

Berlin Brothersvalley
High School
Catalog

2026-2027



Berlin Brothersvalley High School Catalog

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I. Graduation Requirements

State Required Courses	Credits
English	4
Social Studies	3
Math	3
Science	3
Flex Credit (one additional math, science or social studies credit)	1
Arts/Humanities	2
Physical Education	1
Health	1
Graduation Project*	(.5) credit will be earned upon successful completion of graduation project requirements

Local District Required Courses	Credits
STEM	2
Concentration Pathway	<u>5</u>
	25.5

Students planning to attend a four-year college should take four math and science credits.

II. GRADING SCALE

BBHS Grading Scales

Grade	P/F	Low Value-High Value	Main	Honors & Lab Courses	College Dual Enr./AP	SCTC / SCTC	SCTC
			1.0	1.05	1.1	Z	Z
A+	P	97-100	4.333	4.550	4.766		
A	P	93-96	4.000	4.200	4.400	90-100	4.0
A-	P	90-92	3.667	3.850	4.034		
B+	P	87-89	3.333	3.500	3.666		
B	P	83-86	3.000	3.150	3.300	80-89	3.0
B-	P	80-82	2.667	2.800	2.934		
C+	P	77-79	2.333	2.450	2.566		
C	P	73-76	2.000	2.100	2.200	70-79	2.0
C-	P	70-72	1.667	1.750	1.834		
D+	P	67-69	1.333	1.400	1.466		
D	P	63-66	1.000	1.050	1.100	60-69	1.0
D-	P	60-62	0.667	0.700	0.734		
F	F	0 - 59	0	0	0	0-59	0
P	P	60-100	0	0	0		

(1.0) consists of:

(1.05) consists of:

(1.1) consists of:

(Z) consists of:

Academic / Vocational Shops	Honors Courses / Lab Courses	College Courses / AP Courses	SCTC Courses
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Honor Roll Thresholds

High Honors: 3.67

Honor Roll: 3.0

SCHEDULE CHANGE CRITERIA

Schedule Changes will only be granted in the following instances:

1. a student has an incomplete schedule
2. a student has been placed in courses out of sequence (i.e. Spanish II before taking Spanish I)
3. a student desires to move to a more advanced course (i.e. from English 12 to AP English 12) and meets the prerequisite
4. a student did not receive a course required for graduation
5. a student's I.E.P. necessitates a change via the special education process
6. a teacher recommends that the student be moved to a different level based on the student's needs and provides documentation demonstrating this need
7. a student selects another career pathway and different course requirements or recommendations

Schedule Changes will NOT be granted in instances, not limited to, but including:

1. a request for a specific teacher is made when the student did receive the course requested unless that student previously had the class with the teacher with whom he/she is currently scheduled and did not pass (please realize that there are some courses that are taught by only one teacher)
2. The student has received the classes for which he/she registered and has since changed his/her mind
3. A student did not turn in a schedule selection sheet (in this case, the student would be scheduled into classes according to his/her four-year plan)

III. COURSE DESCRIPTIONS

AGRICULTURE EDUCATION

AG 1-INTRODUCTION TO AGRICULTURE SCIENCE AND MECHANICS (grades 9 and 10) (1 credit)

An introduction to agriculture and agriculture mechanics. A general study of careers, livestock, plant and soil science, FFA, welding, carpentry, safety, and other mechanics.

AG 2-AGRICULTURE PRODUCTION (grades 10-12) (1 credit)

This area of agriscience is designed to provide students with knowledge, skills and competencies needed to enter various occupations in agriculture and natural resources. Topics covered in agriscience are animal science and production, plant science, agriculture mechanics, computer applications, leadership and supervised agricultural experience programs. The program combines knowledge and skills with experimental learning and FFA for a total program effect.

AG 3-AGRICULTURE MECHANICS (grades 10-12) (1 credit)

This area of study is designed to provide learners with job entry-level skills in the agricultural mechanics industry. Major instructional concepts include an orientation to mechanics industry, leadership, safety, drawing and blueprinting, shop, hand and power tools.

AG 4-AGRIBUSINESS MANAGEMENT (grades 10-12) (1 credit)

Agribusiness management is for students who seek further agriculture, business, advancement and management techniques that will enable them to become successful in owning and operating a business.

PLANT & ANIMAL BIOSCIENCE (grades 10-12) (1 credit)

PLANT SCIENCE AND GREENHOUSE MANAGEMENT

An in-depth study of plant physiology and processes, growing media, environmental effects upon plants and pests of plants. This will also be an introduction to greenhouse management and plants

ANIMAL AND LIVESTOCK SCIENCE

A general study of animal and veterinary science; including physiology and biological functions of animals, as well as health, nutrition, reproduction, and care and management of livestock

ANIMAL PRODUCTION (grades 11-12) (.5 credit)

In-depth study of animal anatomy, husbandry, genetics, nutrition, care, production & veterinary skills. Livestock, dairy and equine classification and evaluation will also be covered. Live animal handling and care will be used throughout this course

HORTICULTURE AND LANDSCAPE (GRADES 11-12) (.5 credit)

In-depth study of greenhouse management and production, including plant propagation, aquaponics and hydroponics. Landscape design, installation and maintenance will also be covered through this course. Outdoor and indoor work will be required.

SUSTAINABLE AGRICULTURE (grades 10-12) (1 credit)

The Online Sustainable Agriculture pathway focuses on entrepreneurial and technical skills and careers in the broad spectrum of Agriculture, Food, and Natural Resources.

SAE: AGRICULTURAL EXPERIENCE (1 credit)

Students will establish and maintain a supervised agricultural experience program and submit various required records. This course does not have a specified class time and is conducted out of school, including summers. Students must complete an agricultural project. *Independent Study*

SMALL GAS ENGINE (grades 10-12) (.5 credit)

This area of study is designed to provide learners with job entry-level skills in the agriculture mechanics industry. Major concepts include an in depth orientation to small gas engines, internal combustion, 2 and 4 stroke theories, hand tools and power tools, and shop safety.

WELDING (grades 10-12) (.5 credit)

This area of study is designed to provide learners with job-entry level skills in the agriculture mechanics industry. Major instructional concepts include an orientation to mechanics industry, shop safety, blueprinting, MIG welding, TIG welding, Stick welding various types of metals along with the use of hand and power tools.

COMPUTER EDUCATION

21ST CENTURY TECHNOLOGY SKILLS (grade 9) - One Semester (.5 credit)

Students will be introduced to 21st Century Technology Skills through a variety of Web 2.0 tools and computer software including: networking tools, collaboration tools, presentation/data sharing tools, image sharing/editing tools, and online utilities. This course also includes units on Internet Safety and Digital Citizenship. This class is aligned to the National Educational Technology Standards for Students as well as the State of Pennsylvania Standards. A major goal of this course is to integrate the four C's into the student's skills and abilities (critical thinking and problem solving, communication, collaboration, and creativity and innovation) using technology. Students will participate in technology-enriched activities that incorporate individual and cooperative learning opportunities.

INTRODUCTION TO CAREER EDUCATION (grade 9) - One Semester (.5 credit)

In this course, students will be introduced to the following areas of Career Education and Work: Skill and Interest Inventories, Career Awareness and Preparation, Career Acquisition, Career Retention and Advancement, and Appropriate Workplace Conduct. Students will be introduced to the world of working by engaging in all the necessary steps of obtaining employment. Students will use various resources to research job opportunities of interest, complete a job application, resume, cover letter, and participate in mock interviews. They also will interact with a variety of adults already working to learn about careers of interest

through participation in face-to-face interviews and other learning opportunities. The students will also learn how to effectively communicate in a professional environment, both electronically and interpersonally. This class is aligned to the Pennsylvania State Standards for Career Education and Work and the National Business Education Association standards for Career Development.

FAMILY AND CONSUMER SCIENCES:

CULTURAL CUISINE 1 (grades 9-12)

(.5 credit)

Everyone likes to eat and in this class you will do just that. Covering lessons dealing with meal planning, meal preparation, table setting, kitchen equipment, and safety, etc. This is a hands-on class with a lot of group interaction. You will learn the real art behind food and how to make a meal look nice and incorporate all the essential nutrients.

CULTURAL CUISINE 2 (grades 9-12)

(.5 credit)

In this day and age, nutrition should be at the top of everyone's list to improve one's lifestyle. So many Americans are suffering from health related problems and it has been found that your diet plays an important role in that. We live in a world of fast food and disease and it seems there is little effort focused on our health. This hands-on interactive class was developed to show the importance of our health and how nutrition plays a major role in it. Some topics of study include the food guide pyramid, the six nutrients, caloric intake, dieting, exercise, and most importantly, how to eat right and stay fit.

ENGLISH:

ENGLISH 9

(1 credit)

This yearlong course focuses on developing proficient knowledge and skills in reading and writing. During this school year, students will be exposed to a wide variety of literature, including non-fiction, fiction, short stories, and poetry, with an emphasis on drama. This year, students will work to not only understand what they read but to also improve critical thinking and writing skills. Students will develop, organize, and compose expository essays in response to a variety of texts.

ENGLISH 9 HONORS

(1 credit)

This course is designed to prepare students for the college prep and AP English Language Arts courses offered at BBHS; therefore, the material is more rigorous. This yearlong course focuses on developing advanced knowledge and skills in reading and writing. During this school year, students will be exposed to a wide variety of literature, including non-fiction, fiction, short stories, and poetry, with an emphasis on drama. Students will be expected to read independently, and will work to not only understand what they read but to also improve analytical thinking and writing skills. In response to many of the assigned texts, students will develop, organize, and compose expository essays, character analysis essays, and theme analysis essays.

ENGLISH 10

(1 credit)

This course emphasizes the development and mastery of the core language arts components of reading and writing. The 10th grade curriculum focuses on writing analytical constructed responses and expository essays. It also consists of reading and analyzing a variety of literature including novel excerpts, short stories, poetry, and one drama piece. The students will spend the second semester focusing on reading and interpreting nonfiction literature. Assignments are specifically designed around the PA Common Core Standards with the ultimate goal of students receiving a score of proficient or advanced on the Keystone Exam administered at the end of the course in May.

ENGLISH 10 HONORS

(1 credit)

This course is designed for students who are highly motivated and want to prepare for the demands of college by completing this rigorous, fast-paced course. The 10th grade Honors English curriculum is designed to emphasize the major facets of English Education: composition, vocabulary, and literature. Coursework consists of reading fiction, non-fiction, poetry, and one Shakespearean drama. Not only will students complete a summer reading assignment, but they will read novels continuously throughout the school year and compose a literary analysis for each novel. Assignments are specifically designed around the PA Common Core Standards with the ultimate goal of students receiving a score of proficient or advanced on the Keystone exam administered at the end of the course in May.

ENGLISH 11 CAREER PREP

(1 credit)

This course will focus on strengthening students' reading, writing, research, oral communication, and 21st century skills. By focusing on these areas, students will become better equipped with the skills, knowledge, and understanding necessary to achieve success in the workplace and everyday living. Students will experience a variety of literary non-fiction, and respond through writing and oral discussion.

ENGLISH 11 COLLEGE PREP

(1 credit)

College Prep English 11 focuses on preparing students who intend to continue their education beyond the high school level. A strong emphasis will be placed on literature, writing, and research. The course features the development of critical thinking skills through literary analysis of the short story, poetry, drama, and the novel, as well as some non-fiction. Students will also explore college and career options, and enhance their scholarship-writing skills.

AP ENGLISH 11 - LANGUAGE AND COMPOSITION

(1 credit)

Following the College Board's suggested curriculum designed to parallel college-level English courses, AP English Language and Composition exposes students to written works in a variety of periods, disciplines, and rhetorical contexts. This course emphasizes the interaction of authorial purpose, intended audience, and the subject at hand, and through them, students learn to develop stylistic flexibility as they write compositions covering a variety of subjects that are intended for various purposes. AP students are expected to work at an accelerated pace and to engage in outside reading and independent learning. Students must exhibit a "B" average in previous English courses, complete the required summer reading, and have teacher recommendation in order to take this course.

ENGLISH 12 CAREER PREP

(1 credit)

This course will focus on strengthening students' reading, writing, research, oral communication, and 21st century skills. By focusing on these areas, students will become better equipped with the skills, knowledge, and understanding necessary to achieve success in the workplace and everyday living. Students will explore nonfiction literature, applicable to real-life situations, and will work to improve their speaking and writing skills for future employment. The graduation project research paper and speech will be addressed in this course.

ENGLISH 12 COLLEGE PREP

(1 credit)

This course addresses the needs of college-bound seniors by focusing on the mastery of literary, reading, and writing skills. Students will read and respond to a broad range of literature, including fiction, non-fiction, short stories, drama, and poetry. Students' writing will focus on the development of research papers, college admissions writing, and analytical essays. The graduation project research paper and speech will be addressed in this course.

FINE ARTS & OTHER ELECTIVES:

ELECTIVE ART (grades 9-12)

(1 credit)

This course is available to all students in grades 9-12 as a beginning art course. The course will be based on learning beginner techniques and processes involved in Arts and Crafts. Students will get to experience a wide variety of lessons and art mediums (drawing, painting, sculpture, and digital).

ADVANCED ART I (grades 10-12)

(1 credit)

This course is available to any student after taking Elective Art. This course will be an elaboration on previously learned techniques and processes within the arts. There will be more of a focus on the finer aspects of art such as Art History, Art Aesthetics, and Art Criticism. There will be a new list of advanced art projects to be completed in order to better prepare the students for art careers further down the road. (Students would be able to take this course as many times as wanted. Students are required to have completed Elective Art and receive at least a B average.) This course can be taken for college credit at Berlin High School thru Penn Highlands.

BARC: BERLIN ART CLUB (grades 10-12)

(1 credit)

The Berlin Art Club (BARC) is designed for practicing artists to develop skills/techniques to improve overall school/community aesthetics. Projects include but are not limited to: poster designs, bulletin boards, locker/hallway décor, school spirit, and general decorations. Legacy projects including murals, sculptures and various campus improvement projects. Fundraising for art related field trips, apparel and additional art supplies. Community involvement; volunteer for local organizations to promote the arts, including face painting, window painting and arts advocacy. Art competitions i.e. Paint the Plow, Holiday Design Scholarship, Doodle for Google and various poster competitions throughout the year. Student grades will be comprised of classroom participation and behavior, as well as project based grades related to club activities. Recommended Prerequisites: Elective/Advanced Art, an interest in the arts.

INTRO TO GRAPHICS AND DESIGN (grades 10-12)

(.5 credit)

This is an entry-level course designed to introduce students to modern digital art creation tools and techniques. Students will learn and apply the fundamentals of various software applications (such as Illustrator and Photoshop), web design, image editing, drawing and graphic manipulation. Students will be given challenging real world projects and assignments typical in the graphic design industry with an emphasis on typography, image, space, color, balance and form. Recommended Prerequisite: Elective Art.

BAND (Concert) (grades 9-12)

(1 credit)

Band is a performance oriented, co-curricular activity. Students will demonstrate knowledge of intermediate to advanced instrumental skills through warm-ups, pitch and rhythmic recognition, sight reading, and performance. The senior high band is a performing ensemble which is open to all students in grades 9-12. Permission of the instructor through recommendation is required for admission into the course if the student does not possess previous band experience. Students will follow the same procedure as any other elective course when dropping, adding, or electing the course. Concert and all other performance attendance is mandatory for all students enrolled in the class. Enrolled students are eligible for participation in PMEA County, District, Regional, and State Festivals, as well as other performance and enrichment opportunities.

Prerequisite: Previous school band experience. If you have an interest in joining band and you do not have prior band experience, the director's recommendation is required.

CHORUS (grades 9-12)

(1 credit)

Chorus is a performance oriented, co-curricular activity. The students will demonstrate knowledge of basic musical skills through warm-ups, tonal recognition, sight singing, and performance. The students will perform different styles of music including: classical, multi-cultural, jazz, and traditional American. The senior high chorus, which is open to all students in grades 9-12, is a performing ensemble that meets daily. The chorus presents both a winter and spring concert and also performs at baccalaureate. Concert attendance is mandatory for all students enrolled in the class. Students are eligible for participation in PMEA County, District, Regional, and State Festivals, as well as other performance and enrichment opportunities.

MUSIC APPRECIATION (grades 10-12)

(.5 credit)

This course is an introduction to music which studies the elements of music (notation, scales, meter, rhythm, intervals) instruments of the orchestra, vocalization, and the lives and works of composers from many musical eras. Use is made of recordings, concerts and other media. This course can be taken for college credit at Berlin High School thru Penn Highlands

MUSICAL THEATRE (grades 10-12)

(.5 credit)

This course is for the student that is interested in Musical Theatre - both on stage and "behind the scenes". We will study a variety of musicals, basic acting techniques, stage directions, script study, character analysis, vocal technique, and movement. Students will have the opportunity to rehearse, perform, direct, and stage various scenes and shows. All students are expected to either direct/produce or perform.

*Shows performed through this course will be in addition to our annual spring musical production; enrollment in this course does not determine your participation in the extra-curricular musical show in April.

PIANO/KEYBOARD (grades 9-12)

(.5 credit)

This elective course offers students an introduction to the fundamentals of piano playing and basic music theory. Through hands-on instruction and guided practice, students will learn proper piano technique, note reading, rhythm, scales, chords, and simple performance pieces. In addition to developing keyboard skills, students will explore music theory concepts such as notation, intervals, key signatures, and chord progressions to build a strong musical foundation. The course is designed for beginners and students with limited musical experience, though students with some background in music are also welcome. Emphasis will be placed on both individual playing assessments, music literacy, and aural skills. By the end of the semester, students will be able to perform beginner-level pieces, read and write basic music notation, and demonstrate a solid understanding of core music theory principles. **Materials:** School provides access to keyboards and printed materials.

MOUNTAINEERS IN MOTION (grades 10-12)

(1 credit)

Mountaineers in Motion is a class where you are in the school buildings helping out BBSD staff in whatever capacity is needed. We have several students that help the janitorial staff delivering items, some work with their former teachers or in the Pre K program and others help out the secretarial staff. You will also be required to write a letter once a week to either military personnel or your pen pal from Meadow View. We also have different community leaders join us throughout the year in the classroom and speak to us about the importance of community service. We end the school year with a visit to Meadow View to spend time with our pen pals.

ACCOUNTING 1 (grades 10-12)

(.5 credit)

The course emphasizes the basic principles, concepts, and procedures of accounting that every student must understand for a maximum opportunity when entering the world of business. This course progresses from the simple to the complex. It begins with preparing simple balance sheets and continues to adjusting and closing entries for a merchandising business organized as a partnership. Instructional topics include: starting a proprietorship, debits/credits, posting to a general ledger, cash control systems, preparing a worksheet and financial statements for a merchandising business and recording adjusting/closing entries for a service business. Business simulations may also be used to enhance the learning process.

ACCOUNTING 2 (grades 10-12)

(.5 credit)

Students taking this course should have a fundamental knowledge of Accounting 1. This course will focus on completing an accounting cycle for a merchandising business organized as a partnership. Students will gain experience and knowledge in working with additional capital accounts, preparing and interpreting subsidiary ledgers as well as using a payroll system for compensating employees. Instructional topics include: journalizing purchases, sales, cash payments/receipts, posting to general and subsidiary ledgers, preparing payroll records, payroll accounting/taxes/reports, preparing a worksheet and financial statements for a merchandising business and recording adjusting/closing entries for a partnership. Business simulations will also be used to enhance the learning process. This course can be taken for college credit at Berlin High School thru Penn Highlands.

INTRO TO BUSINESS (grades 10-12)

(.5 credit)

This course examines the social, legal, ethical, economic and political interactions of business and society. This is a basic foundation for the student who will specialize in some aspect of business and will also provide the opportunity for students not pursuing business in the future to learn about the relationship and impact of business to a society in which they are citizens, consumers and producers. The class includes such topics as economic systems, government and business, ethics and law, social responsibility, globalization and international business concepts, principles and practices. This course can be taken for college credit at Berlin High School thru Penn Highlands.

PRINCIPLES OF MARKETING (grades 10-12)

(.5 credit)

This course will focus on the major elements of the marketing mix, including demand, product planning, pricing, channels, and the logistics of dispersion and promotion. Principles, functions and current marketing issues will be discussed. Practical case studies will be used to enhance theory. Pre-Requisite: Introduction to Business. This course can be taken for college credit at Berlin High School thru Penn Highlands.

CREATIVE WRITING - (grades 11 & 12)

(1.0 credit)

The Creative Writing course is **designed for juniors and seniors who enjoy writing as a form of art and personal expression**. In this course, students will explore the elements of numerous literary genres (short fiction, poetry, drama, film). Students are expected to write, share, edit and critique the work of their peers on a daily basis. This course is offered every other year.

GREEK MYTHOLOGY (grades 10-12)

(.5 credit)

Try to imagine how you would feel during a severe thunderstorm if you had no clue what rain, storm clouds, thunder or lightning was! Pretty terrifying, right? That's how it was for the ancient Greeks, so they created myths (stories that endure over long periods of time) to explain the mysteries of nature and to understand that which made no sense to them. Their myths, however, are not just old stories; they represent serious attempts to explain the world at large, and they still have relevance today. They can teach us some of life's big lessons. By studying some of these myths, people can learn how to control their actions, or at least think better of what they do. This semester-long course will provide a general overview of classical mythology and will focus on several mythological figures and their stories.

PUBLIC SPEAKING (grades 10-12)

(.5 credit)

This semester course will provide instruction and experience in the preparation and delivery of speeches in the public setting. Emphasis will be on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion speeches. Upon completion of the course, students should be able to prepare and deliver well-organized speeches as well as demonstrate the speaking, listening, and interpersonal skills necessary to be effective communicators in varied settings.

LIFE PREP CLASS (grades 11 and 12)

(.5 credit)

Life is for learning. Learning what? You name it. There's a lot to learn. This semester dynamic and interactive class for juniors and seniors will equip you with many essential (think: stress management, social, emotional, and critical thinking skills) and many non-essential but nevertheless good to know skills (think: understanding insurance, phone etiquette, journaling, and how to tie a tie) as well as life lessons for success in life beyond graduation. Over the course of the semester, we will delve into scores of topics that aim to empower you with knowledge and the confidence you will need to make sound decisions and thrive post-high school. Get ready to embark on a journey of personal growth!

PERSONAL FINANCE (grades 10, 11 and 12) (.5 credit)

The question, "when will I ever use this in life?" gets answered daily in this semester-long personal finance course. The course covers all of the essential personal finance topics necessary to become a financially capable student. Topics include banking, credit, budgeting, insurance, taxes, investing, career and more. By the end of this course, students will have a thorough understanding of personal finance topics and be prepared to handle the financial responsibilities that exist after graduation. All students will be required to take this course for graduation.

PA LOCAL HISTORY (grades 10 through 12) (1 credit)

Pennsylvania and Local History is a survey course based on the political, economic, social and military history of the state of Pennsylvania and Somerset County. This course reveals the state and local areas' role in the founding of our nation, its importance in American history overall, and its present historical markers. In addition to the local curriculum, students will learn about the geography, culture, and government of Pennsylvania. Open to students in grades 10-12, the class offers a wide variety of curriculum that includes primary and secondary source readings, artifacts, and oral history. Come learn about what makes Pennsylvania great!

WORLD MYTHOLOGY (grades 10 through 12) (1 credit)

Did you enjoy Greek Mythology? Did you want even more mythology from outside of the "classics"? Come take a journey with World Mythology! Students will explore the world of mythological gods and beasts, and will come to learn how creation stories and ancient oral traditions served a vital role for early civilizations in making sense of the physical world. We will also cover archetypes, types of stories & the concept of the Hero's Journey. Some of the cultures we will look at include: Norse, Egyptian, Celtic, Asian, Native American & American Folklore. We will also explore the culture around these stories and even go into modern folklore like cryptids & urban legends. We will also explore how these stories influence our modern culture. These stories of the past will encourage students to glean an enriched understanding of the themes, archetypes, symbolism, and motifs they have encountered and will continue to encounter in their literary experiences through high school and beyond.

HEALTH:

BASIC HEALTH 9 (.5 credit)

This course will help you understand yourself by examining self-esteem, values, pressures, stress, and choices/decisions. You will obtain background on eating disorders, tobacco, alcohol, drugs, and human sexuality. Your life now and in the future will be affected by decisions that you choose to make today. Responsible decision making is a must! (This is a required course for all 9th grade students)

DRIVER EDUCATION/FIRST AID (grades 10-12) (.5 credit)

Driver Education is taught the first quarter of the class time. In this class, students learn rules of the road, Pennsylvania driving laws and helpful hints on how to be a successful, safe driver. Behind-the-wheel driving is taught separately to students who have their permit or license. The second half of the semester the student takes First Aid. In this course, lifesaving skills such as CPR are taught and students gain insight into how to lead a safer life. Student must have 6.5 credits with a minimum GPA of 2.0.

ADVANCED HEALTH (grades 11 & 12) (.5 credit)

This is an in depth examination of the Mental, Social/Emotional and Physical Health issues that students will face in their lifetimes. Topics include History of Health, Health Professions, Health Insurance, Life After High School, Adolescence, Stress, Mental Health Topics, Diet and Nutrition, Alcohol, Drugs, Tobacco, Reproduction, STI's, Cancer Awareness, Death and Dying. This course can be taken for college credit at Berlin High School thru Penn Highlands.

LANGUAGE:

SPANISH I (grade 9-12) (1 credit)

Spanish 1 builds the base for language learning. Students will become comfortable listening to, reading, and speaking in the target language. Daily attendance and commitment to completing all assignments are the fundamental elements for success. This course is designed for non-native speakers. This class will teach Spanish the same way everyone learned their first language, through a teaching method called Comprehensible Input. This method prioritizes the students' gaining as much experience in the language (input) as possible. This method also requires the teacher to make all that Spanish completely comprehensible to the student through context, body language, acting, pointing, drawing, even just translating the word to English from time to time. The student's experience in class will largely consist of listening to and reading passages in Spanish, and working to develop proficiency in speaking and writing in Spanish.

SPANISH II (grades 10-12)

(1 credit)

Spanish 2 continues with Spanish reading and conversational skills and introduces more vocabulary while building on grammar concepts. Students will have the opportunity to use Spanish for the purpose of self-expression. Daily attendance and commitment to completing all assignments are the fundamental elements for success. This course is designed for non-native speakers. This class will teach Spanish the same way everyone learned their first language, through a teaching method called Comprehensible Input. This method prioritizes the students' gaining as much experience in the language (input) as possible. This method also requires the teacher to make all that Spanish completely comprehensible to the student through context, body language, acting, pointing, drawing, even just translating the word to English from time to time. The student's experience in class will largely consist of listening to and reading passages in Spanish, and working to develop proficiency in speaking and writing in Spanish. By the end of the year, students will be able to write pages of Spanish without hesitation. Prerequisite: Spanish I

SPANISH III (grades 11 & 12)

(1 credit)

Spanish 3 continues with Spanish reading and conversational skills and introduces more vocabulary while building on grammar concepts. Students will have the opportunity to use Spanish for the purpose of self-expression. Daily attendance and commitment to completing all assignments are the fundamental elements for success. This course is designed for non-native speakers. Students will have more opportunities for independent reading and writing. Students will focus more on past tense than present while continually adding more words to their vocabulary. The Comprehensible Input teaching method will be continued. This method prioritizes the students' gaining as much experience in the language (input) as possible.

Prerequisite: Spanish II

MATHEMATICS:

ALGEBRA I A

(1 credit)

This full year course builds upon the mathematics learned in Pre-Algebra I. In this course, students will primarily explore lines and linear situations. They will solve linear equations and inequalities, graph linear equations and inequalities, be introduced to functions and function notation, learn to write equations for linear functions, and write and solve systems of linear equations and inequalities. In addition, they will be introduced to some fundamental concepts associated with operations with real numbers and expressions. The concepts of absolute value, radicals, and powers will be covered. This course is designed as a prerequisite course for Algebra IB and a preparatory course for taking the Keystone Algebra I test.

ALGEBRA I (grade 9)

(1 credit)

Topics covered in this course include: analyzing linear relationships, graphing linear equations and inequalities, factoring polynomials, simplifying rational expressions, solving systems of two linear equations and inequalities and **simplify expression** containing exponents and square root radicals. It will also prepare students to take the Pennsylvania Keystone Algebra I Exam by covering all of the Algebra I Keystone Standards.

HONORS GEOMETRY/TRIGONOMETRY (grade 9)

(1 credit)

Trigonometry topics in this year-long course include Pythagorean relationships, functions and their graphs, trigonometric functions, right triangle trigonometry, angles of rotation and radian measure, graphs of trigonometric functions, trigonometric formulas and identities, and polar coordinates. Projects typically require students to research topics beyond the scope of the textbook as well as across the curriculum and require the application of the concepts studied in the class to solve real world problems.

ALGEBRA II (grade 10)

(1 credit)

This course emphasizes variation equations, functions, graphs, quadratic equations, matrices, systems, powers and roots. Students will study each concept in depth through applications and practical problems, providing opportunities to develop skills and to understand the importance of mathematics in everyday life. Prerequisites: Algebra I, Geometry.

ALGEBRA II - HONORS (grade 10) (1 credit)

This course is a more intense version of Algebra II. The pace will be faster (approximately 20%). This course emphasizes variation equations, functions, graphs, quadratic equations, matrices, systems, powers, roots, logarithms and trigonometric applications. Students will study each concept through applications, practical problems, and projects. Prerequisite: A "C" or higher in Algebra I.

GEOMETRY (grade 11) (1 credit)

Students will explore characteristics of one, two and three-dimensional objects. The course emphasizes co-ordinate plane geometry, relationships of parallel and perpendicular lines, similar and congruent figures, properties of quadrilaterals, area and perimeter, surface area and volume, and circles as well as an introduction to right triangle trigonometry. Other topics may be covered as time permits. Prerequisite: "Successful Completion of Algebra 1 or Algebra B."

PRE-CALCULUS (grades 11 & 12) (1 credit)

This course provides the opportunity for students to informally investigate the traditional concepts of calculus, such as maxima, minima, sequences and limits. In addition, students work with the algebraic manipulation they will need in future courses. Prerequisite: a "C" or higher in Algebra II.

CALCULUS (grade 12) (1 credit)

This course is designed for students demonstrating a strong interest and background in mathematics. Students will differentiate and integrate equations using a variety of rules. Students will then apply differentiation and integration to solve real-world applications. Prerequisite: Pre-calculus.

STATISTICS (grades 11 & 12) (1 credit)

Statistics acquaints students with the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: 1) exploring data, 2) sampling and experimentation, 3) anticipating patterns, and 4) statistical inference. Students work on projects involving the hands-on gathering and analysis of real-world data. Ideas and computations presented in this course have immediate links and connections with actual events. The use of computers and graphing calculators allows students to focus deeply on the concepts involved in statistics. Prerequisite: Algebra II. This course can be taken for college credit at Berlin High School thru Mount Aloysius College.

PHYSICAL EDUCATION:

PHYSICAL EDUCATION (grade 9) (.5 credit)

Students will demonstrate an appropriate level of physical fitness; a positive attitude toward physical activity; a knowledge and understanding that participation in a variety of physical activities can lead to life-long physical fitness; basic skills related to a variety of physical activities; positive social and emotional behavior; and understanding of how participation in physical activities contributes to healthful living; a value on physical activity as a means of self-realization and fulfillment; and to value healthful life styles. (This is a required course for all 9th grade students)

PHYSICAL ACTIVITY (grades 10-12) (.5 credit)

The students will actively participate in activities that develop and contribute to lifelong fitness goals. The activities will involve individualized cardiovascular aerobic work-outs, flexibility, muscular strength training and lifetime physical activities. The students will demonstrate knowledge and appreciation of the required activities, proper techniques, fundamentals and safety factors associated within this program. The students will work towards an increased level of overall fitness and an understanding of how participation in conditioning activities can contribute to a healthy lifestyle. They will develop self-confidence, improve self esteem, and create positive social interactions throughout a variety of physical activities. This class will prepare them for an actively fit lifestyle which can carry over into their adult lives.

ATHLETIC WEIGHT TRAINING (grades 9 to 12) (.5 credit each semester)

Athletes will engage in an individualized strength and speed program that is custom made to meet their needs as an athlete at Berlin. Strength training, speed training, flexibility and plyometrics will all be addressed in this course. **Students MUST**

participate in at least one Varsity Sport to be eligible to enroll in this course. This course is only for the athlete who is serious about getting stronger and faster.

ATHLETIC BROADCASTING (Independent Study/Club) (Grades 9 to 12) (.5 credit each semester)

This course is designed to be an introduction to the digital video/media field of athletic live streaming. The students will live stream various home, varsity athletic events and broadcast them on to the Berlin Live Stream YouTube page.

TECHNOLOGY/ENGINEERING EDUCATION:

INTRODUCTION TO TECHNOLOGY/ENGINEERING (grades 9 & 10) (1 credit)

The student will be involved in an integrated, laboratory and experience based instructional program designed to prepare him/her to be knowledgeable about technology; its evolution and cultural significance. The student will have experiences in the application of science and math concepts in technological systems in areas such as, but not limited to, construction, manufacturing, communications, and transportation. Students discover, create, solve problems, and construct using a variety of tools, machines, computer systems, materials, and processes.

COMPUTER AIDED DRAFTING I (CAD I) (grades 10-12) (.5 credit)

This course involves the use of computer software and hardware as applied to mechanical design and drafting. Students will learn to manipulate basic geometric entities (points, lines, and arcs) to create 2-D and 3-D wire frame models. Experiences dealing with dimensioning level/layer surfaces and planes are also explored. Students will complete numerous mechanical drawings using problem-solving skills that are applicable to everyday life and work. Students will also identify career opportunities related to CADD and the required education preparation. Course length is 18 weeks.

COMPUTER AIDED DRAFTING II (CAD II) (grades 11 & 12) (.5 credit)

This course will introduce the students to Autodesk's newest 3-D modeling software Inventor. It is targeted for the beginning user who has little or no experience designing in 3D. This course teaches the student how to navigate Inventor's toolbars and menus; create basic 3D parts using Extrude, Revolve, Sweep and Loft, apply and edit dimensions and constraints. Students will also create basic drawing layouts and build assembly models using top down and bottom up approaches. Course length is 18 weeks. (Prerequisite: CAD I and Architectural CAD)

ARCHITECTURAL CAD (grades 10-12) (.5 credit)

This course will introduce students to residential drafting/design and provides basic information necessary for planning various types of dwellings. It presents basic instruction in preparing architectural drawings using the Auto Desk software of AutoCAD and Revit and various other software. Students taking this course will develop the necessary technical skills to communicate architectural ideas in an understandable, efficient and accurate manner. Course length is 18 weeks. (Prerequisite: CAD I)

COMPUTER AIDED INTEGRATED MANUFACTURING (CNC) (grade 12) (.5 credit)

Students taking this course will be introduced to the procedures of programming numerically controlled equipment. Students will use various programs to perform numerous activities related to CNC machines. Students write programs following a machine format detail, using Cartesian coordinates for motion command and incorporating preparatory and miscellaneous commands necessary to manufacture parts on a machining center. Course length is 18 weeks. (Prerequisites: Computer Aided Drafting I)

APPLICATIONS OF TECHNOLOGY EDUCATION (grade 12) (.5 credit)

Students will be required to plan, design, construct and evaluate an individual or group project of their liking, using the skills obtained in Technology Education. Students will be required to design a project using computer aided design software as well as complete a daily log of their progress. Students must research their project topic and complete a paper pertaining to their findings. Students must cover the cost for project materials. Course length is 18 weeks. (Prerequisites: CAD II and Manufacturing Systems or Construction Systems)

MANUFACTURING SYSTEMS (grades 11 & 12) (.5 credit)

This is a course in which students analyze the technical systems, historical evolution and various types of manufacturing. Students will examine the various impacts required for manufacturing, experience a variety of manufacturing processes, produce and investigate manufacturing outputs and evaluate manufacturing impacts. Students will participate in problem solving as they identify, design and produce products in a manufacturing technology laboratory.

ENGINEERING DESIGN (grades 11 & 12) (.5 credit)

This course is designed to challenge, promote and develop creativity through hands-on activities. Students will develop a better understanding of why engineers use a wide variety of materials for products by building prototypes and testing their designs. A variety of STEM (Science, Technology, and Engineering & Mathematics) problem solving activities, projects and instructional approaches will be provided to enable students to demonstrate their abilities to solve problems efficiently and effectively. Students use 3D design software to design and document solutions for the course activities. The safe use of tools & machines will be taught and reinforced as students complete activities. Activities may include: Inventor 3D designs, Mousetrap vehicles, CO2 car dragster, bottle rockets, boat hull designs, hydraulic robotic arm, and Solar & Maglev vehicles. This course is designed for 11th or 12th grade students. (Prerequisites: Physics or currently taking Physics)

ENGINEERING PROJECTS (grades 11 & 12)

(.5 credit)

This course is designed to promote school community involvement through hands on activities. Students will develop pride in improving the school /community environment by developing projects that benefit all involved. Students will be required to use the tools, machines & materials related to the areas of Engineering Technology. Possible examples for projects: musical stage props, signs and maintenance in and outside the school grounds that may be completed by the students.

(Grades 11-12 prerequisites: Introduction to Engineering Technology, Manufacturing Systems or Construction Systems)

SCIENCE:

HONORS BIOLOGY (grade 9)

(1 credit)

Honors Biology is an introductory study of biochemistry, cell structure and function, genetics, metabolism, evolution and the ecology of living things. This Biology course is designed to provide the student interested in a career in the health sciences or allied health technology services with an introduction to the fascinating study of how living things are structured, how they function, and how they interact with each other and their environment. Although there is a heavy load of new terminology to be learned, emphasis will be placed on the concepts of the organization of structure and function. Keeping up with the homework assignments and taking good class notes are absolutely essential to doing well in this class. This class is an accelerated version of 9th grade biology and will require more independent work, higher level thinking skills and at home study.

BIOLOGY I (grade 9)

(2 credits)

An introductory course designed to provide a broad education in the fundamentals of biology (cell biology, bioenergetics, chemical basis for life). This course, in combination with Genetics and Ecology, prepares students for choosing more advanced courses in the biological sciences, (anatomy/physiology, microbiology, paleontology, and genetics). A variety of instruction, including labs, will be used to cover and reinforce key topics. This course is constantly evolving based on real-world events. Biological topics in the news (medical treatments, agricultural techniques) are incorporated in the course to show the student biology's direct connection to their everyday lives.

BIOLOGY II (grades 11 & 12)

(1 credit)

This is a more intense version of the standard biology course. It is designed for students who have a strong interest in the sciences; biology, biochemistry, medicine, agronomy. The content of this course will follow a more traditional approach with the idea of preparing students for post-secondary work in the sciences. The pace will be faster (approx. 30%) so that a broader range of material and experiences can be gained. Exercises may be of a more quantitative nature to give a more experimental feel to the course. Students taking Bio II are eligible for Dual-enrollment through Mount Aloysius. Prerequisite: C or higher in Academic Biology and a score of proficient or higher on the Keystone exam.

CONSUMER CHEMISTRY (grades 10-12)

(1 credit)

Chemistry is all around us and used by virtually everyone, regardless of his or her vocation. This is the most elementary Chemistry course offered here at BBHS. This class will introduce you to the "Basics of Chemistry" that are aligned with the "common core" standards. Each section will present terms and concepts in the best way for your understanding and retention of the topics discussed. The class will be conducted in such a way that a student with minimal science background can successfully complete the class if they apply themselves and complete all assignments to a satisfactory level of achievement.

CHEMISTRY AND LAB (grades 10-12)

(2 credits)

This is an introduction course to chemistry designed for students planning on attending 4 YEAR COLLEGE ONLY. It also will introduce you to the "Basics of Chemistry" that are now aligned with the new "common core" standards. Students use their advanced math skills and problem solving techniques to learn the basics of chemistry. This course also includes a lab period two days per week.

HUMAN ANATOMY/PHYSIOLOGY (grades 11 & 12)

(1 credit)

This course is designed to appeal to students interested in any aspect of the medical profession as well as cosmetology, daycare, medical secretary, etc. Topics covered are aimed at these areas to expose students to various career opportunities. All aspects of human structure and function will be covered, and physical identification is required. This is a college-level class, so more material will be covered in a shorter time period and grading is more intensive. Prerequisite: C or higher in Academic Biology.

ANATOMY/PHYSIOLOGY WITH LAB (grades 11 & 12)

(2 credits)

This course is designed to appeal to students interested in aspects of the medical or health care profession. It is an introduction to the organization of the human body at its molecular, cellular, and tissue levels. All aspects of structure and function will be covered, and physical identification is required. Dissections and other laboratory activities are also a significant part of the class. Pre-requisites include Academic Biology and Academic Chemistry and a score of proficient or higher on the Keystone exam. Dual-enrollment through Mount Aloysius is suggested, but not required.

ACADEMIC PHYSICS (grades 11 & 12)

(1 credit)

Physics is a science course that studies forces, motion, energy, wave theory, basics of DC electricity and basics of nuclear physics. The course is designed for any student that plans to major in any science, engineering, math or medical field. College bound students are greatly encouraged to take this course because it teaches you how to learn and how to think at a higher level. We do many hands on labs as well as some engineering design type labs. The course is offered for college credit through Mount Aloysius College.

CHEMISTRY II (grades 11 & 12)

(1 credit)

This course continues where Chemistry/Lab left off. It is designed for students planning on attending 4 year college or accredited junior college only. It also will introduce you to the "Basics of Chemistry" that are now aligned with the new "common core" standards. Students use their advanced math skills and problem solving techniques in combination with their previous chemistry knowledge to further their understanding of chemistry. Topics will include additional gas laws, stoichiometry, equilibria, properties of solutions, kinetics, intro to biochemistry, and intro to organic chemistry. Prerequisites: "C" or better in the following courses - biology, algebra I, geometry, and chemistry/lab. This course can be taken for college credit at Berlin High School thru Mount Aloysius College.

AP BIOLOGY (grades 11 & 12)

(1 credit)

Advanced Placement Biology is modeled after a two-semester college introductory biology course that follows the curriculum designated by The College Board. AP Biology is a fast paced, in-depth study of many of the fields of study in the biological sciences, and is built around a new framework that organizes biology into four big ideas. Students are asked to integrate detailed information regarding biological processes into broader thematic schemes. Students will develop analytical and laboratory skills necessary to investigate modern biology issues. The range/depth of covered material and the type of work required of students differs significantly from a typical high school biology course. Lab activities, technical reading/writing, and exams will be demanding, cover large amounts of material, and require significant work outside of class. Material will be delivered through traditional lecture, small group discussions, and hands-on labs. Students will be evaluated with frequent short quizzes, in-class assignments, homework, essays, lab reports, and major tests. Students successfully completing this course should have a working knowledge of biology at the collegiate level. Students considering AP Biology should be academically motivated and science-oriented. Completion of Academic Biology and Chemistry is recommended. Please check The College Board website to check AP policies of colleges you may be considering before enrolling.

SOCIAL STUDIES:

WORLD GEOGRAPHY (grade 9)

(1 credit)

Students will be exposed to the basics of geography at the onset of the course. Once basic skills have been attained, students will then be given instruction on all of the major continents and the countries within. This course will be a journey around the globe using various formats: lecture, video, book, class discussion, computer, and a touch of the imagination. Along with actual geography, students will cover cultures and traditions and how they each help shape the environment in which humans live.

WORLD HISTORY (1500s-20th Century) (grade 10)

(1 credit)

This course will feature a survey approach to the major periods and events that occurred from the end of the middle ages to the twentieth century. The period of the Modern Era is commonly used to describe this era. The course will develop as the

means by which human beings have made a transition to modern times. The course will demonstrate the formation of Europe and the Colonial World. The Age of Empires and the rise it gave to Nationalism as well as the Industrial Revolution will be highlighted. The student will be able to understand the evolution of the Modern Era and be able to better understand the world at present.

WORLD HISTORY HONORS (1500s-20th Century) (grade 10) (1 credit)

In addition to what is taught in the standard World History course, Honors World History offers more opportunities for students to engage in critical thinking. Students will have access to a greater variety of materials and will benefit from learning alongside other dedicated students. More rigorous assignments push students to develop skills that not only deepen their understanding of modern history, but also transfer to other disciplines.

AMERICAN HISTORY (grade 11) (1 credit)

The first semester covers American History from Reconstruction following the Civil War to and including WWI. Additional topics are settlement in the Mid-West, Indian Wars, Industrial Revolution, Urbanization, and Immigration, Unionism, Political Corruption, Populism, Imperialism, Spanish-American War and Progressivism. Second semester covers American History from the Age of Normalcy to the most recent events in the United States. Additional topics include the "Roaring Twenties", Great Depression, New Deal, WWII, Cold War, Korean Conflict, New Frontier, Vietnam Conflict, Segregation and Integration and War in the Gulf.

GOVERNMENT & PERSONAL FINANCE (grade 12) (1 credit)

This course will focus on understanding the workings of our government and management of personal finances. During class, we will further apply these learned skills practically in order to prepare students to be successful American citizens as they move toward graduation. In this mixed course, we will cover the specifics on voting, the foundations of the U.S. government, the elements of Constitution, and basic economic principles, as well as creation of post-graduation budgets, exploration of possible entrepreneurial ventures, banking options, credit fundamentals, loan options, and tax basics and investment opportunities. In addition, students will work to acquire soft skills to make themselves more marketable during job seeking/college applications, and practice applying these skills through in-class interactions with local business liaisons and professionals.

ADVANCED PLACEMENT GOVERNMENT AND POLITICS (grades 10-12) (1 credit)

AP U.S. Government and Politics provides a college-level, nonpartisan introduction to key political concepts, ideas, institutions, policies, interactions, roles and behaviors that characterize the constitutional system and political culture of the United States. This course content, which follows the College Board standards, will help students understand the United States Constitution through analyzing balanced political content throughout the curriculum. Students will not only explore the political system but will also become informed citizens who understand the call to preserve, protect and defend the rights and liberties at the core of our nation's charter. Students will be expected to move beyond factual recall into critical analysis of the creation, function and process of government. Both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies will be explored during this year long course. Students enrolled in the course will study the content with the goal of taking and passing the College Board exam in May.

SOMERSET COUNTY TECHNOLOGY CENTER EDUCATION: (grades 10-12)

ASPIRING EDUCATOR (3 credits)

A program that focuses on the general theory and practice of learning and teaching, the basic principles of educational psychology, the art of teaching, the planning and administration of educational activities, school safety and health issues, and the social foundations of education.

AUTOMOTIVE TECHNOLOGY (3 credits)

Students use state-of-the-art equipment to diagnose, service and repair vehicles following PA state inspection guidelines. Students learn all aspects of automotive repair including brakes, steering, suspension, electrical, HVAC, transmission, and engine performance with hands-on and classroom instruction. During their graduating year, students have the opportunity and means necessary to attain their PA State Inspection license upon completing the course, passing the written base line test, category tests, and tactile live inspection test. Many SCTC automotive students have jobs waiting for them upon graduation or go on to excel at post-secondary trade schools.

AVIATION MAINTENANCE TECHNOLOGY (3 credits)

Prepares students to apply technical knowledge and skills to repair, service and maintain all aircraft components other than engines, propellers, avionics and instruments.

CARPENTRY (MILLWORK)

(3 credits)

Students will learn and understand hand tool, portable power tool, and stationary equipment operation and safety. Through hands-on learning, students will experience all phases of construction including blueprint reading layout, framing, interior, and exterior finish. Students will have the opportunity to obtain Mobile Elevated Work Platform operators card and OSHA 10 card.

COLLISION REPAIR & REFINISHING

(3 credits)

Students repair damaged vehicles to like new condition. Utilizing the latest technology, students will learn parts repair/replacement including plastic parts MIG welding, resistance spot welding, adhesive bonding, body and frame alignment, trim, accessories, interior components, painting/painting prep, damage repair cost estimating and detailing.

COMPUTER NETWORKING

(3 credits)

Students will learn the basics of computers, physical networking using copper and fiber optic cabling, logical networking with Cisco based coursework.

CONSTRUCTION TRADES

(3 credits)

Students will participate in and become familiar with a variety of trade areas, including Carpentry, Masonry, Electrical, Pre-Engineering Drafting and Design and Plumbing. Students will operate a wide range of professional hand, power, and air tools and construct building projects from blueprints to completion

COSMETOLOGY

(3 credits)

Using industry standard equipment, tools and products, students will learn shampooing, haircutting and styling, hair coloring, highlighting, perming and chemical relaxing, spa services such as facials, manicures, pedicures and artificial nails, make-up application and eyebrow and lip waxing and tweezing. Motivated students who invest the requisite time can earn a license from the State Board of Cosmetology and begin immediate employment upon completion of the program.

CULINARY ARTS

(3 credits)

Prepares students for careers in hospitality - the largest industry in America today. Instruction includes theory and applications related to food preparation, food management, menu and banquet planning, food and beverage purchasing, quality control cost analysis, commercial baking and pastry, catering, chef preparation, institutional foods, meat cutting, cooking methods, nutrition, safety and sanitation.

DENTAL ASSISTING

(3 credits)

Prepares individuals to function effectively as an integral member of the dental health team. The practitioner will learn to perform chair-side assisting, related office duties and selected dental office laboratory procedures and dental radiography.

ELECTRICAL OCCUPATIONS

(3 credits)

Training involves three major electricity branches: residential, commercial and industrial. Students learn theory and regulatory codes as well as practical applications.

FORESTRY

(3 credits)

Students will learn woodland care and management which includes logging, cutting, planting and marketing of wood and wood products. This program also covers skills involved in sawing, drying and grading lumber.

HEALTH OCCUPATIONS

(3 credits)

Students learn to be direct caregivers through topics such as patient care skills, anatomy and physiology, law and ethics, communication, medical terminology, nutrition and infection control and safety.

HVAC/R

(3 credits)

Heating, Ventilation, Air Conditioning and Refrigeration students will learn and understand how to install or repair heating, central air conditioning, HVAC, or refrigeration systems, including oil burners, hot-air furnaces and heating stoves.

MACHINING TECHNOLOGY

(3 credits)

Students will learn the following skills: Blueprint, Reading, Inspection, Basic GD&T, and Precision Measurement; Layout and Bench work Skills; Drill Press Skills; Lathe Operations; Milling Operations; Surface Grinding Basics; CNC Mill Basics; CNC Lathe Basics and Cam Basics.

MASONRY

(3 credits)

Students will learn brick and block laying techniques, various concrete applications including decorative concrete, how to work with various types of stone and ceramic tile and how to construct a project from layout to completion including cost and material estimates.

PRE-ENGINEERING DRAFTING AND DESIGN

(3 credits)

Students will learn and may specialize in mechanical or architectural drafting or civil engineering. Students use the latest computer aided drafting software and will have the latest technology including a 3D printer and scanner, laser engraver, total station as well as GPS units.

SERVICE OCCUPATIONS

(3 credits)

Students will learn the basics of custodial services, institutional food services, commercial laundry, lawn care, automotive detailing, housekeeping and distribution of goods. Students learn hands-on skills in a lab setting and participate in related activities within the school. This program stresses workplace safety, the development of good work habits and the ability to work cooperatively.

WELDING

(3 credits)

Students will learn to design, fabricate and repair various items made from metal. Students will learn the skills necessary to safely perform SMAW (shielded metal arc welding), GMAW (gas metal arc welding), OFC (oxyfuel cutting), PAC (plasma arc cutting) and ACAC (air carbon arc cutting).

ALLEGANY COLLEGE OF MARYLAND COLLEGE COURSES: (Note: These courses are offered to selected students who are 16 or older. Parents and students will be billed for tuition at a rate to be established by the college offering the course.)

INTRODUCTION TO SOCIOLOGY

(.5 credit)

This one semester course is offered by Allegany College of Maryland at BBHS every other year. Students also earn 3 college credits for the course. This basic course in sociology is an overview of principles of sociology using empirical knowledge and the application of the scientific method. Review of basic principles of social interaction, social roles, organization, processes, stratification, social change, group dynamics, and valuation will be done.

HISTORY OF WESTERN CIVILIZATION

(.5 credit)

The development of Western Civilization and its worldwide influence. Emphasis on the evolution of military, political, social, and economic institutions as well as the cultivation of arts (prehistory to 1500).

INTRODUCTION TO LITERATURE (grade 12)

(1 credit)

Intended to introduce the student to literary forms and approaches to literary criticism, to increase his/her reading ability and analytical skills, and to lead the student to form standards of taste and judgment. Recommended for pre-law students, students in humanities or social and behavioral sciences, and all those whose chosen careers involve analysis, interpretation, and evaluation.

ACM ENGLISH 11 (grade 11)

(1 credit)