*Pathway: AC, BMM, EITS, HNRS, HFS*

**COMPUTERS / TECHNOLOGY**

Students need an ever-increasing understanding of technology in order to remain competitive in their careers. **Since these courses are available to students in grades 9-12, scheduling priority will be given to upperclassmen.**

**Computer Graphics / Animation** **#673**

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

Programs covered will include computer graphics programs such as Photoshop, Illustrate, and InDesign as well as the study of elements of design. Students will design computer animation and learn the basics of design as well as steps involved in publishing their designs.

*Pathway: AC, BMM, EITS, HNRS, HFS*

**Multimedia** **#674**

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

Movie making is the main goal of this class, which includes: lighting, script writing and video editing. Other multimedia programs will also be included.

*Pathway: AC, BMM, EITS, HNRS, HFS*

**Video Production** **#677**

**Credit = .5** Grades 10, 11, 12  
Morning announcements, live-streaming events, broadcasting skills, and production techniques/setup are the main goals of this class. Students will be responsible for producing videos to be viewed by student body, faculty, and community members. This course will be offered period 1 both semesters.  
*Pathway: AC, BMM, EITS, HNRS, HFS*

---

**Technology and Social Media** #681

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

***Penn College Dual Enrollment Course***

Introduction to the basic concepts and applications of computer and Internet-related information technology and its impacts on individual users, businesses, groups, organizations, and society. Topics include access, evaluation, and use of digital information; ethical and security implications of information use and storage; human-computer interactions; social aspects of information systems; economic and legal issues; and professional presentation and communication of information. Information literacy skills that promote lifelong learning are developed through exposure to various existing and emerging technologies, including information resources, communication methods, and technology.

*Pathway: BMM*

---

**Web Page Design** #682

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

***Penn College Dual Enrollment Course***

Students will learn the basics of HTML and a web page development program such as Dreamweaver. By the time they finish the class, students should be able to create most of the things they see on the internet.

*Pathway: AC, BMM, EITS, HNRS, HFS*

---

**SAT Prep** #698

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

Are you prepared for the SAT?

\*Students are encouraged to take this course prior to taking the exam or as close to taking the exam as possible. This course is highly recommended for students who are planning on taking the SAT or for students who have taken the SAT and want to improve their scores. The course will cover all three areas of the SAT: Critical Reading, Math, and Writing. Strategies for multiple-choice, student produced responses, essay writing, grammar, and vocabulary recognition will be taught. Students will take and score practice tests and monitor their progress.

Courses in the Business Education Department are elective for any student attending grades 9 through 12. Advanced courses have prerequisites, which must be met. It is important, therefore, that guidance be sought prior to course selection from members of the department and counseling office.

**Personal Finance** **#721**

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

This course is designed to teach the students about financial responsibility. We will focus on career planning and goals, investing, responsible spending, credit, loans, banking, budgeting, and risk protection. The course will be facilitated through projects, guest speakers, and simulations.

*Pathway: AC, BMM, EITS, HNRS, HFS*

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

**Credit = .5** **\*\*Offered in the Odd Years Only (2019-2020)** Grades 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.

*Pathway: AC, BMM*

**Small Business Development** **#723**

**Credit = .5** **\*\*Offered in the Even Years Only (2018-2019)** Grades 10, 11, 12

Small Business Development is designed to teach students the principles of starting their own business from scratch, buying an existing business or buying a franchised business. They will also learn about basic principles of law that apply to businesses, business owners, and rights and responsibilities of owners and customers. Current legal cases will be incorporated to provide the most current information. Students will learn about self-employment and business law through reading, research and hands-on classroom activities. This course is recommended for any student interested in a career in the business field.

*Pathway: AC, BMM, EIT*

**Accounting Fundamentals** **#725**

**Credit = .5**

Grades 9, 10, 11, 12

This course includes the basic principles of financial accounting for business and non-business students who need placed on using principles learned 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. Basic computerized accounting applications will be integrated into this course.

Pathway: BMM

**Accounting 1**

**#730**

**Credit = 1**

**Weighted 1.2**

Grades 10, 11, 12

***Keystone College Dual Enrollment Course for students in grades 11, and 12***

This course is designed to equip the student with the professional skills that will enable him or her to work in the fields of accounting or bookkeeping. The student receives training in each step of the accounting cycle from journalizing through the end-of-month work, to the preparing of financial statements used by management. Accounting is the backbone of any business structure and is highly recommended for any student considering a career in the business field. Basic computerized accounting applications will now be integrated into Accounting.

Pathway: BMM

**FINE ARTS**

**Music, instrumental or vocal development:** With the hope of broadening interest and creating more interest and membership in our musical groups, we are offering band and chorus on school time. Following are types of band classes at this time: *Spartan Marching / Concert Band:* The Band is comprised of instrumentalist and non-instrumentalists. For anyone not playing an instrument, the band front is an excellent way to become involved. Each winter and spring, training sessions will be held for students interested in band front. Each summer, all members of the Band are required to attend a band camp to receive a full week of music and marching instruction in preparation for the upcoming season.

**Visual Arts:** Students will be instructed in various forms, styles, techniques, methods, and materials of visual art. These are studio-based courses that allow students to engage, explore and elaborate upon various artistic styles and techniques through creative problem solving. Often, lessons reflect an historical, cultural, or commercial art context and projects may be adapted to individual student ability and skill levels. These courses are available to students as noted with priority given to upperclassmen.

**Spartan Band / Spartan Chorus**

**#808**

**Credit = 1** Grades 9, 10, 11, 12  
This course is designated for students who participate in both band and chorus for the entire year.  
*Pathway: AC, BMM, EITS, HNRS, HFS*

**Spartan Marching / Concert Band** #811

**Credit = 1** Grades 9, 10, 11, 12  
The Marching Band, at the conclusion of football season, will become the concert band. There are specific learning disciplines to be gained in participating in both marching and concert bands. Although the concert band is the most important of all the instrumental in acquiring sound musical fundamentals, these concepts will be put into practice for the marching season. While studying music and movement through the use of the body, students will also use large muscles in developing coordination as it relates to the music. The marching and concert bands are a full year activity.  
*Pathway: AC, BMM, EITS, HNRS, HFS*

**Senior High Spartan Chorus / Contemporary Chorus (1<sup>st</sup> semester)** #812

**Senior High Spartan Chorus / Contemporary Chorus (2<sup>nd</sup> semester)** #816

**Credit = .5** (each semester) 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. For more information please visit: [www.spartanchorus.com](http://www.spartanchorus.com)  
*Pathway: AC, BMM, EITS, HNRS, HFS*

**Music Appreciation** #825

**Credit = .5** Grades 9, 10, 11, 12  
This course will provide a high school level appreciation of music, including the topics American musical theater, music history, and music business. Piano/keyboard and beginning band instruments are also offered in this elective. This will class will require multiple written essays and projects during the semester. Students with extensive music background will have the opportunity to study aural skills, composition, and music theory.  
*Pathway: AC*

**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.  
*Pathway: AC, EITS*

**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.

*Pathway: AC, BMM*

**Stained Glass / Mosaic** #834

**Credit = .5** \*\*Offered in the Odd Years Only (2019-2020) Grades 10, 11, 12  
This course covers the basics in stained glass construction and design. Students will create an initial “sampler” to learn the basic copper foil skills and then design and create an original piece. Students will use the solder irons, pliers, cutters, grinders, and other tools of the craft. Students will then transfer their thinking and design skills to a mosaic piece that incorporates the recycled glass chips from the stained-glass project. Materials fee: \$10

*Pathway: AC*

**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. 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. 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 Bridge software to edit and enhance their photos. Finally, students will explore and practice several applications of photography in the commercial realm. A final portfolio of student work is required by the end of the course. It is recommended students utilize their own camera for work in this course.

*Pathway: AC, BMM, EITS, HNRS, HFS*

**Jewelry Making** #850

**Credit = .5** \*\*Offered in the Even Years Only (2018-2019) 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. Materials fee: \$10

*Pathway: AC*

**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.

*Pathway: AC*

**Advanced Placement Studio Art** **#865**

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

Prerequisites = Recommendation of an art teacher. For the 2D Design Portfolio, student must have successfully completed Advertising Art and Illustration 833 or Fine Art Painting 832. For the Drawing Portfolio, student must have successfully completed Fine Art Drawing 831. The goal of this course is to explore a course of study unique to the student's design portfolio orientation, and produce and submit a portfolio that meets AP Studio Art standards. All students will submit the portfolio. While the teacher will be a resource and facilitator, students are expected to be largely self-directed in their practice and work ethic. Rigorous grading standards as per the AP guidelines will be applied and out of class work is expected.

*Pathway: AC*

**CAREER AND TECHNICAL EDUCATION**

\*\*In grade 9, students will schedule themselves a least one a semester of Futures Seminar, Introduction to Engineering, or Modern Technologies.

\*\*In grade 11, students will schedule Career Seminar. If the courses do not fit into their schedule in 11<sup>th</sup> grade, students will be able to take it their 12<sup>th</sup> grade year.

**Yearbook 1 (1st semester)** **#900**

**Yearbook 2 (2<sup>nd</sup> semester)** **#901**

**Credit = .5 (each semester)** Grades 11, 12

**Do you want to help produce the Hughesville High School's Monarch?**

Yearbook class is responsible for creating a comprehensive record of the student life and events at Hughesville Junior-Senior High School. This course focuses on developing skills in journalistic writing, interviewing and listening skills, graphic design, photography, business with sales and advertising, and computer programs. Students who choose this class should be responsible, hard working, motivated, reliable, mature, positive, friendly, and detail-oriented.

*Pathway: AC, BMM, EITS, HNRS, HFS*

**Modern Technologies** **#905**

---

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

This course provides students with opportunities to solve real-world problems using innovative and modern technologies. Students will have access to collaborative and new technologies to work individually and on teams to problem-solve.

*Pathways: HNRS, HFS*

**Introduction to Engineering: Power & Transmission** **#909**

---

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

This is a hands-on course dealing with the topics of generating electric and mechanical power, transmitting electrical and mechanical power, and using electric and mechanical power. This course is a foundation for building systems that require mechanical and electrical knowledge.

*Pathways: HNRS, HFS*

**Futures Seminar** **#910**

---

**Credit = .5** Grade 9

Futures Seminar is an introductory career development course for ninth graders designed to acquaint the students with our five Career Pathways and opportunities in the world of work. Students will be exploring various careers throughout the semester. The students will learn about and experience diverse, changing work and life roles, make lifestyle choices, budget time and money, and deal with career transitions.

*Pathway: AC, BMM, EITS, HNRS, HFS*

**Career Seminar** **#911**

---

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

This course will assist students in meeting the requirements of the graduation. Students will participate in career and personal interest surveys to assist them in determining their post-secondary plans and to understand what they will need to do as seniors. Students will explore various careers, learn how to navigate college websites, understand the college search process and the vocabulary that is used. Students will also gain an understanding of the type of post-secondary schools that will match their interests and needs. Students will complete a personal timeline for their senior year in terms of what is needed and the due dates to effectively be prepared to not only have a successful senior year but also have a well thought out plan of action after high school.

*Pathway: AC, BMM, EITS, HNRS, HFS*

**Robotics Engineering** **#912**

---

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

This is a hands-on course focused on implementing the engineering design process to design and create robotic mechanisms that are capable of practical applications in the real-world. Students may have the opportunity to compete in various robot competitions.

*Pathways: HNRS, HFS*

**Forensics – Crime Scene Investigation**

**#913**

**Credit = .5**

Grades 9, 10, 11, 12

In this Crime Scene Investigation course, students will learn the history and importance of forensics and explore career opportunities in the forensics area. Students will learn and work with the crime scene investigation process. Major areas of study include evidence collection and processing, sketching and photography, fingerprint classification and lifting, DNA as it relates to a crime scene, ballistics investigation, topics in death and decomposition, and how to maintain the proper chain of custody when processing evidence. The final exam for the course will be the processing of a mock crime scene.

*Pathways: HNRS, HFS*

**Online Dual Enrollment Opportunities**  
***Young Scholar Early College Credit Program***

Students may opt to take multiple online dual enrollment courses as electives. Regardless of the number of online courses taken, students will only receive .5 credit, weighted at 1.2, per semester when they are enrolled in courses #1001 or #1002.

Please Note: **Online Dual Enrollment courses may not replace HHS core courses.** See your counselor for more information.

**Independent Online Course (1st semester)** **#1001**

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

**Independent Online Course (2nd semester)** **#1002**

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

**LYCOMING CAREER and TECHNOLOGY CENTER**

**\*Please Note: Students admitted into the Lyco CTC must be in 10<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> grade, have good academic, attendance, and behavioral standing. Students who are deficient in required courses will not eligible to enroll in Lyco CTC classes.**

**Lyco CTC Program Offerings**

- Automotive Technology**
- Construction Technology**
- Culinary Arts**

**Computer Service Technology**  
**Criminal Justice (Law Enforcement)**  
**Drafting & Design Technology**  
**Early Childhood Education**  
**Health Careers**

## **SPECIAL PROGRAMS**

Diversified Occupations (Seniors Only)

Co-op Education Work Base Options

College Credit Options

Penn College Courses

Penn College Now Offerings

---

### **AUTOMOTIVE TECHNOLOGY – (2.0 hours/day) #CTC56**

**Credits = 2.5**

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 Lyco CTC 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.

---

### **COMPUTER SERVICE TECHNOLOGY – (2.0 hours/day) #CTC45**

**Credits = 2.5**

Technology today is changing at supersonic speed. However, you don't need to be left behind. You can become part of the team of experts who repair or maintain computers and networks. By learning operating systems, hardware, and networking as part of the preparation for the Computer Technology Industry Association's (CompTIA) A+ Service Technician Certification, you will gain foundation skills valued by employers.

---

### **CONSTRUCTION TECHNOLOGY – (2.0 hours/day) #CTC53**

**Credits = 2.5**

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. *All students learn to use hand tools, power tools and the safety practices related to their use.* Students may earn the National Center for Construction Education and Research (NCCER) Certification.

---

### **CRIMINAL JUSTICE – (2.0 hours/day) #CTC57**

**Credits = 2.5**

The Criminal Justice program is available to high school students who are interested in law enforcement 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.

**CULINARY ARTS – (2.0 hours/day)**

**#CTC51**

**Credits = 2.5**

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.

**DRAFTING & DESIGN TECHNOLOGY – (2.0 hours/day)**

**#CTC54**

**Credits = 2.5**

If you are interested in combining your creativity with your interests in the architectural, industrial, or mechanical world, this program could be for you. When you enroll in the Drafting & Design Program, you work toward successfully moving into architectural, mechanical, or civil engineering careers. In this curriculum you will branch out into other industrial areas such as Precision Machine Technology or Plastics and Polymers. You can assist in the design of our student-built construction projects. These are fully built, successfully designed and completed each year by our students. What could serve as a better hands-on experience? You can continue your education at a college or university. Your background established here combined with post-secondary education provides you with an excellent foundation for a prosperous career in an engineering related field.

**EARLY CHILDHOOD EDUCATION – (2.0 hours/day)**

**#CTC40**

**Credits = 2.5**

This program prepares students for employment in early childhood education and childcare services and provides the foundations for study in higher education that lead to early childhood educators and child related careers. The course of study includes but is not limited to: planning and guiding developmentally appropriate activities for young children; developmentally appropriate practices of guidance and discipline; application of basic health and safety principles when working with young children; overview of management and operation of licensed child care facilities and employability skills. This course emphasizes learning experiences, which will help students gain knowledge and understanding of the intellectual, physical, social, and emotional development of children from conception to adolescence. The students will have opportunities to apply their understanding about children through participation, observation of children individually and in groups, and planning and evaluating group activities, which meet their needs. It includes instruction in child development and behavior, as well as observations 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.*

**HEALTH CAREERS – (2.0 hours/day)**

**#CTC64**

**Credit = 2.5**

As the world of medicine and science changes and grows virtually every day, the number of jobs in the health field grows as well. Join the Health Careers program and learn about the exciting world of health care in a productive hands-on learning environment to gain a head-start in the health field. Learn about human anatomy, medical abbreviations and terminology, the skills required for lab and technical employment, and the behind-the-scenes work such as insurance billing and record keeping. The Health Careers Program offers students the opportunity to prepare for a variety of health occupations. Students learn basic health assistant skills in the theory and skills lab within the classroom. Whether you are college bound or seeking employment immediately upon high school graduation, this program will prepare you for a future in the health field. Completion of the Health Careers program is not just educational; the program leads students to rewarding careers in one of today's fastest growing job markets.

## **SPECIAL PROGRAMS**

### **DIVERSIFIED OCCUPATIONS (720 hours/year)**

**#CTC70**

**Credit = 2.5**

This senior only, one year program, resembles a traditional apprenticeship as students gain on the job experience in a career field not offered as a program at Lyco CTC.

### **WORK BASE OPTION**

This third year/senior student opportunity allows students to get on the job training in their field at a co-op or internship placement.

### **COLLEGE CREDIT OPTIONS**

This upper level opportunity is based out of the **Pennsylvania College of Technology** (Penn College) for students interested in earning college credits while in high school. Students can earn these credits by attending Penn College courses or by doing coursework at Lyco CTC through the Penn College NOW Program. An agreement between Penn College and Lyco CTC makes these courses available.

## **PENN COLLEGE NOW COURSE DESCRIPTIONS**

Students who are in their third year of select Lyco CTC programs have the opportunity to participate in college courses taught at Lyco CTC. To participate students must be recommended by their instructor and pass all Pennsylvania College of Technology entrance requirements. Not all courses are offered every year.

Construction Technology Offers the following PC Now Options:

### **Construction Hand and Power Tools BCT103**

Survey of hand and power tools typically used to perform construction work. Emphasis on the development of skills needed to effectively perform layout, measurement, cutting, fastening, and finishing operations. Study also includes maintenance of tools and equipment, safe use of hand and power tools, and emerging tool technology. 1 Credit (0 Lecture - 3 Lab)

### **Framing Principles BCT109**

Theory and application of framing techniques in residential and light commercial construction. Emphasis on basic principles and skills used in hand and machine woodworking operations. 4 Credits (2 Lecture - 6 Lab) *Corequisite(s): BCT 102 and BCT103.*

Early Childhood Education Offers the following PC Now Options:

### **Child Development EDU100**

Overview of typical growth and development of young children from birth to age eight. Cognitive, language, physical growth, gross and fine motor, emotional and social developmental milestones are the focus of this course, with a special emphasis on the implications they have for the care and education of young children. Other topics include an introduction to the basic concepts of major developmental theories; principles of learning and development; and developmentally appropriate practice. A strong focus on a family-centered approach is integrated throughout the course. 3 Credits (3 Lecture - 0 Lab)

Drafting & Design Offers the following PC Now Options:

### **AutoCAD Comprehensive 2D Applications CAD120**

Comprehensive application of 2D and 3D techniques using AutoCAD® software. Topics include the generation, editing, and analysis of geometry in alignment with industry standards with an emphasis on productivity. 3 Credits (2 Lecture - 3 Lab) *Corequisite(s): CCD103 and CCD104.*

**Fall Only.**

### **3D Parametric Modeling Using Autodesk Inventor CAD122**

Study and application of solid and surface modeling using Autodesk Inventor® parametric modeling software. Topics include the generation and editing of mechanical parts and assemblies, analysis of mass properties, rendering and animation, and the development of physical models using rapid prototyping (additive manufacturing) equipment. Also included are basic 3D-to-2D documentation techniques. 3 Credits (2 Lecture - 3 Lab)

### **Technical Drawing I CCD103**

Basic principles and skills of drafting as a graphic language using the parametric modeling approach. Topics include technical sketching, SolidWorks® CAD operations and procedures, shape description, geometric construction, multiview projection, sectional views, auxiliary views, revolutions, threads and fasteners, and application of dimensions and tolerancing. Other topics include detail views, part drawings, assembly drawings, manufacturing processes, surface finishing, descriptive geometry, and the use of vendor part catalogs. ANSI/ASME drawing standards and practices are emphasized. 4 Credits (3 Lecture - 3 Lab) *Corequisite(s): CCD104.*

**Fall Only.**

### **Detailing I CCD104**

Technical drawing procedures using SolidWorks® CAD operations in compliance with the ANSI standards to develop finished drawings. Drawing assignments involve technical sketching, shape description, geometric construction, multiview projection, sectional views, auxiliary views, revolutions, threads and fasteners, application of dimensions and tolerancing, detail views, part drawings, and assembly drawings. Other topic will include manufacturing processes, surface finishing, descriptive geometry, and acquiring and using vendor part catalogs. ANSI/ASME drawing standards and practices are emphasized. 3 Credits (0 Lecture - 9 Lab) *Corequisite(s): CCD103. Fall Only.*

Computers Service Technology Offers the following PC Now Options:

**Introduction to Networking CIT171**

Introduction to networking structure, terminology, current and emerging technologies, and the World Wide Web as an integrating framework. Topics covered include TCP/IP, Security Concepts, Wireless Networks, and Network Virtualization. Emphasis on applications of networking to the Web and Programming. (Formerly CIT 170) 3 Credits (3 Lecture - 0 Lab)

*Prerequisite(s): MTH006 or Placement by Examination.*

**PARENT INFORMATION**

Parents of handicapped or disadvantaged students are urged to contact Hughesville High School if there are questions concerning assessment and enrollment in these vocational education opportunities. Please contact the Counseling Office at (570) 584-5111.

**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: Mr. David Maciejewski, Business Manager, 349 Cemetery Street, Hughesville, Pennsylvania 17737-1009, (570-584-2131).