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### **BASD MISSION STATEMENT**

The Bethlehem Area School District, in partnership with the home and community, is committed to providing a safe and supportive environment in which each student will attain the knowledge, skills, and attitudes necessary to become a productive citizen and life-long learner in our technologically demanding and culturally diverse society.

### THE BASD MISSION IN PRACTICE

The job of the Bethlehem Area School District is to graduate students who are college and career ready. Our goal is to provide students with an educational experience that best matches their skills and interests while stretching students to become the best they can be. The path to success is as varied as the individual students we serve. The common variable is that all students must rise to the increased rigor of the PA Common Core Curriculum and the new Keystone graduation requirements. By aligning coursework to students' post-secondary goals, students see the relevance in what they are learning and are more likely to achieve at higher levels.

The 21<sup>s</sup> Century high school is about more than just the acquisition of credits. Students should begin planning for their post-secondary success even before they enter high school. As students begin the scheduling process for their ninth-grade year, counselors will work closely with students to chart a path that, if successfully completed, will give students a competitive advantage when applying to the college or career of their choice.

For those students who wish to accelerate their high school experience and graduate from high school with some college credits in hand, the Bethlehem Area School District offers a wide variety of Advanced Placement and dual enrollment opportunities. Students wishing to participate in a more challenging curriculum but who do not wish to acquire college credits may choose from a number of honors courses in each of the major content areas. Some students may wish to begin their career training while still in high school. The Bethlehem Area Vocational-Technical School (BAVTS), in partnership with the BASD, offers students industry-benchmarked training in high-priority occupations. Ninth-graders desiring to accelerate their career preparation may choose to participate in the FastTrack program, a BAVTS elective offering designed specifically for our ninth-grade students.

Depending upon their college and career goals, students may follow a flexible path that is a combination of those described above. A student wishing to become an engineer may take AP Calculus and AP Physics but opt for honors or college preparatory English. A student who desires to become a writer may opt for AP English Language and Literature, journalism and creative writing electives, and honors or college preparatory math and science. A student whose goal is to be an electrician may opt for AP or honors physics and coursework at BAVTS. The college and career goal of the student, along with his or her interests, should drive the student's schedule.

All of our students, no matter their career path, benefit from community partnerships. The BASD is working with local organizations such as Lehigh University, Moravian College, Northampton Community College, ArtsQuest, PBS, and St. Luke's Hospital to create real-world learning opportunities for our students related to specific career paths. In addition, students must complete sixty hours of community service in order to graduate. This requirement can be tailored to students' interests so that they can explore careers of their choice before committing to a college major.

We are partners in each student's educational experience. Providing each student with a flexible, personalized learning plan will ensure success beyond high school.

LENCE TH

Community Supported Learning

CENTERED INSTALLED STRETCH LEARNING AP Equity & Excellence

STUDENT ENGAGEMENT Digital Access and Literacy

United Way CORE LEARNING RBG3 Career Pathways Ca Community Schools

3

### **GENERAL INFORMATION**

### FOUR-YEAR HIGH SCHOOL GRADUATION REQUIREMENTS

Required Courses	<u>Credit</u>	Grade When Usually Taken
English	4.0	9-12
Social Studies*	4.0	9-12
Mathematics*	3.0	9-12
Science*	3.0	9-12
Math or Science	1.0	9-12
Computer Science*	0.5	9-12
Physical Education	2.0	9-12
Health	1.0 (0.5 per year)	9-10
Freshman and Sophomore Seminar	1.0 (0.5 per year)	9-10
Fine and Practical Arts	1.0	9-12
General Electives	5.0	9-12
Community Service	0.5 (60 hours)	9-12

# 26.0 credits and satisfactory demonstration of proficiency in Algebra 1, Literature 10, and Biology are required for high school graduation.

Fine and Practical Arts courses include select elective courses in the English department and all courses in Art, Music, Family and Consumer Science, and Industrial Arts departments.

Students enrolled in the Vocational-Technical or career course path may, if necessary, replace up to one required credit in Social Studies and the fourth credit in Science or Mathematics with a course aligned to their career goals. Eligibility for pursuing such a credit replacement toward graduation will be determined by the principal (or their designee) in consultation with the student, parent, guidance counselor, and the BAVTS.

\*For the class of 2022 and beyond, a minimum requirement of Social Studies is 3.0 credits. More information regarding the Social Studies course sequence is available on page 39. Students enrolled in the Vocational-Technical or career course path may, if necessary, replace the fourth required credit in Science or Mathematics with a course aligned to their career goals. Eligibility for pursuing such a credit replacement toward graduation will be determined by the principal (or their designee) in consultation with the student, parent, guidance counselor, and the BAVTS. Students will be required to fulfill 6.0 of general elective credits.

Completion of a course in Computer Science is required for students graduating with the class of 2021 and beyond. More information about the Computer Science requirement can be found in the Business and Technology Department section.

Project Lead the Way Engineering course work or Project Lead the Way Biomedical coursework may, if necessary, replace a fourth Science or Mathematics elective.

Prerequisite Courses: In students' best interests, teachers, department chairpersons, administrators, and counselors have agreed on certain suggested prerequisites for some course offerings. We strongly recommend that these prerequisite courses must be completed before taking the course. In cases where there are multiple levels of a course, course one serves as a prerequisite for course two and so forth.

Please see page 66 for NCAA Eligibility Requirement.

### SAMPLE COURSE SEQUENCE for classes 2020 and 2021

### Grade 9

English 9	1.0
U.S. History 2	1.0
Geometry, Algebra 2, Algebra 1	1.0
Biology	1.0
Foreign Language	1.0
Freshman Seminar	0.5
Health 1/ Physical Education	1.0
Pathway Elective	1.5
	8.0

### <u>Grade 11</u>

English 11 or AP Language and Composition	1.0
AP World History, AP Comparative	
Government, or Global Studies	1.0
Pre-Calculus or Geometry	1.0
AP Science or Science Elective	1.0
Foreign Language	1.0
Computer Science	0.5
Physical Education	0.5
Pathway Elective	<u>2.0</u>
	8.0

### SAMPLE COURSE SEQUENCE for class 2022 and 2023

### Grade 9

English 9	1.0
U.S. History	1.0
Geometry, Algebra 1, or Algebra 1A	1.0
Biology	1.0
Foreign Language	1.0
Freshman Seminar	0.5
Health 1/ Physical Education	1.0
Pathway Elective	<u>1.5</u>
	8.0

### <u>Grade 11</u>

English 11 or AP Language and Composition	1.0
Government/Economics, AP Government,	1.0
or AP Macroeconomics	
Pre-Calculus, Algebra 2, Geometry	1.0
AP Science or Science Elective	1.0
Foreign Language	1.0
Computer Science	0.5
Physical Education	0.5
Pathway Elective	<u>2.0</u>
	8.0

### <u>Grade 10</u>

English 10	1.0
U.S. History 3	1.0
Algebra 2, Geometry or Pre-Calculus	1.0
Chemistry <u>or</u> Physics	1.0
Foreign Language	1.0
Sophomore Seminar	0.5
Health 2/ Physical Education	1.0
Pathway Elective	<u>1.5</u>
	8.0

### Grade 12

English 12, Non-Fiction 12, or	1.0
AP Literature and Composition	
Government/Economics, AP Government,	1.0
or AP Macroeconomics	
Calculus, Statistics, College Math, or	1.0
Personal Finance	
AP Science or Science Elective	1.0
Physical Education	0.5
Pathway Electives	<u>3.5</u>
	8.0

### <u>Grade 10</u>

English 10	1.0
AP U.S. History, AP World History,	1.0
AP Comparative Government,	
or Global Studies	
Algebra 1, Geometry, Algebra 2	1.0
Chemistry or Physics	1.0
Foreign Language	1.0
Sophomore Seminar	0.5
Health 2/ Physical Education	1.0
Pathway Elective	<u>1.5</u>
	8.0

### <u>Grade 12</u>

English 12, Non-Fiction 12, or	1.0
AP Literature and Composition	
AP Social Studies, Social Studies Elective	1.0
Calculus, Statistics, College Math, or	1.0
Personal Finance	
AP Science or Science Elective	1.0
Physical Education	0.5
Pathway Electives	<u>3.5</u>
	8.0

### GRADING

All courses are graded with the traditional grading system (A, B, C, F). Honors courses receive weighted average grade point value. The following grading equivalents will be utilized to determine the marking period grade for secondary students:

<u>Report Card Grade</u>		<b>Grade Points</b>	Honors /AP Grade Points
- A+	(100-97)	4.3	5.3
А	(96-93)	4.0	5.0
A-	(92-90)	3.7	4.7
B+	(89-87)	3.3	4.3
В	(86-83)	3.0	4.0
В-	(82-80)	2.7	3.7
C+	(79-77)	2.3	3.3
С	(76-73)	2.0	3.0
C-	(72-70)	1.7	2.7
F	(69-0)	0.0	0.0

Students require a 3.2000 minimum G.P.A. in a quarter to be named for honor roll. Quarterly G.P.A. reflect computation of grades in the quarter only. This average is used for honor roll. An "N" in citizenship or an "F" in any course eliminates a student from consideration for honor roll. Final cumulative G.P.A. shown on the transcript includes all final grades from the beginning of Grade 9 to current final grades.

### **COURSE SELECTION PROCESS**

Counselors will begin this process in early December. Completion of this process occurs in late February and also includes the incoming 9<sup>th</sup> grade class. Students are placed in English, Social Studies, Math, and Science, based on available data. For elective course offerings, please refer to the Career Pathways section. Sometimes, due to scheduling constraints, specific courses may not be available. A course request verification sheet is sent home. Schedules are sent during the summer.

Schedule planning can take place only when the school can consider the course selection of students final and binding. If a student selects a course, he/she is expected to complete it.

Any student who has not successfully completed any core course and has not completed remediation programs will not enter the next level of the course of study.

### **DROP / ADD POLICY**

The following guidelines exist for schedule changes requested after August 8:

- 1. This process is for the academic courses in English, Social Studies, Science, Math, and Foreign Language.
- 2. A "Drop / Add Policy and Form" must be completed by the student and parent. Forms are available on the school website and in the counseling office.
- 3. Schedule changes will be considered for valid educational reasons only. Schedule changes will not be made to accommodate requests for lateral moves within the same subject area or teacher preference.
- 4. The counselor, assigned teacher, and department chair will review schedule change requests.
- 5. Full semester courses will not be dropped after the first 20 instructional days (or 40 days for a year-long course) of class without the W, WP, or WF designation.
- 6. Quarter courses (half semester courses) will not be dropped after the first 10 days of class without the W, WP, or WF designation.
- 7. All students must maintain a full schedule for the entire year.

Withdrawals from a course will not become part of the student transcript if the course is dropped within the first 20 days of a semester class and within the first 10 days of a quarter course (half semester course). A "W" (Withdrew) will be recorded after 20 days but prior to the end of the first quarter. Either a "WP" (Withdraw Passing) or "WF" (Withdraw Failing) will be recorded if the course is dropped after the first marking period of the course, indicating the student's progress at the time of withdrawal.

A course change must be based upon academic considerations, and be facilitated by a conference/plan developed by the student, parent, teacher and counselor/grade level administrator to support student success. This plan will require tutoring, completion of all required work to date, and a sincere demonstration of effort and ability by the student prior to dropping a course or level of course for all classes in English, Social Studies, Math, Science and Foreign Language.

### ENTRY INTO ADVANCED PLACEMENT and HONORS COURSES

The Bethlehem Area School District is committed to providing both an equitable and rigorous curriculum in preparation for the evolving professions of the twenty-first century. While every high school course has been designed with equity and rigor in mind, the Advance Placement and honors courses specially are intended to provide more breadth, depth of knowledge, and often move at a faster pace. As students and parents examine these expectations, the following should be noted:

- 1. The recommended process for entry into Advanced Placement and Honors courses have been put into place in order to give our students the greatest chance for success in the courses.
- 2. Students who, in consultation with their parents and teachers, agree to meet the challenge of an Advanced Placement and/or Honors course will be scheduled accordingly.
- 3. Advanced Placement and Honors courses receive a weighted average grade point value.

\*Please see additional information for specific courses in each section.

Prior to Admission to Advanced Placement and Honors Courses:

- 1. Students must express intent to enroll in the AP or Honors course.
- 2. Student must possess willingness to meet the rigors of the course.
- 3. Data Review will occur with a focus on <u>advanced</u> or <u>proficient</u> standardized test results, final course grades, and attendance.

### SPECIAL PROGRAMS

### ADVANCED PLACEMENT COURSES

Through College Board's AP college-level courses and exams, students can earn college credit and advanced placement, stand out in the admission process, and learn from some of the most skilled, dedicated, and inspiring teachers. From the moment students enter an AP classroom, they notice the difference—in the teacher's approach to the subject, in the attitude of their classmates, in the way their peers start to think. In AP classrooms, the focus is not on memorizing facts and figures. Instead, students engage in intense discussions, solve problems collaboratively, and learn to write clearly and persuasively. With a variety of AP courses to choose from, including Environmental Science, Psychology and Economics, students will be able to explore interests and discover new passions. In AP classes, students study fascinating topics and ideas that just might become the foundation of their future college major or career. AP courses can help acquire the skills and habits needed to be successful in college. Students improve writing skills, sharpen problem-solving abilities, and develop time management skills, discipline, and study habits. Because of the demands of AP courses, the student should choose courses wisely and deliberately based on their personal passions and time commitments.

Most four-year colleges in the United States and many colleges in more than 60 other countries give students credit, advanced placement or both on the basis of AP Exam scores. By entering college with AP credits, students may have the time to move into upper level courses, pursue a double major or study abroad. Multiple research studies have shown that AP students who earn credit and advanced placement for the corresponding introductory college course:

- Perform well in subsequent courses within the same discipline
- Take more, not fewer, courses in the discipline for which they've received AP credit
- Tend to earn higher GPAs than non-AP students.
- Are more likely to graduate from college in four or five years

Talk to an AP teacher or a counselor about the course you want to take. It is crucial that the student and parent discuss the course's workload, prerequisite courses, and any additional preparation students might need. AP courses require planning and preparation by the student through the appropriate course selection and counseling services. Students planning to take AP courses in the future are strongly encouraged to enroll in Honors for prerequisite coursework.

### AP Courses Offered by the Bethlehem Area School District

Biology	
Chemistry	
Environmental Science	
Physics 1&2	
Physics C- Electricity & Magnetism	
Physics C- Mechanics	
French	
German	
Spanish	
Computer Science A	
Computer Science Principles	
AP Music Theory	

### ENROLLMENT IN COLLEGE COURSES

BASD students have the opportunity to complete coursework at a post-secondary institution during their high school careers. The following guidelines apply to students taking college/university courses:

- 1. The course is **pre-approved by the student's Guidance Counselor and Principal**. A college course is not intended to replace a required high school course.
- 2. The college course will **satisfy a HS elective credit**, under special circumstances pre-approved specifically by the Principal and Assistant Superintendent, the college course may replace a required HS course.
- 3. The **student assumes the cost/payment** for the course. The student should furnish a college transcript or grade report to his/her counselor shortly after completion of the college course.
- 4. The grade and credit is reported on the high school transcript. Any grades of "D" will be reported as a "P" on the student's transcript.
- 5. A **3.0 credit college course will count as 1.0 high school credit**. The grade is inputted on the transcript with the college name and the grade the student earned.
- 6. The college course grade will NOT count for GPA, Honor Roll, or Academic Award calculations.

### HONORS SCHOLARS PROGRAM

Our local colleges, Lehigh University, Moravian College, DeSales University, and Lafayette College offer scholarship programs to qualifying seniors each year. This opportunity is by application and successful candidacy offered by the college. This program allows students to earn college credit while attending high school.

### **ONLINE COURSE OFFERINGS**

Students have the opportunity to take selected courses taught by school district teachers in an online environment. Interaction with their teacher will take place through a learning management system, like Blackboard. Attending class in person is required periodically. It is highly recommended that students who are seeking online instruction have completed prerequisite courses with a B average or higher while consistently demonstrating a strong work ethic, solid communication and organizational skills, and strong writing ability throughout the course. To ensure success in the online course, students should have access to a computer and Internet connection outside of school. Interested students may obtain the required online course application form from their courselors. **BASD Online Courses offered in 2019-2020** School Year: Honors English 12, Sophomore Seminar, Health 2, and Physical Education.

### **COMMUNITY SERVICE**

### 0.5 credit = 60 hours

The BASD Community Service Program provides students with the opportunity to explore careers, develop leadership skills, acquire life skills, as well as fosters community participation and responsible citizenship through 60 hours of service. This opportunity provides invaluable experience for students, regardless of their future plans.

Once 60 hours of Community Service at a non-profit agency has been completed, the student will be awarded .5 credit towards graduation. This is a mandatory requirement for graduation. All students have until April 15th of their Senior Year to complete and submit their hours to meet this requirement. Students who choose to do more than 135 hours have the opportunity to earn the Silver Cord Graduation Award. All information on the Community Service Program, and how to complete this .5 credit successfully, is available online https://www.beth.k12.pa.us/ParentsStudents/CommunityService.

It is strongly recommended that the student completes 15 hours of Community Service each year to meet the requirement. Additionally, please note that hours must be completed at a non-profit agency. A list of over 200 agencies is provided to students in our database located under "Search for Opportunities" on the website. If it is not listed on the website, a student must submit a Request to Volunteer form prior to volunteering.

Students may begin earning hours the summer between 8th and 9th grade. A maximum of 30 hours will be credited towards the 60-hour requirement, with any additional hours being banked until the requirement is met. Students are strongly encouraged to begin and complete their Community Service hours as early as possible as it will help them to guide their choices in regards to courses, colleges and career paths.

### **DISTRICT INTERNSHIP**

The *BASD Internship Program* is intended to provide upperclassmen with opportunities to participate in on-site or off-site experiences related to their career goal. Through this program students will interact with, observe, and assist individuals who are employed in an occupation.

The intent of a BASD internship course is to provide activities that will enable the student to make informed career decisions based on significant knowledge and insights developed during participation.

### **Objectives**:

- To provide practical experience that enhances the classroom education of the student.
- To afford opportunities to gain further knowledge of the occupation.
- To help the students understand and appreciate their academic course work through direct application in a work setting.
- To develop effective employability skills and attitudes.

### Criteria:

- Open to students who have completed their sophomore year.
- Students will not be paid for their internship experience.
- All internships require preapproval by an assistant principal or principal.
- Students must be mentored by a field expert.
- Students should establish internship goals with their BASD supervisor and mentor.
- Students will submit a weekly internship log, weekly reflection, portfolio at the conclusion of the course, and a final reflection paper.
- Students spend a minimum of 9 weeks or 60 hours participating in the internship experience.
- A grade of Pass/Fail will be awarded for the Career Internship Experience and .5 credit of internship completion will be noted on the transcript. Class rank and GPA will not be affected by the internship.
- The Bethlehem Area School District Framework for Citizenship applies to student conduct throughout the internship.

### SPECIAL EDUCATION SERVICES AND PROGRAMS

Under Pennsylvania and federal laws, a student who meets the eligibility requirements for special education has the right to participate in the general education curriculum in the regular education classroom in the Least Restrictive Environment (LRE). The program of support and services is described in the student's Individualized Education Program (IEP). Providing a Free and Appropriate Public Education (FAPE) for a student with a disability begins with the consideration of services in the LRE. The organization and delivery of special education services are planned in a flexible and responsive manner to accommodate the student's special needs of eligibility without removing the student, unnecessarily, from the general education curriculum in the regular education classroom. Supplementary aids and services received by the student are dependent on his/her individual needs. The Bethlehem Area School District promotes inclusive opportunities for all students.

The students shall participate in the general education curriculum in the regular education classroom to the maximum extent appropriate, which may be accommodated, adapted, or modified. The district does provide a full continuum of services and programs. Eligible students may be provided instruction through supplemental curricula. Service/program options may be considered when the program of study needs to be intensified in order to meet the student's overall needs.

Transition planning begins at age 14. The IEP team will decide what kinds of courses will prepare the student for life after high school through the transition planning process. The IEP team, including the student and parent, will plan transition activities to prepare the student for post-high school experiences. Discussions during transition planning include: college or post-high school planning; employment exploration; and independent living, including recreation or leisure activities. The transition planning includes consideration of the types of courses the student will take during high school. Early planning encourages a coordinated effort between the present and future goals of the student. Students are encouraged to prepare for a post-high school education, whether it is college or a trade/technical school. Students who are considering college are encouraged to take the PSAT and SAT assessments, with or without accommodations. Some students may elect a vocational curriculum and attend the Bethlehem Area Vocational Technical School (BAVTS), which offers a range of programs.

All students receiving special education services are guaranteed the right for the opportunity to earn a high school diploma. *The IEP Team determines how a student will* be awarded a diploma, the eligible student must successfully complete all required courses and credits, as well as meet performance standards on assessments *or through the IEP transition goals*.

### **CO-TAUGHT COURSES**

Co-teaching is a research-based strategy for helping students in need of academic intervention and designed to assist students in meeting the increased literacy demands required for career and college readiness. Co-taught classes have two teachers who work with the class: a content area certified teacher, for example in English or mathematics, and a special education certified teacher.

The purpose of BASD High School Co-Teaching is to provide quality instruction to academically at-risk students (those not currently showing proficiency) in a high expectations-high supports environment. The program is designed to deliver standards-based instruction aligned to the PA graduation requirements, with high levels of support in place to meet those requirements. High levels of support include adaptations such as a concept-oriented focus, alternative methods of instruction and assessment, and more intensive student/teacher contact time.

With the BASD Roadmap to Educational Excellence as a guide, students will be supported in their Core Learning while developing personal skills in an engaging setting. Classroom roles and responsibilities are defined, targeted individualized support is provided to students, curriculum is delivered on grade level with appropriate adaptations, and modifications and the belief that effort produces achievement is pervasive.

As aforementioned, there are two teachers in the co-taught classes. Each teacher has a different but equally important role, and they work together with each other and with the students to promote academic growth and success. These teachers have equal responsibility for teaching, and students are held to high expectations and are given high levels of support from both teachers.

### **CAREER PATHWAYS**

The Bethlehem Area School District is committed to assist every student focus his or her high school education on a deliberate post-secondary plan that matches the interests, skills, knowledge, and experience of each individual student.

**About the Program:** The driving force behind the Career Pathways program is that every student personalizes his/her career and educational plan beyond high school. Some students believe that learning ends with high school graduation. This attitude and belief system typically results in a low-paying, unfulfilling job, which in turn can impact the individual's entire well-being. Helping students recognize that they have direct control over the career path they choose is the challenge of Career Pathways.

A career path is a broad spectrum of careers that share similar characteristics and for which employment requirements call for common interests, strengths, and competencies. The U.S. Department of Education has identified sixteen (16) Career Clusters that were designed to help students focus on an area of interest and possible career path. BASD's Pathways Program combined the clusters to create four broader and flexible paths for student exploration and instruction. The four Pathways used by the Bethlehem Area School District are as follows:

1	BUSINESS, FINANCE, & LAW
*	SCIENCE, TECHNOLOGY, ENGINEERING & MATH
1	ARTS & COMMUNICATIONS
+	HEALTH & SOCIAL SERVICES

It is recommended that students select a Career Pathway during course selection of their 8<sup>\*</sup> grade year. Students will then be able to examine specific careers and post-high school educational programs related to their Pathway. In addition, elective course recommendations and service learning options will be available to assist parents and students in making course selections that will be most beneficial to their academic and career goals. This information will help students see a connection between what they learn within the classroom and the skills they need for success in their adult lives and the work world.

### Goals:

- To assist each student in determining a Career Pathway based on interest and ability.
- To provide a variety of course offerings that will prepare students for education/training beyond high school to meet individual career goals.
- To produce students who are responsible citizens, effective communicators, cooperative workers, and skilled problem-solvers.

### **Rationale:**

What do you want to be when you grow up? The Pathways Program has been designed to help Bethlehem Area School District students answer this most important question. Students begin their journey by exploring personal skills, interests, and aptitudes through career assessments which supply them with ideas about how one of the four Career Pathways might "best fit" their personality.

### **Course Selection:**

In this Program of Study, electives and other selected courses are marked with one or more of the above Career Pathways symbols. Students are encouraged to choose electives based on their interest in or curiosity about a particular Career Pathway. The guidance department will also help to guide you in your course selection.

### **Career Pathways Overview**

The four pathways are described below. Once you have found a pathway that interests you, peruse for suggested courses, community service opportunities, and career opportunities.

	Science,     Business, Finance       Health & Social     Technology,     Arts &				
4 PATHWAYS	Services	Engineering, & Math	Communications	Law	
	This is a pathway that includes a large and diverse group of careers. Human services involves careers that help people and families meet their needs, including education, social services, and mental health needs. The health and medicine career pathway includes careers that promote health, wellness, and diagnosis as well as treat injuries and diseases. Some of the careers involve working directly with people while others involve research into diseases or collecting and formatting data and information. Work locations are varied and may be in hospitals, medical or dental offices or laboratories, cruise ships, medivac units, sports arenas, space centers, or within the community.	FrankEngineers and technicians design and build things. They are critical in all kinds of manufacturing, especially at the earliest stages when products and processes are being created and refined.A career in science is exciting, challenging, and ever-changing. Learners who pursue one of these career fields will be involved in planning, managing, and providing scientific research and professional and technical services including laboratory and testing services, and research and development services.The agriculture pathway prepares learners for careers in the planning, management, processing, and/or marketing of agricultural commodities and services.	Careers in the Performing Arts, Visual Arts or certain aspects of Journalism, Broadcasting and Film are careers that tap students' creative talents. Careers in Audio- Video Communications Technology, Telecommunications or Printing Technology require strong backgrounds in computer and electronic-based technology and a solid foundation in math and science. All pathways require the ability to communicate effectively in both oral and written form. Information technology careers involve the design, development, support and management of hardware, software, multimedia and systems integration services. The IT industry is a dynamic and entrepreneurial working environment that has a revolutionary impact on the economy and society	The Business, Finance, and Law pathway includes careers in planning, organizing, directing and evaluating <b>business functions</b> essential to efficient and productive business operations. The <b>finance</b> portion of this pathway involves careers in financial and investment planning, banking, insurance and business financial management. The legal system impacts us in many ways, from buying a home to safely driving a car. Careers in <b>law</b> keep the legal system running smoothly and includes <b>public</b> <b>services</b> , jobs that serve and protect people, including law enforcement, firefighting, legal services, and the military.	

Students Considering:	counselor. Courses in the f Health & Social Services	Science, Technology, Arts & Engineering, & Math Communications		Business, Finance & Law
Advanced Degrees	<ul> <li>English 12 Non-fiction</li> <li>AP Psychology</li> </ul>	o English 12 Non-	o AP Literature &	• AP Language & Composition
Degrees <u>Suggested Courses:</u> *4 Years Honors / AP English *4 Years of Honors / AP Math *4 Years Honors / AP Lab Science (biology, chemistry, physics, elective) *4 Years Honors /AP Social Studies *2-3 Years of one Foreign Language Students may also wish to consider concurrent enrollment at local colleges.	<ul> <li>AP Psychology</li> <li>AP Calculus</li> <li>AP Biology</li> <li>AP Chemistry</li> <li>AP Environmental Science</li> <li>AP Physics C</li> <li>Honors Anatomy &amp; Physiology</li> <li>Genetics</li> <li>Biotechnology</li> <li>Forensic Organic Chemistry</li> <li>PLTW - Biomedical Sciences</li> <li>PLTW- Engineering</li> <li>Introduction to Kinesiology</li> <li>Personal Fitness Training</li> <li>Athletic Health and Fitness (BAVTS)</li> <li>Medical Arts Academy (BAVTS)</li> </ul>	fiction O AP Calculus O AP Statistics O AP Biology O AP Chemistry O AP Environmental Science O AP Physics C O Genetics O Biotechnology O Forensic Organic Chemistry O Materials Science O PLTW- Biomedical Sciences O PLTW - Engineering O AP Computer Science Principles O Computer Programming O Academy for Applied Engineering (BAVTS)	<ul> <li>Composition</li> <li>Creative Writing</li> <li>Drama 1&amp;2</li> <li>Public Speaking</li> <li>Effective <ul> <li>Communication for</li> <li>the 21- Century</li> </ul> </li> <li>Intro to <ul> <li>Communications</li> <li>Principles of</li> <li>Communications</li> </ul> </li> <li>Principles of <ul> <li>Communications</li> </ul> </li> <li>Journalism</li> <li>Broadcast <ul> <li>Journalism</li> <li>AP Computer</li> <li>Science Principles</li> <li>Yearbook</li> <li>Webpage Design</li> <li>Digital and Print <ul> <li>Design</li> <li>Video Editing 1&amp;2</li> <li>AP Music Theory</li> <li>Music Production <ul> <li>1&amp;2</li> <li>Music Electives</li> <li>Art Electives</li> </ul> </li> </ul></li></ul></li></ul>	<ul> <li>Composition</li> <li>Public Speaking</li> <li>Effective</li> <li>Communications for the 21 · Century</li> <li>AP US History</li> <li>AP Macroeconomics</li> <li>AP Government</li> <li>Media as a Political Tool</li> <li>Law, Human Rights, and Social Change</li> <li>Skepticism and Logic</li> <li>Criminal Justice: Crime and Police Science</li> <li>Criminal Justice: American Legal System</li> <li>Sociology</li> <li>Psychology</li> <li>AP Statistics</li> <li>Personal Finance</li> <li>Accounting</li> <li>Marketing</li> </ul>
4 Year Degrees <u>Suggested Courses:</u> *4 Years English *4 Years Math *3-4 Years Lab Science (biology, chemistry or physics, elective) *4 Years Social Studies *2-3 Years of one Foreign Language *Students may wish to consider honors courses as well Students may also wish to consider concurrent enrollment at local colleges.	<ul> <li>English 12- Non- fiction</li> <li>Skepticism &amp; Logic</li> <li>Sociology</li> <li>Psychology</li> <li>Calculus</li> <li>Genetics</li> <li>Biotechnology</li> <li>Forensic Organic Chemistry</li> <li>Anatomy &amp; Physiology</li> <li>PLTW - Biomedical Sciences</li> <li>PLTW- Engineering</li> <li>Sports Nutrition</li> <li>Introduction to Kinesiology</li> <li>Introduction to Epidemiology</li> <li>Personal Fitness Training</li> </ul>	<ul> <li>English 12 Non- fiction</li> <li>The Environment in Politics</li> <li>Calculus</li> <li>Genetics</li> <li>Biotechnology</li> <li>Forensic Organic Chemistry</li> <li>Meteorology (FHS)</li> <li>Environmental Science</li> <li>PLTW - Biomedical Sciences</li> <li>PLTW- Engineering</li> <li>Computer Programming</li> </ul>	<ul> <li>Creative Writing</li> <li>Drama 1&amp;2</li> <li>Public Speaking</li> <li>Effective</li> <li>Communication for the 21- century</li> <li>Intro to</li> <li>Communications</li> <li>Principles of</li> <li>Communications</li> <li>Journalism</li> <li>Broadcast</li> <li>Journalism</li> <li>History Through Film</li> <li>Music Production</li> <li>1&amp;2</li> <li>Yearbook</li> <li>Webpage Design</li> <li>Digital and Print Design</li> <li>Video Editing 1&amp;2</li> <li>Intro to Computer Science</li> <li>Computer</li> <li>Programming 1&amp;2</li> <li>Music Electives</li> <li>Art Electives</li> </ul>	<ul> <li>Management</li> <li>Business Law</li> <li>Public Speaking</li> <li>Effective Communications for the 21 · Century</li> <li>Media as a Political Tool</li> <li>Law, Human Rights, and Social Change</li> <li>Skepticism and Logic</li> <li>Criminal Justice: Crime and Police Science</li> <li>Criminal Justice: American Legal System</li> <li>Sociology</li> <li>Psychology</li> <li>Statistics</li> <li>Personal Finance</li> <li>Marketing</li> <li>Accounting</li> <li>Management</li> <li>Business Law</li> </ul>

**Suggested Courses for Specific Career Pathways** Courses will vary with interest of student. The courses listed below are suggestions for discussion between the student, parent, teacher, and counselor. Courses in the far left column are either required or strongly suggested for graduation.

Students Considering:	Health & Social Services	Science, Technology, Engineering, & Math	Arts & Communications	Business, Finance & Law
Community Colleges (with possible transfer to 4 year college) and/or Technical Schools	<ul> <li>O Sociology</li> <li>O Psychology</li> <li>O Skepticism &amp; Logic</li> <li>O Human Forensics</li> </ul>	<ul> <li>O The Environment in Politics</li> <li>O Astronomy</li> <li>O Geology</li> </ul>	<ul> <li>Creative Writing</li> <li>Public Speaking</li> <li>1&amp;2</li> <li>Effective</li> </ul>	<ul> <li>Public Speaking</li> <li>Effective</li> <li>Communications for the 21. Century</li> </ul>
<u>Suggested Courses:</u> *4 Years English *4 Years Math	<ul> <li>Human Forensics</li> <li>Human Growth &amp; Development</li> <li>Genetics</li> <li>Biotechnology</li> </ul>	<ul> <li>O Zoology</li> <li>O Meteorology</li> <li>O Environmental Science</li> </ul>	<ul> <li>Communication for the 21<sup>a</sup> Century</li> <li>Intro to Communications</li> </ul>	<ul> <li>Media as a Political Tool</li> <li>Law, Human Rights, and Social Change</li> </ul>
*3-4 Science *3-4 Social Studies *2-3 Years of one Foreign Language	<ul> <li>O Anatomy &amp; Physiology</li> <li>O PLTW - Biomedical Sciences</li> </ul>	<ul> <li>Biotechnology</li> <li>Genetics</li> <li>Human Forensics</li> <li>Astronomy</li> </ul>	<ul> <li>Principles of Communications</li> <li>Journalism</li> <li>Broadcast</li> </ul>	<ul> <li>Skepticism and Logic</li> <li>Criminal Justice: Crime and Police Science</li> </ul>
Students may also wish to consider concurrent enrollment at local	<ul> <li>PLTW- Engineering</li> <li>Parenting &amp; Child Development</li> <li>Exploring Childhood/</li> </ul>	<ul> <li>PLTW - Engineering</li> <li>PLTW - Biomedical Sciences</li> <li>Computer</li> </ul>	<ul> <li>Journalism</li> <li>Music Production</li> <li>1&amp;2</li> <li>Yearbook</li> </ul>	<ul> <li>Criminal Justice: American Legal System</li> <li>Sociology</li> </ul>
colleges.	<ul> <li>Preschool Lab</li> <li>Cooking Classes</li> <li>Personal Fitness Training</li> </ul>	<ul> <li>Programming</li> <li>Creating Apps for Phones, Pads, &amp; Other Devices</li> </ul>	<ul> <li>Web Page Design</li> <li>Video Editing 1&amp;2</li> <li>Digital and Print Design</li> </ul>	<ul> <li>Psychology</li> <li>Statistics</li> <li>Personal Finance</li> <li>Co-op Program</li> </ul>
	<ul> <li>Athletic Health and Fitness (BAVTS)</li> <li>Medical Arts Academy (BAVTS)</li> </ul>	<ul><li>o Woodcraft</li><li>o Stage Craft</li></ul>	<ul> <li>Intro to Computer Science</li> <li>Computer Programming 1&amp;2</li> </ul>	<ul> <li>Accounting</li> <li>Marketing</li> <li>Management</li> <li>Business Law</li> </ul>
	o Health Careers (BAVTS)		<ul> <li>Creating Apps</li> <li>Exploring Childhood/ Preschool Lab</li> </ul>	
			<ul> <li>Woodcraft 1&amp;2</li> <li>Graphic Arts 1&amp;2</li> <li>Art Electives</li> <li>Music Electives</li> </ul>	
High School Diplomas, Vocational/Technical Training, On the Job Training	<ul> <li>O Sociology</li> <li>O Psychology</li> <li>O Skepticism &amp; Logic</li> </ul>	<ul> <li>PLTW – Engineering</li> <li>PLTW-Biomedical Sciences</li> <li>Bergenet Finance</li> </ul>	<ul> <li>Creative Writing</li> <li>Public Speaking</li> <li>Effective Communication for</li> </ul>	<ul> <li>Public Speaking</li> <li>Effective Communication for the 21 Conturn</li> </ul>
On the Job Training, Career Suggested Courses:	<ul> <li>O Criminal Justice: Crime &amp; Police Science</li> <li>O Human Forensics</li> </ul>	<ul> <li>Personal Finance</li> <li>College Mathematics</li> <li>Intro to Computer</li> <li>Science</li> </ul>	<ul> <li>Communication for the 21<sup>s</sup> Century</li> <li>Intro to Communications</li> </ul>	<ul> <li>the 21- Century</li> <li>Skepticism and Logic</li> <li>Criminal Justice: Crime and Police</li> </ul>
*4 Years English *3 Years Math *3 Years Science *3 Years Social Studies	<ul><li>o Human Growth &amp; Development</li><li>o PLTW - Biomedical</li></ul>	<ul> <li>Computer Programming 1&amp;2</li> <li>Creating Apps</li> <li>BAVTS</li> </ul>	<ul> <li>Principles of Communications</li> <li>Broadcast Journalism</li> </ul>	<ul> <li>Science</li> <li>Criminal Justice: American Legal</li> </ul>
*5 Tears Social Studies	Sciences O Exploring Childhood / Preschool lab O Cooking Classes	• BAVIS	<ul> <li>Video Editing 1&amp;2</li> <li>Office Technology</li> <li>Co-op Program</li> </ul>	System         Sociology         Psychology         Personal Finance
	<ul> <li>Personal Fitness Training</li> <li>BAVTS</li> </ul>		<ul> <li>Digital and Print Design</li> <li>Music Production 1&amp;2</li> </ul>	<ul> <li>Marketing</li> <li>Management</li> <li>Co-op Program</li> <li>Office Technology</li> </ul>
			<ul> <li>Woodcraft 1&amp;2</li> <li>Graphic Arts 1&amp;2</li> <li>Art Electives</li> </ul>	<ul> <li>Office Technology</li> <li>School Store Marketing</li> <li>BAVTS</li> </ul>
			<ul><li>Music Electives</li><li>BAVTS</li></ul>	

### ENGLISH

The Bethlehem Area School District's English Department is dedicated to providing students with a comprehensive education in literacy. Courses are designed to help students become astute readers and effective communicators of the written and spoken word. Students read the classics as well as contemporary texts, write analytically and persuasively, learn the standards of written English, and develop critical thinking skills. In addition, the English electives strive to develop students' creativity and imagination, allowing students to discover their own voices.

English Recommended Course Sequence					
Grade 9	Grade 10	Grade 11	Grade 12		
Honors English 9 Adv. Academic English 9* English 9	Honors English 10 Adv. Academic English 10* English 10	AP Language & Composition Honors English 11 English 11	AP Literature & Composition Honors English 12 English 12 English 12: Non-Fiction		

\*Liberty course only



Prerequisites: See Honors Program Recommendations

Honors English 9 develops and sharpens the communication skills of critical reading, writing, speaking, and listening, with special emphasis on the writing process, independent scholarship, research skills, and critical thinking. Particular focus is placed on the development of the critical analysis essay and the primary source paper and writing cohesive thesisdriven essay effectively supporting a claim. Literature study concentrates on critical analysis of the following genres: short story, novel, poetry, and drama. Grammar study focuses on developing mature sentence structure, coherence, and unity. **Notes:** The grade for this course is weighted. This course is strongly recommended for those students who may consider Advanced Placement courses.

## ADVANCED ENGLISH 9 (EN1001) Eiberty only

Advanced English 9 develops the communication skills of critical reading, writing, speaking, and listening, with special emphasis on the writing process, research skills, critical thinking, and the sharpening of study skills. Particular attention is placed on the development of the literary analysis essay, the primary source paper, the persuasive essay, and the improvement of developing a thesis-driven essay that effectively supports a claim. Literature study concentrates on analysis of the short story, novel, poetry, drama, and non-fiction. Grammar study focuses on developing sentence structure and coherence. **Note:** This course is strongly recommended for those students who may consider pursuing Advanced Placement courses.

ENGLISH 9 (EN1002)



English 9 develops the communication skills of reading, writing, speaking, and listening, with special emphasis on the writing process and the academic essay, critical reading and thinking, research skills, and study skills. Students will analyze literary works from the following genres: short story, novel, poetry, and drama. Units are arranged thematically so that writing and reading skills are continually built upon and reinforced throughout the course.

1.0 credit

1.0 credit

### HONORS ENGLISH 10 (EN2000)

Prerequisites: See Honors Program Recommendations

Honors English 10 continues to develop communication skills of critical reading, analytical writing, speaking and listening, with particular emphasis on independent study skills. Extensive reading, discussion, effective methods of presentation, honing of grammar skills, and vocabulary enrichment are integral parts of this course. Particular emphasis is placed on the refinement of essay-writing skills (persuasive, literary analysis, and research, as well as timed on-demand essays). Notes: The grade for this course is weighted. This course is strongly recommended for those students who may consider Advanced Placement courses.

## ADVANCED ENGLISH 10 (EN2001) Eiberty Only

Advanced Academic English 10 is designed to assist students on a pre-AP or Honors pathway. The course continues to develop communication skills of critical reading, analytical writing, speaking and listening. Students will be guided to develop their independent study skills. Reading of more complex texts, improved discussion and presentation skills, honing of grammar skills, and vocabulary enrichment are integral parts of this course. Particular emphasis is placed on the refinement of essay-writing skills (persuasive, literary analysis, and research). Notes: The grade for this course is not weighted. This course is strongly recommended for those students considering Advanced Placement courses.

ENGLISH 10 (EN2002)

English 10 builds upon the communication skills of reading, writing, speaking, and listening developed in 9th grade. Special emphasis is placed on the writing process, the persuasive essay, literary analysis, critical reading and thinking, study skills, research skills, and vocabulary enrichment. Grammar study focuses on sentence structure and improvement of style. Writing and reading skills are continually built upon and reinforced throughout the semester.

### AP ENGLISH - LANGUAGE AND COMPOSITION (EN5000)

Prerequisites: See Honors Program Recommendations

AP English is a challenging course designed as a substitute for college freshman English. Students who enroll must be astute and sophisticated readers and writers who genuinely love the beauties and complexities of the written word in English. Through the critical reading and analysis of American literature (with a heavy emphasis on nonfiction), students will become skilled readers of a variety of prose and skilled writers of analytical essays. Although literature is used as a vehicle, the emphasis of this course is on the development of a student's writing style in order to master the writing of essays with different purposes and audiences. Emphasis will also be placed on the conventions of language necessary to become expert writers. Notes: The grade for this course is weighted. Students are strongly encouraged to take the AP College Board exam in May.

HONORS ENGLISH 11 (EN3000)

Prerequisites: See Honors Program Recommendations

Honors English 11 is a challenging course designed for an in-depth examination of American literature. Students who enroll must be avid, astute, and sophisticated readers and writers who genuinely love the beauties and complexities of the written and spoken word. Major emphasis is placed on the development of critical thinking and analytical writing skills through intensive class discussions and rigorous writing requirements, focusing on the response to literature and the research paper. The course prepares students for either honors or AP in twelfth grade. Notes: The grade for this course is weighted. This course is strongly recommended for those students who may consider Advanced Placement courses.

1.0 credit

1.0 credit





1.0 credit

# ENGLISH 11 (EN3002)

English 11 concentrates on the continuation of developing reading, writing, speaking, and listening skills students need to become successful in college as well as the workplace. The course encourages critical thinking. Students will engage in the analysis of text and in the writing of the academic theme essay, research essay, literary analysis essay, and the on demand essay for SAT readiness. All of these skills will be reinforced and refined through an exploration of a variety of literary genres and American literary themes.

### **AP ENGLISH LITERATURE AND COMPOSITION (EN5010)**

Prerequisites: See Honors Program Recommendations

AP English Literature and Composition is a challenging course designed as a substitute for college Freshman English. This course features seminar and independent study requirements and requires extensive reading. Using primarily British literature as its focus, the course requires the writing of critical papers of various styles and perspectives and the development of careful, analytical reading and research skills. Notes: The grade for this course is weighted.

HONORS ENGLISH 12 (EN4000) Prerequisites: See Honors Program Recommendations \*This class may be offered in an online environment

Designed for the mature student, Honors English 12 is reading and writing intensive. Using British literature as the focus, and with additional world literature as connections, the course requires the writing of original critical papers and the development of careful and analytical reading, research, speaking, and thinking skills. Along with the study of imaginative literature, the course includes extensive analysis of nonfiction texts. Through close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. This course is recommended for students who are willing to devote extra time and rigor for research, independent reading and study, and projects. Note: The grade for this course is weighted.

### ENGLISH 12 (EN4001)

This literature course concentrates on the refinement of a student's critical reading, writing, speaking, and listening skills. Course material has been selected with an eye toward the requirements of college freshman English, and there is an emphasis on perfecting analytical writing skills, particularly the response to literature and the research paper. The vocabulary strand stresses SAT vocabulary. Evaluation is based on written and spoken projects that stress a student's ability to be self-motivated and to work independently

# ENGLISH 12: NON-FICTION (EN4011)

This 12th-grade English course is designed for those students planning to enter the fields of business or STEM. Students will read and analyze text for key ideas and details, craft and structure, and integration of knowledge and ideas with a heavy emphasis on non-fiction text. In addition, students will refine their writing skills by producing expository, argumentative, and research-based essays. This course satisfies the 12th-grade English requirement.







1.0 credit

1.0 credit

1.0 credit

1.0 credit

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### **ENGLISH ELECTIVES**

### **ACADEMIC LITERACY 1 (EN9004)**

Academic Literacy 1 is a one-semester course that prepares students to successfully meet the academic demands of high school curricula. This course provides students with multiple opportunities to practice and master reading, writing, and study skills that are applied across content areas. Special emphasis is placed on the development of critical reading strategies to aid in comprehension and analysis of increasingly challenging texts. Scholastic's Read 180 software will be used. The course is married to English 9 or English 10.

### **ACADEMIC LITERACY 2 (EN901**

Academic Literacy 2 is a one-semester course that continues to prepare students to successfully meet the academic demands of high school curricula. This course provides students with multiple opportunities to practice and master reading, writing, speaking, and study skills. Special emphasis is placed on the development of critical reading strategies to aid in comprehension and analysis of increasingly challenging texts. Students in this course will also be scheduled into English 9 or English 10.

### SAT/ACT READING, WRITING, and LANGUAGE (EN9009

The purpose of this course is to help college-bound students read and study more effectively. This course focuses on verbal and on-demand writing SAT/ACT preparation. Reading skills, writing skills, study skills, and vocabulary development will be emphasized.

### **CREATIVE WRITING (EN9019)**

Creative Writing is designed to develop and encourage the creative and imaginative aspects of writing. Students will read, critique, and write using a variety of genres including forms of poetry, short fiction, and play/script writing. Emphasis is on student-generated writing projects. Final goal is to publish in approved forums. Note: This course can be taken multiple times for advanced study of the subject.

### **PUBLIC SPEAKING (EN9049)**

Public Speaking helps students prepare for various speaking situations. Students are guided toward the creative development of speaking forms: process, persuasive, and informational. Additional skills emphasized include planning, preparing, and presenting a speech, the incorporation of technology, and critical evaluation.

### EFFECTIVE PRESENTATION SKILLS FOR 21st CENTURY CAREERS (EN9149)

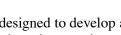
This course will provide students with the necessary skills and supports for career-based public speaking and presentations, including methods of gathering and presenting information for a variety of audiences. Special emphasis will be placed on providing supports for students conducting field studies and capstone projects in all subject areas and career pathways.

1.0 credit

1.0 credit

1.0 credit

0.5 credit





0.5 credit



## DRAMA 1 (EN9079)

This course emphasizes the techniques and skills needed to perform on stage. Improvisation, fundamentals of acting, acting techniques, overcoming stage fright, monologue and scene performance, and play analysis are some of the units studied. All areas of stagecraft will be explored including performance acting, directing, stage crew, and set design.

This class serves as a complement to Drama 1 offering a wide variety of plays from traditional to contemporary drama. Students will continue to hone their skills in improvisation and performance. A culminating final project is performancebased for an external audience.

JOURNALISM (EN9039)

This course is designed for students interested in learning the basics of journalism as well as for advanced students who want to expand their skills into the areas of arts and entertainment writing, sports reporting, and editorial writing. Students will also learn how to research and write editorials as well as the fundamentals of photojournalism. Note: This course can be taken multiple times for advanced study of the subject.

### **BROADCAST JOURNALISM (EN9069)**

Students taking Broadcast Journalism will learn to write copy for and report both news and feature stories. This course exposes students to the process of live television production. Students will learn to operate a studio camera and use angles, shot length, movement and other techniques to create an interesting news story. Students will learn the techniques of producing, directing, editing, and anchoring in the studio providing valuable experience in the television industry. Final Cut Express will be used in this course. Note: This course is in conjunction with the business department and can be taken multiple times for advanced study of the subject.

1.0 credit

1.0 credit

1.0 credit





### COMMUNICATIONS PATHWAY

The Communications Pathway is a four-year elective sequence that explores, develops, and refines skills in the areas of performance and print. The Pathway courses incorporate project-based learning, career and community experiences, educational field trips, and guest speakers. In the foundational courses of the Pathway, students will develop a broad knowledge of mass communications in its various forms. The Pathway's third course customizes learning by providing students with a choice of courses in order to specialize in an area of interest. The Pathway's capstone course synthesizes students' skills and experiences into a collaborative and community-based project.

Recommended Course Sequence:

- Introduction to Communications
- Principles of Communications •
- Journalism or Broadcast Journalism •
- Capstone (coming in 2020-2021) •

### INTRODUCTION TO COMMUNICATION & PUBLIC RELATIONS (EN9109)

Introduction to Communication and Public Relations explores the fundamentals of various applications of persuasive and public relations techniques to forms of written and oral communications. Some forms covered will be press releases, media kits, sales and promotional pieces, newsletters and related formats. Students will apply problem-solving skills and public relations principles to real-world projects and assignments. In addition, students will learn how to promote a product, brand, or event through effective communication campaigns.

# PRINCIPLES OF COMMUNICATIONS (EN9119)

In this course, students will explore the communications/media field by examining the various roles and responsibilities of the media as well as career options. Students will study key topics such as: videography, animation/graphics, editing, reporting and writing, storyboarding, verbal communication, social media and digital strategies.



This course is designed for students interested in learning the basics of journalism as well as for advanced students who want to expand their skills into the areas of arts and entertainment writing, sports reporting, and editorial writing. Students will also learn how to research and write editorials as well as the fundamentals of photojournalism. Note: This course can be taken multiple times for advanced study of the subject.

### **BROADCAST JOURNALISM (EN9069)**

Students taking Broadcast Journalism will learn to write copy and report news and feature stories. This course exposes students to the process of live television production. Students will learn to operate a studio camera and use angles, shot length, movement and other techniques to create an interesting news story. Students will learn the techniques of producing, directing, editing, and anchoring in the studio providing valuable experience in the television industry. Final Cut Express will be used in this course. Note: This course is in conjunction with the business department and can be taken multiple times for advanced study of the subject.

1.0 credit

0.5 credit



### SOCIAL STUDIES

The high school Social Studies program is designed to provide organized and directed student investigations in the areas of history, civics, geography, and economics. Courses are intended to prepare students for life in a competitive global community by focusing on core learning yet offering many accelerated honors and Advanced Placement courses to stretch the 21<sup>e</sup> Century learner.

Social Studies Recommended Course Sequence for classes of 2020 and 2021				
Grade 9	Grade 10	Grade 11	Grade 12	
Honors US History 2	AP US History	AP World History	AP US Government	
Advanced US History 2	Honors US History 3	AP Comparative	AP Macroeconomics	
US History 2	Advanced US History 3	Government	Honors American Government	
	US History 3	Honors Global Studies	& Economics	
		Global Studies	American Government & Economics	

Social Studies Recommended Course Sequence for the class of 2022 and 2023					
Grade 9	Grade 10	Grade 11	Grade 12		
Honors US History	AP US History*	AP US Government	Other Social Studies		
Advanced US History	AP World History	AP Macroeconomics	Electives		
US History	AP Comparative	Honors American Government			
	Government	& Economics			
	Honors Global Studies	American Government & Economics			
	Global Studies				

\*It is highly recommended to take AP US History immediately after Honors US History

### HONORS UNITED STATES HISTORY 2 (SS1000)

Prerequisites: See Honors Program Recommendations

Honors US History includes a study of US History from the Civil War to Present Day. Students will be required to do extensive reading in both texts and supplementary sources. Research and analytical writing assignments, as well as individual and group projects, will be included. Notes: The grade for this course is weighted. **Notes:** The grade for this course is weighted.

## ADVANCED UNITED STATES HISTORY 2 (SS1001)

Advanced US History includes a study of US History from the Civil War to Present Day. Students will be required to read both the text and supplemental sources. Research and analytical writing skills and assignments will be developed in this course. This course is recommended for students looking to sharpen their study skills in order to meet the challenge of AP level work but who are not considering the AP path at this time.

### UNITED STATES HISTORY 2 (SS1002)

US History includes the study of United States History from the Civil War to Present Day. Development of reading, writing, and geographical analytical skills will be emphasized. Current events will be integrated throughout the course.

1.0 credit

1.0 credit

1.0 credit

1002) 🔤

### **AP UNITED STATES HISTORY (SS5000)**

Prerequisite: See Honors Program Recommendations

AP U.S. History is designed to be the equivalent of a college course that includes a study of U.S. History from 1898 to the present. Students will be required to do extensive reading in both texts and supplementary sources. Research and analytical writing assignments as well as individual and group projects will be included. **Notes:** The grade for this course is weighted. Students are strongly encouraged to take the AP College Board exam in May.

### AP WORLD HISTORY (SS5010)

Prerequisite: See Honors Program Recommendations

AP World History is designed to be the equivalent of a college course that develops a greater understanding of the evolution of global processes and contacts in different types of human societies. The course highlights the nature of changes in global frameworks and their causes and consequences, as well as comparisons among major societies. It emphasizes factual knowledge, leading interpretive issues, and skills in analyzing types of historical evidence. **Notes:** The grade for this course is weighted. Students are strongly encouraged to take the AP College Board exam in May.

### AP COMPARATIVE GOVERNMENT AND POLITICS (SS5020)

Prerequisite: See Honors Program Recommendations

AP Comparative Government and Politics is designed to be the equivalent of a college course that introduces students to fundamental concepts used by political scientists to study the processes and outcomes of politics in a variety of country settings. The course aims to illustrate the rich diversity of political life, to show available institutional alternatives, to explain differences in processes and policy outcomes, and to communicate to students the importance of global political and economic changes. Six countries form the core of the AP Comparative Government and Politics course. **Notes:** The grade for this course is weighted. Students are strongly encouraged to take the AP College Board exam in May.

### HONORS GLOBAL STUDIES (SS3000)

Prerequisite: See Honors Program Recommendations

Honors Global Studies examines how continuity and change has impacted the world today. The course will specifically focus on how the interactions of history, politics, economics, belief systems, and geography have helped to shape the world's history. Students will also examine the role groups and individuals played in the social, political, cultural, and economic development of our world's history. **Notes:** The grade for this course is weighted.

### GLOBAL STUDIES (SS3002)

Global Studies examines how continuity and change has impacted the world today. The course will specifically focus on how the interactions of history, politics, economics, belief systems, and geography have helped to shape the world's history. Students will also examine the role groups and individuals played in the social political, cultural, and economic development throughout world history.



1.0 credit

1.0 credit

1.0 credit

1.0 credit

### AP MACROECONOMICS (SS5040)

Prerequisites: See Honors Program Recommendations

AP Macroeconomics is designed to be the equivalent of a college course that gives students a thorough understanding of the principles of economics that apply to an economic system as a whole. Such a course places particular emphasis on the study of national income and price-level determination and also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth and international economics. **Note:** The grade for this course is weighted. Students are strongly encouraged to take the AP College Board exam in May.

### AP US GOVERNMENT & POLITICS (SS503)

Prerequisites: See Honors Program Recommendations

AP United States Government and Politics is designed to be the equivalent of a college course that gives students an analytical perspective on government and politics in the United States. The course involves extensive reading, independent study, document analysis, research, essay writing, and classroom discussion. **Notes:** The grade for this course is weighted. Students are strongly encouraged to take the AP College Board exam in May.

### HONORS US GOVERNMENT & ECONOMICS (SS4000)

Prerequisites: See Honors Program Recommendations

Honors US Government & Economics is a comprehensive and government education program dedicated to developing economically and politically literate students. Emphasis is placed upon the application of knowledge to various themes; e.g. Law and Order, Economic Stability, etc., which will be developed throughout the course. The course involves extensive readings, essay writing, analysis of problems and classroom discussion. **Note:** The grade for this course is weighted.

### US GOVERNMENT & ECONOMICS (SS4001)

US Government & Economics is a survey course examining the organization and operation of the U.S. government and economic systems. National, state, and local governments as well as macroeconomic and microeconomic issues will be studied. Current events and contemporary themes are emphasized. Requirements include reading, writing, research and analysis of contemporary political and economic issues.



### 1.0 credit

1.0 credit

1.0 credit

### SOCIAL STUDIES ELECTIVES

# AP PSYCHOLOGY (SS5050) 🔡 🔤

AP Psychology introduces the systematic and scientific study of the behavior and mental processes of human beings and other animals. Included is a consideration of 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.

### PSYCHOLOGY (SS9149)

SOCIOLOGY (SS9139)

This course involves a survey of selected themes in psychology. It is an academic course with a variety of assessments as well as homework. The class will familiarize students with general psychological terms and ideas in preparation for college or work force expectations. The following topics will be covered: introduction to psychology, altered states of consciousness, infancy and adulthood, adolescence, adulthood, old age, stress and health, abnormal behavior, and therapy and change.

This course will familiarize students with general sociological terms and ideas in preparation for college or work force expectations. The primary objective of this course is to study the process of human interaction and the social dynamics present in this behavior. The following topics will be covered: introduction to sociology, the socialization process, sex and gender, crime, the American family, gerontology, and sociology-present and future. This course involves an in-depth investigation of a variety of subfields of sociology. This investigation will be undertaken in one or more of several types of project-based activities chosen jointly by the instructor and student. The course will also include in-depth seminar discussions of sociology topics.

# SKEPTICISM and LOGIC (SS9129)

Skepticism and Logic is a course designed to develop a student's critical thinking and analytical skills by challenging some of our widely held conventional, non-conventional and even supernatural beliefs. Students will read scientific journals by Stephen Jay Gould, James Randi, Carl Sagan, and Michael Shermer. Students will learn how to process information in today's media-rich environment, applying cognitive analysis with a focus on interesting topics such as ghosts, urban legends, folklore, rumors and myths, as well as conspiracy theories and the psychology of how things are presented to the public. The course is designed to help guide students in how to critique their own beliefs, understand how perception can be misleading, and above all, learn how to use the scientific and other empirical methods.

### MEDIA AS A POLITICAL TOOL (SS9049)

Media as a Political Tool introduces students to themes, issues and debates found within our current media. Students will develop an understanding of historical media as well as modern forms of communication. It examines the factors that influence the media and, in turn, examines the influence of media on attitudes, values and behaviors, both individual and social. Students will explore debates about the role and power of media in society in influencing our social and cultural values and political beliefs.

### WARS AND REVOLUTIONS (SS9159)

Wars and Revolutions explores and examines how conflicts have impacted and shaped human society and culture. Students to explore the history of the most pivotal wars and revolutions and to trace both origins and results.



1.0 credit

1.0 credit

1.0 credit

0.5 credit

0.5 credit

1.0 credit

Offered at Liberty High School

### SPORTS HISTORY (SS9119)



0.5 credit

Sports History offers students a history of sports from the pre-Olympic time period into modern times. This course will enable the students to examine how sports reflect the culture, politics, social relationships, and entertainment of respective eras in history. This course will allow students to examine how sports evolved from the early games in ancient Greek and Roman life to the multi-billion dollar industry it has become in the 21st century. The course is designed to offer instruction and knowledge in sports media, law, and ethics for a multitude of sports-related careers where professionals working in the sports industry have a grasp on applicable laws and ethical considerations.

## HISTORY THROUGH FILM 1 (SS9099) Offered at Freedom High School

1.0 credit

History through Film examines people and events of American history, depicted in Hollywood films, television, and historical dramas. Students in this course will view movies/films/series on various historical topics, events, and people; evaluate and critique the accuracy, intention, and effects on society; research the history upon which these films were based and write essays summarizing the actual historical events, citing what is fact and what is fiction, and comparing the film evidence to information in more traditional sources, such as articles, reviews, and documentaries; compare and contrast two or more movies depicting similar events in history.

### LAW PATHWAY

The Law Pathway is designed for student who have interest in the law or law enforcement. Students will develop a broad understanding of the world around them, and they should investigate the realities of a law enforcement or legal career. Courses in the law pathway are designed to prepare students through developing skills in analysis, critical thinking, research, and community connections.

### Law Pathway Course Sequence:

- Introduction to Law
- Criminal Justice: Crime and Police Science AND/OR
- Criminal Justice: American Legal System
- Law, Human Rights, and Social Change
- Capstone: Community Activism

### INTRODUCTION TO LAW (SS9169)

Introduction to Law explores multiple legal disciplines including attorneys, clerks, paralegals, bailiffs, probation officers, etc. Students will learn about the skills and tasks most required of multiple legal professions (debates, group tasks, research, and role-play exercises), in order to assess whether they themselves would be suited to such careers in the future. The Introduction to Law course will incorporate the school's Mock Trial team.

### CRIMINAL JUSTICE: CRIME AND POLICE SCIENCE (SS9189)

This course is designed to be a second course in the Law Pathway in the BASD. This class will explore what constitutes crime and criminal behavior in our society and the measures taken, by law enforcement, to prevent these behaviors. Students will study Criminology: Types of crimes, Theories of criminal behavior, Victimization (Lifestyle Theory), Principles of Criminal law, Basic elements of a crime, Responsibilities of criminal acts (defenses) and Procedural Criminal law (Due Process rights). Students will also study American Law Enforcement with a brief history of policing, emphasizing the 4 eras of American Policing and Federalism.

### CRIMINAL JUSTICE: AMERICAN LEGAL SYSTEM (SS9199)

American Legal System will open with an overview of the American Judicial System. It will emphasize the Sources of law, Concept of Federalism, the Constitution, the Organization of the American Court system and the Supreme Court and the many landmark decisions that impact our society.

### LAW, HUMAN RIGHTS, AND SOCIAL CHANGE (SS9209)

This course is designed to be the third course in the Law Pathway in the BASD. This class will explore the interaction of law and law enforcement with social policy, media, identity, and social mobilization. Students will explore criminal justice institutions and practices in social context. Students will answer, "How should culture influence law and law enforcement and vice versa?" Topics covered in this course include: Youth, Justice, and Culture; Punishment, Culture, and Society; Human Rights and Technology; Psychology, Psychology of Diversity, & the Law

# CAPSTONE: COMMUNITY ACTIVISM (SS9219)

1.0 credit

0.5 credit

0.5 credit

1.0 credit

0.5 credit





### **MATHEMATICS**

The Bethlehem Area School District Mathematics program of studies offers a variety of classes aimed at providing a strong mathematical foundation for life after high school. Teachers present content through direct instruction, inductive lessons, investigations, and technology. Students are challenged at all levels from core learning to many honors and Advanced Placement courses.

	Math Recommended Course Sequence				
Course Completed in Grade 8	Grade 9	Grade 10	Grade 11	Grade 12	
Algebra 1	Honors Geometry Advanced Geometry* Geometry	Honors Algebra 2 Advanced Algebra 2* Algebra 2	Honors Pre-Calculus Pre-Calculus	AP Calculus Calculus AP Statistics Statistics College Math	
Advanced Math 8	Honors Algebra 1 Advanced Algebra 1* Algebra 1	Honors Geometry Advanced Geometry Geometry Standards Geometry	Honors Algebra 2 Advanced Algebra 2* Algebra 2	Honors Pre-Calculus Pre-Calculus Personal Finance College Math	
Math 8	Algebra 1 Algebra 1A Academic Mathematics	Algebra 1 Algebra 1A Geometry Standards Geometry	Algebra 1 Geometry Algebra 2 Standards Algebra 2	Pre-Calculus Statistics Personal Finance College Math	

Note: Students may also choose to take two math courses during any year. \*Liberty course only

### HONORS ALGEBRA 1 (MA1000)

Prerequisites: See Honors Program Recommendations

This course contains the standard topics of Algebra 1 such as variables, formulas, the real number system, linear equations and inequalities, the graphs of relations and functions, probability and data analysis. The course also integrates statistics/probability, direct and inverse variation, and systems of equations and inequalities. These topics will be taught and learned in greater depth since there are more challenging problems and a greater emphasis on problem solving than Algebra 1. Notes: The grade for this course is weighted. This course is strongly recommended for those students who may consider Advanced Placement courses.



1.0 credit

This course is designed to get students honors-ready. Topics will be the same as Honors Algebra 1, but with more supports and a focus on filling in foundational knowledge. Students will start the course with less independence, but will work toward an honors level of independence by the end of the course.

ALGEBRA 1 (MA1002)

Algebra 1 is the gateway course to higher mathematics. This course is designed to emphasize the development of concepts, skills and techniques for use with variables, formulas, the real number system, linear equations, inequalities, the graphs of relations and functions, probability, and data analysis.

1.0 credit

### ALGEBRA 1A (MA1004)

Topics in this course include: exploring and communicating mathematics, using measures and equations, representing data, coordinates and functions, and equations for problem solving.

HONORS ALGEBRA 2 (MA2000)

Prerequisites: See Honors Program Recommendations

This is a highly intensive second year algebra course. The course includes: relations, functions and variations; first and second degree equations and inequalities of one and more than one variable; polynomials and factoring; rational and irrational numbers; systems of equations and inequalities; and exponents, imaginary numbers and logarithms. The conic sections, progressions, permutations and combinations, the binomial expansion and statistical procedures are also included. Notes: The grade for this course is weighted. This course is strongly recommended for those students who may consider Advanced Placement courses.

# ADVANCED ALGEBRA 2 (MA2001) Liberty Only

ALGEBRA 2 (MA2002)

This course is designed to get students honors-ready. Topics will be the same as Honors Algebra 2, but with more supports and a focus on filling in foundational knowledge. Students will start the course with less independence, but will work toward an honors level of independence by the end of the course.

1.0 credit

This is a second year algebra course. The course includes: relations, functions and variations; first and second degree equations and inequalities of one and more than one variable; polynomials and factoring; rational and irrational numbers; systems of equations and inequalities; and exponents, imaginary numbers and logarithms. Permutations and combinations and statistical procedures are also included.

### STANDARDS ALGEBRA 2 (MA2003)

This course extends Algebra 1 skills and uses calculators to assist problem solving. Topics include graphing, systems of linear equations and inequalities, and quadratics.

### HONORS GEOMETRY (MA3000)

Prerequisites: See Honors Program Recommendations

This is an accelerated course in geometry with an emphasis on deductive reasoning. Topics include angles, parallel and perpendicular lines, congruent and similar triangles, circles, coordinate geometry, transformations, right triangle trigonometry, advanced constructions, polyhedral, applications of area and volumes, using algebra skills, using graphical representations of data, and the introduction of other geometries. Notes: The grade for this course is weighted. This course is strongly recommended for those students who may consider Advanced Placement courses.





1.0 credit

1.0 credit

1.0 credit

1.0 credit





# ADVANCED GEOMETRY (MA3001) Liberty Only

This course is designed to get students honors-ready. Topics will be the same as Honors Geometry, but with more supports and a focus on filling in foundational knowledge. Students will start the course with less independence, but will work toward an honors level of independence by the end of the course.

Topics include angles, parallel and perpendicular lines, congruent and similar triangles, circles, coordinate geometry, transformations, right triangle trigonometry, advanced constructions, polyhedral, applications of area and volumes, and the introduction of other geometries.

### STANDARDS GEOMETRY (MA3003)

HONORS PRECALCULUS (MA4000)

GEOMETRY (MA3002)

This course is designed for 10<sup>a</sup> and 11<sup>a</sup> grade students who have successfully completed Algebra 1A and 1B. Topics in this course include: ratio and proportion, right triangle trig and the Pythagorean Theorem, solving algebraic equations and formulas, taking surveys, graphing, parallel lines and angles, and standard deviation.

Prerequisites: See Honors Program Recommendations

This accelerated course incorporates topics from both trigonometry and advanced algebra with a heavy emphasis on modern technology. Topics include the graphing and algebra of functions polynomial, rational, trigonometric, exponential and logarithmic equations, trigonometry of triangles, trigonometric equations and identities, polar coordinates and complex numbers, conic sections, matrix algebra, sequences and series, probability and limits, and an introduction of calculus. **Notes:** The grade for this course is weighted. This course is strongly recommended for those students who may consider Advanced Placement courses.

### PRECALCULUS (MA4002)

Topics include the graphing and algebra of polynomial, rational, trigonometric, exponential and logarithmic equations, trigonometry of triangles, trigonometric equations and identities, polar coordinates and complex numbers, conic sections, matrix algebra, sequences and series, probability and limits, and an introduction of calculus.

AP STATISTICS (MA5030)

Prerequisites: See Honors Program Recommendations

Topics covered will consist of major concepts and tools that are used in collecting, analyzing, and drawing conclusions from data. Topics will include concepts such as exploratory data analysis, fundamentals of designing a study, probability models, and inferential statistics. This course will also illustrate how statistics is used in a variety of fields. Graphing calculators (TI-83 or TI-89) with statistical capabilities will be used. Students are encouraged to take the Advanced Placement Examination. **Note:** The grade for this course is weighted.







1.0 credit

laohro 1A

1.0 credit

1.0 credit

1.0 credit

1.0 credit

## STATISTICS (MA4022)

CALCULUS (MA4012)

This course strikes a balance between statistical computation, decision-making and the conceptual understanding of statistics so that students can make informed "real world" decisions. Topics will include analysis of single variable and bivariate data, probability, distributions (probability, normal and Poisson), inferential statistics and hypothesis testing.

Prerequisites: See Honors Program Recommendations

Calculus is the mathematics of change and motion and rests upon the fundamental concept of limit. This college level course contains polynomial, trigonometric, exponential and logarithmic functions; limits and continuity; the derivative; application of the derivative; the integral; applications of the integral; and the fundamentals of analytic geometry. Emphasis is on both algebraic and graphical approaches. Students are encouraged to take the Advanced Placement Examination. Notes: The grade for this course is weighted. A graphing calculator is recommended.

Calculus is the mathematics of change and motion and rests upon the fundamental concept of limit. This course contains polynomial, exponential and logarithmic functions; limits and continuity; the derivative; application of the derivative; the integral; applications of the integral; and the fundamentals of analytic geometry.

### **COLLEGE MATHEMATICS (MA4032)**

Students will complete mathematics coursework to prepare for the transition from BASD to college. Students will use both real and complex numbers to explore the following topics: solving linear, polynomial, ratios, absolute value, and radical equations, inequalities, graphing functions, problem solving, solving systems of linear equations, operations using and simplifying exponents, factoring polynomials, simplifying rational and radical expressions. Successful completion of the course competencies will satisfy a Northampton Community College remedial mathematics course. Note: Placement test will be given in May of junior year.

PERSONAL FINANCE (MA4042)

This course will develop mastery of mathematical skills as they apply to real life situations. The students will be taught to think critically and apply today's technology while studying topics from probability, consumerism, taxes, investment, credit and budgeting. Included in the course will be statistics in one or two variables and data analysis. Optional topics will include selected topics from discrete mathematics.



1.0 credit

1.0 credit

10 credit

1.0 credit

1.0 credit

AP CALCULUS (MA5000)

### MATHEMATICS ELECTIVES

### **ACADEMIC MATHEMATICS (MA9004)**

Academic Mathematics is a one-semester course that prepares students to successfully meet the academic demands of high school curricula. This course provides students with multiple opportunities to practice and master mathematical concepts and study skills across content areas. Special emphasis is placed on the development of concepts, skills and techniques for use with variables, formulas, the real number system, linear equations, inequalities, the graphs of relations and functions, probability, and data analysis.

### **AP CALCULUS AB EXTENSION (MA5010)**

This course is a review of Calculus topics and a formal preparation for the AB Advanced Placement Examination in Calculus.

### **AP CALCULUS BC EXTENSION (MA5020)**

This course serves a dual purpose: the additional Calculus topics of polar coordinates, vector analysis and series as well as the formal preparation for the BC Advanced Placement Examination in Calculus.

### SAT/ACT MATHEMATICS (MA9009)

SAT/ACT Math preparation is general review of mathematics preparing the students to take the SAT and/or ACT. It is a review of arithmetic, geometry, algebra, and statistics.

0.5 credit

0.5 credit

1.0 credit

0.5 credit





### SCIENCE

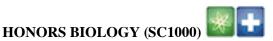
The BASD science departments' courses are designed to develop conceptual understandings of scientific laws, theories, and principles in order for students to be knowledgeable about the natural world. Through diverse course offerings, the science departments provide students with the knowledge and skills base needed to meet the PA Academic Standards in the following areas:

- Unifying Themes of Science
- Inquiry and Design
- Biological Sciences
- Physical Science, Chemistry, and Physics
- Science, Technology and Human Endeavors
- Earth Sciences
- Environment and Ecology

Students are required to take a total of 7.0 Math and Science credit, a minimum of 3.0 credits in Science. Please review the recommended course sequence below. To meet the PA Academic Standards, each student should successfully complete a minimum of one credit of Biology, one credit of Chemistry or one credit of Physics, and one science elective credit. Upon completion of the required courses, students will find a multitude of diverse and challenging courses to prepare them for further education beyond high school. Please note that many of the upper level courses have course prerequisites.

Science Recommended Course Sequence					
Grade 9 Required	Grade 10 Required with Choice of	Grade 11 Required with Choice of	Grade 12 Choice of		
Honors Biology Advanced Biology*	Honors Chemistry Advanced Chemistry*	Other Science Electives	Other Science Electives		
Biology	Chemistry Conceptual Chemistry	Honors Human Anatomy Human Anatomy	Project Lead the Way		
		AP Physics 1	Honors Human Anatomy		
*Students will be prepared	OR	AP Physics 2	Human Anatomy		
to pass the Keystone		AP Physics C	AP Physics 1		
Biology Exam	AP Physics 1	AP Biology	AP Physics 2		
	Physics	AP Chemistry	AP Physics C		
	Conceptual Physics	AP Environmental Science	AP Biology		
			AP Chemistry		
			AP Environmental Science		

\*Liberty only



1.0 credit

Prerequisite: See Honors Program Requirements

Honors Biology is a course designed for the college preparatory student who is exceptional, highly motivated, and capable of independent study. Laboratory experiences and techniques are emphasized to enhance learning and to improve skills. Some topics in the laboratory-oriented program are cytology, biochemistry, molecular biology, microbiology, genetics, botany, zoology, evolution, and ecology. **Notes:** A required fetal pig dissection will take place. The grade for this course is weighted. This course is strongly recommended for those students who may consider Advanced Placement courses.

# ADVANCED BIOLOGY (SC1001) Eiberty only

Advanced Academic Biology is a course designed for the college preparatory student who is highly motivated and eager to be challenged. Laboratory experiences and techniques are emphasized to enhance learning and to improve skills. Some topics in the laboratory-oriented program are cytology, biochemistry, molecular biology, microbiology, genetics, botany, zoology, evolution, and ecology. Students will analyze concepts through both student-directed and teacher directed lessons. Teachers will have high expectations for students; however, also provide high supports to scaffold their learning.

BIOLOGY (SC1002)

Biology is a course designed for the college preparatory student. The topics in the course, cytology, microbiology, evolution, genetics, DNA, botany, zoology, and ecology, are designed to expose students to the biological principles that bind all life on earth together and to acquaint them with laboratory techniques and tools.

HONORS CHEMISTRY (SC2000) 1.0 credit Prerequisites: See Honors Program Requirements and Successful completion of Algebra 1

Honors Chemistry is a rigorous and challenging course designed to give students knowledge of the broad concepts and models upon which chemistry operates. There is a heavy emphasis on the integration of algebra and geometry with the abstract concepts of chemistry. Among the concepts to be stressed are: chemical formulas, stoichiometry, atomic structure, chemical bonds and molecular geometry, periodicity, quantum mechanics, solutions and thermochemistry. Extensive qualitative and quantitative laboratory work is required. Notes: The grade for this course is weighted. This course is strongly recommended for those students who may consider Advanced Placement courses or plan on taking the SAT II in Chemistry.

# ADVANCED CHEMISTRY (SC2001)

Advanced Academic Chemistry is a challenging course designed to give students knowledge of the broad concepts and models upon which chemistry operates. There will be an algebra emphasis in this course. Among the concepts to be stressed are: chemical formulas, stoichiometry, atomic structure, chemical bonds and molecular geometry, periodicity, quantum mechanics, solutions and/or thermochemistry. Some qualitative and quantitative laboratory work is required. Students will analyze and begin to synthesize concepts through both teacher-facilitated and student-directed activities.

CHEMISTRY (SC2002) Prerequisites: Successful completion of Algebra 1

Chemistry is a course designed to give the college-bound student knowledge of the broad concepts and models upon which chemistry operates. After successful completion of Biology and Algebra 1, chemistry students will study topics including chemical formulas, reactions, basic atomic structure, properties of matter, and the mathematics of chemistry. Qualitative and quantitative laboratory work is included.

### **CONCEPTUAL CHEMISTRY (SC2003)**

This course introduces the basic concepts of chemistry and their application in the everyday world. There is a reduced emphasis on the quantitative aspect of science but focuses on qualitative and descriptive chemistry as well as the practical use of chemistry in our daily lives. Students will be expected to relate and use learned concepts in class through lab experiences, projects, tests and common applications.











1.0 credit

1.0 credit

1.0 credit

1.0 credit







AP Physics 2 is an Algebra 2-based (as opposed to calculus based) course, which is equivalent to a second semester college course in physics. This course covers fluid mechanics; thermodynamics; electricity and magnetism; optics; atomic and nuclear physics. Students are required to apply these principles in problem solving techniques. Note: The grade for this course is weighted. Students are encouraged to take the advanced placement examination for AP Physics 2.

AP PHYSICS 1 (SC5000) Prerequisites: Successful Completion of Algebra 2

AP Physics 1 is an Algebra 2-based (as opposed to calculus based) course, which is equivalent to a first semester college course in physics. This course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound. It also introduces electric circuits. Students are required to apply these principles in problem solving techniques. Note: The grade for this course is weighted. Students are encouraged to take the advanced placement examination for AP Physics 1.

Physics is a study of mechanics, forces, heat, electricity, sound and/or light / optics. After successful completion of Chemistry and Algebra 2 the students will be prepared for this rigorous college preparatory course. This is a course providing an excellent background for a college-bound student aiming at a non-technical major. Sufficient mathematical applications are provided so that students will be prepared for college physics and physical science courses.

### **CONCEPTUAL PHYSICS (SC3003)**

Prerequisite: Successful Completion of Algebra 2

PHYSICS (SC3002)

Physics will be presented at a hands-on concrete level emphasizing the physical laws without the mathematical rigor but challenging reasoning and critical thinking skills. This physics course covers mechanics, properties of matter, heat, sound, and light.



1.0 credit

1.0 credit

1.0 credit

# 36

### SCIENCE ELECTIVES

1.5 credits (27 weeks) Prerequisites: See Honors Program Requirements; successful completion of Honors Biology is highly recommended; Successful completion of Honors Chemistry is highly recommended

The Advanced Placement Biology course is designed to be the equivalent of a college introductory biology course. It aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. Students are challenged with new ideas and greater detail in the eight major themes of biology: evolution, energy transfer, continuity and change, relationship of structure and function, regulation, interdependence in nature, science as process, and science, technology, and society. Major units include biochemistry, cellular biology, energy, genetics, molecular genetics, evolution, anatomy and physiology, plant and animal diversity, and ecology. Laboratory skills, including dissection, are developed and reinforced through the AP labs. Notes: The grade for this course is weighted. Students are strongly encouraged to take the AP College Board exam in May.

AP CHEMISTRY (SC5040) 1.5 credits (27 weeks) Prerequisite: Successful completion of Chemistry is required, preferably Honors Chemistry.

The AP Chemistry course is designed to be the equivalent of a college introductory chemistry course. Students will complete experiments and problems designed to prepare them for taking standardized chemistry tests such as the Advanced Placement Chemistry Exam and SAT II Chemistry exam. Basic concepts of nomenclature, mole relationships and stoichiometry are reviewed to help provide background for lab experiments performed. In depth studies include: analytical chemistry techniques, solutions, equilibria, thermochemistry, kinetics, electrochemistry, materials science, organic chemistry and biochemistry. Notes: The grade for this course is weighted. Students are strongly encouraged to take the AP College Board exam in May.

### **AP PHYSICS C: ELECTRICITY & MAGNETISM (SC5030)**

Prerequisites: See Honors Program Requirements; Successful completion of AP Physics 1; Successful completion or concurrent enrollment in Precalculus; Offered at Liberty High School

AP Physics C- Electricity & Magnetism is a calculus-based course equivalent to the pre-engineering introductory Physics course for university students. This course is designed in accordance with the College Board guidelines. The emphasis of this course is on the understanding of the fundamental principles of electricity and magnetism using analytical problem solving skills and engaging students in laboratory work. Differential and Integral Calculus is used throughout the course. Each student will keep a laboratory notebook or save all lab reports in a portfolio. Note: The grade for this course is weighted. Students are strongly encouraged to take the AP College Board exam in May.

# **AP PHYSICS C: MECHANICS (SC5020)**

Prerequisites: See Honors Program Requirements; Successful completion of AP Physics 1; Successful completion or concurrent enrollment in Precalculus; Offered at Freedom High School

AP Physics C – Mechanics will improve student's skills by stressing the use of fundamental modeling in classical mechanics, increasing their analytical skills, and using hands-on laboratory investigations. Differential and Integral calculus is used throughout the course. Students will be required to keep a detailed lab book. Each student will be required to keep a detailed notebook. Note: The grade for this course is weighted. Students are strongly encouraged to take the AP College Board exam in May.

### AP BIOLOGY (SC5050)



1.0 credit

1.5 credits (27 weeks)

# 37

# 1.5 credits (27 weeks)

Prerequisites: Successful completion of Honors Biology and Honors Chemistry is highly recommended

The goal of the AP Environmental Science Course is 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 solutions for resolving and/or preventing them. This course is designed to be the equivalent of a one-semester, introductory college course in Environmental Science. Students are encouraged to take the AP Environmental Science test offered by College Board in the spring. Note: The grade for this course is weighted. Students are strongly encouraged to take the AP College Board exam in May.

# ENVIRONMENTAL SCIENCE (SC9009)

Prerequisite: Successful completion of Biology

AP ENVIRONMENTAL SCIENCE (SC5060)

The goal of the Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. Students will also identify and analyze environmental issues both natural and human-made. The students will be exposed to a variety of environmental testing techniques to help understand the strategies involved in solving environmental problems. Topics may include: ecology, water, soils, pollution, and populations.

# PENNSYLVANIA WILDLIFE CSI (SC9039)

Pennsylvania Wildlife CSI is a course for third year science students and will provide a detailed study of the ecology of Pennsylvania including wildlife, aquatics, and forestry. The emphasis will then be on using this information to solve a variety of crimes based on biological clues taken from the scene. Forensic skills utilized will be microscopy fiber analysis, trace evidence study, forensic entomology, forensic botany, fingerprint identification, and other evidence. Most of the work will be done on simulated crime scenes based on real life cases.

## HONORS HUMAN ANATOMY AND PHYSIOLOGY (SC9000)

Prerequisites: See Honors Program Requirements and successful completion of biology and completion of or concurrent enrollment in Chemistry

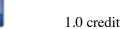
Honors Human Anatomy and Physiology is designed for the highly motivated college preparatory student who may be planning further study in the natural sciences or in the allied health fields or simply would like to understand their own bodies better. This course will emphasize, in detail, metabolism, histology, support, movement, communication, control, and integration. Instructional methods include but are not limited to: lecture and discussion, report writing, computeraided instruction, handling human skeletons, and multiple in depth dissections. Notes: The grade for this course is weighted. This course is strongly recommended for those students who may consider Advanced Placement courses.

# HUMAN ANATOMY AND PHYSIOLOGY (SC9002)

1.0 credit Prerequisite: Successful completion of Biology and completion of or concurrent enrollment in Chemistry

Human Anatomy and Physiology is a course designed for the college preparatory student who has successfully completed Biology and Chemistry and who is interested in careers in the allied health fields, or any student that has a strong interest in the structure and function of the human body. This course will cover: anatomical and physiological terminology, basic biochemistry, cytology, histology, the skeletal system, the muscular system, and the nervous system. Instructional methods include but are not limited to: lecture and discussion, computer-aided instruction, handling human skeletons, and multiple in depth dissections.

Offered at Liberty High School 1.0 credit







# EARTH AND SPACE SCIENCE (SC9119)

Earth and Space Science will provide a student with a brief overview of the primary disciplines comprising Earth and Space Science. Approximately six weeks will be spent on each of the following areas: oceanography, geology, cartography and meteorology. It will also emphasize student awareness of the relationships between the various disciplines of Earth and Space Science.

# ASTRONOMY 1 (SC9129)



Astronomy 1 is a non-mathematical course in which the student will study the solar system, the earth, and the earth's immediate space environment. The history of astronomy, the space race, eclipses, the planets, physical laws governing the universe, the measurement of time, and theories regarding the origin of the solar system and universe will be considered.

# ASTRONOMY 2 (SC9139)



Offered at Freedom High School

Astronomy 2 is a course intended to continue the study of Astronomy using Starry Night Software and the Planetarium. This course is intended to introduce the student to other topics in astronomy that include the solar system and moons and planets, asteroids, Comets and meteors, near earth objects, galaxies and our milky way galaxy, black holes, Creation of the universe, and other advanced topics in astronomy.

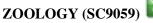
**METEOROLOGY** (SC9149) Offered at Freedom High School

This course will provide students with an overview of meteorology. The students will investigate the forces that determine weather patterns both locally and globally. Topics will include the formation, movement, and interactions of air masses. Severe weather disturbances such as thunderstorms, tornadoes, and hurricanes will also be discussed. The class will wrap up with a cumulative weather map forecasting project designed to incorporate much of the course content.

## GEOLOGY (SC9159)

Offered at Liberty High School

Geology is the study of the materials of which the earth is composed and the geologic processes taking place within the earth and on its surface. The third year student will study topics including minerals, weathering, erosion, and plate tectonics, earthquakes, volcanoes, and mass wasting.



0.5 credit

0.5 credit

This course explores zoology and issues dealing with ecology, evolution, comparative anatomy and biotechnology. This course is designed for college prep students who have completed Biology and are self-motivated and interested in broadening their knowledge of the biological sciences. Students will have the opportunity to enhance laboratory and research skills in groups and independent explorations.



38

0.5 credit

0.5 credit

# HUMAN FORENSICS (SC9079)

As a 9-week course, Human Forensics will introduce criminalistics and forensics, including such topics as: fingerprints; impressions (footprints, bite marks, tool marks, tire marks, and firearms), document analysis, analysis of human (including skeletal) remains, and evidence from blood and other bodily fluids. The course includes case studies and examination of reproduced evidence from actual crimes as well as laboratory analysis of evidence gathered at simulated crime scenes.

GENETICS (SC9089)

Prerequisite: Successful completion of Biology

This course will expand upon what is learned about genetics in Honors Biology or Biology. Students will explore the principles of heredity at an advanced level using multiple model organisms. Human inheritance will be explored focusing on human behavior and disorders. Emphasis will be placed on statistical analysis of data in laboratory experiments, as well as reading scientific literature. At least one formal lab report is required. This course can be taken along with the Biotechnology elective for a full semester course.

### **BIOTECHNOLOGY (SC9099)**

Prerequisite: Successful completion of Biology

This course will focus on answering three questions: How does our understanding of human heredity and genetics allow us to investigate and manipulate cellular function? How can we use these techniques to impact and advance human society? How can the scientific community ethically monitor its use of this technology? Students will enhance their understanding of inheritance and gene expression as they expand upon the foundational knowledge learned in the introductory biology course. The majority of class time will be spent in the laboratory setting, where students will be actively engaged in learning various biotech techniques such as DNA extraction, microbial culturing, quantitative protein analysis, polymerase chain reaction, bacterial transformation, and gel electrophoresis. A written component of this course requires students to write detailed lab report summaries, as well as summarize and evaluate at least one scientific journal article. This course can be taken along with the Genetics elective for a full semester course.

# HUMAN GROWTH AND DEVELOPMENT (SC9069)

Offered at Liberty High School

This course focuses on the basic structure and function of the human reproductive system. The physiology of gametogenesis, fertilization, contraception, gestation, parturition, lactation, and reproductive behavior will be discussed. Fetal development and the process of delivery will be studied in relation to pregnancy and birth.

# FORENSIC ORGANIC CHEMISTRY (SC9109)

Prerequisite: Successful completion of Chemistry

Forensic Organic Chemistry includes such topics such as organic structures and simple nomenclature, properties of organic chemicals; investigation of arson and bomb evidence; and analysis of physical evidence such as ink, paint, fibers, and lipstick; and drug and toxicology screens. The course will include case studies and examination of reproduced evidence from actual crimes as well as laboratory analysis of evidence gathered at simulated crime scenes. Note: This course does not take the place of regular chemistry.

39

0.5 credit

0.5 credit









0.5 credit

0.5 credit

## MATERIAL SCIENCE: METALS AND SOLIDS (SC9189)

Materials Science is the study of "stuff." It involves designing, choosing, and using two major classes of materials — metals and solids. The course is lab and project-based with intensive hands-on experiences. Investigations include growth of crystals, corrosion, making alloys, rolling a coin, drawing a wire, tin-lead soldering, science of chocolate, and more. This course is perfect for the student who is interested in an engineering and STEM career pathway. Evaluation is based on journaling, homework, projects, lab reports, lab practicals, and quizzes.

# **MATERIAL SCIENCE: CERAMICS (SC9199)**

Materials Science is the study of "stuff." It involves designing, choosing, and using three major classes of materials ceramics, polymers, and composites. The course is lab and project-based with intensive hands-on experiences. Investigations include stained glass, Raku pottery, polymer identification, making Nylon and Latex, concrete, and more. This course is perfect for the student who is interested in an engineering and STEM career pathway. Evaluation is based on journaling, homework, projects, lab reports, lab practicals, and quizzes.

0.5 credit

## Project Lead the Way (PLTW) National High School Engineering Curriculum

The PLTW curriculum, when combined with traditional mathematics and science courses in high school, introduces students to the scope, rigor and discipline of engineering prior to entering college. Throughout PLTW, students learn and apply the design process, acquire strong teamwork and communication proficiency and develop organizational, critical thinking and problem-solving skills. Along the way, students investigate a variety of careers in STEM fields. Students who complete the course and the national exam with high achievement are eligible to receive college credits from various colleges for a fee.

PLTW Engineering Course Sequence:

- Introduction to Engineering Design
- Principles of Engineering
- PLTW Civil Engineering and Architecture and/or Environmental Sustainability
- Engineering Design and Development (Capstone Project)

# **INTRODUCTION TO ENGINEERING DESIGN (PLTW01)**

Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3-D modeling software, and use an engineering notebook to document their work. Note: Completion of Algebra 1 recommended.

# **PRINCIPLES OF ENGINEERING (PLTW02)**

Prerequisite: Introduction to Engineering Design

Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation.

# CIVIL ENGINEERING AND ARCHITECTURE (PLTW04)

Prerequisite: Introduction to Engineering Design, Principles of Engineering; Offered at Liberty High School

Students learn important aspects of building and site design and development. They apply math, science, and standard engineering practices to design both residential and commercial projects and document their work using 3D architecture design software. Note: The grade for this course is weighted.

## ENVIRONMENTAL SUSTAINABILITY (PLTW08)

Prerequisite: Introduction to Engineering Design, Principles of Engineering; Offered at Freedom High School

Students investigate and design solutions in response to real-world challenges related to clean and abundant drinking water, food supply issues, and renewable energy. Students research and design potential solutions to these true-to-life challenges through hands-on activities and simulations. Note: The grade for this course is weighted.

### PLTW ENGINEERING DEVELOPMENT AND DESIGN (PLTW09)

Prerequisite: Introduction to Engineering Design, Principles of Engineering, Environmental Sustainability or Civil *Engineering and Architecture* 

The knowledge and skills students acquire throughout PLTW Engineering come together in EDD as students identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of practicing engineers. Students apply the professional skills they have developed to document a design process, and they complete EDD ready to take on any post-secondary program or career. Note: The grade for this course is weighted.

# 1.0 credit

1.0 credit

1.0 credit

1.0 credit









### Project Lead the Way (PLTW) National High School Biomedical Science Curriculum

The rigorous and relevant four-course PLTW Biomedical Science sequence allows students to investigate the roles of biomedical professionals as they study the concepts of human medicine, physiology, genetics, microbiology, and public health. Students engage in activities like investigating the death of a fictional person to learn content in the context of realworld cases. They examine the structures and interactions of human body systems and explore the prevention, diagnosis, and treatment of disease, all while working collaboratively to understand and design solutions to the most pressing health challenges of today and the future. Each course in the Biomedical Science sequence builds on the skills and knowledge students gain in the preceding courses. Schools offer the three PLTW Biomedical Science foundation courses within a period of three academic years and may also offer the capstone course.

PLTW Biomedical Studies Course Sequence:

- Principles of Biomedical Science
- Human Body Systems
- Medical Interventions
- Biomedical Innovation (Capstone Project)

# PRINCIPLES OF BIOMEDICAL SCIENCE (PLTW11)

In the introductory course of the PLTW Biomedical Science program, students explore concepts of biology and medicine to determine factors that led to the death of a fictional person. While investigating the case, students examine autopsy reports, investigate medical history, and explore medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, basic biology, medicine, and research processes while allowing them to design their own experiments to solve problems.

# HUMAN BODY SYSTEMS (PLTW12)

Prerequisite: Principles of Biomedical Science

Students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis. Exploring science in action, students build organs and tissues on a skeletal Maniken®; use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration; and take on the roles of biomedical professionals to solve real-world medical cases.

# PLTW MEDICAL INTERVENTION (PLTW13)

Prerequisite: PLTW Principles of Biomedical Science and PLTW Human Body Systems

Students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through cases, students learn about a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics. Notes: The grade for this course is weighted. Note: The grade for this course is weighted.

# PLTW BIOMEDICAL INNOVATION (PLTW14)

Prerequisite: PLTW Principles of Biomedical, PLTW Human Body Systems, and PLTW Medical Interventions

In the final course of the PLTW Biomedical Science sequence, students build on the knowledge and skills gained from previous courses to design innovative solutions for the most pressing health challenges of the 21st century. Students address topics ranging from public health and biomedical engineering to clinical medicine and physiology. They have the opportunity to work on an independent project with a mentor or advisor from a university, medical facility, or research institution. Note: The grade for this course is weighted.

## 1.0 credit

1.0 credit

1.0 credit





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# ENGLISH FOR SPEAKERS OF OTHER LANGUAGES

All students grade 9-12 identified as English Learners as classified by language assessments take classes within the English Acquisition Program. This program will increase the English language proficiency of eligible students so that they can attain the academic standards adopted by the Board and achieve academic success. The goal of the classes is to prepare students to be mainstreamed into general education classes.

	Language Development 1		
	Algebra 1A / Algebra 1		
Level 1 (Entering)	Geography & World Cultures		
	Science Concepts / Earth & Space Science		
	Language Development 2		
	Algebra 1A / Algebra 1		
Level 2 (Emerging)	Civics		
	Science Concepts		
	Introduction to Health & Fitness		
	Language Development 3		
Level 3 (Developing)	Survey of History		
	Biology		
	Language Development 4		
Level 4 (Expanding)	Language and Literature 1		
	Language and Literature 2		

# LANGUAGE DEVELOPMENT 1 (WI9101)

The course is designed to develop a foundation in English literacy skills through focused instruction and repetition ensuring mastery of concepts and strategies. An emphasis is placed on social and instructional language development, as well as, academic vocabulary.

# LANGUAGE DEVELOPMENT 2 (WI9112)

This course is a continuation of Language Development 1. The course is designed to develop the students' oral/aural language skills, as well as, literacy skills that will enable the student to be successful in mainstream content area classes. An emphasis is placed on introducing the students' academic vocabulary in order to prepare them to be mainstreamed into academic classes.

# LANGUAGE DEVELOPMENT 3 (WI9123)

This course is a continuation of Language Development 2. The class is designed to give the students greater linguistic competencies by working with complex grammatical structures, involving the students in literature and continuing to develop the writing process. The students are required to fully participate in discussions pertaining to literary selections read by the class. A great emphasis is placed on broadening the students' active vocabulary in order to prepare them to be mainstreamed into academic classes.

# LANGUAGE DEVELOPMENT 4 (WI9134)

This course is a continuation of Language Development 3. The class is designed to give the students greater linguistic competencies by working with complex grammatical structures, involving the students in literature and continuing to develop the writing process. The students are required to fully participate in discussions pertaining to literary selections read by the class. A great emphasis is placed on broadening the students' active vocabulary in order to prepare them to be mainstreamed into academic classes.

2.0 credits

2.0 credits

2.0 credits

# LANGUAGE AND LITERATURE 1 (WI9149)

This course further develops the English Learner's skills in academic reading, writing, and oral/aural communication. Literature selections parallel those used in the mainstream ELA classes. This course prepares students for continuation of higher education upon graduation.

# LANGUAGE AND LITERATURE 2 (WI9159)

This extension course is for those students who have completed the Language Development 4 class and remain at the advanced level of English development. Students will continue to improve reading and writing skills necessary for success in content area courses.

# ACADEMIC LITERACY 1 (WI9009)(WI9019)

Reading level assessed using the Scholastic Reading Inventory (SRI) and the Scholastic Phonics Inventory (SPI) This course focuses on improving phonemic awareness and reading comprehension skills, accompanied by vocabulary study and writing skills, which are needed to be successful in academic areas. The SYSTEM 44 program will be used as the main reading component of this course.

# ACADEMIC LITERACY 2 (WI9029)(WI9039)

Prerequisites: Reading level assessed using the Scholastic Reading Inventory (SRI)

This course focuses on improving reading comprehension skills, accompanied by vocabulary study and writing skills required to be more successful in academic areas. The READ 180 program will be used as the main reading component of this course.

# BUSINESS CO-OP (WI9629)

In this yearlong course, students will explore their passions, talents, and goals and investigate career clusters. Students will identify possible career opportunities. Students are given a business background and communications skills needed to explore, experience and communicate about a variety of business careers. This is a full year educational program in which the students conduct fieldwork with community partners.

### HOSPITAL AND HEALTH CO-OP (WI9619)

Prerequisites: Submission and acceptance of application

This Hospital and Health Exploration course integrates science and an intermediate level of English with hospital careers exploration at St. Luke's Hospital. Students are given the scientific background and communications skills needed to explore, experience and communicate about a variety of vital health careers. This is a full year educational program in which the students spend two mornings a week at the hospital experiencing different career opportunities in the health field.

- **HOSPITAL SCIENCE (WI9609)** •
- LANGUAGE AND LITERATURE Workplace Experience (WI9169) • \*Both courses must be taken in conjunction with Hospital and Health CO-OP

# **GEOGRAPHY AND WORLD CULTURES (WI9401)**

This course is designed for Language Development 1 students. Students will develop an awareness of how the interactions of geography, belief systems, politics and economics have helped shape world history. Emphasis is placed on language form and function in the content area.

Grades 10-12 1.75 credit Grades 10-12 1.75 credit

1.0 or 2.0 credits





1.0 credit

1.0 credit

1.0 or 2.0 credits

2.0 credits

0.5 credit

# CIVICS (WI9412)

This course is a survey of United States History, highlighting the American political system. Emphasis is placed on content academic vocabulary, literacy, geography, citizenship, and study skills. This course will acquaint the student with the Constitution as the foundation of the American political system.

## SURVEY OF US HISTORY (WI9423)

This Survey of History course is geared for the student who is seeking entry into an academic history program during the following year. This course provides a general survey of United States history from Reconstruction to Modern Day. This course will acquaint the students with the basic premises upon which the U.S. was founded and enable them to have a better understanding of the American political system.

# EARTH AND SPACE SCIENCE (WI9301)

Earth and Space Science will give Language Development 1 students a brief overview of the primary disciplines comprising Earth and Space Science. Approximately six weeks will be spent on each of the following areas: oceanography, geology, cartography and meteorology. The scientific method will be introduced and utilized to prepare students for continued study in the sciences. Emphasis will be placed on academic vocabulary and English language form and function.

## **SCIENCE CONCEPTS (WI9312)**

This course will focus on selected science concepts that relate to the students' lives and meet the needs of English Learners. Possible topics to be covered include: the scientific method, the needs of living things, types and structure of plants, an introduction to insects and an introduction to ecology.

### BIOLOGY (WI9329) \*Science

This course is designed to prepare English learners for a college preparatory course of study in the mainstream classes and for the continuation of higher education upon graduation. The topics in the course; cytology, microbiology, evolution, genetics, DNA, botany, zoology, and ecology are designed to expose students to biological principles that bind all life on earth together and to acquaint them with laboratory techniques and tools.

### ALGEBRA 1A (WI9209) \*Math

This course contains necessary accommodations for English Acquisition students and topics in this course include: exploring and communicating mathematics, using measures and equations, representing data, coordinates and functions, and equations for problem solving. The Scholastic Math 180 course 2 will be used in this course.

### ALGEBRA 1 (WI9219) \*Math

This course is designed for students who have successfully completed Algebra 1A for English Learners and contains necessary accommodations for English Acquisition students. Topics in this course include: ratios, probability and similarity, direct variation, linear equations, Pythagorean Theorem, and an introduction to quadratic equations.

## INTRODUCTION TO HEALTH/FITNESS (WI9509) \*Health and PE

The course is designed for students who are newly arrived to BASD high schools. Coursework will be adapted to meet the language and learning levels of the students while maintaining the same academic standards of the curriculum.

1.0 credit

1.0 credit

1.0 credit

1.0 credit

0.5 credits





1.0 credit

1.0 credit

### WORLD LANGUAGE

The World Language Department encourages the completion of at least three years of a language at the high school level. The department further recommends the completion of both the Honors Level 4 and the AP course for those students who wish to perform at an extremely high level in preparation for college and/or a career in which knowledge of a second or third language is beneficial. It is the department's belief that multilingual students can best navigate and respond to the demands of an ever-developing global community. To this end, courses are designed to enable students to communicate effectively in the target language while increasing the students' appreciation of the cultural perspectives, practices, and products of different cultures. Students are advised to review the requirements of their particular Program of Studies before they select their language. Note: After completing the coursework for a given level of foreign language study, each student is required to pass a final exam or proficiency evaluation to ensure exit proficiency criteria have been met before moving to the next level of the foreign language

	World Language Recom	mended Course Sequence	
Grade 9	Grade 10	Grade 11	Grade 12
Level 1	Level 2 or Level 2 and 3	Level 3, Level 4, or Level Honors 4 or Level 4 or Level Honors 4	AP Language
Level 2	Level 3	Level 4 or Level Honors 4	AP Language
Heritage Spanish 1	Heritage Spanish 2	Heritage Spanish 3	AP Spanish

### FRENCH

### 1.0 credit

The student will be taught basic vocabulary and language patterns. The student will also learn introductory information about France, the French people and their culture. There will be an equal emphasis in this course on listening, speaking, reading, writing, and culture.

FRENCH 1 (FR1002)

The student will be taught additional vocabulary and language patterns that will enable the student to demonstrate emerging signs of spontaneity and flexibility. There will be an equal emphasis in this course on listening, speaking, reading, writing, and culture.

FRENCH 3 (FR3002)

Students will be taught additional vocabulary and language patterns. The students will be able to sustain short conversations. Moreover, the student will be able to satisfy basic speaking and listening survival needs. Additional information about France and French speaking countries will be introduced. There will be an equal emphasis in this course on listening, speaking, reading, writing, and culture.

1.0 credit



# FRENCH 4 (FR4002)

This course provides the student the opportunities to develop the foreign language skills of reading, writing, listening, and speaking. The student will be able to satisfy most routine travel and survival needs and some limited social demands. There will be equal emphasis in this course on listening, speaking, reading, writing, and culture.

## HONORS FRENCH 4 (FR4000)

This course provides the student the opportunities to develop the foreign language skills of reading, writing, listening, and speaking. The student will be able to satisfy most routine travel and survival needs and some limited social demands. Selections from French literature are also studied, and students will learn more information about French regions. There will be equal emphasis in this course on listening, speaking, reading, writing, and culture. Classes are conducted primarily in French. Notes: As an honors level course, the grade for this course is weighted. This course is strongly recommended for those students who may consider Advanced Placement courses.

Prerequisite: See Honors Program Requirements

AP French is a challenging course that is meant to be the equivalent of a freshman college course, and can earn college credit if the student is successful in passing a national test administered by the College Board. This course will be open to students who have successfully completed Level 4 French. This course uses a variety of authentic materials to practice reading, listening, writing, and speaking French at a high level of competency. At completion of the course, students may take either the AP French or CLEP French exams for college credit. Note: The grade for this course is weighted. Students are strongly encouraged to take the AP College Board exam in May.

**GERMAN** 

**GERMAN 1 (GE1002)** 

Basic vocabulary and language patterns are taught. Varied activities provide students with opportunities to practice and develop skills in the target language. Each unit includes some aspect of German Culture. There will be equal emphasis in this course on listening, speaking, reading, writing, and culture.

**GERMAN 2 (GE2002)** 

Students acquire additional vocabulary and language patterns. Students learn to discuss events in the past, present, and future. There will be equal emphasis in this course on listening, speaking, reading, writing, and culture.

The students will learn additional vocabulary and language patterns. There will be equal emphasis in this course on listening, speaking, reading, writing, and culture. Students are expected to master grammatical concepts that form the basis of the German language.

GERMAN 3 (GE3002)





1.0 credit

1.0 credit

1.0 credit

1.0 credit



1.0 credit

# GERMAN 4 (GE4002) 🔤 🎉 ∓

Students will learn additional vocabulary and language patterns and be able to sustain short conversations. There will be equal emphasis in this course on listening, speaking, reading, writing, and culture.

# HONORS GERMAN 4 (GE4000)

Students will learn additional vocabulary and language patterns and be able to sustain short conversations. There will be equal emphasis in this course on listening, speaking, reading, writing, and culture. A greater emphasis will be placed on mastery of grammatical concepts. Literature is also discussed in greater detail, and German is spoken regularly in class. Notes: As an honors level course, the grade for this course is weighted. This course is strongly recommended for those students who may consider Advanced Placement courses.

### AP GERMAN LANGUAGE (GE5000)

Prerequisite: See Honors Program Requirements

AP German is a challenging course that is meant to be the equivalent of a freshman college course, and can earn college credit if the student is successful in passing a national test administered by the College Board. This course will be open to students who have successfully completed Level 4 German. This course uses a variety of authentic materials to practice reading, listening, writing, and speaking German at a high level of competency. At the completion of course, students may take either the AP German or CLEP German exams for college credit. Students will also be fully prepared to take the SAT Subject Exam in German. Note: The grade for this course is weighted. Students are strongly encouraged to take the AP College Board exam in May.

**SPANISH** 

The student will learn functional vocabulary and language patterns to perform on a beginner communicative competence level concerning everyday topics such as greetings, likes/dislikes, activities, foods, and the school day. Basic grammatical structures are introduced, and introductory material on Latino culture will be presented. The skills of listening, speaking, reading, and writing will be developed.

SPANISH 2 (SP2002) 🔯 🎇 🕂

The student will learn additional vocabulary and language patterns to integrate and expand previously learned material. The student will begin to enhance their basic skills and proceed towards a more functional communicative level. Topics include family and celebrations, household chores and activities, clothing and shopping. More complex grammatical structures are explored. The inclusion of culture is an integral part of the course. The skills of listening, speaking, reading, and writing will continue to be developed, with an emphasis on building writing skills in the target language.

SPANISH 3 (SP3002) ざ 😻 📑

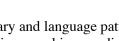
The student will learn additional information vocabulary and language patterns in order to participate in short exchanges; verbal and written expression. The student will begin to initiate and sustain basic communicative tasks on topics such as making purchases and ordering a meal. Additional cultural information will be presented. The skills of listening, speaking, reading, and writing will continue to be developed, with an emphasis on building speaking skills in the target language. Writing skills will focus more on individual expression and creativity.

# 1.0 credit

1.0 credit

1.0 credit







1.0 credit

1.0 credit

Students will learn additional vocabulary and language patterns in order to manipulate the target language to produce comprehensible utterances in the spoken and written word. The student will gain proficiency in the skill areas of listening, speaking, reading, and writing by utilizing situational topics and cultural material.

# HONORS SPANISH 4 (SP4000) 🌌 🎇 🛨

Students will learn additional vocabulary and language patterns in order to manipulate the target language to produce comprehensible statements in the spoken and written word. The grammar concepts of previous levels are reviewed and reinforced. Reading and writing skills are practiced at length, and functional ability is expected before students move on to the next level of the program. Classes are conducted primarily in Spanish. Note: The grade for this course is weighted. This course is strongly recommended for those students who may consider Advanced Placement courses.

# AP SPANISH LANGUAGE (SP5000)

Prerequisite: See Honors Program Requirements

AP Spanish is a challenging course that is meant to be the equivalent of a freshman college course, and can earn college credit if the student is successful in passing a national test administered by the College Board. This course will be open to students who have successfully completed Spanish 4 Honors, or who have completed 2-3 years of Native Speakers. This course uses a variety of authentic materials to practice reading, listening, writing, and speaking Spanish at a high level of competency. Students will focus on the presentational aspects required for the AP exam, as well as focusing on the mastery of listening, speaking, reading and writing skills. At completion of course students may elect to take either the AP Spanish or CLEP Spanish exams for college credit. Students will also be fully prepared to take the SAT Subject Exam in Spanish. Notes: The grade for this course is weighted. Students are strongly encouraged to take the AP College Board exam in May.

### HERITAGE SPANISH 1 (SP1012)

Prerequisites: Student must speak and understand spoken Spanish on a basic level and have the recommendation of his/her current Spanish teacher. The student does not need to be completely fluent in Spanish, and when speaking he/she may sometimes mix English and Spanish.

The focus of this course will be to teach heritage speakers to read and write Spanish, while developing and improving their speaking ability. The course will focus on building literacy skills while exploring the rich cultural heritage of the Spanish-speaking world. Students will receive instruction in more formal grammar and will develop proficiency in all the skill areas - listening, speaking, reading, and writing.

## HERITAGE SPANISH 2 (SP2012)

Prerequisites: Student must meet one of these requirements: (1) a grade of at least B- in a previous Spanish class with a teacher recommendation, (2) previous extensive study in a Spanish-speaking country, or (3) a successful interview with the instructor.

The primary focus of this course is to refine further the Spanish skills that many heritage students use in their daily lives. Students will continue to improve their reading skills, writing skills, and grammar usage through project based, thematic units, current events, and cultural/literary reading.





1.0 credit

1.0 credit

1.0 credit

1.0 credit





# HERITAGE SPANISH 3 (SP3012)

Prerequisites: Student must meet one of these requirements: (1) a grade of at least a B- in a previous Spanish class with a teacher recommendation, (2) previous extensive study in a Spanish-speaking country, or (3) a successful interview with the instructor.

The focus of this course is to offer advanced students a comprehensive grammar review and insight into Hispanic/Latino thought and culture. Students will use the language extensively in their writing, and students will read and discuss current events, excerpts of novels, and selected modern and classical works in order to increase their literacy in Spanish. Students who take Heritage 3 are encouraged to take AP Spanish upon successful completion of the course.

# AMERICAN SIGN LANGUAGE

# AMERICAN SIGN LANGUAGE 1 (AS1002)

This course will provide an introduction to the signed alphabet and basic sign language. New vocabulary and language patterns will be provided for expressive and receptive practice. Upon successful completion of this course, students will be able to communicate in a limited degree with the deaf and hard-of-hearing community using finger spelling and gesturing.

# AMERICAN SIGN LANGUAGE 2 (AS2002)

Students in this course further develop skills acquired in American Sign Language I and acquire new skills for communicating with members of the deaf community and with others who use American Sign Language.

## WORLD LANGUAGES INDEPENDENT STUDY (SP9009)

Prerequisites: Completion of AP French, AP German, or AP Spanish. This course requires the approvals of the teacher supervising the independent study and the department chairperson. PASS/FAIL

World Language Independent Study is for students who wish to continue their language study past the AP French, AP German, or AP Spanish. The course is literature based focused on reading novels and short stories in the target language. Students will also have the opportunity to maintain and improve their speaking and writing proficiency, as well as prepare for the CLEP and/or AP tests.

1.0 credit

1.0 credit

1.0 credit





## **BUSINESS AND TECHNOLOGY DEPARTMENT**

The Business and Technology department offers innovative and relevant courses that prepare students with skills necessary for success in today's competitive, evolving employment environment. Students are exposed to the dynamic world of business and computer science, and students learn to become contributing members of a global society. Students learn about marketing and promotion, accounting and finance, business law, and computer skills.

BASD aims to provide all students with a strong foundation in the core area of Computer Science, from the hardware/software interface up through systems software, programming languages, and the foundations of computing. Learning computer science empowers young people to compete in the global economy and pursue careers across all sectors because it teaches students computational thinking and problem-solving skills applicable in any industry. All students must complete a 0.5 credit graduation requirement in Computer Science. Computer Science core concepts include computer systems, networks and the internet, data and analysis, algorithms and programming, and impacts of computing. Computer Science core practices include fostering and inclusive computing culture, collaborating around computing, recognizing and defining computational problems, developing and using abstractions, creating computational artifacts, testing and refining computational artifacts, communicating about computing.

Students may satisfy the 0.5 credit Computer Science graduation requirement with one of the following courses:

- Introduction to Computer Science
- Computer Programming 1
- Computer Programming 2
- AP Computer Science Principles
- **BUSINESS**

AP Computer Science A

Web Page Design

**Computer Animation** 

This introductory course is designed to help students develop the basic skills necessary for double-entry accounting as well as obtain a basic understanding of a business's financial operation. The course covers the entire accounting cycle for a service business organized as a proprietorship and a merchandising partnership. Students will learn to use the general ledger, journals and subsidiary ledgers. Note: This course can be taken multiple times for advanced study of subject.

# PRINCIPLES OF BUSINESS (BU9009)

Students will learn basic business terminology and functions used in business. Topics include an overview of various aspects of world economies and the economic interdependency of countries. Included are a study of banking systems and the relationships of business to government, labor, and international trade. Preparation and exploration are included for further education as college business majors and /or for post-high school careers in the business community. Students experience many facets of the world of work through the use of guest speakers, field trips and simulations.

# **BUSINESS LAW (BU9119)**

Students will explore the history, career component and real-life application of business law. Areas of legal focus are civil, criminal, contract, landlord-tenant, employment, and consumer law. Through classroom discussion and the study of legal cases, students will strive to develop their own critical thinking process and make informed decisions as consumers and productive citizens. This course may utilize field trips and guest speakers as a means of exploring legal careers as it pertains to business. Students will exit the course having a better understanding of how business law pertains to everyday life, running their own business and make informed consumer decisions.

1.0 credit

Creating Apps for Phone, Pads, and Other Devices

1.0 credit



# **BUSINESS OF SPORTS (BU9109)**

This course will give an overview of the many career opportunities available in the sports industry. Sports Marketing is essential to the promotion of sports and the promotion of products through sports. The sports marketing basics and the importance of public images will be discussed in this class. This course will explore the different levels of sports: recreational, amateur, college, and professional and the importance of choosing the best target market. This course provides an overview of the different marketing techniques used at each level of sports.

### **ENTREPRENEURSHIP (BU9249)**

Entrepreneurship introduces the concept of business ownership and the risks inherent in starting, owning, and operating a business. Students are taught how to develop a business plan by learning to describe and analyze a business situation, prepare the organization and marketing section of a business plan, and prepare a financial plan for investors. Marketing research and its importance to business owners is also reviewed in this course and involves the systematic gathering, recording, and analysis of data related to the marketing of goods and services.

### **MANAGEMENT (BU9089)**

This course aims to provide the student with a foundation for critically thinking about organization, management and the leadership of people. This course is ideal for any student taking on leadership positions in high school. This course prepares those students who have an interest in leadership and managerial positions in community, social, governmental, professional, arts and business organizations.

# **PRINCIPLES OF MARKETING (BU9049)**

Principles of Marketing introduces students to the foundations of marketing. The course covers basic marketing concepts such as: product, place, price and promotion. Other topics to be explored are advertising and sales as well as distribution. The course is project-and-presentation oriented, with application projects designed to coincide with each concept studied. Careers in marketing are examined after each topic.

### **MARKETING MUSIKFEST (BU9069)**

Marketing Musikfest is a special course that brings into partnership the Bethlehem Area School District and ArtsQuest. The course will be real-life exploration of marketing where students will assist ArtsQuest officials in the identification of a Musikfest performer. Using the local entertainment industry as a context, students will learn about target demographics, talent recruitment and selection, branding, event planning and marketing, and event evaluation. Students will develop and implement a marketing plan related to their assigned Musikfest performer. Students will be encouraged to apply available service learning hours to the course as to have a first-hand marketing experience during the August festival. Note: This course can be taken multiple times for advanced study of subject.

### SCHOOL STORE - MARKETING IN PRACTICE (BU9079)

This course is geared towards students who are interested in gaining the hands-on skills needed to operate a business. Students will participate in the various activities necessary for running a successful business. These activities include ordering, purchasing, delivering product, stocking, sales, inventory, customer relations, and advertising/promoting; as well as preparing the necessary financial papers that go into the operation of a successful business.

### 1.0 credit

0.5 credit

0.5 credit

1.0 credit

1.0 credit





# COOPERATIVE DIVERSIFIED OCCUPATIONS (BU9159)

The Co-Op Diversified Occupations Program allows students to gain on-the-job experience in their chosen field while under the supervision of a certified Co-Op Coordinator. The coordinator visits the student on the job and meets with both the student and the employer to develop and implement the student's training plan. Students are evaluated by the Co-Op Coordinator from site visits, and also by the employer through evaluations sent to the school. Students get hands-on experience in their career field, earn an income, receive instruction and guidance, and receive school credits. The Co-Op experience is open to all students enrolled in 11th or 12th grade. A minimum of 15 hours per week on the job is required. Good attendance, maturity, counselor/administrator/parent approval is necessary to be enrolled in this program.

## FRESHMAN SEMINAR (BU1009)

The Freshman Seminar course is designed to teach success skills for the 21th century learner. It will focus on developing study skills and an understanding of career pathways. Computer technology is embedded throughout the course. **Note:** This course is a graduation requirement

### SOPHOMORE SEMINAR (BU2009)

The Sophomore Seminar course is designed to further develop and apply interests and strengths into specific career pathways: Science, Technology, Engineering, and Math (STEM); Health and Social Services; Arts and Communications; and Business and Law. Students will explore specific careers within their chosen pathway. **Note:** This course is a graduation requirement.

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1.0 credit

0.5 credit

### TECHNOLOGY

# **INTRODUCTION TO COMPUTER SCIENCE (TE9159)**

This course is designed to introduce students to computer science through an exploration of engaging and accessible topics. Topics include human computer interaction, problem solving, web design, programming, and data analysis.

# **COMPUTER PROGRAMMING 1 (TE9009)**

The Computer Programming course is designed to introduce the concepts of computer programming using a studio of current programming languages. Students will learn how to analyze tasks and design algorithms to solve mathematical and real-world business related problems. Students learn the process of coding, debugging and executing program files. Visual Basic.net, C++ and Java are taught throughout the course. Students will code programs throughout the course and a final project will be designed at the end of the course. Note: Strong math skills and a sincere interest in computer programming are recommended.

# **COMPUTER PROGRAMMING 2 (TE9019)**

In the first half of this course, students will continue to develop their computer programming skills using the structured design of Java, C++, or Visual Basic. Fostering an understanding of program flow will be emphasized. The second half of this course will be independent study as students will be required to design a final project utilizing the advanced programming techniques taught in class.

# **AP COMPUTER SCIENCE PRINCIPLES (TE5010)**

Prerequisite: Successful completion of Algebra 1

The AP Computer Science Principles course is equivalent to a first-semester introductory college course where students develop computational thinking skills vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course is unique in its focus on fostering student creativity. Students are encouraged to apply creative processes when developing computational artifacts and to think creatively while using computer software and other technology to explore questions that interest them. They will also develop effective communication and collaboration skills, working individually and collaboratively to solve problems, and discussing and writing about the importance of these problems and the impacts to their community, society and the world.

## **AP COMPUTER SCIENCE A (TE5000)**

AP Computer Science students will learn to design, use and implement programming tools to solve complex problems relevant to today's society including art, media and engineering through hands on experience and examples. Core aspects of computer science will be used to create programming solutions that are understandable, adaptable, and reusable using development and analysis of algorithms, fundamental data structures and the use of logic and formal methods. The course and exam are designed to prepare students to continue their study of computing and STEM related fields. The course emphasizes object-oriented and imperative problem solving in addition to the ethical and social aspects and implications of computing. Note: The grade for this course is weighted upon successful completion of the course.

1.0 credit

1.0 credit

1.0 credit





### 0.5 credit





# **COMPUTER ANIMATION (TE9169)**

In this project-based course, students will build interactive content that can be shared over the Internet. The course will cover creating graphics, animation, and motion graphics. Students will learn about the aesthetics of design, motion, and sound. By constructing user interactive projects, students will be challenged to think in a nonlinear way. Students will learn to use a combination of logical reasoning (basic programming), critical thinking and artistic creativity. This course is open to all grades and would not require any prerequisites. It targets students interested in digital media-- students who are inclined towards a combination of art and technology.

# CREATING APPS FOR PHONE, PADS AND OTHER DEVICES (TE9029

This is a semester-long introduction to smartphone application development. Students will create apps that function on Android and iPhone smartphones. The course will cover design best practices and utilize a variety of tools / programing languages to create apps. While computer programing is used in the class, no previous programing knowledge is required.

# **DIGITAL AND PRINT DESIGN (TE9099)**

This is a beginning course designed to give students an in-depth introduction and well-grounded understanding of the digital media way of thinking, opportunities in the field, various tools, and introduction to development techniques. Utilizing industry standard software from the Adobe Creative Suites, students will take a hands-on approach to explore the power of both print and digital design. Students will apply the principles of typography, the basic elements of design, and color theory to develop documents, which combine text, graphics, color, and photographs on a printed page for personal and business use using Adobe InDesign. Students will also be introduced to the concepts of Adobe Photoshop where they will learn basic Photoshop techniques for image development.

# VIDEO EDITING 1 (TE9059)

This course is designed for students who wish to engage in the creative process of modifying raw video into a finished product. This includes video and sound recording, and how they apply to commercial media presentations. The student will plan, design, and produce, starting from the script and storyboard, multimedia presentations and commercials similar to those used in commercial settings and seen on television.

VIDEO EDITING 2 (TE9069)

Prerequisite: Video Editing 1 or Broadcasting Journalism

The Video Editing 2 gives students an opportunity to continue to develop their video editing skills and learn professional video editing software. The student will learn real production techniques in actual filming situations. They will learn camera and lighting skills and advanced post-production editing techniques using computer software programs. Special video projects that enhance the BASD community will be developed. This course may be taken multiple times for advanced study of the subject. Note: This course can be taken multiple times for advanced study of subject.

# WEB PAGE DESIGN (TE9149)

Students will learn the basics of creating web pages using the HTML 5 programming language. The evaluation of existing web sites will also be stressed to better understand the components of an outstanding web site. This course may be taken multiple times for advanced study of the subject.





0.5 credit

1.0 credit

0.5 credit

0.5 credit

1.0 credit

# YEARBOOK (TE9119)



1.0 credit

This class manages the annual publication of the yearbook. Students will be responsible for planning all facets of the yearbook from theme to distribution. Desktop publishing expertise is highly recommended Digital & Print Design. Students enrolling in this course should be self motivated, responsible, able to work as part of a team and efficient with personal time management. **Note:** This course can be taken multiple times for advanced study of the subject.

# **OFFICE TECHNOLOGY (TE9129)**



1.0 credit

Office Technology provides the fundamental coursework necessary for a career in the administrative assistant field. Students will develop office workforce skills including, but not limited to: document processing using word processing, spreadsheet, and presentation software. Bookkeeping, keyboarding, filing, and effective communication will be addressed. Students will develop a positive work ethic while enhancing their communication, critical thinking, and problem solving skills. This course will provide an opportunity for students to become certified in the Microsoft Office Users System.

# 57

## **FINE & PRACTICAL ARTS**

Fine and Practical Arts electives are designed to aid the student in becoming a well-rounded individual. Curriculum is developed to be of interest to all students, regardless of talent, and encourages active participation in the classroom. The experiences resulting from participation stimulate growth of the student, create an awareness and appreciation for the Arts as a universal enrichment medium, and develop the student physically, intellectually, and emotionally. The Fine and Practical Arts play an important role in the development of the whole student. Music, Art, Family Consumer Science, and Industrial Arts contribute to personal development, expression, creativity, and basic skills necessary for every student.

### FAMILY CONSUMER SCIENCES

# CHILD DEVELOPMENT AND PARENTING (FC9039)

A course designed to introduce students to child development and childcare concepts and investigates the rewards and responsibilities of parenting. Human development from conception to age three is discussed. Course content focuses on understanding the physical, emotional, and intellectual development with practical application to ensure that knowledge is put to good use. Students also learn how parents and other caregivers can nurture, encourage, and stimulate children's growth in all areas of development.

# EXPLORING CHILDHOOD / PRESCHOOL LAB (FC9049)

If you enjoy working with children or want to pursue a career in Early Childhood Education, this is the course for you. This program provides an opportunity to study the development of children three through five years old. The student will participate in observing, interacting, planning activities and teaching in a lab preschool program. Administration reserves the right to deny enrollment due to behavioral issues. Note: This course can be taken multiple times for advanced study of the subject.

Nutrition is the emphasis of the Foods and You class. Develop your food preparation skills, learn how to select food, plan healthy meals, and work safely and sanitarily in the kitchen. Become familiar with healthy choices as you prepare foods from each food group. Compare foods and ingredients and learn to fit them into a well-balanced diet.

# AMERICAN COOKERY (FC9019)

Explore how and why particular foods become a part of cuisine in various regions of the United States through sample menus and dishes. Your food preparation skills will be expanded as you prepare dishes and menus representative of United States regional cookery.

# **INTERNATIONAL FOODS (FC9029)**

This course explores different styles and methods of food preparation from various countries. Social customs, geography, climate, and economic influences that affect food choices will be included. Your vocabulary of ethnic cooking terms and your food preparation skills will be expanded as you prepare dishes and meals from around the world.

# **CLOTHING CREATION (FC9069)** Offered at Freedom High School

This course is for someone who never sewed before or someone who is a beginner. Learn about color coordination, natural and synthetic fibers, sewing vocabulary, and how to read a pattern. Learn basic hand sewing and machine sewing techniques. Create your own garment in an easy, step-by-step process. Note: Students must purchase their own materials.

# FOODS AND YOU (FC9009)







0.5 credit

1.0 credit

0.5 credit

0.5 credit

1.0 credit

## Offered at Freedom High School INTERIOR DESIGN (FC9059)

Planning a career in Interior Design? Renting your first apartment? Design in Interiors teaches home design, floor plan studies, furniture balance, color usage, floor and window treatments and furniture qualities. Learn how to design unique floor and wall surfaces. Create appealing rooms with very little money. Have fun creating a makeover for your own room or creating a "dream" room.

### **INDUSTRIAL ARTS**

This course develops a student's use of simple tools and equipment for the construction of woodcraft projects. There will be an emphasis on the ability to use simple tools, design layout and project completion. This is an introduction to woodworking focusing on the safe and proper use of woodworking tools, power machines, and materials.

Woodcraft 2 will include a review of skills taught in Woodcraft 1 with further instruction on design and more advanced machine operations. The emphasis will be on planning and construction of fine furniture and cabinetry. Woodcraft 2 will provide the opportunity for the student to further develop and refine his/her skills. There will be ample time for the student to explore advanced methods and procedures utilized in the construction of fine furniture.

STAGE CRAFT (IA9069)

This class will include sections on set construction, lighting design and installation, sound systems including using microphones, monitor speakers and mixers. Stage craft will have many hands on activities setting up for the many programs and events.

Offered at Liberty High School

HOME DESIGN AND MODEL BUILDING (IA9059) Offered at Liberty High School

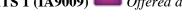
Students will learn basic home construction techniques and house framing skills through the use of hands on home model building work. Emphasis will be placed on determining the correct lumber and types for construction, as well as the other building materials that go into every house-building project. All work will be done using simple woodworking hand and craft tools.

**GRAPHIC ARTS 1 (IA9009)** Offered at Liberty High School

Graphic Arts is a basic course for the beginning student who would like to explore the fundamentals in basic stenciling, lettering and design, badge production, one color screen printing, airbrush illustrations and desktop composition.

# **GRAPHICS ARTS 2 (IA9019)** Offered at Liberty High School

This is an advanced course where a student will work independently and continue to explore and refine fundamentals in the areas of multiple color screen printing, photo screen printing, technical airbrush illustrations, desktop composition, and offset press productions.



0.5 credit

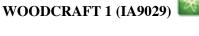
1.0 credit

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1.0 credit

1.0 credit









ART

# STUDIO ART 1 (AR9009)

This is an introductory course. This course is devoted to teaching the different techniques of drawing and painting through the use of the elements of art: line, shape, value, form, space, color, and texture. Students will be introduced to the principles of design. Art history will be used to develop criticism and aesthetic judgment skills. Students will be responsible for course terminology, class projects, homework assignments, and a sketchbook. Evaluation is based on creativity, craftsmanship and fulfilling objectives of studio work. Artwork will be exhibited.

### STUDIO ART 2 (AR9019)

CERAMICS 1 (AR9059)

Art 2 is an in-depth study of the principles of design-rhythm, movement, balance, proportion, variety, unity, and emphasis. Students will explore both two-dimensional and three-dimensional media to create a variety of visual experiences. Art history, criticism and aesthetics will be emphasized. Students will be responsible for vocabulary, studio work, homework assignments and a sketchbook. Evaluation is based on creativity, craftsmanship, and fulfilling objectives of class projects. Artwork will be exhibited.

This introductory program gives students the opportunity to learn basic hand building processes in working with clay. The following four methods will be emphasized: pinch pot, coil slab and potter's wheel. In addition to learning to form clay articles, students will learn to glaze the finished product.

Ceramics 2 is for students working beyond their prior experience in shaping, glazing, and using the potter's wheel. Note: This course can be taken multiple times for advanced study of the subject.

### PHOTOGRAPHY 1 (AR9039)

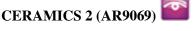
This course is a beginning course that covers the history of photography, basic design and composition, intro to lighting and the darkroom. Pinhole cameras, photograms, basic camera parts and functions are explored and students are assigned shooting projects incorporating these techniques. Basic editing and digital editing are also covered.

# PHOTOGRAPHY 2 (AR9049

This course is for the student who wants to explore photography further and learn more about advanced Black and White darkroom techniques, how to use filters, dodging and burning, push process film and other alternative darkroom techniques. Advanced digital editing and shooting techniques are also covered. This course can be taken multiple times for advanced study of the subject.







1.0 credit

1.0 credit

1.0 credit

1.0 credit

1.0 credit

# **3-D DESIGN 1 (AR9079)** Offered at Liberty High School

Students will be introduced to the two types of sculpture: relief and sculpture in the round. They will work with a variety of materials such as wire, plastic, cardboard, paper, fibers and glass. Students will demonstrate how design is used in both artistic and practical applications.

**3-D DESIGN 2 (AR9089)** Offered at Liberty High School

Students will continue their exploration of materials to create sculptural works of art. Emphasis will be placed on refining skills and applying good design. This course can be taken multiple times for advanced study of the subject.

# PORTFOLIO PREPARATION (AR9099)

Prerequisite: This is a capstone course. A minimum of level 1 and 2 courses are required.

This course is designed for students seeking to enter college-level art programs. Young people wishing to explore their talents and learn about careers in art and students seeking self-development and personal enrichment are encouraged to enroll in this course. Assistance with college entrance requirements and portfolio preparation is provided. Ultimately students will produce a portfolio of 15-20 examples of art in the student's area of focus. Evaluation is based on presentation of portfolio. Note: Students are expected to secure their own portfolio case; school will not supply. This course can be taken multiple times for advanced study of the subject.

MUSIC

**AP MUSIC THEORY (MU5000)** 

The goal of AP Music Theory course is to develop a student's ability to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a score. The achievement of this goal may be best promoted by integrated approaches to the student's development of aural skills through listening exercises, sight-singing skills through performance exercises, written skills through written exercises, compositional skills as creative exercises, analytical skills through analytical exercises. Ultimately, this course is to prepare students who might be interested in a career in the music field or industry and to prepare students for the AP Music Theory Exam. Certain colleges accept the AP Music Theory test score to preclude students from having to take a 1<sup>st</sup> semester music theory class. Notes: The grade for this course is weighted. It is imperative that the student already knows how to read music before taking this class.

# **MUSIC THEORY (MU9109)**

This course covers rules of writing and performing music; use of music symbols, music reading, scales intervals, melody writing, transposition, rhythm training, music dictation, sight singing, harmonization, analysis of musical forms, and simple piano accompaniments. Music theory should be considered a "must" for students planning to enter elementary or music education courses in college. Note: It is imperative that the student knows how to read music.

# **MUSIC APPRECIATION (MU9239)**

Students will explore many elements of music including history, theory, singing and keyboard skills. This introductory music course will help students develop their ear to identify instruments, musical pieces, and musical periods by their sound. Students will also learn music terminology in order to give accurate descriptions of music. This course is designed to be a broad overview of the many aspects of music and develop an appreciation and understanding of music.





1.0 credit

0.5 credit

1.0 credit



1.0 credit

1.0 credit





# THE HISTORY OF MUSIC (MU9089)

This course will explore the various composers and stylistic periods of music from Medieval to current. Basic concepts and elements of music will be explored in depth and will be related to current popular music as well.

# MUSIC PRODUCTION 1 (MU9189)

This nine-week course will introduce students to the fundamentals of software and hardware tools used to produce and record music. Students will use arranging software, synthesizers, and recorded instruments to create digital audio compositions. Students will learn the basics of digital audio editing, mixing, and signal processing. **Note:** Students must have a basic understanding of music before taking this course.

# **MUSIC PRODUCTION 2 (MU9199)**

This course will reinforce and expand upon the concepts and skills acquired in Music Production 1. Students will be familiarized with the appropriate implementation of various studio microphones while recording musicians, groups and ensembles. Students will also apply advanced digital audio editing, mixing, and mastering techniques using industry standard software and equipment. The emphasis of the course will be career readiness in the music production industry and related fields.

Techniques of proper breathing, care of the voice, tone production, phrasing, music reading, and general musicianship are emphasized. A beginning singer's repertoire is presented in addition to student-selected repertoire for analysis, singing, and performing. Students may take this course in sequential marking periods or multiple times, since repertoire and skill development will be varied and differentiated for each player.

This course is designed for the student who wants to learn to play the piano. Techniques are presented and performed on a multi-timbral keyboard synthesizer. Students will be taught how to read and play a wide genre of piano pieces, including student-selected material. Students may take this course in sequential marking periods or multiple times, since repertoire and skill development will be varied and differentiated for each player.

The class is designed to read and perform more challenging piano music. The focus will be on developing technique and performing various styles of repertoire including present day music.

# GUITAR 1 (MU9209) Offered at Freedom High School

PIANO 2 (MU9129)

The Guitar 1 elective provides the opportunity to learn basic guitar playing techniques or build upon current skills in a supportive setting. Students will work on basic guitar repertoire and songs of choice with the overall goal being performances throughout the semester.





VOICE CLASS (MU9159)



0.5 credit

0.5 credit

0.5 credit

0.5 credit

1.0 credit

**GUITAR 2 (MU9219)** Prerequisite: Guitar 1

The Guitar 2 elective provides the opportunity to learn more advanced guitar playing techniques and build upon current skills in a supportive setting. Students will work on various guitar repertoire and songs of choice with the overall goal being performances throughout the semester.

Offered at Freedom High School

# JAZZ IMPROVISATION (MU9149)

Prerequisite: Ability to read and perform instrumental music.

Students will learn and perform various concepts related to Jazz improvisation, including harmonic, melodic, and stylistic components.

### FREEDOM MUSICAL PERFORMANCE OFFERINGS:

PATRIOT BAND (MU9009) Prerequisite: Audition

The Patriot Band meets first period every other day. Throughout the football season, rehearsals begin at 7:00 A.M. Summer rehearsals begin in mid-August. Performances include football games, parades, and assembly programs, pep rallies and concerts. Grading, seating and continued membership are determined through auditions and attendance.

Prerequisite: Audition

**ORCHESTRA (MU9019)** 

The Orchestra meets the first block from September to June. From November through June, rehearsals begin at 7:00 a.m. This course provides students with an excellent opportunity to explore and study orchestra literature while performing in a full-size orchestra. On occasion, the group will divide into a string orchestra and wind ensemble format. Concerts are presented throughout the school year. Students are required to perform a holiday concert, two spring concerts, and at graduation to obtain credit.

## PATRIOT CHOIR (MU9059)

Prerequisite: Audition

The Patriot Choir is a choral organization, which meets first block every other day. Membership in this choir provides an opportunity for singing a variety of music repertoire. Two major concerts are presented each year (December and May), in addition to occasional assemblies and/or community programs. Opportunity is provided to strengthen abilities in music reading and to improve techniques in breathing, tone quality, diction, and phrasing through the preparation of music to be presented in concerts. A formal and informal choral setting enhances the repertoire.

# **CONCERT CHOIR (MU9049)**

The Concert Choir is a choral organization, which meets first block every other day. Membership in this choir provides an opportunity for singing a variety of music repertoire. Two major concerts are presented each year (December and May), in addition to occasional assemblies and/or community programs. Opportunity is provided to strengthen abilities in music reading and to improve techniques in breathing, tone quality, diction, and phrasing through the preparation of music to be presented in concerts. A formal and informal choral setting enhances the repertoire. This ensemble is open to all interested students in 9th through 12th grade.



1.0 credit

0.5 credit

0.5 credit

1.0 credit

1.0 credit

### **LIBERTY MUSICAL PERFORMANCE OFFERINGS:**

## GRENADIER BAND (MU9009)

Prerequisite: Audition

The Grenadier Band meets first block from September to June. Rehearsals begin at 7:00 a.m. every day. Summer rehearsals begin around August 15. The course provides the student with an excellent opportunity to explore the many phases of the modern day band. The first ten weeks of the school year are devoted to marching band techniques; the remainder of the year is devoted primarily to concert music. The L.H.S. Grenadier Band is nationally known and has traveled throughout the USA and abroad. Students are required to perform at all football games, two basketball games, several announced parades, and a spring concert to obtain credit.



Prerequisite: Audition

The Orchestra meets the first block from September to June. From November through June, rehearsals begin at 7:00 a.m. This course provides students with an excellent opportunity to explore and study orchestra literature while performing in a full-size orchestra. On occasion, the group will divide into a string orchestra and wind ensemble format. Concerts are presented throughout the school year. The Orchestra often participates in exchange concerts with other schools. Students are required to perform a holiday concert, two spring concerts, and at graduation to obtain credit.

## WOMEN'S ENSEMBLE (MU9039)

Prerequisite: Audition

The Women's Ensemble is one of two choral performing groups. The Women's Ensemble meeting time is arranged to provide all students involved in the instrumental and vocal performing groups an opportunity to fit all of these activities into their schedules. The Ensemble performs at the Holiday, Pops, Specialty and Spring Concerts, as well as other community and school programs. Four evening rehearsals and five concerts per year are required in order to obtain credit.

# CHORALIERS (MU9029)

The Choraliers are one of two choral performing groups. The Choraliers' meeting time is arranged to provide all students involved in the instrumental and vocal performing groups an opportunity to fit all of these activities into their schedules. Performing highly demanding choral music of diverse origins, the Choraliers perform at the Holiday, Pops, Specialty and Spring Concerts, as well as other community and school programs. Four evening rehearsals and five concerts per year are required in order to obtain credit.

1.0 credit

1.0 credit

1.0 credit



### **HEALTH/PHYSICAL EDUCATION**

### The Health and Physical Education Department at Bethlehem Area School District allows students to have the opportunity to develop a range of fundamental motor and movement skills that form the basis of leisure, sporting and recreational activities. Students will be able to benefit from gaining an understanding of the importance of personal and community actions to aid their physical, social and emotional health and promote health and life-long participation in physical activity for a long healthy life.

This health course is required for all ninth grade students. This class will include aspects of restorative practice, decisionmaking, communication, violence and prevention and drugs and alcohol. Curriculum is reinforced through community agency and non-profit organizations. This course must be satisfactorily completed for graduation.

0.5 credit

0.5 credit

0.5 credit

0.5 credit



## **HEALTH 1 (HF1009)**

HEALTH 2 (HF2009)

This health course is required for all tenth grade students. This class will include aspects of fitness, nutrition, reproduction, abstinence, STD's and HIV, and various other issues dealing with teenage sexuality. Curriculum is reinforced through community agencies and non-profit organizations. This course must be satisfactorily completed for graduation.

# PHYSICAL EDUCATION (HF9109)

The physical education curriculum offers a variety of activities. Students will be involved in team sport activities, racquet activities, aerobics, fitness activities, weight training, swimming and other teacher-selected activities. This course must be satisfactorily completed for graduation.

# MAXIMUM FITNESS (HF9019)

Maximum Fitness is designed for students who wish to further their physical fitness through a variety of high-intensity activities in individualized fitness programming. Students will learn basic and advanced strength training principles, cardiovascular training practices, and supporting concepts, such as nutrition and exercise science. Students will leave this course with the skills and knowledge needed to walk into their local fitness center and perform a variety of advanced fitness programs. Maximum fitness may be taken in place of regular physical education to meet graduation requirements.

## **TARGET PHYSICAL EDUCATION (HF9009)**

The TARGET (Taking Aim-Reaching Goals-Exceling Together) program is designed for students who prefer a lowimpact, cardiovascular-based approach to physical education, rather than the competitive, sport-based approach found in regular Physical Education classes. TARGET students will learn a variety of techniques that promote total body wellness, including basic strength training, cardiovascular activities, flexibility, and mental health practices. Students will leave this course with the skills and knowledge needed to participate in regular physical activity on a daily basis and live a healthy lifestyle. TARGET Physical Education may be taken in place of regular physical education to meet graduation requirements.







# **PE ATHLETE (HF9029)** Freedom only

0.5 credit

0.5 credit

0.5 credit

Prerequisites: Students must be an active participant in the Bethlehem Area School District athletic program and have authorization of the varsity coach. Students may utilize this credit for either their  $10^{a}$ ,  $11^{a}$  or  $12^{a}$  grade Physical Education requirement. The course is offered <u>only</u> to the student athlete population at Bethlehem Area School District. The course affords in-season athletes the opportunity to maximize the strength training, cardiovascular and technical aspects of their discipline in a classroom environment. The Physical Educator communicates with the head coaches on the specific needs of the athletes. **Note:** Students must also be able to run 2 mile per day along with strength training every other day. Students may utilize this credit for  $10^{a}$ ,  $11^{a}$ , or  $12^{a}$  grade Physical Education requirement.

### LIFEGUARDING (HF9039)

9) 🗄

Prerequisites: Students must possess a valid Lifesaving/First Aid and a CPR card in order to participate. Students must also obtain permission from Health and Physical Education Department Chair.

Students will receive 11th or 12th grade PE credit upon successful completion of the course. Expectations include the application of lifeguarding duties, skills and responsibilities during the entire class period. If the natatorium is not in use for a particular day, all lifeguards are expected to change and participate in regular physical education courses.

### ELECTIVE PE (HF4029)

The physical education curriculum offers a variety of activities. Students will be involved in team sport activities, racquet activities, aerobics, fitness activities, weight training, swimming and other teacher-selected activities. This course is taken as an additional PE 0.5 credit.



# HEALTH & PE ELECTIVES

# INTRODUCTION TO EPIDEMIOLOGY (HF9089)

This course explores specific health-related issues relevant to students through the science of epidemiology, the study of how and why diseases are distributed in a given population. This course will prepare students to make personal and collective evidence-based decisions pertaining to public health.

# INTRODUCTION TO KINESIOLOGY (HF9079)

This course is designed for those students who are interested in pursuing a career in the field of kinesiology. The philosophy, history and scientific foundations of kinesiology, exercise science, health/wellness, fitness and sport will be covered. Students will have the opportunity to explore professional career opportunities in teaching, coaching, athletic training, sport management, fitness leadership, sport media and health/wellness. The challenges, future of kinesiology, sport and health/wellness are also addressed.

# SPORTS NUTRITION (HF9069)

Sports Nutrition is a class that enables students to examine the relationship between physical activity, proper nutrition, sports performance and overall wellness. Students will learn what foods are needed for healthy lifestyles and peak performance. This course strengthens health promotion and disease prevention through increased knowledge of nutrition and physical activity. This course will also take an in-depth look at the role of dietary supplements in high school athletics. Sports Nutrition is a great class for students interested in pursuing a career in the fitness field or are currently involved in an athletic program.

# LIFEGUARD TRAINING AND ADVENTURE (HF9139)

Students will complete the American Red Cross Lifeguard course. Swimming ability equal to American Red Cross Lifeguard pre-course skills checklist. Students must be 15 years of age. A swimming ability equal to level 4 of the Red Cross swim program is required, which includes swimming for distances with rhythmic breathing, treading water, deep water submersion.

# PERSONAL FITNESS TRAINING (HF9149)

A hybrid course designed specifically for students who have an interest in learning about becoming a personal fitness trainer. Students will learn about anatomy, biomechanics, exercise physiology, fitness testing and health assessment, nutrition, exercise prescription, equipment usage, and legal/safety issues. Interested seniors will be provided with the option of sitting for a National Personal Fitness Trainer Certification exam upon successful completion of the course. **Note:** Students must be 18 years of age to take the National Personal Fitness Trainer Certification exam.





0.5 credit

0.5 credit

0.5 credit

0.5 credit

NC44 Eligibility Center

# ONE OPPORTUNITY. LIMITLESS POSSIBILITIES.

If you want to play sports at an NCAA Division I or II school, start by registering for a Certification Account with the NCAA Eligibility Center at **eligibilitycenter.org**. If you want to play Division III sports or you aren't sure where you want to compete, start by creating a Profile Page at **eligibilitycenter.org**.

### **ACADEMIC REQUIREMENTS**

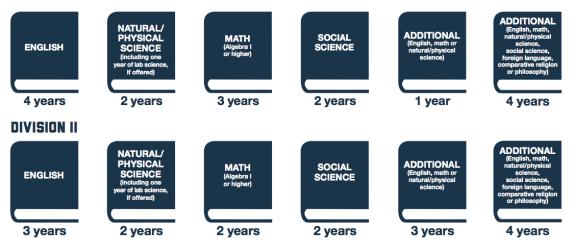
To play sports at a Division I or II school, you must graduate from high school, complete 16 NCAA-approved core courses, earn a minimum GPA, and earn an ACT or SAT score that matches your core-course GPA.

### **CORE COURSES**

Visit **eligibilitycenter.org/courselist** for a full list of your high school's approved core courses. Complete 16 core courses in the following areas:

### **DIVISION I**

Complete 10 NCAA core courses, including seven in English, math or natural/physical science, before your seventh semester.



### **GRADE-POINT AVERAGE**

The NCAA Eligibility Center calculates your grade-point average (GPA) based on the grades you earn in NCAA-approved core courses.

- DI requires a minimum 2.3 GPA
- DII requires a minimum 2.2 GPA

### **SLIDING SCALE**

Divisions I and II use sliding scales to match test scores and GPAs to determine eligibility. The sliding scale balances your test score with your GPA. If you have a low test score, you need a higher GPA to be eligible. Find more information about sliding scales at **ncaa.org/playcollegesports**.

### **TEST SCORES**

Take the ACT or SAT as many times as you want before you enroll full time in college, but remember to list the NCAA Eligibility Center (code **9999**) as a score recipient whenever you register to take a test. If you take a test more than once, send us all your scores and we will choose the best scores from each test section to create your sum score. We accept official scores only from the ACT or SAT, and won't use scores shown on your high school transcript. Remember to apply the College Board concordance table for SAT tests taken in March 2016 and after.







# **HIGH SCHOOL TIMELINE**

# **GRADE 9**

### Plan

- Start planning now! Take the right courses and earn the best grades you can.
- Ask your counselor for a list of your high school's NCAA core courses to make sure you take the right classes. Or, find your high school's list of NCAA core courses at eligibilitycenter.org/courselist.

# **GRADE 10**

### Register

- Register for a Certification Account or Profile Page with the NCAA Eligibility Center at eligibilitycenter.org.
- If you fall behind on courses, don't take shortcuts to catch up. Ask your counselor for help with finding approved courses or programs you can take.

### **Core Courses**

This simple formula will help you meet Division I and II core-course requirements.

### 4x4=16

- + 4 English courses (one per year)
- + 4 math courses (one per year)
- + 4 science courses (one per year)
- + 4 social science courses (one per year)
- = 16 NCAA CORE COURSES

## **GRADE 11**

### Study

- Check with your counselor to make sure you are on track to graduate on time.
- Take the ACT or SAT, and make sure we get your scores by using code 9999.
- At the end of the year, ask your counselor to upload your official transcript.

### GRADE 12 Graduate

- Take the ACT or SAT again, if necessary, and make sure we get your scores by using code 9999.
- Request your final amateurism certification after April 1.
- After you graduate, ask your counselor to upload your final official transcript with proof of graduation.

For more information: ncaa.org/playcollegesports eligibilitycenter.org

Search Frequently Asked Questions ncaa.org/studentfaq

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# **DIVISION I ACADEMIC REQUIREMENTS**

College-bound student-athletes will need to meet the following academic requirements to practice, receive athletic scholarships, and/or compete during their first year.



# **Full Qualifier**

- Complete 16 core courses.
  - Ten of the 16 core courses must be completed before the seventh semester (senior year) of high school.
  - Seven of the 10 core courses must be in English, math or science.
- Earn a core-course GPA of at least 2.300.
- Earn the ACT/SAT score matching your core-course GPA on the Division I sliding scale (see back page).
- Graduate high school.

### **Academic Redshirt**

- Complete 16 core courses.
- Earn a core-course GPA of at least 2.000.
- Earn the ACT/SAT score matching your core-course GPA on the Division I sliding scale (see back page).
- Graduate high school.

### Full Qualifier:

College-bound student-athletes may practice, compete and receive athletics scholarships during their first year of enrollment at an NCAA Division I school.

### Academic Redshirt:

College-bound student-athletes may receive athletics scholarships during their first year of enrollment and may practice during their first regular academic term, but may NOT compete during their first year of enrollment.

### Nonqualifier:

College-bound student-athletes cannot practice, receive athletics scholarships or compete during their first year of enrollment at an NCAA Division I school.

# **Test Scores**

When a student registers for the SAT or ACT, he or she can use the NCAA Eligibility Center code of **9999** so his or her scores are sent directly to the NCAA Eligibility Center from the testing agency. Test scores on transcripts will **NOT** be used in his or her academic certification.

A combined SAT score is calculated by adding reading and math subscores. An ACT sum score is calculated by adding English, math, reading and science subscores. A student may take the SAT or ACT an unlimited number of times before he or she enrolls full time in college. If a student takes either test more than once, the best subscore from different tests are used to meet initial-eligibility requirements.

If a student took the SAT before March 2016 and then took the redesigned SAT at a later date, the NCAA Eligibility Center will not combine section scores from the former and redesigned SAT when determining his or her initial eligibility. The NCAA Eligibility Center will only combine section scores from the same version of the test. Because the redesigned SAT varies in design and measures different academic concepts than the former SAT, the Eligibility Center will apply the College Board's concordance tables when performing academic certifications for students with redesigned SAT scores.

\*To compare SAT scores, click here for a comparison table, or click here to visit the College Board's website.

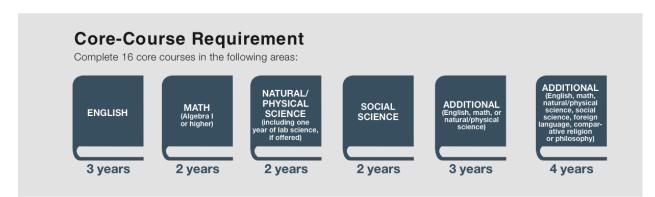
DIVISION I FULL QUALIFIER SLIDING SCALE		
CORE GPA	SAT*	ACT SUM
	READING/MATH	
3.550	400	37
3.525	410	38
3.500	420	39
3.475	430	40
3.450	440	41
3.425	450	41
3.400	460	42
3.375	470	42
3.350	480	43
3.325	490	44
3.300	500	44
3.275	510	45
3.250	520	46
3.225	530	46
3.200	540	47
3.175	550	47
3.150	560	48
3.125	570	49
3.100	580	49
3.075	590	50
3.050	600	50
3.025	610	51
3.000	620	52
2.975	630	52
2.950	640	53
2.925	650	53
2.925	660	54
2.900	670	55
2.875	680	55
2.825	690	56
2.800	700	57
2.775	710	58

**ACADEMIC REDSHIRT** 



# **2018 DIVISION II NEW ACADEMIC REQUIREMENTS**

College-bound student-athletes first enrolling at an NCAA Division II school on or after August 1, 2018, need to meet new academic rules to practice, compete and receive athletics scholarships during their first year.



# **Full Qualifier**

- Complete 16 core courses.
- Earn a core-course GPA of at least 2.200.
- Earn the ACT/SAT score matching your core-course GPA on the Division II full qualifier sliding scale (see back page).
- Graduate high school.

### **Partial Qualifier**

- Complete 16 core courses.
- Earn a core-course GPA of at least 2.000.
- Earn the ACT/SAT score matching your core-course GPA on the Division II partial qualifier sliding scale (see back page).
- Graduate high school.

### Full Qualifier:

College-bound student-athletes may practice, compete and receive athletics scholarships during their first year of enrollment at an NCAA Division II school.

### **Partial Qualifier:**

College-bound student-athletes may receive athletics scholarships during their first year of enrollment and may practice during their first regular academic term, but may NOT compete during their first year of enrollment.

### Nonqualifier:

College-bound student-athletes may not practice, compete or receive athletics scholarships during their first year of enrollment at an NCAA Division II school.

# **Test Scores**

If a student took the SAT before March 2016 and then took the redesigned SAT at a later date, the NCAA Eligibility Center will not combine section scores from the former and redesigned SAT when determining his or her initial eligibility. The NCAA Eligibility Center will only combine section scores from the same version of the test. Because the redesigned SAT varies in design and measures different academic concepts than the former SAT, the Eligibility Center will apply the College Board's concordance tables when performing academic certifications for students with redesigned SAT scores.

\*To compare SAT scores, click here for a comparison table, or click here to visit the College Board's website.

USE FOR DIVISION II BEGI           CORE GPA         SAT           3.300 & above         400           3.275         410           3.250         420           3.250         420           3.225         430           3.200         440           3.175         460           3.175         460           3.150         460           3.150         460           3.150         460           3.150         460           3.00         520           3.00         520           2.975         530           2.950         540           2.975         550           2.900         560           2.900         560           2.925         550           2.900         560           2.800         600           2.875         590           2.800         600           2.775         610           2.700         640           2.675         650           2.700         640           2.650         700           2.650         700	ACT SL	USE FOR DIVI CORE GPA 3.050 & above 3.025 3.000 2.975 2.950 2.925 2.900 2.875 2.850 2.825 2.800 2.775 2.750 2.775 2.750 2.725 2.700	SION II BEGINNING A SAT* READING/MATH 400 410 420 430 440 450 460 470 480 490 500 510 520 530	AUGUST 2018 ACT SUM 37 38 39 40 40 41 41 41 42 42 42 43 44 44 44 45 46
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3.025         510           3.000         520           2.975         530           2.950         540           2.925         550           2.900         560           2.875         570           2.850         580           2.825         590           2.800         600           2.775         610           2.725         630           2.725         630           2.675         650           2.650         660           2.655         670           2.650         680           2.550         700           2.550         700           2.550         700           2.550         700           2.550         700           2.550         700           2.475         730           2.450         740           2.450         740           2.425         750           2.400         760	45 46 46 47	2.775 2.750 2.725	510 520	45
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2.975         530           2.950         540           2.925         550           2.900         560           2.875         570           2.850         580           2.825         590           2.800         600           2.775         610           2.750         620           2.750         620           2.750         620           2.750         620           2.750         620           2.755         630           2.700         640           2.675         650           2.650         660           2.625         670           2.625         670           2.650         700           2.550         700           2.555         710           2.500         720           2.475         730           2.475         730           2.450         740           2.425         750           2.400         760	46 47	2.725		46
2.950         540           2.925         550           2.900         560           2.875         570           2.850         580           2.825         590           2.800         600           2.775         610           2.750         620           2.700         640           2.675         650           2.600         660           2.675         650           2.650         660           2.555         670           2.550         700           2.555         710           2.500         720           2.475         730           2.475         730           2.450         740           2.425         750	47		530	
2.925         550           2.900         560           2.875         570           2.850         580           2.825         590           2.800         600           2.775         610           2.725         630           2.725         630           2.675         650           2.675         650           2.650         660           2.675         690           2.555         710           2.550         700           2.550         700           2.500         720           2.475         730           2.475         730           2.450         740           2.425         750		2.700		46
2.900         560           2.875         570           2.850         580           2.825         590           2.800         600           2.775         610           2.725         630           2.725         630           2.700         640           2.675         650           2.650         660           2.675         650           2.650         660           2.555         710           2.550         700           2.525         710           2.500         720           2.475         730           2.475         730           2.450         740           2.425         750	47	 	540	47
2.875         570           2.850         580           2.825         590           2.800         600           2.775         610           2.750         620           2.700         640           2.675         650           2.675         650           2.650         660           2.625         670           2.650         700           2.550         700           2.550         700           2.550         730           2.475         730           2.450         740           2.425         750		2.675	550	47
2.850         580           2.825         590           2.800         600           2.775         610           2.750         620           2.725         630           2.700         640           2.675         650           2.650         660           2.625         670           2.625         670           2.550         700           2.550         700           2.525         710           2.500         720           2.475         730           2.450         740           2.425         750	48	 2.650	560	48
2.825         590           2.800         600           2.775         610           2.750         620           2.725         630           2.700         640           2.675         650           2.650         660           2.625         670           2.600         680           2.575         690           2.550         700           2.525         710           2.500         720           2.475         730           2.450         740           2.425         750	49	 2.625	570	49
2.800         600           2.775         610           2.750         620           2.725         630           2.700         640           2.675         650           2.650         660           2.625         670           2.600         680           2.575         690           2.550         700           2.525         710           2.500         720           2.475         730           2.450         740           2.425         750           2.400         760	49	 2.600	580	49
2.775         610           2.750         620           2.725         630           2.700         640           2.675         650           2.650         660           2.625         670           2.600         680           2.575         690           2.550         700           2.525         710           2.500         720           2.475         730           2.450         740           2.425         750           2.400         760	50	2.575	590	50
2.750         620           2.725         630           2.700         640           2.675         650           2.650         660           2.625         670           2.600         680           2.575         690           2.550         700           2.525         710           2.500         720           2.475         730           2.450         740           2.425         750           2.400         760	50	 2.550	600	50
2.725         630           2.700         640           2.675         650           2.650         660           2.625         670           2.600         680           2.575         690           2.550         700           2.525         710           2.500         720           2.475         730           2.450         740           2.425         750           2.400         760	51	 2.525	610	51
2.700         640           2.675         650           2.650         660           2.625         670           2.600         680           2.575         690           2.525         710           2.500         720           2.500         720           2.475         730           2.450         740           2.425         750           2.400         760	52	 2.500	620	52
2.675         650           2.650         660           2.625         670           2.600         680           2.575         690           2.550         700           2.525         710           2.500         720           2.475         730           2.450         740           2.425         750           2.400         760	52	 2.475	630	52
2.650         660           2.625         670           2.600         680           2.575         690           2.550         700           2.525         710           2.500         720           2.475         730           2.450         740           2.425         750           2.420         760	53	2.450	640	53
2.625         670           2.600         680           2.575         690           2.550         700           2.525         710           2.500         720           2.475         730           2.450         740           2.425         750           2.420         760	53	2.425	650	53
2.600         680           2.575         690           2.550         700           2.525         710           2.500         720           2.475         730           2.450         740           2.425         750           2.420         760	54	 2.400	660	54
2.575         690           2.550         700           2.525         710           2.500         720           2.475         730           2.450         740           2.425         750           2.425         760	55	2.375	670	55
2.550         700           2.525         710           2.500         720           2.475         730           2.450         740           2.425         750           2.420         760	56	2.350	680	56
2.525         710           2.500         720           2.475         730           2.450         740           2.425         750           2.420         760	56	2.325	690	56
2.500         720           2.475         730           2.450         740           2.425         750           2.400         760	57	2.300	700	57
2.475         730           2.450         740           2.425         750           2.400         760	58	2.275	710	58
2.450         740           2.425         750           2.400         760	59	2.250	720	59
2.425 750 2.400 760	60	2.225	730	60
2.400 760	61	2.200	740	61
	61	2.175	750	61
	62	 2.150	760	62
2.375 770	63	2.125	770	63
2.350 780	00	2.100	780	64
2.325 790	64	2.075	790	65
2.300 800		2.050	800	66
2.275 810	64	 2.025	810	67
2.250 820	64 65	2.000	820 & above	68 & above
2.225 830	64 65 66	 2.000	-10 0 00010	000.000

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### ACADEMY CLUSTER (Seniors Only)

### The Academy for Medical Sciences

Students will learn Medical Terminology, Legal Responsibility, Ethics, Human Development, Basic Life Support and Safety in the Health Care Environment. The course is an academic course for college bound SENIORS with learning components involving lecture and discussion, research and lab activities consisting of individual and group projects designed to reinforce the theory components. A major part of the course includes clinical observations through St Luke's University Hospital and Lehigh Valley Health Network for students who meet the course prerequisites. Students can also earn their Basic Life Support certification. The program has an articulation agreement with NCC.

### The Academy for Applied Engineering

Students will learn about various areas of the engineering industry including, but not limited to Mechanical, Electrical, Civil and Chemical. The program is an academic course for college bound SENIORS with learning components involving lecture, discussion and research. Lab activities consist of individual and group projects designed to reinforce the theory components, permitting the students to participate in actual engineering projects involving design, construction and prototype testing. The program has a major group project which will be analyzed and judged by professors from Lafayette College. The program offers the opportunity to earn 4 credits from Lafayette College for their Introduction to Engineering course where students participate in labs and lectures at the college.

### **CONSTRUCTION CLUSTER**

### **Building Trades**

Students learn multiple areas of construction disciplines including, but not limited to carpentry, electrical and masonry. Level one students work in a hands-on learning environment, developing skills and tool usage of a variety of hand and power tools applicable to the trade on a full scale house project in the shop. Advanced level students will be increasing their skill set by working on the BAVTS House Project and other community projects. Students have the opportunity to earn an OSHA Certification.

### Cabinetmaking

Students learn the basic skills for designing, cutting, assembling and finishing, through a series of woodworking projects, including the design and installation of the kitchen for the House Project. Students learn to draw and read blueprints, operate various tools, apply finish in our spray booth, and install finished projects. Level one students will begin working on the lathe and other machines to create projects such as a turned pen and pencil, cutting board, and table. Advanced level students will be increasing their skills with more advanced projects such as building a night stand, book shelf, cornhole game, and kitchen cabinets. Throughout the course students work with various types of construction materials such as hardwoods, softwoods, plywood, laminate, plexiglass, and more. Students have the opportunity to earn an OSHA Certification.

### Carpentry

Students will learn the fundamental skills using a variety of materials and numerous tools of the trade to create projects ranging from simple, to complex, to complete layout and construction of residential properties. Level one students work in a hands-on learning environment, developing skills using a variety of hand and power tools, measuring and blueprint reading. Advanced level students will increase their skill set by working on the BAVTS House Project and other community projects. Students have the opportunity to earn OSHA and NAHB Certifications.

### **Electrical Construction**

Students will learn to assemble, install and test wiring, fixtures and devices used in commercial, industrial and residential applications. Level one students work in a hands-on learning environment, developing skills and tool usage as well as learning theory; includes calculating amperage, voltage, current and power in electrical circuits. They will learn to read blueprints and schematics for motor control and programmable logic controllers. Advanced level students will increase their skill set by working on real-world project such as the BAVTS House and projects around the school. The student's skill set and job readiness will be measured based on the National Electrical Code standards. Students have the opportunity to earn an OSHA Certification.

### Plumbing

Students will learn to assemble, install, alter and repair pipe systems which carry water, steam or other materials for sanitation, residential or industrial uses as well as install plumbing fixtures, appliances and hydronic systems. Level one students work in a hands-on learning environment, using acetylene torches and a variety of hand and power tools, reading blueprints and learning pipe fitting formulas. Advanced level students will increase their skill set by working on the BAVTS House Project. The student's skill set and job readiness will be measured based on the International Plumbing Code standards. Students have the opportunity to earn track pipe and gastite certifications.

### Masonry

Students will learn the fundamental skills of a mason using concrete, brick, stone and block to create a series of projects that progress from jobs as simple as a brick pyramid to as complex as a residential fireplace. Level one students work in a hands-on learning environment, developing skills while using the hand tools of the trade, which include scaffolding, masonry rules, mortar mixers and other basic tools as well as reading blueprints. Advanced level students will be increasing their skill set by working on the BAVTS House Project. Students have the opportunity to earn an OSHA Certification.

### Heating, Ventilation & Air Conditioning

Students will learn the core skills for both residential and commercial applications of heating, ventilation and air conditioning. Level one students work in a hands-on learning environment, developing skills while learning blueprint reading, piping and tubing applications, sheet metal and electrical, using the hand tools of the trade. Advanced level students will be increasing their skill set by working on the BAVTS House Project. Students receive training in EPA Section 608 and flexible gas pipe, leading to National Certifications. Students have the opportunity to earn an OSHA Certification.

### **CREATIVE CLUSTER**

### Video & Media Arts

Students will learn to create the images and sounds that come from TV programs and the Internet by combining sound, video and computer graphics to make entertaining and eye-catching programs. This 3-year program consists of Audio and Television production in the first year where you'll learn to run a mixer, camera or video switcher. Year two is concentrated on Video production where students write scripts, conduct interviews, produce and direct those scripts with the use of our professional HD camcorders and edit them on our Final Cut editing stations. Third year students concentrate on Effects production using LightWave 3D, a 3D modeling and animation software program. Instruction in unmanned aerial vehicles (UAV's) for aerial videography using DJI's Phantom 2 Quadcopters is also included. The program has a 3 credit articulation agreement with NCC.

### **Commercial Art (Advertising Design)**

Students will learn the principles of graphic design, typography, basic illustration, use of color, page layout, advertising and digital photography. Working with the latest graphics software and technology, students create brochures, posters, magazine covers, layouts, signs, logos and more. Students will learn how to apply their artistic talents to today's market, beyond pencil and pen, to the computer and using the internet. Advanced level students will be increasing their skill set by compiling a portfolio and using their design skills for school and community projects. The program has an articulation agreement with NCC for 4 credits in Computer Graphics.

### **Graphic Communications (Print Technology)**

Students will learn how to create marketing products to promote businesses and events using a variety of printing techniques, including digital printing, screen printing and large format printing. Level one students will be in a hands-on learning environment, developing skills working with the latest graphics software and technology learning the principles of design, typography, use of color, layout, print production and finishing and bindery. Advanced level students will be increasing their skill set by compiling a portfolio and using their design and print skills for school and community projects. The program is PrintED accredited and the students can earn industry certifications in 6 areas. The program has an articulation agreement with NCC for 4 credits in Computer Graphics.

### Web Design & Development

Students will learn how to design and develop websites using a combination of creativity and computer science. Level one students will be in a hands-on environment, learning the core design principles using various programs such as Photoshop and Illustrator to create website layouts and other visual elements. While still implementing design skills, advanced level students will work heavily on website development. Students will use HTML, CSS, JavaScript, PHP and other programming languages to bring life to their designs. With a 20% employment growth projection by 2022, Web Design & Development students will have an abundance of future career opportunities. The program has an articulation agreement with NCC for 4 credits in Computer Graphics.

### **Computer Networking**

This is an instructional program that focuses on the design, implementation and management of linked systems of computers, peripherals and associated software and prepares students with the technical skills required to support networks and network users. This program includes instruction in networks technologies and standards; system design, architecture, operating systems, security, communications protocols, client support, messaging services, network management, trouble shooting and server optimization. Those completing the program may be employed as a network administrator, network specialist, network technician, webmaster, client services analyst (end user) or network operator.

### **CULINARY ARTS CLUSTER**

### Baking

Students will work in a professional kitchen, learning how ingredients are weighed and measured for commercial sized batches of dough and batter. They will operate large mixing machines and other commercial baking related equipment. Students will learn the various mixing methods to create sweet and savory treats and participate in the production of many different varieties of bread, rolls, doughnuts, sweet rolls, Danish pastry, cookies and many other pastry varieties. Students will learn how to decorate cakes, starting with layer cakes and sheet cakes, advancing to large multi-tiered wedding cakes. Students will learn the advantages and disadvantages of different production options such as the use of prepared bakery mixes and frozen pre-formed products. Students have the opportunity to earn their National Restaurant Association ServSafe certification.

### **Culinary Arts**

Students will learn the fundamental core competencies in safety, sanitation, measurements, equipment, hand tools, basic food preparation and customer service while rotating through three kitchen settings. Advanced students will develop employability skills as they practice hands on skills in basic baking, food safety, health nutrition, cross utilization, sustainability, organization and cost control. Students have the opportunity to earn their National Restaurant Association ServSafe certification.

### HEALTH CLUSTER

### **Athletic Health and Fitness**

Students will learn about sports medicine, health fitness and kinesiology (the study of the mechanics of body movements). Level one students will be in a hands-on learning environment, developing fundamentals in theories of injury prevention and recognition, emergency care, creating exercise and rehabilitation programs along with overall mental and physical health wellness. Advanced level students will be increasing their skill set by learning medical terminology, safety procedures, nutritional facts, basic anatomy and kinesiology. Students have the opportunity to earn their First Aide, CPR, AED and Blood Borne Pathogens certifications.

### **Health Careers**

Students will explore various occupations in the healthcare industry. Core curriculum focuses on anatomy and physiology, medical terminology, medical math, medical professionalism and fundamentals of patient care. The academic content is focused on the student who is considering post-secondary education in various fields such as, but not limited to, pre-med, nursing, physical therapy, medical assistant, occupational therapy, radiology, ultrasound technician, massage therapy and many more. Additionally, students learn basic patient care skills such as taking vital signs, activities of daily living and first aid skills. Students will practice these skills on their peers as well as on simulation mannequins. Advanced level students will be increasing their skill set by being taken into the community for various observations at local healthcare facilities. Students have the opportunity to earn their CPR, Basic Life Support, First Aide, Residential Licensing and Blood Borne Pathogens certification. The program has a articulation agreement with NCC.

### **MANUFACTURING CLUSTER**

### **Electronic Technology**

Students will learn the fundamental skills related to the electronics industry. Level one students will be in a hands-on learning environment, developing skills in AC/DC Circuits, Digital Electronics, Solid State Devices and Computer Applications. Advanced level students will be increasing their skill set by designing and manufacturing electronic assemblies. Students have the opportunity to earn certifications for IPC-610-Electronic Assemblies and J-STP-001

### **Precision Machining**

Students will learn the fundamental skills for machining metal and other materials. Level one students will be in a handson learning environment, developing skills which include blueprint reading and precise measurements as well as tool usage on lathes, milling machines, surface grinders, saws, drill presses and a variety of hand tools. Advanced level students will be increasing their skill set using the computer lab to setup, operate and program CNC (Computer Numerical Control) machines as well as exposure to the Electrical Discharge Machining process. Students have the opportunity to earn national certification in 9 areas through successful completion of the National Institute for Metalworking Skills (NIMS). The program has an articulation agreement with Penn Tech.

### Welding

Students will learn the fundamental skills for welding carbon steel and other metals. Level one students will be in a handson learning environment, developing skills which include basic welds to various configurations and positions, use of a variety of hand tools, operation of the saw, drill press, hand and pedestal grinders, brake press used for the fabrication preparation. Advanced level students will be increasing their skill set progressing to more complex joints, cutting and various metal removal methods and read and visualize shapes from blueprints. The student's skill set and job readiness will be measured based on the American Welding Society standards. Students have the opportunity to earn an OSHA Certification. The program has articulation agreements with NCC and Penn Tech.

### SERVICE CLUSTER

### Cosmetology

Students will learn the fundamental skills needed to sit for the Pennsylvania State Board of Cosmetology Licensing Exam. Level one students will be in a hands-on learning environment, developing skills using mannequins to learn permanent waving, shampooing and styling, manicuring, haircutting, facials, scalp treatments and color. Each student works independently and advances from one skill to another throughout the training process. Advanced level students increase their skill set by working on clients in the school's salon.

### Esthetics

Students will learn the fundamental skills needed to sit for the Pennsylvania State Board of Estheticians Licensing Exam. This is a 300 hour course which can be complete in one year (2 blocks per day). Students will be in a hands-on learning environment, developing skills in skin diseases and disorders, facial hair removal, facial massages and treatments, make-up application, anatomy of the skin and electrotherapy. Students will be increasing their skill set by working on clients in the school's salon.

### **Protective Services**

Students will learn the technical knowledge and skills required for entry-level duties as a police officer, firefighter, paramedic, military service and other safety services. Level one students will be in a hands-on learning environment, learning the techniques, methods and procedures particular to the areas of criminal justice, military protocol and fire protection, especially in emergency and disaster situations. Physical development, discipline and self confidence skills are emphasized due to the nature of the specific occupations. Advanced level students will be increasing their skill set by receiving training in social and psychological skills, map reading, vehicle and equipment operations, the judicial system, pre-hospital emergency medical care, appropriate emergency assessment, treatment and communication. Students have the opportunity to earn their CPR, First Aid, AED, NIMS (National Incident Management System), PATH (Practical and Tactical Handcuffing), PPBT (Personal Protection Baton Tactics, OCAT (Oleorasin Capsicum Aerosol Training and Personal Protection Control and Defense certifications.

### TRANSPORTATION CLUSTER

### **Auto Collision Repair**

Students will learn the fundamental skills needed to be employed in local body shops or insurance claim adjuster. Level one students will be in a hands-on learning environment, developing skills which include repairing and replacing panels, working with sophisticated automotive finishes, special alloy steels and plastics as well as the safe use of hand and power tools. Advanced level students will be increasing their skill set progressing through all phases of repair; including the use of frame straightening equipment and the latest in repair and refinishing techniques, using industry standard equipment. Hands on training on customer-owned vehicles gives students the opportunity for real-world experiences.

### **Automotive Technology**

The Automotive program is credentialed by the National Automotive Technician Education Foundation (NATEF) under the approved Maintenance & Light Repair (MLR) requirements. The curriculum follows the Automotive Service Excellence (ASE) framework and is designed to prepare students for entry level service positions at local dealerships, the military and/or post-secondary education in the high-priority Automotive Service field. Teachers hold ASE Master level certification status in; A1-A8, L1 Emissions, G1 General Automotive Repair, C1 Service Consultant, Safety Inspection, Emissions and NC3 Electronics/Electrical. Students are engaged in high-level STEM integration as they research and apply repair information and technical skills in the servicing and maintenance of all types of automobiles and light trucks. Learners apply Physics, varied practical Mathematical applications including Geometry, literacy, and communication skills that are all applicable to the automotive workplace. Students may complete optional coursework in order to obtain certifications as a PA State Inspection technician, Emissions Inspector and ASE 609 Refrigerant Recovery and Recycling technician for a fee of approximately \$100.

### **CAREER EXPLORATION (Freshman – Second Semester Only)**

### Fast Track

This competitive program is designed to provide ninth grade students who are at or above Grade Level standards (i.e. proficient on 8<sup>a</sup> Grade PSSA) the opportunity to attend *Bethlehem Area Vocational-Technical School* during their freshman year for one (1) semester. This is a Career Exploration opportunity that will rotate students through all career areas offered at BAVTS on a flex schedule during blocks 1 or 2 (Freedom) and 3 or 4 (Liberty) of their school day. By the end of the semester, the students will have an opportunity to apply for a specific program for their 10<sup>a</sup> grade year. This is different from the traditional 10<sup>a</sup> grade student schedule of rotating through four (4) programs before selecting the program of their choice. This program gives the students a clear indication and FastTrack pathway to their potential career goals at the secondary level.

### **COOPERATIVE EDUCATION**

This is a half day, supervised, work-based experience in the student's occupational area, assisting in the transition from school to the workplace. This program is reserved for those individuals recommended by their instructors to be the most likely to succeed on the job. Students are representing the school and establishing reputations and records that will follow them beyond graduation. Considering the responsibility of representing your instructor, school and yourself in a business, there are qualifications to ensure that only conscientious and proficient students participate in the program.

### INTEGRATED INSTRUCTION

In conjunction with the shop class, BAVTS offers integrated instruction in English, Mathematics and Technology to make sure our students have the basic skills needed to enter the workforce upon graduation.