Boyertown Area Senior High

2025 – 2026

Program of Academic Studies

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MISSION STATEMENT OF THE BOYERTOWN AREA SCHOOL DISTRICT

To cultivate an exceptional, innovative learning community that enables all students to succeed in a changing world.

LETTER FROM THE PRINCIPAL

Dear Students and Parents/Guardians:

This Program of Academic Studies has been designed to assist students and their parents/guardians in developing a meaningful and sequential educational program. Students should select courses based on their educational and career plans that they have developed within our Career Portfolio program.

For students entering ninth grade, it is important to consider the sequence of courses in grades 9-12 so that graduation requirements are fulfilled. This publication is a comprehensive listing of all course offerings for grades 9-12. We encourage students and parents/guardians to review those sections which pertain to the development of their education program and career pathway.

Students and parents/guardians are asked to carefully consider the options available along with the recommendations made by teachers during the course selection process. Teachers, school counselors, and administrators are available to assist with your selections.

Jared K. Sparks
Principal
Boyertown Area Senior High

PURPOSE AND FORMAT OF THE CATALOG

This catalog describes the planned courses available to Boyertown Area Senior High (BASH) students. The purpose of the *Program of Academic Studies* is to assist students and parents/guardians in selecting courses most beneficial and relevant to each student's post-high school plans.

CHAPTER 4 PENNSYLVANIA ACADEMIC STANDARDS AND PENNSYLVANIA SYSTEM OF SCHOOL ASSESSMENT

On September 12, 2013, the State Board of Education approved final-form revisions to Chapter 4 Academic Standards and Assessment. The Pennsylvania Common Core State Standards has established academic standards for English Language Arts including Literacy in History/Social Studies, Science, and Technical Subjects and Mathematics. Boyertown Area School District (BASD) is committed to preparing students for adult life by attending to their intellectual and developmental needs and challenging them to achieve at their highest level possible. In conjunction with families and other community institutions, public education prepares students to become self-directed, life-long learners and responsible, involved citizens. At this time, academic standards have now been adopted in most areas. Academic standards define what skills students should know and be able to do upon graduation. The BASD has been working with these standards and is working on a continuous improvement cycle to revise the curriculum to align with them.

ASSURANCE OF NON-DISCRIMINATION

Students and parents/guardians are assured that the BASD does not discriminate on the basis of race, religion, ethnic heritage, sex, or handicap in its educational programs or activities offered in the schools.

Any complaints alleging such discrimination should be directed to the responsible persons with the following procedure:

1. Complaints alleging discrimination on the basis of race, religion, ethnic heritage, or handicap (Title VI and/or Section 504) should be presented in writing to the building principal, Boyertown Area Senior High School, 120 North Monroe Street, Boyertown, PA 19512 (610-369-7435).

2. Complaints alleging sex discrimination (Title IX) should be presented in writing to the Assistant to the Superintendent for Human Resources, Boyertown Area School District, 911 Montgomery Avenue, Boyertown, PA 19512 (610-367-6031).

3. Students with limited English language skills are not excluded from any program offerings (OCR Guidelines SS-4-L). Students needing assistance should contact the building principal, Boyertown Area Senior High School, 120 North Monroe Street, Boyertown, PA 19512 (610-369-7435) so that help or interpretations may be provided.

Appeals generated by the response of the first-level hearing officer may be taken to the Office of the Superintendent.

SCHOOL COUNSELING DEPARTMENT

COUNSELING ASSISTANCE

Course selection places great responsibility on students to work cooperatively with their parents/guardians, teachers, and school counselors. A cooperative effort will aid in interpreting one's abilities, talents, and interests in order that the proper educational and career goals may be achieved.

The School Counseling Department of BASH, staffed with six counselors, is prepared to assist with the course selection process. Although students meet with their counselors at various times to discuss course selections, parents/guardians are encouraged to contact the counselor for assistance and advice and choose courses based on teacher input and future goals. Counseling aid can provide the necessary background information for wise decision-making.

School Counselors and Counseling support for the 2025-2026 academic school year are:

Lisa Oxenreider	loxenreider@boyertownasd.org	Counselor: Class of 2027 (A-L)/Grade 9 (A-Ce)
Crystal McArthur	cmcarthur@boyertownasd.org	Counselor: Class of 2028 (A-L)/Grade 9 (P-Sc)
Jordan Durante	jwebb@boyertownasd.org	Counselor: Class of 2026 (A-L)/Grade 9 (G-Ko)
Sandy Gallagher	sgallagher@boyertownasd.org	Counselor: Class of 2026 (M-Z)/Grade 9 (Kp-O)
Christen Mazzie	cmazzie@boyertownasd.org	Counselor: Class of 2028 (M-Z)/Grade 9 (Sd-Z)
Christy Greener	cgreener@boyertownasd.org	Department Leader Counselor: Class of 2027 (M-Z)/Grade 9 (Cf-F)
Kathy Hiryak	khiryak@boyertownasd.org	Counseling Office Assistant
Michelle Bright	mbright@boyertownasd.org	Career Resources Assistant
Natalie Warren	nwarren@boyertownasd.org	Internship Mentor Coordinator

SCHOOL COUNSELING DEPARTMENT RESOURCES

Students have access to web-based programs, such as SmartFutures and Everfi, related to post-secondary institutions, financial aid, and career exploration. Students may make appointments to see their school counselor or to meet with the career assistant. Students may also meet with representatives from post-secondary institutions when they visit. These resources are available by appointment during regular school hours. Periodic evening programs are scheduled throughout the school year as well. All resources including the school counselor department's calendar of events can be found at this link: http://www.boyertownasd.org/domain/126.

TESTING PROGRAMS FOR POST-SECONDARY ADMISSIONS

Students of BASH planning to attend a post-secondary school or institution should take part in the various admission testing programs that are offered throughout the year. As most schools require test information, it is important that students become thoroughly familiar with the programs early in their high school careers.

PSAT/NMSQT

The Preliminary Scholastic Assessment Test/National Merit Scholarship Qualifying Test, or the PSAT/NMSQT, is a test that is taken by high school juniors only. It is given at Boyertown Senior High School once each year in October. Students who wish to be considered in the National Merit Scholarship Competition must take this test in their junior year.

PRE-ACT

Pre-ACT Assessments measure student progress toward college and career readiness. Pre-ACT scores reflect the knowledge and skills students develop over time—across grades—and link these results to readiness for college and career, providing an evolving picture of student growth. This actionable information enables educators to address students' strengths, areas for improvement, and potential. This is taken by all sophomores in October.

ACT

The American College Testing Program (ACT) includes four tests, a Student Profile section, and self-reported high school grades. The ACT is accepted by all colleges and universities. Boyertown is NOT a test center; however, a list of testing centers can be found on the ACT website at www.act.org.

SAT REASONING TESTS

The Scholastic Assessment Test (SAT) is a test which is taken by both high school juniors and seniors. The SAT is accepted by all colleges/ universities. Boyertown is typically a test center for the March administration. Students must register on their own at www.collegeboard.org and select from a variety of dates and locations.

ASVAB

The Armed Services Vocational Aptitude Battery (ASVAB) is a multiple-aptitude battery that measures developed abilities and helps predict future academic and occupational success. It is administered semi-annually. Enlisting in the military is an independent process and is not required to take this assessment. Students may be required to take this assessment to meet an alternative graduation pathway.

GUIDELINES FOR COURSE SELECTION

SELECTION OF COURSES

During the registration period, each student should carefully select those courses that will comprise his/her schedule for the following school year. Students are encouraged to seek assistance and advice from their parents/guardians, teachers, and school counselors. Once a student registers for a course, it becomes an agreement. Every effort will be made to provide the student with his/her selection; however, certain courses may not be scheduled due to enrollment restrictions or staff changes.

Students are encouraged to follow a sequential pattern as they select courses. Students are encouraged to select their electives wisely. Electives can be used to explore career paths.

Students are required to select a minimum of six (6) credits. Students can only take a maximum of eight (8) credits. Students should take challenging courses to better prepare themselves for their future goals. It is recommended that a student receive at least a 'C' grade before selecting the next course in a sequence. This is especially true in mathematics, world language, advanced sciences, and other sequential subjects. The school counselor and teachers should be consulted when scheduling advanced sequential courses if there is a question about the successful completion of the course.

The school builds its master schedule and projects its needs on the basis of all the courses selected by approximately 2,200 students. Therefore, once completed, **student course selections will be considered finalized on MAY 9, 2025 unless the selections fail to prepare the student for minimum graduation requirements or fail to meet curricular program requirements**.

Course availability for non-required, elective courses is determined by sufficient student selection and/or staff availability. **Insufficient requests or staffing constraints could cause a course to become unavailable after the initial scheduling selection process. All students will receive a verification of course selections in the spring.** This does not represent the student's scheduled courses; students will receive the scheduled courses prior to the start of the school year.

SCHEDULE CHANGES

Students are requested to give considerable thought when selecting courses. **All students are expected to continue and complete the courses selected**. Adequate schedule planning for students, teachers, and classroom space can be completed only when school officials can consider students' schedule requests to be final and binding. There will be times when a change is necessary. The special circumstances that often precipitate a schedule change are course failures from previous semesters/term, changing to a course with a higher degree of difficulty in the same subject area, new student arrival, senior graduation requirement fulfillment, and/or some other extenuating circumstance. An administrative withdrawal is a rare but existing option. This option is often a disciplinary/academic decision. It involves withdrawing a student from a course and that student receiving a failing grade for the course. Changes to course requests must be made on or prior to **May 9, 2025.** After this date, all requests are considered final and changes will not be made.

SCHEDULING REQUIREMENT

The first step in building a satisfactory student schedule is to determine what requirements must be met. The following pages list these specific requirements including:

- Career Portfolio / BCTC Senior Project
- End-of-Course Assessments (EOCAs)
- Graduation Credit Requirements
- Promotion Policy Guidelines
- Courses Required of All Students
- Required Graduation Pathways

CAREER PORTFOLIO / BCTC SENIOR PROJECT

All students receiving a BASD diploma will need to complete either a career portfolio or the BCTC senior project based on student attendance. Students utilize Smart Futures, a web-based program designed to provide meaningful career-oriented experiences. The portfolio process will provide every student with maximum opportunity to research careers and come to an educated, informed decision as to what next steps need to be taken to ensure success beyond high school. To assist in the process, high school staff members will be assigned to groups of students as portfolio advisors. The advisor, typically the student's homeroom teacher, will meet with the students throughout the year during homeroom and establish checkpoints to assess progress toward completion of yearly goals. Information regarding specific portfolio requirements can be found here: Career Portfolio / Welcome (boyertownasd.org).

END-OF-COURSE ASSESSMENTS (EOCAs)/ MID-TERM EXAMS

EOCAs and Mid-Term Exams are administered as part of our district's assessment plan to measure what we want students to know and be able to do at the middle (for year-long courses) and end of each course. Biology, Algebra I, and English Literature Keystone Exams as well as AP exams take the place of EOCAs in those content areas.

Administration of Midterms & EOCAs

The administration of the Midterms & EOCAs will occur as follows:

- Mid-term Exams will be administered before the completion of the first semester during regularly scheduled classes.
- All **core courses** including English, Math, Science, and Social Studies will administer an EOCA during the last week of school following a specially designed schedule, except for courses administering Keystone Exams or if the student sits for the respective AP exam.
- **Related studies courses**, including World Language, Art, Music, Health / Physical Education, Business Education, Technology Education and Family and Consumer Science, will administer an EOCA.. The end-of-course assessment will be administered during class time.
- All courses that are semester-based courses will have their EOCA administered during regularly scheduled class times at the conclusion of the course in the Fall or Spring.

Weight of EOCA and Mid-Term grades

- The "weight" of the EOCA will be 10% of the students' final grade and the Mid-Term exam will be 10% of the students' final grade for yearlong courses. For semester courses, the EOCA will be 20% of the students' final grade.

GRADUATION REQUIREMENTS

Each year, students must select a minimum of 6 credits and a maximum of 8 Boyertown Area School District provided credits. **This includes all BASD virtual academy classes and independent study courses.** A minimum of 24 credits accumulated in grades 9 through 12 are required for graduation from BASH. Students are also required to complete a Career Portfolio / Senior Project or BCTC Senior Project. Successful completion of the Career Portfolio / Senior Project will result in a .5 credit addition to the student's transcript. Graduation from BASH involves the fulfillment of the following items:

<u>Minimum</u> number of courses/credits needed for graduation.

SUBJECT	SPECIFIED AS
English	The equivalent of four year-long courses in grades 9-12
Social Studies	The equivalent of four year-long courses in grades 9-12
Science*	Three year-long courses in grades 9, 10, 11, or 12
Mathematics	Four year-long courses in grades 9, 10, 11, or 12
Health / PE I, II	Two planned courses, one each in grades 9 and 10
Physical Education**	.5 planned in grade 11 and 12
Career Portfolio	Successful completion of Senior Presentation
Electives (See Course Description Section)	
	Total credits must equal or exceed 24

* Students who plan to attend a four-year college/university are encouraged to take four courses.

** NJROTC fulfills Phys Ed in grades 11 and 12.

PROMOTION POLICY GUIDELINES

<u>Minimum credit attainment:</u> In order to be eligible to graduate within 4 years (9-10-11-12) at BASH, it is required that you carry and pass the following minimum number of credits, accumulating them as follows:

Progression	Minimum	Maximum
9th to 10th Grade	6	8
10th to 11th Grade	12	16
11th to 12th Grade	17	24
12th to Graduation	24	32

A student is eligible for graduation at the end of his/her twelfth-grade school year when all graduation requirements are fully completed.

If a student fails to accumulate 24 credits, complete their career portfolio, and other requirements set forth by the state of Pennsylvania by the end of the twelfth-grade school year, they will not receive a diploma. If a student fails to meet the recommended credits necessary for promotion, they will be retained in the grade- level and homeroom based on credits earned.

GRADUATION EXERCISE

COMMENCEMENT CEREMONY EXERCISE

Graduation Note: Students who have not fully met all graduation requirements by the end of the senior year **WILL NOT BE ELIGIBLE TO PARTICIPATE IN COMMENCEMENT CEREMONY EXERCISES** with his/her class. Students who have not fully met all graduation requirements by the end of the senior year (and hence are denied participation in commencement ceremony exercises) shall have the opportunity to be awarded a diploma at the August BASD Board of School Directors meeting upon completion of the requirements in the summer school immediately following, providing all such requirements can be met during the summer session. If the requirements are not met by the end of summer school immediately following, the student can become eligible for a BASH diploma only through a regular school program in subsequent years. *If you do not pass all the required courses in a given year, it is strongly recommended that as many classes as possible be made up in summer school that year.* **All** student obligations must be clear to participate in the commencement ceremony.

MINIMUM COURSES REQUIRED OF ALL STUDENTS FOR 2025 – 2026

GRADE 9

Subject	Credit
English	1.00
Social Studies	1.00
Science	1.00
Math	1.00
Health & Physical Education	0.83
Electives	Varies

GRADE 10

Subject	Credit
English	1.00
Social Studies	1.00
Science	1.00
Math	1.00
Health & Physical Education	0.83
Electives	Varies

GRADE 11

Subject	Credit
English	1.00
Social Studies	1.00
Science	1.00
Math	1.00
Health & Physical Education	0.50
Electives	Varies

GRADE 12

Subject	Credit
English	1.00
Social Studies	1.00
Math	1.00
Health & Physical Education	0.50
Career Portfolio	0.50
Electives	Varies

KEYSTONE EXAMS

Beginning with the Class of 2023 and beyond, students must satisfy the Act 158 "Keystone Pathways" requirement as one of the graduation requirements in accordance with PA Department of Education requirements. Click HERE for further information and reference the flow chart below for a better understanding of this requirement.

#1 Keystone Proficiency Pathway				
Proficient or Advanced in Algebra I	AND	Proficient or Advanced in Biology	AND	Proficient or Advanced in Literature

# 2 Keystone Composite Pathway*				
At least one Keystone score is Proficient or Advanced	AND	No score is below basic	AND	Composite Keystone Score is **4452 or greater**

*If a student has a non-numeric proficient from 2020 in one Keystone area, and a composite score in the remaining two areas of 2939 or greater with at least one score being proficient or better and neither being below basic, the student has met the composite pathway.

#3 CTE Concentrator Pathway	#4 Alternative Assessment Pathway	#5 Evidenced Based Pathway
Earn a passing grade in course(s) associated with the content area(s) of the Keystone exams in which not proficient and complete requirements in pathways 3, 4, or 5.		
Attain one of the following: • Industry-based competency certification • Likelihood of industry-based competency assessment success • Readiness for continued engagement in CTE Concentrator program of study	OR Complete one of the following: • Attainment of PDE established score on an alternate assessment: SAT (1010), PSAT (970), ACT (21), ASVAB (31) • Attainment of the Gold Level on the ACT Work Keys • Attainment of a score of a 3 or better on AP exam in each related Keystone Exam area in which less than proficient • Successful completion of a dual enrollment or post-secondary course in the associated Keystone Exam content area in which less than proficient • Acceptance to an accredited four-year institution of higher education for college-level coursework	OR Demonstrate readiness for postsecondary engagement consistent with the student's goals with **three** pieces of evidence. **Select at least 1 piece of evidence from tier 1:** • Attainment of 630 on any SAT subject-specific test • Attainment of PDE established score of Silver Level or better on the ACT Work Keys • Attainment of 3 on any AP exam • Successful completion of any concurrent enrollment course or postsecondary course • Industry-recognized credentialization • Acceptance to an accredited nonprofit institution of higher education other than an accredited four-year, nonprofit institution and evidence of the ability to enroll in college-level, credit-bearing coursework **Select up to 2 pieces from tier 2:** • Any additional item from tier 1 • Attainment of a proficient or advanced score on a Keystone Exam • Successful completion of a pre-approved service-learning project • Letter guaranteeing full-time employment or military enlistment • Completion of an internship, externship, or cooperative education program • Compliance with the NCAA Division II academic requirements

ENRICHMENT COURSES

GIFTED PROGRAM

The purpose of the gifted enrichment program is to provide academically gifted students with opportunities to further develop skills that will aid them in the realization of the maximum potential of their talents. Before entering this program, each student must meet eligibility requirements as established by the Commonwealth of Pennsylvania and the BASD. At the high school level, students have their Gifted Individualized Educational Plans (GIEP) met in various ways. At the yearly GIEP meeting, areas of student interest, specialty, and aptitude are explored. With the guidance of the GIEP Teacher of Record, individual plans and goals are developed for the upcoming year. In addition to the yearly plan development, students with GIEPs are encouraged to explore the following programming options as classes:

- BASH Advanced Placement, Dual Enrollment, and Honors level course participation:

  Advanced Placement (AP), Dual Enrollment, and Honors level courses are offered to all students at BASH. Students with a GIEP are strongly encouraged to participate in selecting these course options for their high school course of study. Credits for these courses vary depending upon the number of days the seat time is for the course in a six-day cycle. AP and Honors courses carry a weight in cumulative GPA calculations. DE courses provide students with the opportunity to gain college credits while simultaneously earning the designated high school credits for each particular DE course.

- AP Seminar (1304) and AP Research (1305)

  Students with a GIEP are immediately eligible to take AP Seminar, the first of two AP Capstone Courses, starting in the 10th grade. In this course, students develop and strengthen analytical and inquiry skills while exploring relevant cross-curricular issues. Using an inquiry framework, students will learn to consider an issue from multiple perspectives, evaluate the strength of an argument, and ultimately pose their own questions, research, and communicate through various media. This full year course will be scheduled as a “line” on students’ schedules and will meet every other day for the entire year (exceptions granted by administration for labs which may conflict days out of the cycle). This unique course includes assessments throughout the year and completion of the AP Seminar exam. Students who elect to take AP Seminar must sign up for the AP Exam, as an alternative EOCA is not offered. Students work through the skills and content during the first half of the year, and then apply these skills during the second semester assessment process. The course is worth one graded credit that will be calculated with the appropriate AP weight (.2 bump for a ‘C’ or better).

  Students who have successfully completed AP Seminar may enroll in AP Research the following year which allows them to work toward their Capstone Diploma. The College Board and the Common Application recognize the certificate (AP Seminar and AP Research) and AP Capstone Diploma certification with the completion of 4 AP Courses and the completion of the 2 AP Capstone courses. In AP Research, students cultivate the skills and discipline necessary to conduct independent research and inquiry in order to produce and defend their scholarly work.

HONORS AND ADVANCED PLACEMENT COURSES

The Honors and Advanced Placement (AP) program is intended for responsible, motivated, and self-directed students who are interested in an enriched and accelerated experience in a specific subject area. A student must have the ability and desire to cope with the increased academic demands and requirements of these courses. Students who complete an AP course are given the option of taking the AP examination for college credit at the expense of the parent/guardian. Beginning in 2019-2020, per the College Board, all AP students will be required to commit to and pay for that year's AP exams in the fall of the year in which the exam is given. For more information (e.g. exam fees) please click: https://apstudent.collegeboard.org/takingtheexam/exam-fees .

Advanced Placement Examinations are offered annually to give high school students opportunities to demonstrate college-level achievement. Students who successfully complete the AP exams *may* receive the following benefits:

- Advanced Placement provides the college-bound student with the maximum preparation for college coursework.
- Exemption by your college or university from beginning courses and permission to take higher level courses in certain fields.
- Tuition savings may be given for an AP qualifying grade of 3 or higher.
- Eligibility for honors and other special programs is open to students who have received AP recognition.

Weighted Grades for Honors, Dual Enrollment, and Advanced Placement Courses:
The final GPA of a student for each honors course in which the student has achieved at least a grade of B- will be raised 0.1 per credit. The final GPA of a student for an advanced placement (AP) or dual enrollment (DE) course in which the student has achieved at least a grade of C or higher will be raised 0.2 per credit.

RECOMMENDATIONS FOR HONORS AND ADVANCED PLACEMENT COURSES

In each subject area in which the student selects Honors or AP classes, it is recommended that he/she has consistently earned report card grades of 'B' or higher in previous honors courses, or 'A's' in regular academic classes. Teacher recommendation is also recommended. Individual departments may have additional requirements listed with their courses.

ADVANCED PLACEMENT COURSE OFFERINGS:

AP Biology	AP World History	AP Research
AP Calculus – AB	AP Language & Composition	AP Seminar
AP Calculus – BC	AP Literature & Composition	AP Statistics
AP Chemistry	AP Music Theory	AP Studio Art
AP Computer Science	AP Physics 1	AP US Government/AP Comparative Government
AP Macroeconomics	AP Physics – C	AP US History
AP Microeconomics	AP Psychology	AP Human Geography
AP Environmental Science		

DUAL ENROLLMENT COURSES

Dual Enrollment (DE) courses are locally administered class offerings that allow a high school student to enroll in college courses while receiving both secondary and college credit for that coursework. High school students earn college credits that may be transferred to a post-secondary institution allowing the student to get a jump-start on their college education. The local programs are run through partnerships between the high school and college. Dual Enrollment courses will be identified in the Course Descriptions section of this booklet. Tuition will be charged at a discounted rate and billed to the family through the college. Upon successful completion of a DE course, with a C or better, college credits will be earned. Students are strongly encouraged to explore these options as the cost of the credits are significantly cheaper at BASH than the current cost of a student enrolled in college.

In order for BASH to be able to offer DE courses, our curriculum and syllabi have been vetted and approved by the offering college/ universities and the teacher has been hired as an adjunct professor. Some courses offered in the Program of Studies are eligible for AP, DE, and/or Honors Credit. Students may elect to pursue none, some, or all of the potential credit, depending on their future educational and career plans. These options are outlined in each course description throughout the Program of Studies. Students and parents/guardians should consult with their school counselor to make the best-informed decision as to what pathway to choose when selecting these courses that will benefit the student post-secondary planning as well as financial planning.

Currently, BASH has partnerships with Montgomery County Community College and Harrisburg University. Additional offerings for DE courses can be attained through the Berks Career & Technology Center with Reading Area Community College and Penn State-Berks Campus. For more information (e.g., tuition/materials fees) please click: HERE

NOTE: Weight is prorated on a quarterly basis. * Students who earn a 'C' for a Dual Enrollment class will receive MCCC credit

BASH DUAL ENROLLMENT OFFERINGS

Boyertown Area Senior High School offers courses at the high school that may be taken for both high school credit and college credit. Courses are offered through Montgomery County Community College (MCCC) and Harrisburg University of Science & Technology (HU). The transfer of credits to other post-secondary institutions varies. The courses we offer, along with the name of the course at the partner college are listed below.

Business
DE Computer Applications
(3 MCCC credits – CIS 110)
DE Web Design
(3 MCCC credits-CIS 114)

Education
DE Introduction to Education
(3 MCCC credits - EDU 100)

English
*DE English Comp I & II
(6 MCCC credits -ENG 101 & ENG 102)
DE Public Speaking
(3 HU credits-COMM 110)

Family & Consumer Science
DE Basic Nutrition
(3 MCCC credits- ESW 206)

Health & Physical Education
DE CPR/First Aid
(3 MCCC credits- ESW 245)

Mathematics
DE College Algebra
(3 HU credits – MATH120)
DE Calculus
(3 HU credits – MATH 220)
DE Statistics
(3 HU credits – MATH 280)

Science
DE Environmental Science
(3 MCCC credits – BIO 115)
DE Biology
(4 HU Credits – BIO 102&BIO 103)

Social Science
DE Macroeconomics
(3 MCCC Credits – ECO 121)
DE Microeconomics
(3 MCCC credits – ECO 122)

World Language
*DE Spanish III
(6 MCCC credits- SPA 101 & SPA 102)
*DE Spanish IV
(6 MCCC credits- SPA 201 & SPA 202)

For more specific information regarding each course, please see the BASH Program of Studies at: https://www.boyertownasd.org/domain/94

*Pre-requisite of a "C" or better in the Fall Semester to be eligible to take the Spring Semester Course.

The final grade-point-average (GPA) of a student for each Dual Enrollment (DE) course in which the student has achieved at least a grade of 'B-' will be raised 0.2.

Students must earn at least a C to receive MCCC or HU credit and at least a D- to earn BASH credit.

GENERAL INFORMATION

Berks Career & Technology Center

OUR MISSION is to prepare all students for successful careers and higher education through a highly acclaimed, integrated academic and technical education experience.

BCTC is a premier career & technical education center with state-of-the-art learning labs.
Teachers are experienced professionals with practical experience.
Programs are reviewed and updated annually by local business and industry advisors.

Why BCTC?

BCTC prepares YOU for:

- Two or four-year college
- Technical or trade school
- Apprenticeship programs
- Military service
- Direct entry into the workforce

BCTC also offers students the opportunity to be involved in career and technical student organizations such the National Technical Honor Society. Such organizations provide personal growth, leadership and networking opportunities.

Berks Career & Technology Center consists of two campuses:
East Campus | 3307 Friedensburg Road | Oley, PA 19547 | 610-374-4073
West Campus| 1057 County Road | Leesport, PA 19533 | 610-374-4073
Visit us online at www.berkscareer.com

The Berks Career and Technology Center (BCTC) offers seven career clusters to students in grades 10,11, and 12 from 16 area School Districts in Berks County. Students electing BCTC attend on a half-day basis, taking required academic courses at their high school while attending the BCTC for their technical program. All programs are available to all students regardless of district location.

Laboratories equipped with computers, industrial machinery, and other state-of-the-art equipment provide hands-on training for students, in addition to the academic component of each course of study. All curricula are competency based, allowing students to proceed at a rate that is best for them and tailored to meet their own career objectives.

There are many opportunities available for students enrolled in a BCTC program. Open Houses at both campuses are held yearly in the fall. Students should see a school counselor at the high school for more information on BCTC.

Students who apply and are selected will attend one of the career-technical centers on a half-day basis. All BCTC students will be expected to attend their sessions at the BCTC even if the classes at Boyertown are not in session. Transportation on these days will be provided to and from BCTC but not between BASH and home.

BCTC STUDENT PROJECT
(Fulfills BASH Graduation Project Requirement)

The BCTC requires all students to complete a culminating project to ensure that he/she is able to apply, analyze, conduct research, synthesize and evaluate information and communicate significant knowledge and understanding. Students must complete Learning Guides 98.01-98.03 and present their student project before Spring/Easter Break of their senior year. If not completed by the end of the third quarter, the student will receive a grade of (I) incomplete for the quarter. All student project requirements must be satisfied with the exception of the scheduled oral presentation before any student is eligible for work-based learning.

Dual Enrollment Opportunities

BCTC provides college-bound students an opportunity to earn college credits in the Technical Academy or Teacher Academy. The following programs offer college credits:

- Business Management and Entrepreneurship
- Computer Systems Networking and Security
- IT Programming
- Mechatronics Engineering Technologies
- Early Childhood Education

More information can be found at berkscareer.com.

Seven Career Pathways

Business & Information Technology
Business Management & Entrepreneurship (W)
Computer Systems Networking & Security (E)
IT Programming (W)

Communications
Advertising Art & Design Technology (W)
Video and Media Content Production (W)

Construction
Building Construction Occupations (E)
Cabinetry & Wood Technology (E)
Carpentry (E)
Electrical Occupations (W)
Heavy Equipment Operations (E)
HVAC/Refrigeration (E)
Masonry (E)
Residential Painting and Interior Design (E)
Plumbing & Heating (E)
Horticulture (E)

Diversified Occupations-Seniors Only (E)

Engineering & Manufacturing Technology
Mechatronics Engineering
Technologies (W)
Drafting Design Technology (W)
Precision/Computerized Machining Technology (W)
Welding Technology (W)

Healthcare
Dental Occupations (E)
Health Occupations (W)
Medical Health Professions (W): *Seniors Only* Test
Sports Medicine & Rehabilitative Therapy (E)

Services
Cosmetology (B)
Culinary Arts (B)
Early Childhood Education (B)
Protective Service (E)
*Homeland Security
*Law Enforcement
Services Occupation (E)

Transportation
Automotive Collision Repair Technology (B)
Automotive Technology (B)
Diesel Technology (E)
Heavy Equipment Technology (E)
Recreational & Power Equipment Technology (W)

Note:
(B) *indicates the program is offered at both campuses*
(E) *indicates the program is offered at the East Campus in Oley*
(W) *indicates the program is offered only at the West Campus in Leesport*

BCTC COURSE NUMBERS

EAST CENTER – Oley

AM Course #	Subject	PM Course #	Credit
9011 AM	HVAC/Refrigeration	9021 PM	3.00
9051 AM	Auto Collision Repair Technology	9061 PM	3.00
9071 AM	Automotive Technology	9081 PM	3.00
9091 AM	Carpentry	9101 PM	3.00
9111 AM	Cabinetry and Wood Technology	9121 PM	3.00
9161 AM	Cosmetology	9171 PM	3.00
9201 AM	Dental Occupations	9211 PM	3.00
9215 AM	Diesel Technology	9216 PM	3.00
9261 AM	Culinary Arts	9271 PM	3.00
9298 AM	Sports Medicine and Rehab Therapy	9308 PM	3.00
9351 AM	Building Construction Occupations	9361 PM	3.00
9371 AM	Masonry	9381 PM	3.00
9401 AM	Residential Painting and Interior Design	9411 PM	3.00
9421 AM	Plumbing and Heating	9431 PM	3.00
9501 AM	Early Childhood Education	9511 PM	3.00
9541 AM	Horticulture	9551 PM	3.00
9561 AM	Service Occupations	9572 PM	3.00
9611 AM	Computer Systems Networking and Security	9281 PM	3.00
9631 AM	Heavy Equipment Technology	9671 PM	3.00
9632 AM	Heavy Equipment Operations	9672 PM	3.00
9651 AM	Protective Services	9661 PM	3.00
9217 AM	Diversified Occupations-Seniors Only	9218 PM	3.00

WEST CENTER - Leesport

AM Course #	Subject	PM Course #	Credit
	Drafting Design Technology	9041 PM	3.00
	Video and Media Content Production	9152 PM	3.00
	IT Programming	9191 PM	3.00
	Electrical Occupations	9231 PM	3.00
	Health Occupations	9301 PM	3.00
9297 AM	Medical Health Professions-Seniors Only	9307 PM	3.00
	Advertising Art & Design Technology	9321 PM	3.00
	Mechatronics Machining Technology	9341 PM	3.00
	Engineering Technologies	9462 PM	3.00
	Welding Technology	9471 PM	3.00
	Business Management & Entrepreneurship	9582 PM	3.00
	Rec/ Power Equip Technology	9601 PM	3.00

WHAT IS THE NCAA?

The National Collegiate Athletic Association is a member-led organization dedicated to the well-being and lifelong success of college athletes.

The advantages of competing in college sports are both immediate and lifelong. Participating in college sports provides opportunities to learn, compete and succeed. Student-athletes receive top-notch academic support, quality medical care and regular access to outstanding coaching, facilities, and equipment. Student-athletes as a group graduate at higher rates than their peers in the general student body and feel better prepared for life after college.

College-bound student-athletes preparing to enroll in a Division I or Division II school need to register with the NCAA Eligibility Center to ensure they have met amateurism standards and are academically prepared for college coursework.

Are you ready to play college sports? Click on the link below for more information.

2024-2025 Guide for the College-Bound Student Athlete

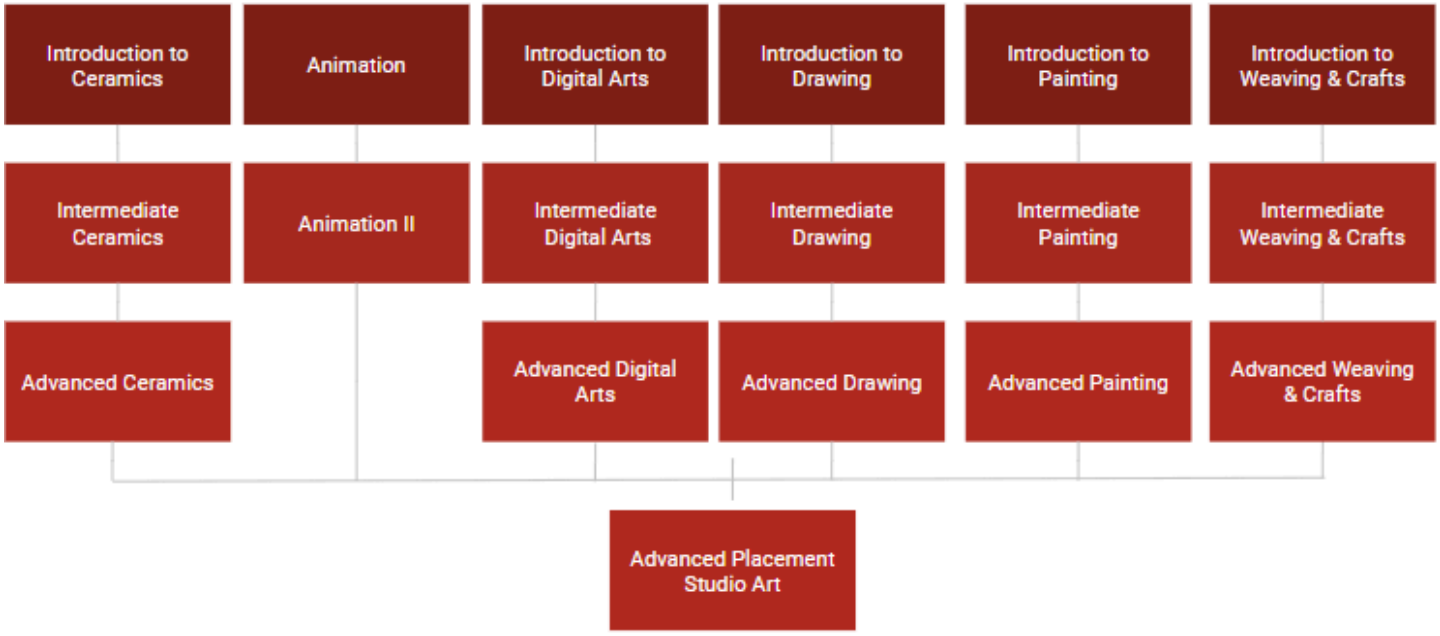
COURSE DESCRIPTIONS

Key to Course Number

Y = Full Year Course
S = Semester

ART

Fine Arts (visual) Course Sequence



COURSE	COURSE NAME	SEM.	GRADE	CREDITS	PDS. PER CYCLE	PREREQUISITES
5663	Adaptive Art Education	S	9,10,11,12	0.5	6	Life Skills or Learning Support Students Only
6111	Introduction to Ceramics	S	9,10,11,12	0.5	6	
6112	Intermediate Ceramics	S	10,11,12	0.5	6	Intro to Ceramics
6113	Advanced Ceramics	S	10,11,12	0.5	6	Inter. Ceramics & Teacher recommendation
6121	Introduction to Painting	S	9,10,11,12	0.5	6	
6122	Intermediate Painting	S	10,11,12	0.5	6	Introduction to Painting
6123	Advanced Painting	S	10,11,12	0.5	6	Inter. Painting & Teacher recommendation
6131	Introduction to Drawing	S	9,10,11,12	0.5	6	
6132	Intermediate Drawing	S	10,11,12	0.5	6	Intro to Drawing
6133	Advanced Drawing	S	10,11,12	0.5	6	Inter. Drawing & Teacher Recommendation
6151	Introduction to Digital Arts	S	9,10,11,12	0.5	6	
6152	Intermediate Digital Arts	S	10,11,12	0.5	6	Intro to Computer Graphics
6153	Advanced Digital Arts	S	10,11,12	0.5	6	Inter. Computer Graphics & Teacher Recommendation
6161	Introduction to Animation	S	9,10,11,12	0.5	6	
6162	Advanced Animation	S	10,11,12	0.5	6	Intro to Animation & Teacher Recommendation
6171	Intro to Weaving & Crafts	S	9,10,11,12	0.5	6	
6172	Intermediate Weaving & Crafts	S	10,11,12	0.5	6	Intro to Weaving
6173	Advanced Weaving & Crafts	S	10,11,12	0.5	6	Inter Weaving & Teacher Recommendation
6184	AP Studio Art	Y	11,12	1	6	Intro to Drawing and High School Art Teacher recommendation

***It is strongly recommended that students planning a career in art take Introduction to Drawing before or simultaneously with a concentration in more specialized courses. In all multi-level courses students must take each course in the correct succession with the prerequisite being the previous level.

5663: ADAPTIVE ART EDUCATION

This class is restricted to students enrolled in the life skills and or learning support programs. In an adapted format, this class will present artistic concepts and skills to students in a manner appropriate to student abilities. Activities will encompass beginner computer graphics, weaving, painting, and mixed media areas.

6111: INTRODUCTION TO CERAMICS – Hand Building Intensive

This course is designed for students with an interest in ceramic arts. The focus of this class is to have students learn the essential skills that enable an artist to create functional and sculptural works in clay. Students will create various three-dimensional forms using pinched, coil, and slab methods of construction. Students will spend the majority of the semester developing basic hand built constructing skills with clay and how it works. To close out the semester the students may be introduced to the pottery wheel to prepare them for the intermediate level which is wheel thrown intensive. Students will experiment with primitive firing techniques as well as basic glazing techniques in an electric kiln. While the skill development and studio work are the main focus of the course, there will be also be an emphasis on personal artistic development, craftsmanship, art history, and creative problem solving.

6112: INTERMEDIATE CERAMICS – Wheel Thrown Introduction

This course is designed for students with a serious interest in the ceramic arts. The main focus of this class is to have students apply the essential skills covered in Introduction to Ceramics by creating functional and sculptural works in clay. Students will be taught basic and intensive wheel throwing skills to create sets of functional mugs, bowls, and other functional vessels for everyday use. Students will apply hand-building techniques learned in the Introduction class to enhance their wheel thrown work. Students will spend the majority of the semester working on the potter's wheel. Students will learn to begin to explore glaze development. Towards the completion of this course students would begin to develop their own personal artistic voice and style in clay. A further emphasis will be put on personal artistic development, craftsmanship, art history, and creative problem solving.

Prerequisite: Introduction to Ceramics

6113: ADVANCED CERAMICS – Wheel Thrown Intensive

This course is designed for serious art students that are self-disciplined, self-motivated, and have a strong interest in further developing their ceramic art skills. Students will be combining all the previous knowledge and skills acquired in Introduction to Ceramics and Intermediate Ceramics to create more in-depth and more challenging works of art. Students will have the choice to master the essential skills of either working on the potter's wheel or constructing three-dimensional hand-built pieces. Students will focus on three-dimensional forms of personal interest. Students will learn technical aspects of the ceramic arts like mixing clay and glazes. Students will be using the core art elements and design principles in their own work and will create several pieces of artwork that carry a unifying theme. Students will be required to keep a sketchbook. Students will examine a wide variety of ceramic art from prehistoric times to contemporary ceramic artists.

Prerequisite*: *Intermediate Ceramics

6121: INTRODUCTION TO PAINTING

Students will explore the fundamentals of painting with a variety of painting media and artistic styles. Knowledge about the color wheel, mixing colors, as well as design and composition will be emphasized. Instruction and demonstration will precede each painting assignment. Painting media may include watercolor, acrylics, and oils. Specific subject matter will be assigned for each painting medium.

6122: INTERMEDIATE PAINTING

Students will continue to explore painting with a variety of painting media and artistic styles. Design and composition will continue to be emphasized. A review of methods and techniques will precede each painting assignment. Painting media may include watercolor, acrylics, and oils. Specific subject matter will be assigned for each painting medium.

Prerequisite: Successful completion of Introduction to Painting

6123: ADVANCED PAINTING

This course is designed for junior or senior students who have an interest in pursuing art studies after graduation and for students who love to paint. This is a rigorous course for highly motivated students looking to challenge their artistic abilities. Students will finish the course with well-developed portfolios that show a broad range of artistic studies, hence many different subjects and many different painting media, as well as the opportunity to do in-depth painting relating to one subject and/or medium.

Prerequisite: Introduction to Painting and Successful completion of Intermediate Painting

6131: INTRODUCTION TO DRAWING (Foundation Course)

Students will explore the fundamentals of drawing with a wide variety of drawing media and artistic styles. Design and composition concepts will be an integral part of the instruction. The course will be centered on basic drawing methods, aesthetics, art history, and critical analysis. Drawing media may include graphite pencil, charcoal, pen and ink, colored pencils, and pastels. Some possible subject matter may include still life, landscapes, portraiture, figure studies, and working from abstraction. All students interested in pursuing an art career should take this course. Students will be required to complete an independent final project that will make up 20% of their final grade.

6132: INTERMEDIATE DRAWING

Interested sophomores are welcome to take this course with approval from their Jr. High Art Teacher. Students will continue to explore drawing with a wide variety of drawing media and artistic styles. Design and composition concepts will still be emphasized as an integral part of the instruction. The course will be centered on advanced drawing methods, aesthetics, art history, critical analysis, and contemporary artists. Drawing media mostly includes charcoal and colored pencils. Subject matter may include still life, portraiture, figure studies, abstraction, and conceptual drawings. Students will be required to complete an independent final project that will make up 20% of their final grade.

Prerequisite: Introduction to Drawing

6133: ADVANCED DRAWING

This course is designed for junior or senior students who have an interest in pursuing art studies after graduation. This is a rigorous course for highly motivated students looking to challenge their artistic abilities. Students will finish the course with a well-developed portfolio that shows a broad range of drawing abilities. Students will have the ability to explore their own style while drawing from life to create complex compositions. Students will be required to complete weekly homework to give them extra time to master their skills. Students will be required to complete an independent final project that will make up 20% of their final grade.

Prerequisite: Art teacher recommendation; successful completion of Intro. to Drawing and Inter. Drawing

6151: INTRODUCTION TO DIGITAL ARTS

Intro to Computer Graphics is designed to cover the fundamentals of computer graphics technology with an introduction to visual communication through photo editing, vector illustration and graphic design concepts. An emphasis will be placed on understanding proper composition and design principles. Scanning, file uploads, printing, digital photography, image manipulation, and a variety of software applications will be covered including Adobe Photoshop and Adobe Illustrator. Students will be required to complete an independent final project that will make up 20% of their final grade.

6152: INTERMEDIATE DIGITAL ARTS

Intermediate Computer Graphics will have an emphasis on utilizing and applying proper compositional and design principles for visual communication through photo manipulation and graphics illustration. Students will create graphic designs and conceptual works as they relate to the contemporary digital arts culture. Students will begin to develop their own digital art style and utilize it in their projects as well as focus on applying personal, creative ideas to their projects. Students will be required to complete an independent final project that will make up 20% of their final grade.

Prerequisite: Successful completion of Intro to Digital Arts

6153: ADVANCED DIGITAL ARTS

Advanced computer graphics will give practical experience to students who are considering computer graphics as a career. Students will develop an individual digital art style by exploring different media and tools while using a variety of software for advertising, marketing, illustration, graphic design, and other forms of digital artmaking. A strong emphasis will be placed on mastering proper layout and design principles as well as developing individual art styles through portfolio building. Students will be required to complete an independent final project that will make up 20% of their final grade.

Prerequisite: Successful completion of Intro and Intermediate Digital Arts

6161: INTRODUCTION TO ANIMATION

Animation students will use Adobe Animate and other Apps to learn about historical animation techniques as well as contemporary methods. Much of the class will be spent using Adobe Animate to explore timelines, tweens, frame by frames, masks, graphic animations, and simple interactive animations. Projects are not limited to but may include original character animations, banners, vector animations, and collaborations with other departments at BASH. Students will be required to complete an independent final project that will make up 20% of their final grade.

6162: ADVANCED ANIMATION

This course is for juniors and seniors who have successfully completed Intro to Animation. The purpose of this course is to put together a portfolio for a possible career in animation. Students will be exploring advanced interactive animation, character development, story design, and professional portfolio preparation. Students will be required to complete an independent final project that will make up 20% of their final grade.

Prerequisite: Successful completion of Intro to Animation

6171: INTRODUCTION TO WEAVING AND CRAFTS

This course is designed for students with an interest in weaving and crafts. The introductory level will introduce students to loom and non-loom woven processes including loom weaving and basketry. Students may also be introduced to select crafts such as embroidery, sewing, soft sculpture, and textile design techniques. Students will be required to complete an independent final project that will make up 20% of their final grade.

6172: INTERMEDIATE WEAVING AND CRAFTS

This course is a more in-depth study of various weaving and craft experiences. An emphasis on individual style, creative expression, and design elements and principles will be incorporated. Students will also focus on the craftsmanship of technique, as well as the combination of woven techniques and craft construction of various forms. Students will be required to complete an independent final project that will make up 20% of their final grade.

Prerequisite: Successful completion of Introduction to Weaving and Crafts

6173: ADVANCED WEAVING AND CRAFTS

The incorporation of introductory and advanced skills, techniques, styles and craftsmanship will be the primary focus for both woven and craft assignments. Advanced Weaving and Craft students will have the opportunity to learn how to create their own designs utilizing pattern drafting techniques. There will be an emphasis on the combination of advanced techniques and handcrafted processes for the creation of professional quality woven and craft forms. Students will create both functional and non-functional pieces. Students will be required to complete an independent final project that will make up 20% of their final grade.

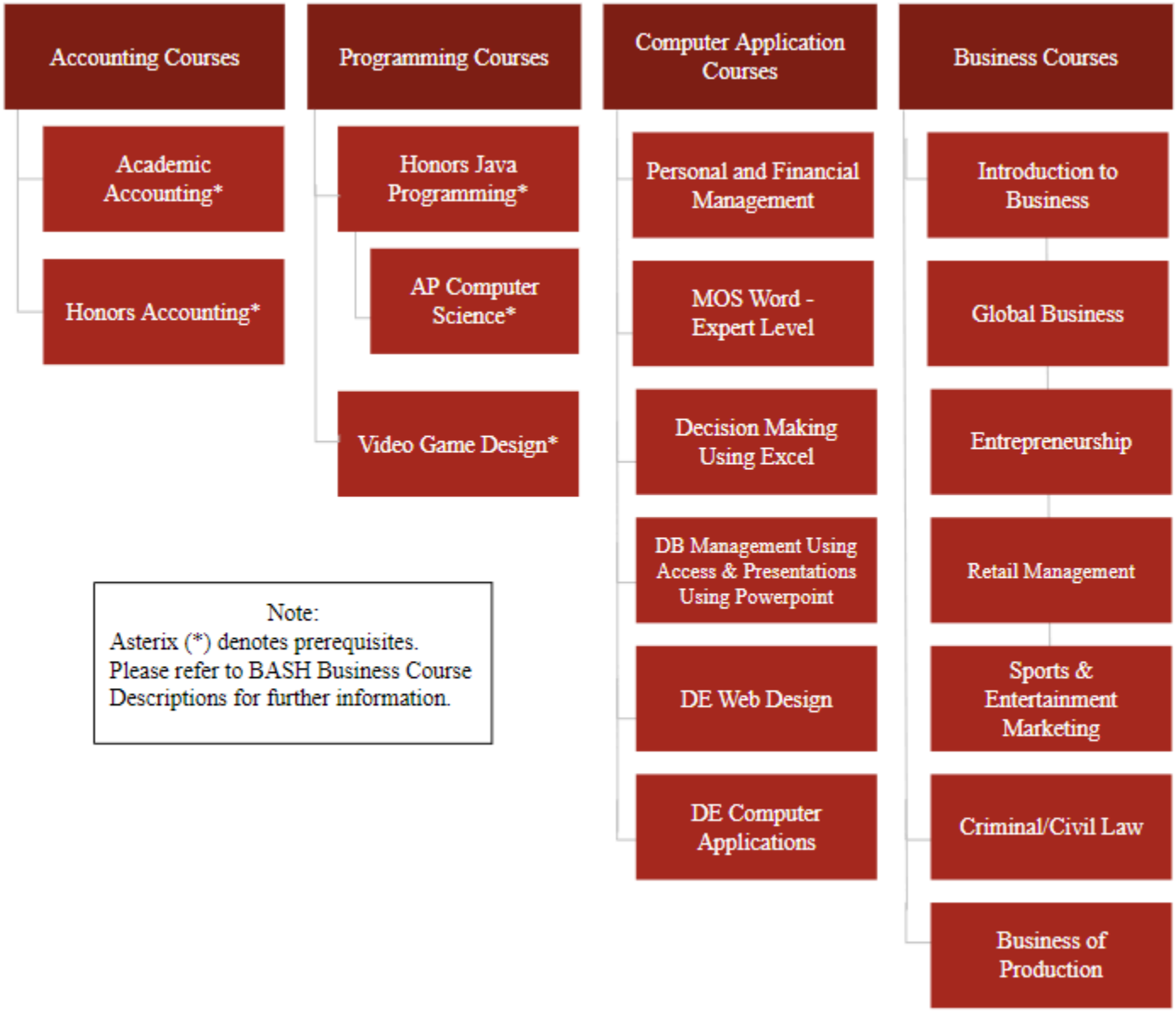
Prerequisite: Successful completion of Intermediate Weaving and Crafts

6184: AP STUDIO ART

This course is designed for senior students who have a definite interest in pursuing art studies after graduation. Students must submit either a Drawing or 2-D Design portfolio for evaluation by the College Board near the end of the year. Students have the opportunity to earn college credit and/or advanced placement while in high school based on their completed portfolios' score. The portfolios have specific requirements that must be met according to the AP Studio Art Advanced Placement curriculum. Students will pursue independent, individual studies within the course; however, some projects, lessons, or activities will be teacher initiated. It is expected that students will be highly motivated, resulting in portfolios that show a broad range of studies and pursuits, hence many different subjects and many different media. In addition, time should permit in-depth studies and pieces of artwork related to one subject and/or medium as well.

Prerequisite: AP teacher recommendation, Drawing- Introduction and Intermediate

BUSINESS & COMPUTER SCIENCE



COURSE	COURSE NAME	SEM.	GRADE	CREDITS	PDS. PER CYCLE	PREREQUISITES
6400	Introduction to Business	S	9,10,11,12	0.5	6	Juniors or Seniors need business teacher recommendation
6411	Entrepreneurship	S	9,10,11,12	0.5	6	Recommended: successful completion of Intro to Business
6412	Retail Management	S	9,10,11,12	0.5	6	Recommended: successful completion of Intro to Business
6413	Sports & Entertainment Marketing	S	9,10,11,12	0.5	6	Recommended: successful completion of Intro to Business
6414	Global Business	S	10,11,12	0.5	6	Recommended: successful completion of Intro to Business
6415	Personal Financial Management	S	11,12	0.5	6	
6416	Criminal/Civil Law	S	9,10,11,12	0.5	6	
6417	Business of Production	Y	10,11,12	1	6	
6421	Accounting I	Y	9,10,11,12	1	6	
6422	Honors Accounting II	Y	10,11,12	1	6	'C' average in Accounting I
6430	Microsoft Office Certifications	Y	9,10,11,12	1	6	
6431	Video Game Design	S	10,11,12	0.5	6	Department Leader Recommendation
6432	App Development	S	10,11,12	0.5	6	
6433	Honors JAVA Programming	Y	9,10,11,12	1	6	Teacher Recommendation
6434	AP Computer Science	Y	10,11,12	1	6	Successful completion of Honors JAVA Programming/Teacher recommendation
6437	DE Web Design	S	10,11,12	0.5	6	
6438	DE Computer Applications	S	10,11,12	0.5	6	

6400: INTRODUCTION TO BUSINESS

Introduction to Business is an introductory course to the world of business. This course is designed to explore the various areas within business such as Entrepreneurship, Retail Management, and Marketing as well as incorporating concepts of accounting, programming, and interview skills. Introduction to Business will serve as a background for other business courses that students may elect to take in high school and will assist them in preparing for future employment.

Juniors or Seniors need a business teacher recommendation.

6411: ENTREPRENEURSHIP

In this introductory business course, students learn the basics of planning and launching their own successful business. Whether they want to start their own money-making business or create a non-profit to help others, this course helps students develop the core skills they need to be successful. They learn how to produce new business ideas, attract investors, market their business, and manage expenses.

Students are recommended to have completed Introduction to Business

6412: RETAIL MANAGEMENT

Retail business vary in size from a small one-man operation to large international organizations. The needs of the consumer have produced an amazing variety of retail stores, which need to be organized by managers. This course includes the topics of store location, layout, design, management, retail buying, and customer service. Students will receive practice in a realistic simulation that covers all aspects of managing a store, which adds unique hands-on experience to the learning.

Students are recommended to have completed Introduction to Business

6413: SPORTS AND ENTERTAINMENT MARKETING

This course is recommended for students pursuing a future in sports and/or the business world. This highly interactive course will enable students to engage their creative side while learning how to market a team, a sports figure, a product/service and most importantly, how to market themselves. New trends in Marketing will be explored. Emphasis will be placed on all aspects of marketing including ethical behavior, planning, consumer behavior, product research, e- commerce, advertising, and communication. Students will frequently engage in individual/group activities and writing assignments in addition to utilizing the Web to explore and research existing companies.

Students are recommended to have completed Introduction to Business

6414: GLOBAL BUSINESS

This course provides an overview of the importance of international business and trade in the global economy and explores the factors that influence success in international markets. Cultural customs and traditions, trade, currency, business travel, geography, current events, international marketing, global issues and career opportunities will be the major topics covered.

Students are recommended to have completed Introduction to Business

6415: PERSONAL FINANCIAL MANAGEMENT

In this course, students will gain practical life skills and knowledge necessary to thrive as a member of society. Topics covered will include finding a job, budgeting and saving, post-secondary education, renting & buying a car and house, credit, investing, and insurance. Students will gain knowledge of budgeting using savings and checking while also understanding financing with credit. Students will become familiar with filing tax forms and completing the Free Application for Federal Student Aid (FAFSA). This course will help students gain future financial independence.

6416: CRIMINAL/CIVIL LAW

If you are interested in pursuing a career in law enforcement or learning your rights as a citizen, this course is for you! Students will study and investigate both civil and criminal law, the court system and making contracts, and apply that knowledge to everyday life. Professionals in law enforcement will provide information on how procedures are performed and the current law. Students will engage in a mock trial, which includes deciding the strategy, preparing questions and responses, and a jury. A visit to the Berks County Court system is also planned.

6417: BUSINESS OF PRODUCTION

Welcome to the captivating world of the Business of Production, where you'll be the ultimate backstage magician, orchestrating the enchantment of live entertainment. Get ready for a hands-on exploration that takes you beyond the spotlight and deep into the heart of theater production at BASH.

6421: ACADEMIC ACCOUNTING I

This course is recommended for students planning to pursue a business degree. Students will complete the accounting cycle from preparing journal entries to doing financial statements. Students will be exposed to working with sole proprietorships, merchandising business, and corporations. Students will be required to complete a realistic accounting simulation as part of this course. This course covers chapters 1-13.

6422: HONORS ACCOUNTING II

This course is designed for students who plan to pursue a degree in accounting and/or be challenged in an advanced level course. This course covers the accounting cycle from a sole proprietorship to a corporation. Students will be required to complete a realistic accounting simulation as part of the course. This course covers chapters 14-24.

Prerequisite: Passed ('C' average) in Accounting 1

6430: MICROSOFT OFFICE - CERTIFICATION COURSES

In today's competitive job market, having digital skills is necessary. Microsoft Office is one of the topmost sought-after skills by hiring managers. This year-long course encompasses the core and advanced skills for Microsoft Word, Excel, PowerPoint & Access. Students will be required to take the MS Word, Excel, PowerPoint & Access Specialist and/or Expert certifications. Students may also demonstrate that they have the deepest level of skills needed to proficiently use Office programs by earning a Microsoft Office Specialist Master certification. Required tests: Word Expert 1, Word Expert 2, Excel Specialist, and choice of Access or PowerPoint. A second option is Excel Expert 1, Excel Expert 2, Word Specialist, and choice of Access or PowerPoint. The Microsoft Office Specialist (MOS) certification is the leading IT certification in the world. MOS enables students to become experts in the software by utilizing the full features and functionality of the Microsoft Office system.

6431: VIDEO GAME DESIGN

Students will learn to use Construct 3, one of the most widely used packages for game development. Students will understand key concepts in game design including scripting, physics, particle effects; test and optimize games. Students will build a variety of games (2D and 3D), and then develop their own. The software has the ability to deploy the games to the web to allow for universal testing and feedback.

Department leader recommendation

6432: APP DEVELOPMENT

Students will learn the required skills to develop mobile applications that work on both Android and iOS operating systems. The class will use the React Native language. There is no prerequisite for this course, but experience with Java and or HTML could be helpful.

6433: HONORS JAVA PROGRAMMING

This full-year offering is designed for the academic student who has a desire to take a first course in computer science. Students will learn fundamentals of computer science, structured programs, and develop their programming skills. Java is the language taught in introductory programming courses at many colleges and universities and is used to develop commercial microcomputer software. This is an excellent course for students pursuing a career in science, math, engineering, or computer science. NOTE: This course satisfies PA Department of Education requirement for either a math or a science credit.

Teacher recommendation

6434: AP COMPUTER SCIENCE

This second-year computer science course emphasizes programming methodology and procedural abstraction through the study of algorithms, data structures, and data abstraction. The curriculum will prepare students to take the AP Computer Science Test. NOTE: This course satisfies PA Department of Education requirements for either a math or a science credit.

Prerequisite: Successful completion of Honors JAVA Programming or teacher recommendation.

6437: DE WEB DESIGN (Dual Enrollment offering- MCCC)

Using the popular point & click software, such as Dreamweaver, this course will have you develop a web design involving careful planning, organization and creativity. The technical skills involving a design include linking, multi-media elements, color, graphics, tables, shared borders, frames and much more. Basic HTML code, Java applets, Java scripts, macromedia flash, and Cascading Style Sheets will be covered. No programming skills are required…just your imagination! Interested students are eligible for college credits from Montgomery County Community College upon completion of the course with a grade of a 'C' or better.

6438: DE COMPUTER APPLICATIONS (Dual Enrollment offering- MCCC)

This course introduces non-computer science majors to the fundamentals of computer hardware and software and their integration into management information systems. Specific software topics will include word processing, spreadsheet, presentation, database management and operating systems. Using these skills, students will solve problems that they will most likely encounter in a digital world. Additional topics will include computer hardware analysis, electronic communications, the Internet, computer networking, social implications of computing and other current computer topics. Interested students are eligible for college credits from Montgomery County Community College upon completion of the course with a grade of a 'C' or better. This course satisfies most college and university requirements for an introduction to computer course.

MONTGOMERY COUNTY COMMUNITY COLLEGE DUAL ENROLLMENT COURSE

Course	Course Name	Semester	Grade	Credits	Periods Per Cycle	Prerequisites/Recommendations
2270	Introduction to Education	Y	11,12	1.0	6	

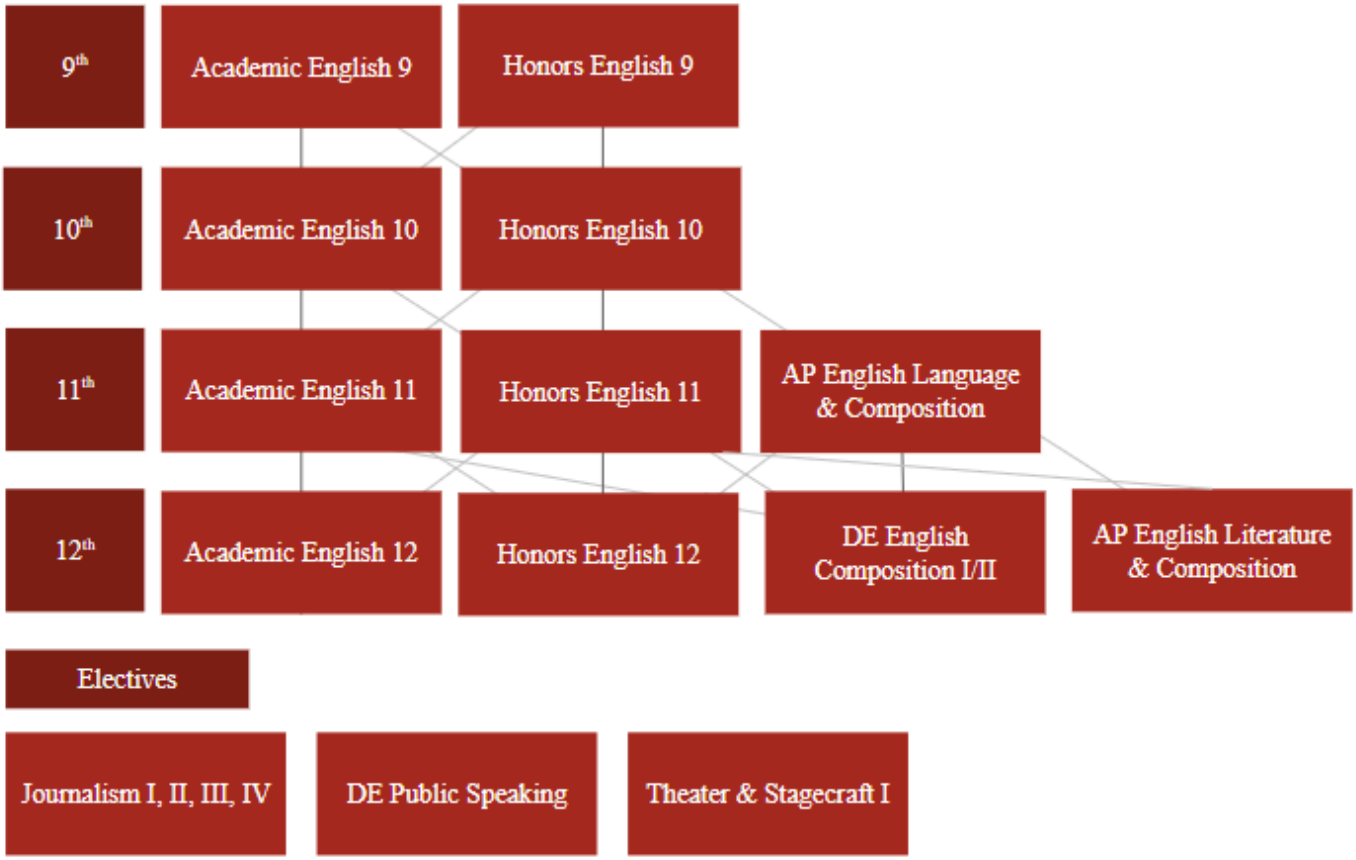
2270: DE INTRODUCTION TO EDUCATION (Dual Enrollment offering- MCCC)

This course is designed to give prospective teachers an introduction to education, including historical, ethical, legal, and theoretical perspectives, cultural influences, as well as classroom management techniques. While in class, students will participate in various instructional strategies both individually and in group settings. The course requires students to complete 20 hours of field experience/observation in an early childhood, elementary, or secondary school setting in order to reflect on present-day practices and the diverse roles and responsibilities of teachers in today's world. This experience will help prospective teachers to confirm their career choice. Upon successful completion of the course with a 'C' or better and completion of the Field Experience/Observation experience, students will earn college credits through Montgomery County Community College.

Students must obtain child care background clearances in order to complete 20 hours of field experience/observation.

****Students must purchase a textbook for this class.***

ENGLISH LANGUAGE ARTS



Course	Course Name	Sem	Grade	Credits	Pds. Per Cycle	Prequisites
1092	Academic English 9	Y	9	1	6	
1093	Honors English 9	Y	9	1	6	See course description
1102	Academic English 10	Y	10	1	6	
1103	Honors English 10	Y	10	1	6	See course description
1112	Academic English 11	Y	11	1	6	See course description
1113	Honors English 11	Y	11	1	6	See course description
1114	AP English Language and Composition	Y	11	1	6	See course description
1122	Academic English 12	Y	12	1	6	See course description
1123	Honors English 12	Y	12	1	6	See course description
1124	AP English Literature and Composition	Y	12	1	6	See course description
1127	DE English Comp III	Y	12	1	6	Community College Placement Test
1128	DE English Comp/Technical Writing	Y	12	1	6	Community College Placement Test
1209	Journalism I	Y	9,10,11,12	1	6	
1210	Journalism II	Y	10,11,12	1	6	Journalism I
1211	Journalism III	Y	11,12	1	6	Journalism II
1212	Journalism IV	Y	12	1	6	Journalism III
1307	DE Public Speaking	Y	11,12	1	6	
1308	Theater and Stagecraft I	Y	9,10,11,12			

1092: ACADEMIC ENGLISH 9 **(NCAA Approved Course)**

Students will experience a wide variety of literature, including fiction and non-fiction, poetic and dramatic selections. Writing and reading skills are emphasized; listening and speaking skills are incorporated in preparation for further education and careers. Traditional grammar, mechanics, and usage skills are continued as part of the writing process.

1093: HONORS ENGLISH 9 **(NCAA Approved Course)**

The ninth grade Honors curriculum analyzes classic literature as well as modern works. Students in this course will be challenged by delving deeper into the works studied and developing their thinking and writing skills at a higher level. Students will develop their communication and thinking skills through instruction in the writing process, individual and collaborative projects, and speaking practices. Traditional grammar, mechanics, and usage skills are continued as part of the writing process.

Recommendation: 'A' in academic 8th grade English and teacher recommendation

1102: ACADEMIC ENGLISH 10 **(NCAA Approved Course)**

This rigorous, standards-based course provides a solid foundation for students whose future studies and employment will require extensive use of English communications skills. Students will develop the vital skills of self-expression through speaking, listening, reading, and writing, with emphasis on grammar, content, and writing instruction. Special attention will be paid to the development of literacy in both fiction and nonfiction texts. Students will also learn to analyze various genres of literature in preparation for junior and senior level literature courses. The writing component of this course focuses on the integration of primary and secondary source material. A Literature Keystone Exam will be administered at the end of the course.

1103: HONORS ENGLISH 10 **(NCAA Approved Course)**

This course, designed for the outstanding English student, provides a solid foundation for college bound students whose future studies and employment will require extensive use of English communications skills. Students will develop the vital skills of self-expression through speaking, listening, and writing, with an emphasis on grammar, content, and sophisticated elements of style. This course will also deal with various literary types in a critical and analytical fashion. Students will employ advanced terminology to explore concepts of poetry, prose, fiction, and drama. In addition to orally analyzing literature, students will further develop composition skills in the written analysis of literature. The course includes both fiction and nonfiction multicultural works. Some of the works include independent reading and studying. The writing component of this course focuses on the integration of primary and secondary source material. A Literature Keystone Exam will be administered at the end of the course.

Recommendation: 'B' or better in 9th grade Honors English or 'A' in regular academic 9th grade English, and teacher recommendation.

1112: ACADEMIC ENGLISH 11 **(NCAA Approved Course)**

This survey course traces the development of the American Dream and its effect on the contemporary American identity. Just as Americans in 1776 fought for their independence in order to forge a new nation, writers struggled to create a literature that was truly American, not only in content, but also in expression. In studying the Colonial, Revolutionary, Romantic, Transcendental, Realist, and Modernist periods of American literature, the student will gain new insights into the unique literary heritage of America. The writing component of this course focuses on the further development of a mature, scholarly style with the inclusion of primary and secondary source material. This course will conclude with a common department End Of Course Assessment.

Students selecting the honors level should demonstrate excellence in both writing and reading comprehension, evidenced by a grade of 'B' or better in previous honors classes or 'A' in previous academic classes and teacher recommendation.

1113: HONORS ENGLISH 11 **(NCAA Approved Course)**

This survey course traces the development of the American Dream and its effect on the contemporary American identity. This is achieved through a deeper exploration of literary analysis. Using literary theory and formal criticism, students will have a more enriched understanding of American literature. Just as Americans in 1776 fought for their independence in order to forge a new nation, writers struggled to create a literature that was truly American, not only in content, but also in expression. In studying the Colonial, Revolutionary, Romantic, Transcendental, Realist, and Modernist periods of American literature, the student will gain new insights into the unique literary heritage of America. The writing component of this course focuses on the further development of a mature, scholarly style with the inclusion of primary and secondary source material. There is a higher expectation of skill, rigor, and discourse. Students are expected to exhibit a higher level of commitment, preparation, and critical thinking. Student inquiry and Socratic seminar will drive analysis of text complexity. This course will conclude with a common department End Of Course Assessment.

1122: ACADEMIC ENGLISH 12 **(NCAA Approved Course)**

As part of the course content students will read a variety of texts as they explore how environment, culture, and relationships shape personal identity. Students will consider this heightened consciousness of themselves as they seek to understand the motivations of others in their community and their world. Such motivations are often revealed by writers in their lifetime as they seek to effect social change. Students will focus on factors that impact social change, while analyzing the role of literature in illustrating and inspiring these changes. The course will reinforce students' self-awareness, inter-cultural competency, and understanding of social issues in context. Student writing will include argumentative pieces requiring students to read and think critically. Throughout the course students will independently engage in a verbal discourse by propelling conversations through posing and responding to questions, synthesizing comments, and working with peers to promote civil, democratic discussions. This course will conclude with a common department End Of Course Assessment.

Students selecting the honors level should demonstrate excellence in both writing and reading comprehension, evidenced by a grade of 'B' or better in previous honors classes or 'A' in previous academic classes and teacher recommendation.

1123: HONORS ENGLISH 12 **(NCAA Approved Course)**

Our Honors English 12 classes will address the same standards as Academic English 12 but go deeper into the content, at a much faster pace, and have higher expectations for both the quality and quantity of student work. Furthermore, the texts selected for this course will have a greater complexity of rigor that push student learning above and beyond grade-level. As part of the course content students will read a variety of texts as they explore how environment, culture, and relationships shape personal identity. Students will consider this heightened consciousness of themselves as they seek to understand the motivations of others in their community and their world. Such motivations are often revealed by writers in their lifetime as they seek to effect social change. Students will focus on factors that impact social change, while analyzing the role of literature in illustrating and inspiring these changes. The course will reinforce students' self-awareness, inter-cultural competency, and understanding of social issues in context. Student writing will include argumentative pieces requiring students to read and think critically. Throughout the course students will independently engage in a verbal discourse by propelling conversations through posing and responding to questions, synthesizing comments, and working with peers to promote civil, democratic discussions. This course will conclude with a common department End Of Course Assessment. Students selecting the honors level should demonstrate excellence in both writing and reading comprehension, evidenced by a grade of 'B' or better in previous honors classes or 'A' in previous academic classes and teacher recommendation.

ADVANCED PLACEMENT ENGLISH COURSES

BASH offers two Advanced Placement English courses for outstanding English students seeking rigorous courses and the possibility of college credit/acceleration via the AP testing program. Excellence in both writing and reading skills is required. Each course is independent of the other.

1114: AP ENGLISH LANGUAGE AND COMPOSITION (NCAA Approved Course)

**Students may choose to take this course in their Junior year only.*

The purpose of this course is to enable students to read complex texts with understanding and to write prose of sufficient richness and complexity to communicate effectively. Writing instruction will move beyond formalistic writing such as the five-paragraph essay, placing emphasis on content, purpose, and audience and allowing this focus to guide the organization of their writing. Students will explore the process of composition. They will write in both formal and informal contexts to gain authority and to learn to take risks in writing. Literature selections will be studied to aid students in understanding rhetorical and linguistic choices. Summer reading selections will be required; a reading list will be provided in June. ***Recommendation: 'B' or better in previous honors courses and recommendation of 10th grade Honors English teacher.***

1124: AP ENGLISH LITERATURE AND COMPOSITION (NCAA Approved Course)

**Students may choose to take this course in their Senior year only.*

The AP English Literature and Composition offered at BASH follows the course description as determined by the College Board, most recently published in these terms:

The AP English Literature and Composition course is intended to give you the experience of a typical introductory college literature course. It includes intensive study of representative works from various genres, periods, and cultures, concentrating on works of recognized literary merit. Reading in the course builds on the reading done in your previous English courses. You will learn to read deliberately and thoroughly, taking time to understand a work's complexity, to absorb its richness of meaning, and to analyze how that meaning is embodied in literary form. You will also learn to consider the social and historical values a work reflects and embodies. Careful attention to both textual detail and historical context provides a foundation for interpreting a text. Writing assignments in the course will address the critical analysis of literature and will include expository, analytical, and argumentative essays. In addition, creative-writing assignments such as response and reaction papers, freewriting, or keeping a journal will help you see from the inside how literature is written. The goal of both types of writing assignments is to increase your ability to explain clearly and cogently what you understand about literary works and how you interpret them.

Students selecting this AP English course should demonstrate excellence in both writing and reading comprehension, evidenced by a grade of 'B' or better in previous honors classes or AP Language and Composition teacher.

DUAL ENROLLMENT ENGLISH COURSES

1127: DE ENGLISH COMP I/II (Dual Enrollment offering- MCCC) **(NCAA Approved Course)**

**Students may choose to take this course in their Senior year only.*

English Composition I and II is a yearlong course that is based on the premise that clear thinking generates clear writing. During the first half of the year (Composition I), students learn how to use the tools of effective writing and how to develop ideas through such expository patterns as example, process analysis, cause and effect, classification, comparison/contrast, definition, argument, narration, and description. However, the second half of the year (Composition II) focuses on writing a college-level research paper and develops each student's mastery of communication, information literacy, and analytic skills with emphasis placed on research and documentation methods. Students use writing, reading, listening, and observation skills to understand, organize, receive, and convey information. Using research gleaned from diverse sources, students employ logic, reasoning, and analysis to craft effective essays. Interested students are eligible for college credits from Montgomery County Community College upon completion of the course with a grade of a 'C' or better.

****Students must have a 3.0 Overall GPA, or a 3.0 English GPA to enroll in this class***

*****Please note that a grade of 'C' or better must be obtained in the fall semester in order to be able to take the course as a Dual Enrollment option. Students who fail to earn a grade of 'C' or better will continue to be enrolled in the course but will not be eligible for MCCC credits.***

******Successful completion of the course with a 'C' or better in all four quarters will provide you with 6 MCCC credits and 1 BASH credit as well as fulfill your senior English requirement.***

1128: DE ENGLISH COMP I/TECHNICAL WRITING (Dual Enrollment offering- MCCC)
(Not NCAA Approved Course)

**Students may choose to take this course in their Senior year only.*

English Composition I and Technical Writing is a yearlong course based on the premise that clear thinking generates clear writing. During the first half of the year (Composition I), students learn how to use the tools of effective writing and how to develop ideas through such expository patterns as example, process analysis, cause and effect, classification, comparison/contrast, definition, argument, narration, and description. The second half of the year (Technical Writing) is an application of skills taught in English Composition I and teaches how to do on-the- job writing. It concentrates on special and practical forms of communication, letters and memos, the summary, the critique, the report, the article, and the technical speech. The course also adapts formal English to the style of the technical or specialized writer. Interested students are eligible for college credits from Montgomery County Community College upon completion of the course with a grade of a 'C' or better.

****Students must have a 3.0 Overall GPA, or a 3.0 English GPA to enroll in this class***

*****Please note that a grade of 'C' or better must be obtained in the fall semester to be able to take the course as a Dual Enrollment option. Students who fail to earn a grade of 'C' or better will continue to be enrolled in the course but will not be eligible for MCCC credits.***

******Successful completion of the course with a 'C' or better in all four quarters will provide you with 6 MCCC credits and 1 BASH credit as well as fulfill your senior English requirement.***

1307: DE PUBLIC SPEAKING (Dual Enrollment offering – Harrisburg University)

This year-long course is designed to build on skills acquired in previous English courses. Students will continue to study the process of effective communication, based on an understanding of purpose and audience using speaking techniques such as enunciation and modulation. Upon successful completion of the course, students will be able to select appropriate speaking strategies, choose and use appropriate methods based on purpose and audience, demonstrate self-reflection skills that lead to growth and improvement, locate and use reliable and relevant source material, demonstrate persuasive and informative speaking skills, and assess and document research sources. Upon successful completion of the course with a 'C' or better, students will earn college credits through Harrisburg University.

****Possible materials fee.***

***** Textbook may be retrieved from http://publicspeakingproject.org/psvirtualtext.html***

ENGLISH ELECTIVE COURSES

JOURNALISM

Each of the Journalism electives is a full year 1-credit course. These courses are designed to allow the student news publication, The Cub, to become completely student-run. Students will learn journalistic skills to develop and edit stories, design the news website and print editions themselves.

1209: JOURNALISM I

Journalism I is a year-long course in which students learn basic news gathering, writing, editing and design skills. The course's focus is on developing reporting and news writing skills (not creative writing). They will use these skills to contribute to a student publication while following a code of ethics.
It is strongly recommended that students have at least a 'B' in English class.

1210: JOURNALISM II

Students will build on news gathering and writing skills learned in Journalism I. Specifically, they will work on writing more in-depth features that involve research.
Prerequisite: Successful completion of Journalism I

1211: JOURNALISM III

Students will build on news gathering and writing skills learned in Journalism I and II, focusing more on investigative news. They will begin to take on leadership roles on the publication, helping edit stories and design publications.
Prerequisite: Successful completion of Journalism II

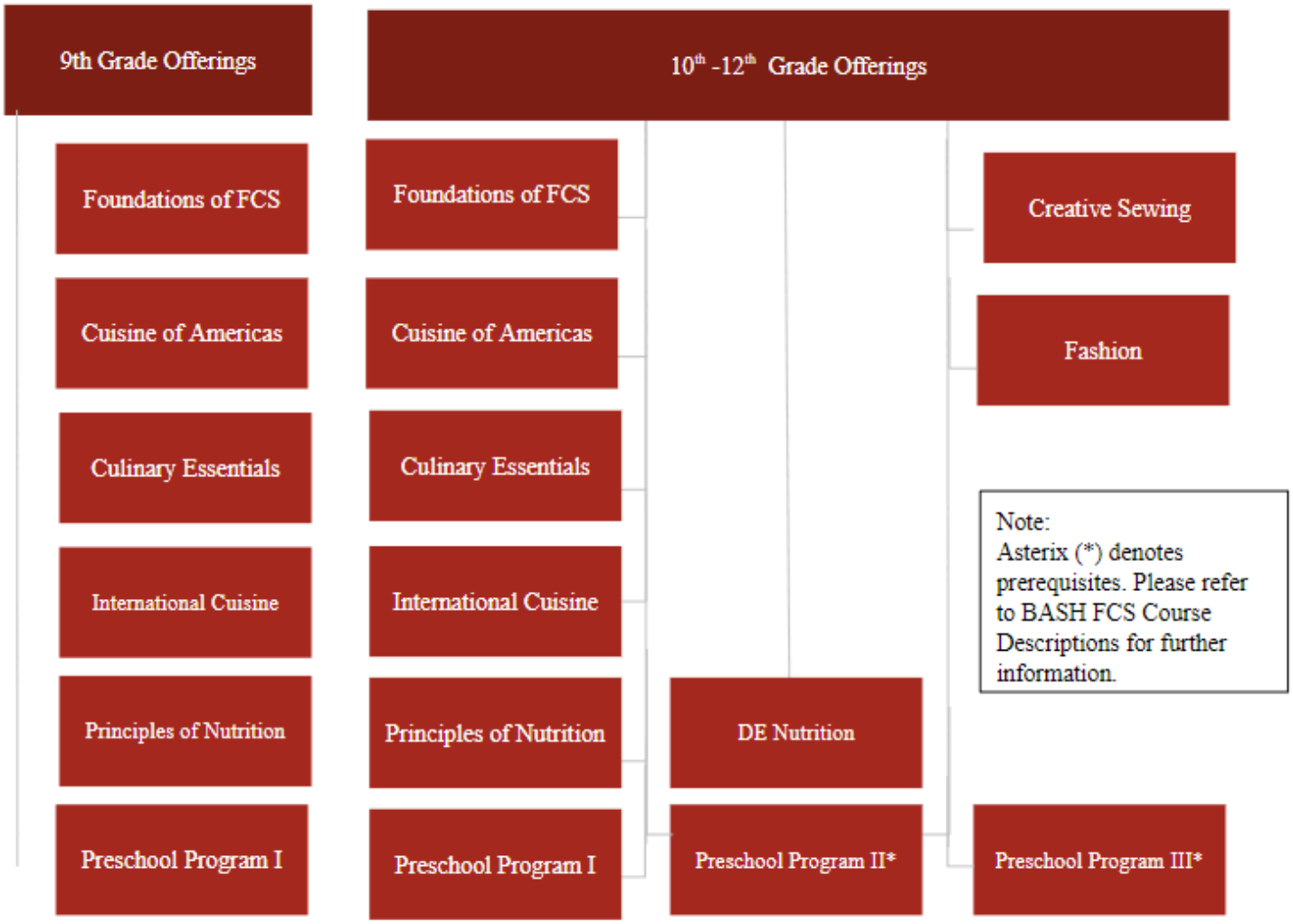
1212: JOURNALISM IV

Students will build on news gathering and writing skills learned in Journalism I, II, and III and be placed in a major leadership position. They also will focus specifically on opinion/editorial writing.
Prerequisite: Successful completion of Journalism III

1308: THEATER AND STAGECRAFT I

Students in *Theater and Stagecraft I* will study principles of acting and theater conventions, learning the skills and techniques necessary for effective script analysis in order to create believable characters. Techniques of improvisation, diction and body movement will be included. Students will become fluent in basic performance terminology. Students will learn the basic principles of theatrical design, such as set design and construction, costuming, makeup, lighting, and sound, as well as direction and production. Participation in any capacity in one of BASH's theatrical performances per year is required, such as the Fall Play, Musical, or in a spring production.

FAMILY AND CONSUMER SCIENCES



Course	Course Name	Sem	Grade	Credits	Pds. Per Cycle	Prerequisites
6300	Foundations of FCS	S	9,10,11,12	0.5	6	
6311	The Preschool Program I-Intro to Child Development	S	9,10,11,12	0.5	6	
6312	The Preschool Program II	S	10,11,12	0.5	6	Preschool Program I
6313	The Preschool Program III	S	10,11,12	0.5	6	Preschool Program II
6320	Culinary Essentials	S	9,10,11,12	0.5	6	
6321	Principles of Nutrition	S	9,10,11,12	0.5	6	
6322	Cuisine of the Americas	S	9,10,11,12	0.5	6	
6323	International Cuisine	S	9,10,11,12	0.5	6	
6327	DE Basic Nutrition	S	10,11,12	0.5	6	
6330	Creative Sewing	S	9,10,11,12	0.5	6	
6331	Fashion	S	9,10,11,12	0.5	6	

6300: FOUNDATIONS OF FCS (9-12)
This course explores the various topics of Family & Consumer Sciences including nutrition, meal planning, culinary techniques and personal finance. Students will learn about these concepts through a variety of hands-on activities. Students will have experience planning a meal while focusing on the nutritional content. Planning a personal budget and payroll deductions are among the topics covered in the finance unit.

6311: THE PRESCHOOL PROGRAM I-Intro. to Child Development (9-12)
Learn about children while working with them! Studying and understanding how children grow and develop are important parts of teaching young children. The areas of development, benefits of play, the importance of early childhood literacy, and guiding children's behavior are some of the topics covered. You will have the opportunity to apply your knowledge by planning and teaching developmentally age-appropriate lessons to preschool students enrolled in the Pre-K counts program at BASH. This is an excellent class to take if you are thinking about a leadership or teaching career path. Students enrolled in this course will have the opportunity to receive American Red Cross certifications for Babysitting, First Aid, and CPR training. Students enrolled in this course will have the opportunity to receive American Red Cross certifications for Babysitting, First Aid, and CPR training.

6312: THE PRESCHOOL PROGRAM II (10-12)
The focus of Preschool II will be the Child Development theorists and their contribution to child development. These theories provide insight into how children play, grow, and learn. Students will apply their learning of these theories as they plan lessons to teach the preschoolers. Throughout the semester students will be paired with a preschooler and assist them with activities and engage in lessons twice a week. Students enrolled in this course will have the opportunity to receive American Red Cross certifications for Babysitting, First Aid, and CPR training.
Prerequisite: The Preschool Program I

6313: THE PRESCHOOL PROGRAM III (10-12)
This course provides the opportunity to exercise ingenuity to devise play and creative activities for the children. Special needs children will be the focus of the Preschool III curriculum.
Students will serve as a resource for Preschool I students to develop and implement lessons.
Prerequisite: The Preschool Program II

6320: CULINARY ESSENTIALS (9-12)
Students will learn and apply the principles of healthy food selection from each food group, meal planning, and food science. Food safety and sanitation will be reviewed as well as genetically modified foods. Food lab participation and evaluations will be included for each of the food groups and are a significant portion of the semester grade. Please note the FCS classroom is not free of the top eight allergens.

6321: PRINCIPLES OF NUTRITION (9-12)
This course introduces students to the study of the science of nutrition as it relates to their health. The course will provide an understanding of nutrients and their functions, deficiencies and excesses, sports nutrition, eating disorders, and current nutritional issues. Students will explore the Dietary Guidelines for Americans, My Plate food guidance system, and nutritional needs throughout the lifespan.

6322: CUISINE OF THE AMERICAS (9-12)

This course is designed to focus on cultural experiences while continuing to perfect culinary skills. Students will research the history, traditions, and foods of North and South America. The many regions of the United States as well as Canada and Latin America will be studied. Safe food handling techniques are taught and implemented in order to prepare authentic dishes throughout the semester. Food lab participation and evaluations will be included for each region of study and are a significant portion of the semester grade. Please note the FCS classroom is not free of the top eight allergens.

6323: INTERNATIONAL CUISINE (9-12)

This course studies the cultural and geographical impact on food habits and nutrition of people around the world. Students will learn about the history, traditions, and culinary techniques from various regions. Safe food handling techniques are taught and implemented in order to prepare authentic dishes throughout the semester. Countries explored include Germany, France, England, Ireland, Denmark, Spain, Italy, Greece, and China. Food lab participation and evaluations will be included for each region of study and are a significant portion of the semester grade. Please note the FCS classroom is not free of the top eight allergens.

6327: DE BASIC NUTRITION (10-12) (Dual Enrollment offering- MCCC & HU)

This course will introduce students to the study of nutrition. It will incorporate fundamental scientific principles enabling students to develop their own nutritional lifestyle compatible with these principles. The course will provide an understanding of nutrients, their function in the body, deficiency diseases, body composition, nutrition and physical activity, nutrition through the life span, food faddism, consumer issues, and an evaluation of diets. The course will encourage the intelligent application of information to enable the students to succeed in implementing good nutrition in their own lives. Interested students are eligible for college credits from Montgomery County Community College and Harrisburg University upon completion of the course with a grade of a 'C' or better. **Students will be responsible for the required online resource "Connect" that accompanies the textbook, at the expense of the parent/guardian.**

6330: CREATIVE SEWING (9-12)

This is an introductory course for students interested in pursuing careers in the fashion and textile industry. Related skills are learned through problem solving, critical thinking, and creative expression. Areas of study include tools & equipment, fabrics, pattern layout & symbols, hand & machine sewing, and simple construction principles.

6331: FASHION (9-12)

This course examines the role of the textiles and apparel industry in our individual and family lives. Students will explore fashion design and merchandising concepts. Topics that will be included are; history of fashion, elements and principles of design, the use of clothing as self- expression and the marketing strategies of the industry. Clothing construction will not be included in this course.

HEALTH AND PHYSICAL EDUCATION

Course	Course Name	Sem	Grade	Credits	Pds. Per Cycle	Prerequisites
4501	Health/PE I	Y	9	.83	5	
4502	Health/PE II	Y	10	.83	5	
4507	Honors Human Anatomy	Y	11,12	1	6	Must also be enrolled in 4203
4601	Coaching & Officiating in Team Sports	S	11,12	0.5	5	
4602	Fundamentals of Athletic Training	S	11,12	0.5	5	
4603	Essentials of Personal Training	S	11.12	0.5	5	
4604	Outdoor Education	S	11,12	0.5	5	
4605	Sports Psychology	S	11,12	0.5	5	
4606	Tactics of Lifetime Sports I	S	11,12	0.5	5	
4613	Tactics of Lifetime Sports II	S	11,12	0.5	5	Prerequisite: Tactics of Lifetime Sports I
4607	Fit For Life	S	11,12	0.5	5	
4608	Strength Training and Conditioning I	S	11,12	0.5	5	
4609	Strength Training and Conditioning II	S	11,12	0.5	5	Prerequisite: Strength Training and Conditioning I
4610	Lifeguarding and Swim Instruction	S	11,12	0.5	5	Teacher Recommendation
4611	Dance I	S	11,12	0.5	5	
4612	Dance II	S	11,12	0.5	5	Prerequisite: Dance I
4701	CPR/First Aid	S	11,12	0.5	5	
4707	DE CPR/First Aid	S	11,12	0.5	5	MCCC requires a 3.0 cumulative GPA to take this course
4506	Inclusive Sports leadership	S	11,12	0.5	5	
5450	Adapted Physical Education	Y	9, 10,11,12	0.5	3	Department or Physician's recommendation

REQUIRED COURSE (9th Grade):

4501: HEALTH/PE I - Freshmen Only

This course is a combination of health and fitness classes. The objective of the course is to teach students how to evaluate and engage in an individualized physical activity plan that supports achievement of personal fitness and life skills to promote life-long participation in fitness activities. The emphasis will be given on improving cardiovascular fitness and the ability to sustain in an individual target heart rate zone for at least 20 minutes during physical activities.

Health content is designed to teach students the skills of decision making, analyzing influences, goal setting, communication, accessing information, self-management, and advocacy. The health core concepts taught are health promotion, lifestyles that enhance quality of life, personal health disease prevention, and destructive behaviors including: tobacco, alcohol, and drug misuse and abuse.

REQUIRED COURSE (10th grade, BCTC – 10th or 11th grade):
4502: HEALTH/PE II– Sophomore Only (BCTC – Sophomore or Freshmen)
This course is a combination of wellness and physical education class. The focus of the physical education portion of the course is on an in-depth study of concepts, principles, and strategies of sport and exercise, as well as skills and attitude development that promotes lifelong fitness. The wellness section of the course will cover topics such as male and female reproductive systems, pregnancy, childbirth, HIV/Aids education, cancer (prevention and treatment) and other infectious diseases. Destructive behaviors such as use of alcohol, tobacco, and other drugs and their impact on decision making will also be addressed in this course. Students will learn the skills necessary to develop and maintain healthy relationships. In addition, the students will receive instruction in first aid and CPR.

HPE ELECTIVE COURSES (1 course required in 11th or 12th grade):
4507: HONORS HUMAN ANATOMY
This is a rigorous academic course designed for potential entrants into nursing, physician assistants, health-related fields, paramedical fields, and physical education (pre-med. students should also consider A.P. - Chemistry). In this health and physical education course, students have the opportunity to learn about human anatomy and physiology. Content includes an in-depth study of fitness training and all eleven body systems. Recommendation: Have earned a 'B' or above in Biology, a 'B' or above in Chemistry, Physics completed or taken concurrently, and must be a junior or senior. Students selecting the course must also enroll in Honors Human Physiology (4203 - see Science). Successful completion of both courses will provide you with two BASH credits (1 Science and 1 PE, fulfilling your senior physical education requirement).

4601: COACHING AND OFFICIATING IN TEAM SPORTS
This course is a health and physical education class for students involved with or who have a high interest in athletics. Students will learn various team games, learn coaching concepts, be able to design practices, teach basic skills to their classmates and be prepared to take PIAA field and paper exams in a team sport of their choosing. Students will also learn proper conditioning techniques through warm up, flexibility, strength, endurance, power, and cool down exercises. The Coaching Unit will have students participate in various team games including flag football, soccer, floor hockey, ultimate Frisbee, basketball, volleyball, handball and softball. Students will learn the concepts and drills needed to design a practice including individual, partner and small games. They will learn to explain, demonstrate, practice and perform drills as well as how to provide performance and motivational feedback. As part of this unit, the students will teach basic skills of the sport to teammates and participate in peer assessments. The Referee Unit will prepare the students to take field and paper exams. Students will pick a team sport from the following choices: field hockey, soccer, basketball, baseball, and girls' lacrosse. They will read the corresponding rule book and then create a presentation to teach the rules, objectives, and dimensions of the playing surface for that sport.

4602: FUNDAMENTALS OF ATHLETIC TRAINING
This course will explain foundational concepts in athletic training, injuries, and illnesses commonly encountered by certified athletic trainers. Students will develop the knowledge and skills of athletic trainers on the field and in the training room. This could also be beneficial to those considering future careers as sports medicine professionals.

4604: OUTDOOR EDUCATION
Students will be introduced to a variety of outdoor/environmental physical activities. In this course students will learn how to plan for outdoor excursions, monitor fitness, prepare for changing weather, practice No Trace Philosophy, and develop a plan for living an active lifestyle within the natural environment.

4605: SPORTS PSYCHOLOGY

This course is a health and physical education class for students involved with or who have a high interest in athletics. This course will provide students with knowledge about psychological factors and principles that affect performance in sports such as motivation, concentration, focus, confidence, peak performance, anxiety, and relaxation. Students will also be introduced to mental skills (mind/body or mental/physical integration) that will enhance performance, make athletic participation more enjoyable, and learn skills that can be transferred to other aspects of their lives. Specific skills to be covered in this class will include how to set measurable goals and strategies to achieve them, visualization and imagery techniques, leadership, teambuilding, and coping strategies to recover from injuries. Students participate in various team games including volleyball, ultimate games, football, soccer, floor hockey, basketball, handball, and softball.

4606: TACTICS OF LIFETIME SPORTS I

Students will study a variety of games/sports and the strategies used during game play. Strategies will be analyzed and compared from one activity to another. Additionally, the activities will supply a focus and opportunity to expand into lifelong fitness. Activities will include but are not limited to tennis, badminton, pickleball, volleyball, and disc golf.

4613: TACTICS OF LIFETIME SPORTS II

Students will continue to study a variety of games/sports while also learning more advanced strategies and a deeper understanding through skill development and teaching game strategies. Activities will include but are not limited to tennis, golf, backyard games, badminton, pickleball, volleyball, and disc golf.

4607: FIT FOR LIFE

Students will explore and develop a personal fitness routine which demonstrates the benefits of exercise adherence. The following is a list of possible activities in the course: jogging/walking, aerobic activities, circuit training, weight training, flexibility workouts, group fitness, outdoor winter activities for fitness, lifetime fitness activities, and Physical Fitness Testing each quarter.

4611: DANCE I

This class will challenge both the body and mind through classes in dance technique, group fitness exercise, choreography and performance. It will improve body intelligence through increased physical and psychological awareness of the body, understanding of body mechanics, and articulation of physical character as so to provide a strong foundation for dance performance and choreography of fitness. Units will include, but are not limited to dance styles, dance production, cardio kickboxing, Zumba and Tabata.

4612: DANCE II

Dance II is a class for experienced dancers. In this class, students will continue to study and refine the movement vocabulary, technique and history of ballet, jazz, tap, modern dance and world cultures. As their knowledge of dance elements expands, students will deepen their exploration into improvisational work as well as choreography. Students will learn to analyze and critique choreography and dance performances.
Prerequisite: Dance I

4701: CPR/FIRST AID

This course will provide the information, written, practical and skill work to be proficient in The American Heart Association CPR and First Aid. It is possible to become certified, but it would require the purchase of a workbook, breathing mask and certification fee.

4707: DE CPR/FIRST AID (Dual Enrollment offering- MCCC)
This course will provide a deeper understanding of the knowledge and skills required in an emergency. It will provide all the necessary information, written, practical and skill work to become certified by the American Heart Association in CPR and First Aid. Interested students are eligible for college credits from Montgomery County Community College upon completion of the course with a grade of a 'C' or better.
**** Possible book and materials fee.***

4608: STRENGTH TRAINING AND CONDITIONING I
Students learn how to design and implement their own personal fitness program targeted to meet individual needs; this format allows the student flexibility in choosing their strength program in which they will participate. Those individuals who have an interest in improving and/or maintaining their personal fitness level should take this course.

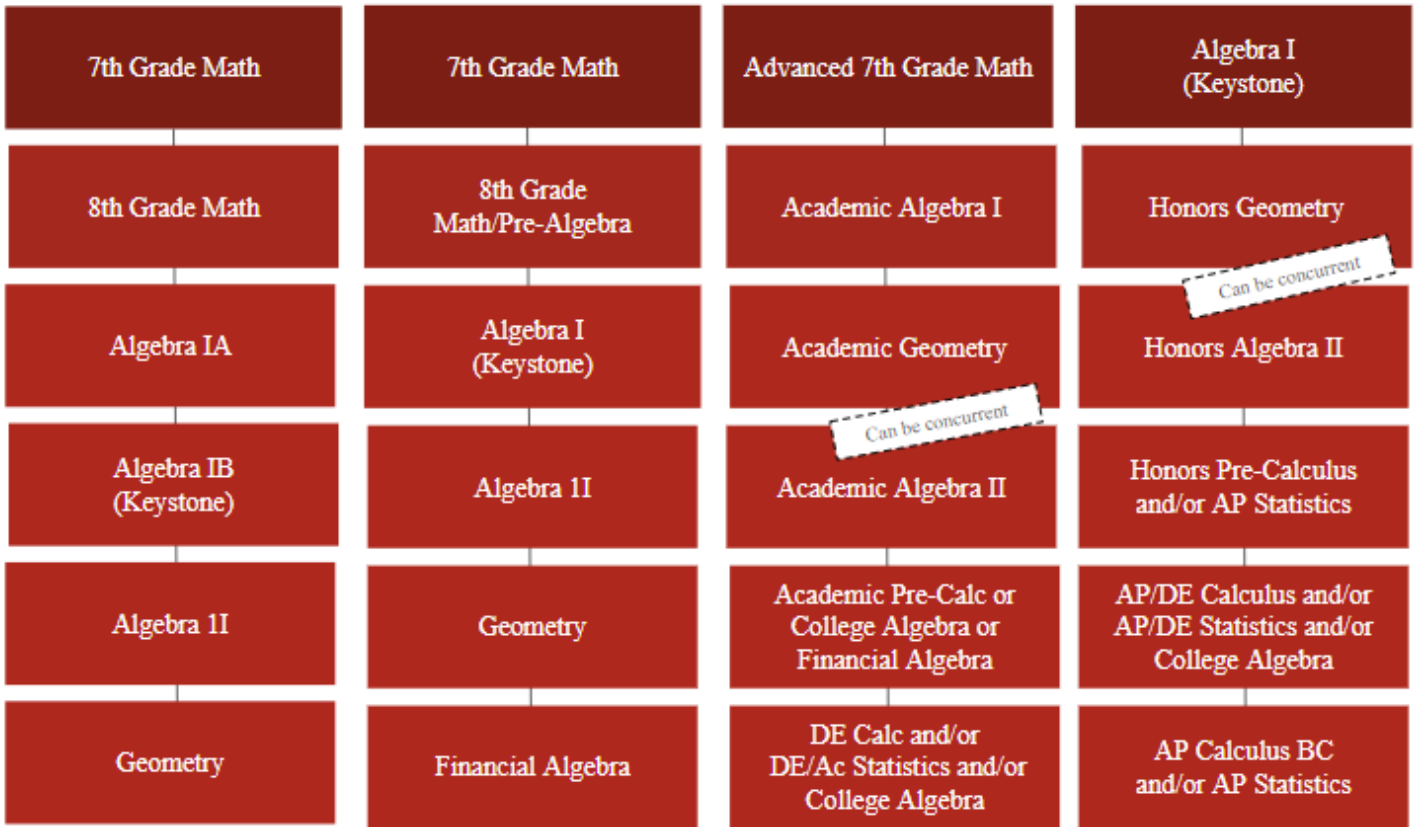
4609: STRENGTH TRAINING AND CONDITIONING II
This course expands upon the information and techniques learned in Strength Training and Conditioning I. Students will learn more in depth aspects of fitness program design to meet individual needs. The students learn how to improve their own personal fitness, and develop the skills and knowledge needed to take a personal training certification course.
Prerequisite: Strength Training and Conditioning I.

4610: LIFEGUARDING AND SWIM INSTRUCTION
In this course, the students will gain the skills and knowledge necessary to earn an American Red Cross Lifeguard certification and/or FA/CPR for professional rescuer certification. The curriculum will focus on water safety, prevention and responding to aquatic emergencies, swimming skills progression and teaching techniques, as well as swim conditioning and stroke development. The class will be held in a BASH classroom and one to two days per cycle at the Boyertown YMCA. To receive the certification at the conclusion of the course, the students will have to be 15 years or older, able to complete a 300-yard continuous swim, able to demonstrate 4 of the 6 strokes in a good form (front crawl, back crawl, breaststroke, sidestroke, elementary backstroke and butterfly), tread water for 2 minutes, and retrieve a weighted brick from the bottom of pool.
****Special Consideration: Obtaining a Lifeguarding, First Aid and Professional CPR Certification will require a fee (up to $350).***

4506: INCLUSIVE SPORTS LEADERSHIP
This course will focus on development of leadership skills through activities that promote social inclusion and create welcoming environments for students with disabilities. Inclusive Leadership teaches students to value and learn from people with intellectual disabilities to create meaningful inclusion in their teams, organizations, families and communities. Students will work directly with students from our adapted fitness course to support and lead activities that facilitate students' relationships, friendships, and mutual appreciation that support academic, social-emotional and civic development and achievement. Students will have an opportunity to participate in events such as the Boyertown Bear Challenge.

5450: ADAPTED PHYSICAL EDUCATION
Adapted Fitness will be available to students who are unable to participate in the regular fitness program. This program offers a variety of modified activities or specially designed activities to meet the individual needs of the students.
Physician's recommendation required.

MATHEMATICS



The diagram is meant to illustrate **typical** course progressions. Students may move from one column path to another if circumstances dictate the move's necessity. Grade levels are not relevant (although for most students the progression shown begins in 7th grade)– the proper sequence of courses is much more important. Please read further for more detailed information.

Course	Course Name	Sem	Grade	Credits	Pds. Per Cycle	Prerequisites/Recommendations
3090A	Algebra 1A	Y	9	1	6	Passed 8th grade math
3090B	Algebra 1B	Y	10	1	6	Passed Algebra 1A
3090	Algebra I	Y	9	1	6	Passed Math 8 or Math 8/Pre-Algebra
3092	Algebra II	Y	10,11	1	6	Passed Algebra I or Algebra 1B
3093	Academic Algebra II	Y	9,10	1	6	Passed Academic Algebra I
3094	Honors Algebra II	Y	9,10	1	6	'B' in Adv. Alg. I and 'B' in Hon. Geo unless concurrent w/Geo
3095	Financial Algebra	Y	11, 12	1	6	Passed Alg II & Geo: Cannot have passed Pre-Calc, Jrs must have teacher approval
3097	DE College Algebra	Y	11,12	1	6	Passed Ac Alg II with 75% & teacher rec.
3100	Geometry	Y	11	1	6	Passed Algebra II (or concurrent)
3101	Academic Geometry	Y	9, 10	1	6	Passed Academic Algebra I (C or higher)
3103	Honors Geometry	Y	9	1	6	Passed Advanced Algebra I 8
3110	Academic Pre-Calculus	Y	11,12	1	6	Passed Ac. Algebra II & Ac. Geometry
3111	Honors Pre-Calculus	Y	10,11	1	6	'A/B' in Honors Alg II and 'A/B' in Ac Geo and teacher recommendation
3114	AP Calculus – AB	Y	11,12	1	6	'A' in Honors Pre-Calculus & teacher rec
3115	AP Calculus – BC	Y	12	1	6	'A' in AP Calculus (AB) and/or teacher rec
3117	DE Calculus	Y	11,12	1	6	Passed Pre-Calculus
3120	Academic Statistics	Y	12	1	6	Passed Academic Algebra II
3124	AP Statistics	Y	10,11,12	1	6	'B' in Honors Pre-Calc or Conc. w/Honors Pre-Calc if B in Honors Alg II
3127	DE Statistics	Y	11,12	1	6	B in a Pre-Calc AND teacher rec.

3090A: ALGEBRA IA

The curriculum is designed to develop logical reasoning, mathematical communication skills and begin to lay a solid foundation of algebra skills to be successful in Algebra. Students will begin with algebra basics then move through solving linear equations and inequalities. Students will progress into word problems, functions, and graphing lines/inequalities. This course will prepare students to take the Algebra IB course next year. **Note**: The Algebra 1 Keystone Exam is **not** administered in this class. **A scientific calculator is highly recommended for this class.**

Prerequisite: Passed 8th grade math

3090B: ALGEBRA IB

The curriculum is designed to develop logical reasoning, mathematical communication skills and further a solid foundation of algebra skills to be successful in Algebra II. Students will review algebra basics like solving linear equations/inequalities, interpreting word problems, graphing lines/inequalities. The course will progress into solving systems of linear equations and inequalities, exponents, factoring and solving quadratics, and data analysis & probability. The Algebra 1 Keystone Exam **is** administered in this class. **A scientific calculator is highly recommended for this class.**

Prerequisite: Passed Algebra IA

3090: ALGEBRA I **(NCAA Approved Course)**

This course is designed to assist students to successfully complete the Algebra 1 Keystone test in 9th grade. Students will apply number theory concepts to show relationships between numbers and problems solving settings, simplify expressions involving polynomials, model and solve real world situations using linear equations and inequalities including those involving absolute value, study relationships, functions, and function properties. Students that do not complete Academic Algebra I in 8th grade with a C should be placed into this class. **A scientific calculator is required.**

Prerequisite: Passed Math 8 or Math 8/Pre-Algebra

3092: ALGEBRA II **(NCAA Approved Course)**

This course is continuation of Algebra in which the following topics are studied: properties of real numbers, exponents, radicals; linear, exponential, rational and quadratic functions; sequences and introductory logarithms. This class can be taken concurrently with Academic Geometry. **A scientific calculator is required.**

Prerequisite: Passed Algebra I or Algebra 1B

3093: ACADEMIC ALGEBRA II **(NCAA Approved Course)**

This course is continuation of Algebra in which the following topics are studied: properties of real numbers, exponents, radicals; linear, exponential, rational and quadratic functions; sequences and introductory logarithms. This class can be taken concurrently with Academic Geometry. **TI84 is strongly recommended and at least a scientific calculator is required.**

Prerequisite: Passed Academic Algebra I with a 'C' or higher

3094: HONORS ALGEBRA II **(NCAA Approved Course)**

This course is a continuation of Algebra in which the following topics are studied: properties of real numbers, exponents, radicals; linear, exponential, rational and quadratic functions; sequences, logarithms and matrices. This class can be concurrent w/ Honors Geometry. **TI84 is required.**

Recommendation: 'B' in Advanced Algebra 1 and either 'B' in Honors Geometry or concurrently with Honors Geometry and a teacher recommendation.

3095: FINANCIAL ALGEBRA **(NCAA Approved Course-PENDING APPROVAL)**

This course will cover high school mathematics topics blended with personal finance topics. Students will be engaged in real-world financial applications while maintaining mathematical rigor. Students who have passed a Pre-Calculus class are not eligible for this course.

TI84 calculator is very helpful but at least a scientific calculator is required.

Prerequisite: Passed Algebra II & Geometry and a Senior, Juniors need mandatory teacher approval.

3097: DE COLLEGE ALGEBRA (HU)

This course is designed for the student with an elementary knowledge of algebra. Topics include properties of real numbers, problem solving using equations and inequalities, algebraic functions, graphing, systems of equations and inequalities, polynomial functions and graphs, exponents and radicals, the binomial theorem, zeroes of polynomials, inverse functions and applications. Interested students are eligible for college credits from Harrisburg University of Science and Technology upon completion of the course with a grade of a 'C' or better. **No calculator is used in this class. Students are expected to purchase the textbook.** Financial assistance is available if necessary. Students are expected to complete an assignment the summer before taking the class.

Prerequisite: Passed Academic Algebra 2 with a 75% and teacher rec or took Pre-Calc and teacher rec.

3100: GEOMETRY **(NCAA Approved Course)**

This course will cover congruence and similarity, area and volume, properties of circles, properties of triangles, coordinate geometry, The course will focus on logical reasoning as well as algebraic manipulation. **A scientific calculator is required.**

Prerequisite: Passed Algebra II

3101: ACADEMIC GEOMETRY **(NCAA Approved Course)**

This course will cover congruence and similarity, area and volume, properties of circles, properties of triangles, coordinate geometry, properties of quadrilaterals, and right triangle trig. The course will focus on logical reasoning as well as algebraic manipulation. This class can be taken concurrently with Academic Algebra 2. **A scientific calculator is required.**

Prerequisite: Passed Academic Algebra 1 with a C or Higher

3103: HONORS GEOMETRY **(NCAA Approved Course)**

Geometry students will study the properties and applications of points, lines, planes and angles, reasoning, proofs and logic, congruent triangles, similarity, right triangles, circles, areas and volumes, transformations and conic sections and trigonometry. Since this is an honors class, students will be taught at a faster pace and will participate in enrichment projects. **TI84 calculator is required**. This class can be taken concurrently with Honors Algebra 2.

Prerequisite: Passed Accelerated Algebra 1 with a B or Higher and teacher recommendation

3110: ACADEMIC PRE-CALCULUS **(NCAA Approved Course)**

Topics include function behavior, exponentials & logarithms, triangle trig, analytic trig, and limits. This course requires good reasoning and algebra skills. **TI84 calculator is required.**

Prerequisite: Passed Academic Algebra II with a C or higher & Academic Geometry

3111: HONORS PRE-CALCULUS **(NCAA Approved Course)**

Topics include function behavior, sequences & series, exponentials & logarithms, triangle trig, analytic trig, limits, and area under a curve. This course requires abstract reasoning, strong algebra skills, and a good work ethic. TI84 calculator is required.

Prerequisite: 'B' in Honors Algebra II and 'B' in Geometry and a teacher recommendation

3114: AP CALCULUS - AB **(NCAA Approved Course)**

This course covers all the topics required to take the AB level of the AP Calculus exam, which includes the equivalent of 1.5 semesters of college calculus. It requires extensive work outside of class, including the previous summer. Financial assistance is available if necessary. **TI84 calculator is required.**

Prerequisite: 'A' or 'B' in Honors Pre-Calculus and teacher recommendation

3115: AP CALCULUS – BC **(NCAA Approved Course)**

This course covers all the topics required to take the BC level of the AP Calculus exam, which includes the equivalent of 2.5 semesters of college calculus. It requires extensive work outside of class. **TI83 or TI84 calculator is required.** Financial assistance is available if necessary.

Prerequisite: Passed AP Calculus (AB) and/or teacher recommendation.

3117: DE CALCULUS (HU) **(NCAA Approved Course)**

The calculus course includes a review of mathematical topics necessary for the study of differentiation and integration. The concepts of slope and area will be developed into differentiation and integration, respectively. Applications will demonstrate the use and interconnectedness of these two main concepts. Interested students are eligible for college credits from Harrisburg University of Science and Technology upon completion of the course with a grade of a 'C' or better. **TI84 calculator is required.** Financial assistance is available if necessary. **Students are expected to purchase the textbook.**

Prerequisite: Passed Pre-Calculus

3120: ACADEMIC STATISTICS **(NCAA Approved Course)**

This course is for students who have taken a course. In Statistics students will see how it is used to picture and describe the real world, and to show that statistics is used to make informed decisions. Probability serves as the backbone for "decision-making" statistics and will also be studied in its own right. A strong algebraic background is not required. This class requires a lot of reading and writing. **TI84 calculator is required**. Because of the statistical capabilities Casio and Hewlett- Packard will not be sufficient. Financial assistance will be available as needed.

Prerequisite: Passed Academic Algebra 2

3124: AP STATISTICS **(NCAA Approved Course)**

AP Statistics is designed to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Projects, investigations, and group activities will be employed to emphasize understanding of concepts rather than the memorization of formulas. AP Statistics is recommended as an additional elective math course for the junior or senior year or as an alternative to calculus for students who will not pursue science or engineering related fields. Though this course does not require advanced mathematics, it does require strong thinking, reading, and writing skills, and extensive work outside of class.

TI84 calculator is required.

Recommendation: 'B' in Honors Pre-Calc or Concurrent with Honors Pre-Calc if 'B' in Honors Algebra II

3127: DUAL ENROLLMENT INTRO TO STATISTICS (HU)

This course covers elementary topics from the probability and statistics of both discrete and continuous random variables. Topics include independence, dependence, mean, variance, and expectation and distributions of random variables. Statistics is applied to hypothesis testing. The emphasis is on practical application of statistics. This class requires a lot of reading and writing. Interested students are eligible for college credits from Harrisburg University of Science and Technology upon completion of the course with a grade of a 'C' or better. **TI84 calculator is required.** Financial assistance is available if necessary.

Prerequisite: B in a Pre-Calc AND teacher rec. or DE College Algebra AND teacher rec.

MUSIC

Course	Course Name	Sem	Grade	Credits	Pds.Per Cycle	Prerequisites/Recommendations
6201	Symphonic Band/Orchestra	Y	9,10,11,12	1	6	Audition/Previous Participation
6202	Symphonic Band	Y	9,10,11,12	1	6	Audition/Previous Participation
6203	Orchestra	Y	9,10,11,12	1	6	Audition/Previous Participation
6204	Wind Ensemble	Y	9,10,11,12	1	6	Audition
6205	Wind Ensemble/Orchestra	Y	9,10,11,12	1	6	Audition/Previous Participation
6206	Percussion Methods	Y	9,10,11,12	1	6	
6211	Show Choir	Y	10,11,12	1	6	Audition
6212	Concert Choir	Y	9,10,11,12	1	6	
6213	Voces Excelsis	Y	9,10,11,12	1	6	Audition
6214	BASH Tones	Y	9,10,11,12	1	6	
6221	Music Theory	S	9,10,11,12	0.5	6	
6223	Piano	S	9,10,11,12	0.25	3	
6235	Music Recording	S	9,10,11,12	0.5	6	
6244	Advanced Placement Music Theory	Y	10,11,12	1	6	Music Instructor Approval

6201: SYMPHONIC BAND/ORCHESTRA

This course is for any student who plays both a string instrument and a band instrument and still wishes to participate in both performing ensembles. Students in this class split their time between Symphonic Band and Orchestra. Students who only play a band instrument but wish to be considered for symphonic (full) orchestra should sign up and audition for Wind Ensemble instead. See course descriptions for specific details.

Required Materials: All students need to provide, **at their own expense**, their own instrument for performing ensembles. Larger instruments will be loaned to students for use in school. Individual questions regarding this requirement can be directed to the music teachers. Percussionists can find their required materials on the following website: https://www.steveweissmusic.com/category/boyertown-area-high-school

6202: SYMPHONIC BAND

The Symphonic Band program encompasses a wide variety of performing activities. The Symphonic Band rehearses throughout the fall season and is featured in an annual holiday performance as well as a performance in the spring. Traditionally, the band has also had the opportunity to travel and perform in the spring. We expect students enrolled in the band to attend all after-school rehearsals and performances. Exemptions are made for illness and family emergencies. A student's work schedule must not conflict with after-school activities.

To ensure that students maximize their performing opportunities, we strongly advise that students participate in both the in-school and after-school marching band activities. The marching band functions throughout the fall athletic season with pre-game and halftime performances as well as various parades.

As stated in the student handbook, a band member participating in a sport may choose not to participate in after-school band during that season. However, the student is encouraged to schedule band and participate in band class during the day. At the conclusion of the athletic season, the members will return to normal after-school band activities. Symphonic Band members are eligible to participate in county, district, and regional bands if selected by audition. Career Tech students that wish to participate in band are encouraged to do so. The student should contact their guidance counselor and band director to make special arrangements for inclusion in the band.

Any student who auditions for Wind Ensemble but is not selected will automatically be placed into Symphonic Band.

Required Materials: All students need to provide, **at their own expense**, their own instrument for performing ensembles. Larger instruments will be loaned to students for use in school. Individual questions regarding this requirement can be directed to the music teachers. Percussionists can find their required materials on the following website: https://www.steveweissmusic.com/category/boyertown-area-high-school

Prerequisite: Open to band instrument performers. Selection by audition.

6203: ORCHESTRA (strings)

The orchestra performs local school events and community functions, playing a repertoire which includes classical and popular music. Orchestra is a course with both in-school and after- school responsibilities. Students enrolled in orchestra are expected to attend all after school rehearsals and performances. Exemptions are made for illness and family emergencies. These after school responsibilities take precedence over student work schedules. Selected wind and percussion students join the string students two days per cycle on school time. These students will also have limited after school rehearsal responsibilities. Orchestra members are eligible to participate in county, district and regional events if selected by audition.

Prerequisite: Open to string players. Selection by audition.

Required Materials: All students need to provide, **at their own expense**, their own instrument for performing ensembles. Larger instruments will be loaned to students for use in school. Individual questions regarding this requirement can be directed to the music teachers.

6204: WIND ENSEMBLE

The Wind Ensemble is an audition-only performing ensemble that is similar in set up to Symphonic Band. This ensemble meets every day and performs in various concerts throughout the year. Wind Ensemble members will perform more rigorous wind band literature that challenges the individual musician. This ensemble will also perform at various festivals and adjudications to allow for further education and evaluation.

Required Materials: All students need to provide, **at their own expense**, their own instrument for performing ensembles. Larger instruments will be loaned to students for use in school. Individual questions regarding this requirement can be directed to the music teachers. Percussionists can find their required materials on the following website: https://www.steveweissmusic.com/category/boyertown-area-high-school

Prerequisite: Open to 9th through 12th grade students. At least one year of Band and/or successful audition (all interested students will be required to audition for this Wind Ensemble).

6205: WIND ENSEMBLE/ORCHESTRA

This performing ensemble course is for any student who plays both a string instrument and a band instrument and still wishes to participate in both ensembles. Students must audition and be selected for Wind Ensemble to register for this class. If students are not accepted into Wind Ensemble, they will automatically be placed in the Symphonic Band/Orchestra class. Students in this class split their time between both ensembles.

Students who only play a band instrument but wish to be considered for symphonic (full) orchestra should sign up and audition for Wind Ensemble instead. See course descriptions below for specific details.

Required Materials: All students need to provide, **at their own expense**, their own instrument for performing ensembles. Larger instruments will be loaned to students for use in school. Individual questions regarding this requirement can be directed to the music teachers. Percussionists can find their required materials on the following website: https://www.steveweissmusic.com/category/boyertown-area-high-school

6206: PERCUSSION METHODS

This performing ensemble class is for all percussionists not enrolled in Wind Ensemble or anyone that is interested in percussion techniques. The Percussion Methods class covers all aspects of non-pitched (snare drum, bass drum, tambourine, etc.) and pitched percussion (mallet percussion, timpani, etc.) and will include percussion technique as well as concert literature. Prior percussion experience is not necessary. Students in Percussion Methods are automatically members of Symphonic Band and will be required to participate in all concerts in which Symphonic Band performs, however they will meet separately during school.

Note: Students who sign up for Percussion Methods should not schedule Symphonic Band in their schedule.

Required Materials: All students need to provide, **at their own expense**, their own instrument for performing ensembles. Larger instruments will be loaned to students for use in school. Individual questions regarding this requirement can be directed to the music teachers. Percussionists can find their required materials on the following website: https://www.steveweissmusic.com/category/boyertown-area-high-school

6211: SHOW CHOIR

Advanced knowledge of reading music reading, and vocal experience is needed. The choir meets every day and performs varied types of choral music, including sacred and secular selections. Students must be available for a minimal amount of time for after-school rehearsals and non-school time performances. Show choir members are eligible to audition for county, district, and regional events.

Prerequisite: Open to 10th, 11th and 12th grade students. At least one year of Concert Choir and a successful audition (all interested students will be required to audition for this choir).

6212: CONCERT CHOIR

The choir meets every day of the six-day cycle, and performs varied types of choral music, including sacred and secular selections. Students must be available for a minimal number of after-school rehearsals and non-school time performances. Concert Choir members are eligible to audition for county, district, and regional events. Members need not audition for this choir. All female singers will be placed in this class as well as anyone who does not successfully audition for Show Choir or Voces Excelsis.

6213: VOCES EXCELSIS

Knowledge of reading music and vocal experience is needed. This choir is an advanced choir for voices who sing soprano and alto only. This choir meets every day and performs varied types of choral music, including sacred and secular selections. Students must be available for a minimal amount of time for after-school rehearsals and non-school time performances. Voces Excelsis members are eligible to audition for county, district, and regional events if selected by audition.

Prerequisite: Open to 9th, 10th, 11th, and 12th grade students who have successful audition (all interested students will be required to audition for this choir).

6214: BASH TONES

The choir meets every day of the six-cycle, and performs varied types of choral music, including sacred and secular selections. Students must be available for a minimal amount of time for after-school rehearsals and non-school time performances. BASH TONES members are eligible to audition for county, district, and regional events. Members need not audition for this choir. All male singers will be placed in this class as well as anyone who does not successfully audition for Show Choir or Voces Excelsis.

6221: MUSIC THEORY

This course provides a fundamental understanding of music by considering the basics of musical construction, with examples drawn from the history of music. Students will study musical notation, interval recognition, elements of pitch and rhythm, scale and chord construction, essential concepts of harmony, basic musical forms, and basic sight-singing and piano skills. No previous piano training is necessary. Students should have some basic form of musicianship before enrolling in this class.

Please note: AP Music Theory and Music Theory I will be offered alternating years.

6223: PIANO CLASS

This is a course designed for students who wish to learn how to play the piano and have little to no experience already. Students will use pianos in the music department keyboard lab and can be loaned a small digital keyboard to practice with at home if needed. Students with some piano knowledge or skills are still welcome to join and will be given time to work independently on more advanced music. Class size is limited to the number of available pianos in the lab.

6235: MUSIC RECORDING

This course will familiarize students with the overall concepts of music production and the techniques used to record and produce their own song. Students will learn the basics of sound, gear, and digital audio workstations such as GarageBand, Logic Pro, and Ableton Live. Students will gain experience recording in both live and traditional studio settings. Class size is limited to equipment requirements.

6244: ADVANCED PLACEMENT MUSIC THEORY

A major component of any college curriculum in music is a course introducing the first-year student to music theory, a subject that comprises musical materials and procedures. It may emphasize one aspect of music, such as harmony; more often, however, it integrates aspects of melody, harmony, texture, rhythm, form, musical analysis, elementary composition, and to some extent, history and style. Musicianship skills such as dictation and other listening skills, sight- singing, and keyboard harmony are considered an important part of the theory course. The student's ability to read and write musical notation is fundamental to such a course. It is also assumed that the student has acquired (or is acquiring) at least basic performance skills in voice or on an instrument. The ultimate goal of an 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. ***Prerequisite: Teacher approval and successful completion of fundamental musicianship assessment OR successful completion of Theory I. Class size is limited and is offered to students based on seniority.***

Please note: AP Music Theory and Music Theory I will be offered alternating years.

NAVY JUNIOR RESERVE OFFICERS' TRAINING CORPS (NJROTC)

Course	Course Name	Sem.	Grade	Credits	Pds. Per Cycle	Prerequisites/Recommendations
2401	Naval Science 1	Y	8, 9,10,11,12	1	6	None
2402	Naval Science 2	Y	10,11,12	1	6	Naval Science 1
2403	Naval Science 3	Y	11,12	1	6	Naval Science 2
2404	Naval Science 4	Y	12	1	3	12th Grade, Naval Science 1, 2, 3
2490	Independent Study-NJROTC	Y	10,11,12	1	6	SNSI approval

Naval Junior Reserve Officers' Training Corps (NJROTC) is a Citizen Development Program and teaches you self-discipline, self-confidence, and leadership skills that can help you successfully meet life's challenges. NJROTC curriculum, instruction, and activities are designed to develop your leadership ability regardless of your career path. The Naval Science curriculum is usually three to four years in length. It consists of formal classroom training supplemented by ship training cruises, orientation visits, and field trips to various naval and military activities to enhance classroom studies. Required Naval and Military Activities that have been proven to strengthen a cadet's leadership, self-discipline, patience, coordination, motivation to learn and achieve, self-worth, attention to detail, and safety awareness include the following: Military Drill and Marching Procedures/Parades/Competitions, Color Guard Procedures/Parades/Competitions, Personal Military Grooming Procedures/Competitions, Military Physical Fitness Procedures/Competitions, Air-Rifle Safety and Sporting Procedures/Competitions, Personal Safety Procedures/Competitions, Computer Operating Systems and Network Procedures/Competitions, and Mechanical Building and Problem Solving Procedures/Competitions. There is NO OBLIGATION to join the armed forces of the United States. Uniforms are on loan to cadets at no cost other than to maintain the cleanliness of the uniform. The six-day cycle is usually broken down into two days of military academic orientation, two days of drill training, and two days of physical fitness training. Each cadet is required to correctly wear the U.S. Navy uniform all day on one designated day per week (usually Wednesday), and for special functions.

Completion of a three-year curriculum entitles a cadet graduate to potential additional opportunities:

1. If enlisting in the Armed Forces, a promotion of three ranks is normal (except for the U.S. Marine Corps) upon completion of Service Boot Camp. **Monthly Salary increase is $300.00!**
2. ROTC opportunities for scholarships at major colleges and universities. **College Students are debt free after potentially receiving tuition payments of $250,000.00 over 4 years.**
3. Potential for Military Academy nominations. **Graduates of Military Academies are debt free and earn a salary of $50,000.00+!**

Following U.S. Navy Grooming Regulations while wearing the uniform is required; specifically:

Males: --haircuts must be U.S. Navy Regulation and earrings/gauges (plugs) or other facial piercings may not be worn in the NJROTC classroom or when in uniform.

Females: -- hair (only natural hair colors) must be within the U.S. Navy Grooming Regulations and worn in a style keeping hair above the collar when in uniform and only one set of post earrings may be worn in the NJROTC classroom and one set of post earrings when in uniform. Gauges (plugs) or other facial piercings are not allowed.

2400: NAVAL SCIENCE 1

Naval Science 1 introduces students to the meaning of citizenship, the elements of leadership, the value of scholarship in attaining life goals, and engenders a sound appreciation for the heritage and traditions of America. It includes an introduction to leadership, naval customs and traditions, naval ships, their missions and organizations, maritime geography, naval aviation and orienteering. Students will take field trips, learn to drill, be involved in community activities and participate in a variety of in-class and extracurricular activities to include: Military Drill and Marching Procedures/Parades/Competitions, Color Guard Procedures/Parades/Competitions, Personal Military Grooming Procedures/Competitions, Military Physical Fitness Procedures/Competitions, Air-Rifle Safety and Sporting Procedures/Competitions, Personal Safety Procedures/Competitions, Computer Operating Systems and Network Procedures/Competitions, and Mechanical Building and Problem Solving Procedures/Competitions.

** NJROTC courses satisfy physical education requirements for 11th and 12th grade.

2401: NAVAL SCIENCE 2

Naval Science 2 challenges students to continue to develop their traits of citizenship and leadership, responsibility, self-discipline and appreciation for the heritage and traditions of America. It includes further leadership training, military drill with arms, maritime history, and nautical sciences. The purpose of this course is designed to engender a sound appreciation for:

a. The Naval Sciences that have underpinned Naval Power Projections (Mathematics, Astronomy, Meteorology, Marine Biology and Weapons Development).
b. Leadership Principles (Characteristics, Techniques and Motivational Theory).
c. The heritage and traditions of America, with recognition that the historically significant role of sea power will be important in America's future, a sound understanding of maritime geography as it relates to our national resources, landforms, climate, soil, bodies of water, people, governments, military, and geopolitics.

Additionally, this course helps develop within each cadet a growing sense of pride in his/her organization, associates, and self. Students will take field trips, improve drill, be involved in community activities and participate in a variety of in-class and extracurricular activities to include: Military Drill and Marching Procedures/Parades/Competitions, Color Guard Procedures/Parades/Competitions, Personal Military Grooming Procedures/Competitions, Military Physical Fitness Procedures/Competitions, Air-Rifle Safety and Sporting Procedures/Competitions, Personal Safety Procedures/Competitions, Computer Operating Systems and Network Procedures/Competitions, and Mechanical Building and Problem Solving Procedures/Competitions. After successfully completing this course, the student will be knowledgeable of the STEM Process and growth and influence of the United States sea power throughout our nation's development.

Prerequisite: Naval Science 1 plus Naval Science Instructor recommendation

** NJROTC courses satisfy physical education requirements for 11th and 12th grade.

2402: NAVAL SCIENCE 3

Naval Science 3 further challenges students to continue to develop their skills of citizenship and leadership, responsibility, self-discipline, and the appreciation for the heritage and traditions of America. It includes further instruction in the following: leadership, military drill with arms, the naval skills of basic seamanship and navigation, and the U.S. Navy operations and strategy. To enhance their breadth of growth students will take field trips, learn complex drill, be involved in community activities and participate in a variety of in-class and extracurricular activities to include: Military Drill and Marching Procedures/Parades/Competitions, Color Guard Procedures/Parades/Competitions, Personal Military Grooming Procedures/Competitions, Military Physical Fitness Procedures/Competitions, Air-Rifle Safety and Sporting Procedures/Competitions, Personal Safety Procedures/Competitions, Computer Operating

Systems and Network Procedures/Competitions, and Mechanical Building and Problem Solving Procedures/Competitions.. The purpose of this course is to further develop the understanding and importance of sea power and national security, naval operations and support functions, military law, international law and the sea, introduce cadets to the technical areas of naval science study, and engender a deeper awareness of the vital importance of the world oceans to the continued well-being of the United States. Specific topics to be covered include the following: national security, military law, ship building and navigation.

Prerequisite: Naval Science 1 and/or 2 plus Naval Science Instructor recommendation

** NJROTC courses satisfy physical education requirements for 11th and 12th grade.

2403: NAVAL SCIENCE 4

Naval Science 4 is a leadership development course that brings together all previous leadership techniques and tools learned during the three Naval Science courses. Cadets apply these techniques and management skills to discuss historical and hypothetical leadership challenges and their solutions. Additionally, cadets will be managing the day-to-day administration and leadership challenges of running a corps of over one hundred cadets. Seniors will receive instruction on Personal Finance through the National Endowment for Financial Education's High School Financial Planning Program to enable them to function as financially responsible young adults in society. Students will **lead** field trip activities, drill, be involved leading junior cadets in community activities and participate in a variety of in-class and extracurricular activities to include: Military Drill and Marching Procedures/Parades/Competitions, Color Guard Procedures/Parades/Competitions, Personal Military Grooming Procedures/Competitions, Military Physical Fitness Procedures/Competitions, Air-Rifle Safety and Sporting Procedures/Competitions, Personal Safety Procedures/Competitions, Computer Operating Systems and Network Procedures/Competitions, and Mechanical Building and Problem Solving Procedures/Competitions.

***Prerequisite:* 12th Grade Naval Science 1 (NS-1) and NS-2 or NS-3, and Senior Naval Science Instructor recommendation.**

** NJROTC courses satisfy physical education requirements for 11th and 12th grade.

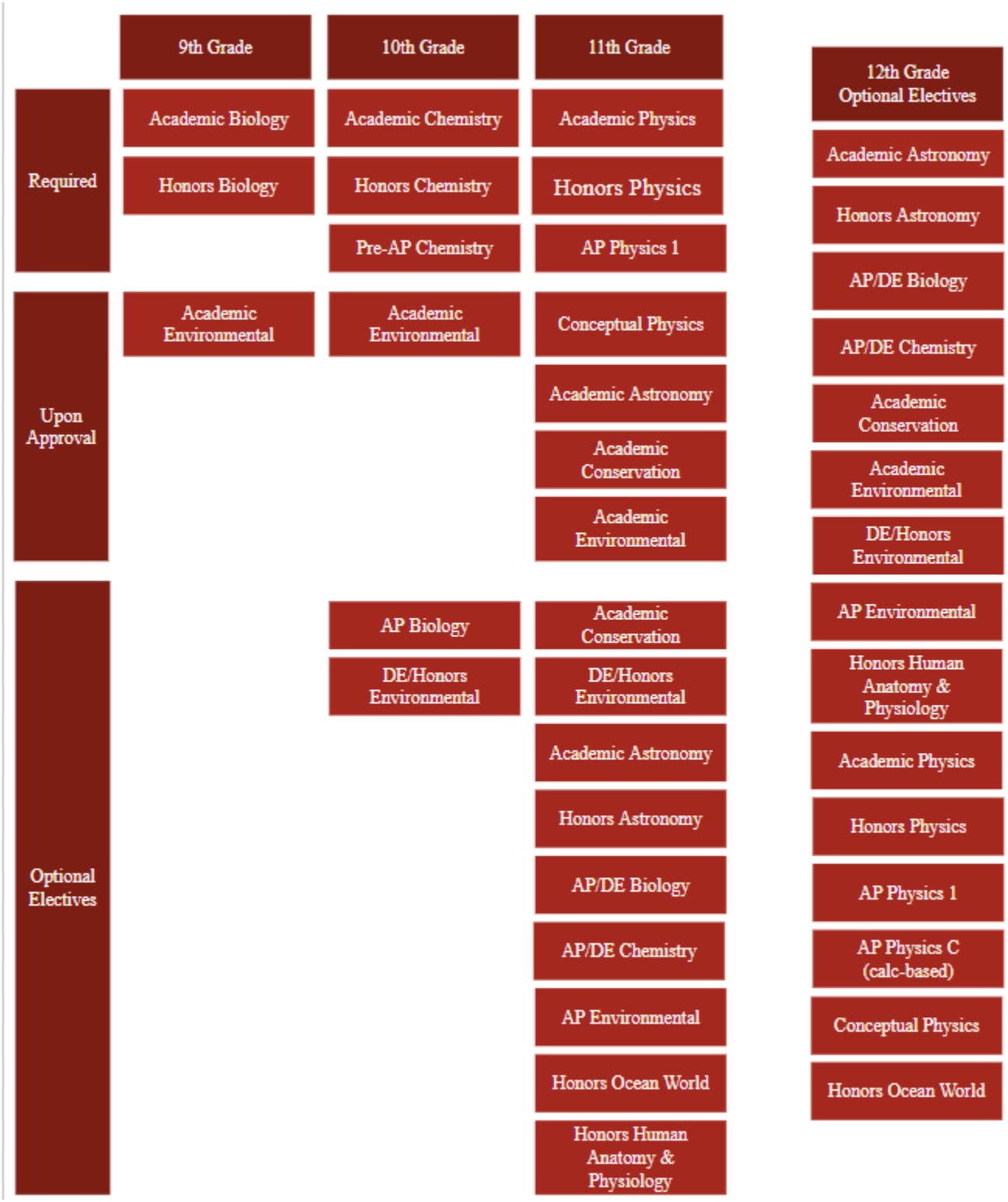
2490: INDEPENDENT STUDY - NJROTC

This course is designed for students who are unable to schedule NJROTC classes during daily class time. Students must be prepared to complete assignments on their own time. A weekly appointment will be set at which time work from the previous week will be evaluated and graded. A weekly NJROTC Personnel Uniform Inspection is required throughout the course. Students will (when scheduling permits) take field trips, learn to drill, be involved in community activities and participate in a variety of in-class and extracurricular activities to include: Military Drill and Marching Procedures/Parades/Competitions, Color Guard Procedures/Parades/Competitions, Personal Military Grooming Procedures/Competitions, Military Physical Fitness Procedures/Competitions, Air-Rifle Safety and Sporting Procedures/Competitions, Personal Safety Procedures/Competitions, Computer Operating Systems and Network Procedures/Competitions, and Mechanical Building and Problem Solving Procedures/Competitions.

Prerequisite: Teacher recommendation, demonstrated academic excellence in all course work, and Senior Naval Science Instructor approval

SCIENCE

In order to meet the state academic standards for graduation it is strongly recommended that students take one of the following sequences of sciences courses. Students may also take electives to augment their science program. Some courses may be taken simultaneously, provided all prerequisites are satisfied.



Course	Course Name	Sem.	Grade	Credits	Pds. Per Cycle	Prerequisites/Recommendations
4092	Academic Biology	Y	9	1 .17	7	
4093	Honors Biology	Y	9	1.17	7	'A' average in current science class; teacher recommendation
4094	AP/DE Biology	Y	10, 11,12	1.33	8	'B" in Honors Bio or better; Pre-AP or Honors Chemistry completed or concurrent
4102	Academic Chemistry	Y	10	1	6	'C' or better in Academic Biology
4103	Honors Chemistry	Y	10	1	6	'A or B' in Academic Biology or 'C' or above in Honors Biology, 'A or B' average in Algebra I (Keystone Course), Algebra II completed or taking concurrently.
4105	Pre-AP Chemistry	Y	10	1.17	7	'A or B' in Honors Biology, 'A or B' average in Algebra 1, Algebra II completed with A or B or taking concurrently.
4104	AP/DE Chemistry	Y	11,12	1.33	8	'B or above' in either Pre-AP Chemistry or 'A' in Honors Chemistry
4111	Conceptual Physics	Y	11	1	6	With permission
4112	Academic Physics	Y	11	1	6	'C' in Alg. II
4113	Honors Physics	Y	11	1	6	'B' in Ac. Alg. II
4114	AP Physics – 1	Y	11,12	1.33	8	"B" in Ac. Alg. II
4115	AP Physics – C Mechanics	Y	11,12	1.33	8	'B' in Pre- AP Honors Chem. Concurrently enrolled in Calculus
4121	Environmental Science	Y	11,12	1	6	With permission in Grade 10
4123	DE/Hon. Environmental Science	Y	10,11,12	1	6	'A' in Acad. Bio or 'B' in Honors Bio
4124	AP Environmental Science	Y	11,12	1.33	6	'B' in Bio.; Chem.
4128	Honors Ocean World	Y	11, 12	1	6	C or better in Biology, Chemistry and Algebra II
4203	Honors Human Physiology Honors Human Anatomy & Physiology	Y	11,12	1 1	6 6	'B' in Bio and a 'B' in Chem, Physics completed or concurrent. Must also be enrolled in 4507 (Honors Human Anatomy) B' in Bio and a 'B' in Chem, Physics completed or concurrent.
4222	Astronomy	Y	11,12	1	6	'C' in Algebra II
4224	DE/Honors Astronomy	Y	11,12	1	6	'C' in Algebra II
4223	Academic Conservation Science	Y	11,12	1	6	

4092: ACADEMIC BIOLOGY **(NCAA Approved Course-PENDING APPROVAL)**

Academic Biology employs an inquiry-based approach to bridge the gap between biological concepts and students' everyday experiences. Through hands-on activities and investigations aligned with unit themes and phenomena, students are challenged to evaluate scientific evidence and weigh the potential consequences of personal and societal choices. The curriculum delves into key areas such as sustainability, ecology, biology, genetics, and evolution. This is a laboratory course. A Biology Keystone Exam will be administered at the end of the course.

4093: HONORS BIOLOGY **(NCAA Approved Course-PENDING APPROVAL)**

Honors Biology is a rigorous introduction to the biological sciences in which the student will explore the basic make-up of living things, how they are put together, carry on life processes, pass characteristics on from one generation to the next, and interact with one another and the environment. Honors Biology is available only to students with high interest and exceptional ability. Topics are covered in greater depth and at a quicker pace. Greater emphasis is placed on higher order thinking skills. Substantial in-depth group or individual projects, oral presentations, and out of class work are required. This is a laboratory course. A Biology Keystone Exam will be administered at the end of the course.

Recommendation: 'A' average in current science class; teacher recommendation, strong study skills, and motivation to do out-of-class work.

4094: AP BIOLOGY/DE BIOLOGY **(NCAA Approved Course)**

Advanced Placement Biology is an advanced course in biology for college-bound students. This course is equivalent to a general biology course taken during the first year of college. It is rigorous and is recommended only for highly motivated, high ability students who are either contemplating a career in science or want to possibly fulfill a college science requirement**. A wide range of comprehensive topics will be studied coming under "The 4 Big Ideas: 1. Evolution, 2. Cellular Processes 3. Information Transfer and 4. Systems Interactions." Students have the option to take the Advanced Placement Examination for college credit at the conclusion of the course AND/OR take it as a Dual Enrollment (DE) course through Harrisburg University of Science and Technology.. Upon successful completion of the DE course requirements with a 'C' or better, students will earn college credits through Harrisburg University of Science and Technology. In addition to work done in class, students will complete additional independent key assignments aligned with Harrisburg University's requirements.

Prerequisite: 'B' or better in Honors Biology; Pre-AP Chemistry or Honors Chemistry completed or taken concurrently; or teacher recommendation

*****This would be based on your AP Biology test score and the accepting post-secondary school policy.***

4102: ACADEMIC CHEMISTRY **(NCAA Approved Course-PENDING APPROVAL)**

Academic chemistry is a course designed to help students better understand the world around them. Students will make sense between chemical processes and larger natural phenomena in our world. Students will be participating in a variety of laboratory based scenarios in order to discover patterns in natural behavior. Students will be asked to model their experiences. Students will learn the basics of atomic structure, chemical bonding, chemical reactions and energy transfer. Students must have a basic math background for success in this class and a willingness to participate, collaborate, and think critically. Academic chemistry will meet 6 periods per 6 day cycle, without a double period lab.

Recommendation: 'C' in Academic Biology

4103: HONORS CHEMISTRY **(NCAA Approved Course-PENDING APPROVAL)**

Honors Chemistry is similar to Academic Chemistry but is suggested to students who demonstrate increased interest and ability. It will cover the same content as Academic Chemistry while incorporating more in-depth discussion and problem solving as well as several opportunities for enrichment. Honors chemistry will also incorporate more mathematical connections, so an increased algebraic ability is suggested. Honors chemistry will meet 6 periods per 6 day cycle, without a double period lab. Lab and hands-on activities will be incorporated throughout the course.

Recommendation: 'A or B' in Academic Biology or 'C' or above in Honors Biology, 'A or B' average in Algebra I (Keystone Course), Algebra II completed or taking concurrently

4105: PRE-AP CHEMISTRY **(NCAA Approved Course-PENDING APPROVAL)**

Pre-AP Chemistry is a full year course following a nationally recognized curriculum designed for students seeking an opportunity for advanced problem solving in chemistry. This course is suggested for students seeking careers in the science or math fields, medical or health professions, or who have a deep interest in science and enjoy a challenge. Students have frequent opportunities to engage deeply with texts and data as well as compelling higher-order questions and problems in order to strengthen critical thinking skills needed to engage in high level college courses. Pre-AP Chemistry contains four main units of study including the structure and properties of matter, chemical bonding and interactions, chemical quantities, and chemical transformations. Pre-AP Chemistry also focuses on developing four interdisciplinary skills including academic conversation, higher-order questioning, evidence based writing, and close observation and analysis. Pre-AP Chemistry maintains a separately scheduled lab period, meeting 7 periods during a 6 day cycle (one double period per 6 day cycle). Students completing the Pre-AP curriculum are not required to continue to AP Chemistry curriculum, but it is recommended. It is highly recommended that students have strong algebra skills.

Recommendation: 'A or B' in Honors Biology, 'A or B' average in Algebra 1, Algebra II completed with A or B concurrently.

4104: AP/DE CHEMISTRY **(NCAA Approved Course)**

The Advanced Placement Chemistry course is equivalent to two semesters of college freshman level chemistry. Students completing this course may register to take the AP Chemistry exam in May and may also register for Dual Enrollment Credits through Harrisburg University. AP Chemistry is rigorous and is recommended only for highly motivated, high ability students who are planning a career in science. The course includes advanced topics such as chemical equilibrium, chemical kinetics, and thermodynamics. The laboratory investigations are complex and require in-depth analysis, as well as independently written reports. Students will engage in experimental design as they are asked to design and implement their own experiments frequently. AP Chemistry meets 8 periods per 6 day cycle, including two double laboratory periods every cycle. Students have the option to take the Advanced Placement Examination for college credit at the conclusion of the course AND/OR take it as a Dual Enrollment (DE) course through Harrisburg University of Science and Technology.. Upon successful completion of the DE course requirements with a 'C' or better, students will earn college credits through Harrisburg University of Science and Technology.

Recommendation: 'B' in Pre-AP Chemistry or 'A' in Honors Chemistry AND teacher recommendation.

4111: CONCEPTUAL PHYSICS **(NCAA Approved Course)**

Conceptual Physics is a one-year laboratory science. Mathematics will be reinforced through experiments and activities. The course will provide studies in the following areas: motion and its causes, conservation laws, periodic motion, electricity, magnetism, and electromagnetic radiation, light and optics. The laboratory section of this course is designed to develop your investigative skills as well as problem solving and independent critical thinking.

4112: ACADEMIC PHYSICS **(NCAA Approved Course-PENDING APPROVAL)**

Academic Physics will integrate physical science, earth and space science, and engineering design across five units of instruction called storylines. Each storyline is launched with an Anchoring Phenomenon that is revisited in the investigations comprising the storyline. This course is a blended and integrated approach based on student driven digital and hands-on activities. Each learning experience is designed to integrate the three dimensions of science instruction: disciplinary core ideas, science and engineering practices, and crosscutting concepts. The course covers Matter and its Interactions, Motion and Stability: Forces and Interactions, Energy, Waves and their Applications in Technologies for Information Transfer, Earth's Place in the Universe, Earth's Systems, Earth and Human Activity, and Engineering Design. Algebra and Geo/Trig is used for evaluating formulae, analyzing data, graphing, solving problems and recognizing trends. A scientific calculator is required.
Recommendation: 'C' in Algebra II

4113: HONORS PHYSICS **(NCAA Approved Course)**

Honors Physics is a laboratory-based course with a great deal of hands-on experience. The course is fast paced and covers waves, light, sound, static electricity, DC circuits, measurements, forces, motion, and energy. Mathematics is used extensively for evaluating formulae, analyzing data, graphing, solving problems and recognizing trends. It is open to students with high interest and exceptional ability. Application of concepts is stressed. A scientific calculator is required. (May take concurrently with AP Chemistry.) Students interested in Engineering may also consider taking the following courses: Technical Drawing & Design, Engineering Design and Microsoft Excel.
Recommendation: 'B' in Ac. Algebra II

4114: AP PHYSICS-1 **(NCAA Approved Course)**

This course is an advanced course for college-bound students who excel in science and or mathematics. It focuses on the big ideas typically included in the first semester of an algebra- based, introductory college-level physics course. It is rigorous and is recommended only for highly motivated, high ability students. The laboratory investigations are complex and require in- depth analysis utilizing word processing and computer graphing skills. The class will meet eight periods per cycle. **Students have the option to take the Advanced Placement Examination for college credit at the conclusion of the course. A scientific calculator is required. No prior physics course is required.
Recommendation: 'B' in Algebra II
****This would be based on your AP Physics-1 test score and the accepting post-secondary school's policy.***

4115: AP PHYSICS-C MECHANICS **(NCAA Approved Course)**

AP Physics-C is a calculus-based physics course for students who plan to major in physics, astronomy, mathematics, or any type of engineering. Students will be instructed on all necessary calculus topics prior to testing. The course will meet eight periods per cycle. Students have the option to take the Advanced Placement Examination for college credit at the conclusion of the course. A TI84 calculator is required. (May take Honors Physics and Pre-AP Honors Chemistry concurrently in grade 11 and then take AP Physics in grade 12, but this is not required.) Students interested in Engineering may also consider taking the following courses: Technical Drawing & Design and Engineering Design.

Required: Successful completion of or concurrently enrolled in Calculus (no prior Physics course is required)

4121: ACADEMIC ENVIRONMENTAL SCIENCE **(NCAA Approved Course)**

Academic Environmental Science is a course that examines the science behind local and global environmental issues. Topics include ecology – biodiversity, material cycles, energy flow, succession; watersheds, wetlands, and aquatic ecosystems; the use and availability of natural resources; agriculture; integrated pest management; waste management; pollution, climate change and sustainability.

Recommendation: Successful completion of Academic Biology

4123: DE/HONORS ENVIRONMENTAL SCIENCE **(NCAA Approved Course)**

DE/Honors Environmental Science is an academic, laboratory course that examines the science behind local and global environmental issues. Topics include population ecology and dynamics, water quality, resource management, energy, atmospheric pollution, climate change, biodiversity, and agriculture. Field work and environmental community service are required. Curriculum equivalent to a freshman year college course will be followed. This course is a DE course and students will receive three science credits with a grade of "C" or higher through Montgomery County Community College. Students must register for the DE portion of the class to earn the 0.2 GPA bump.

Recommendation: 'A' in Academic or 'B' or above in Honors Biology

4124: AP ENVIRONMENTAL SCIENCE **(NCAA Approved Course)**

The Advanced Placement Environmental Science course is equivalent to a one semester introductory college course in environmental science. AP Environmental Science is an interdisciplinary, rigorous science course for motivated students interested in complex natural systems, environmental problems, risks, alternatives, and solutions. AP Environmental Science stresses *field investigation* as well as laboratory work. The following major topics serves to describe the scope of the AP Environmental Science course and exam: Earth Systems and Resources, The Living Word, Population, Land and Water Use, Energy Resources and Consumption, Pollution, and Global Change. It is rigorous and is recommended only for highly motivated, high ability students who are either contemplating a career in science or want to possibly fulfill a college science requirement. ** Students have the option to take the Advanced Placement Examination for college credit at the conclusion of the course. This course includes two double laboratory periods every cycle. No prior environmental courses required.

Recommendation: 'B' in Biology, successful completion of Chemistry and Algebra, or teacher recommendation. **This would be based on your AP Environmental test score and the accepting post-secondary school's policy.

4128: HONORS OCEAN WORLD: An Introduction to Marine Science **(NCAA Approved Course)**

This course investigates the historical, geological, physical, chemical, and biological characteristics of the ocean environment. The basic language of marine science and its underlying principles are explored. Students will pursue an understanding of the underwater history of the planet and the importance of the sciences, including the scientific method of research through daily lessons and hands-on laboratory activities.

Recommendation: 'C' in Biology, Chemistry, and Algebra II or recommendation by teacher; must be a junior or senior

4203: HONORS HUMAN PHYSIOLOGY **(NCAA Approved Course)**

This is a rigorous academic course designed for potential entrants into nursing, physician assistants, health-related fields, paramedical fields, and physical education (pre-med. students should also consider A.P. - Chemistry). In this science course students will study the physiological functions of the human body from cellular and molecular levels to organ systems levels with a focus upon the related anatomical structures. Laboratory work is also a major part of this class. Recommendation: Have earned a 'B' or above in Biology, a 'B' or above in Chemistry, Physics completed or taken concurrently, and must be a junior or senior. Students selecting the course must also enroll in Human Anatomy (4507 - see Health & Physical Education). Successful completion of both courses will provide you with two BASH credits (1 Science and 1 PE, fulfilling your senior Physical Education requirement).

Recommendation: Must have earned a 'B' or above in Biology and a 'B' or above in Chemistry and Physics completed or taking concurrently; must be a junior or a senior

4222: ASTRONOMY **(NCAA Approved Course)**

This course is an inquiry into the fundamental concepts of the universe. Topics include the celestial sphere, historical astronomy, telescopes, light and the spectrum, the solar system, the Sun, the life cycle of stars, galaxies, cosmology, and the possibilities of life in space. Students will be involved in research assignments, oral presentations, and current events in astronomy. Mathematics is used in various laboratory exercises designed to show modern methods of observing the sky.

4224: DE/HONORS ASTRONOMY **(NCAA Approved Course)**

Honors Astronomy is an advanced level course in basic astronomy. The course explains a broad range in astronomical concepts and principles including understanding the sky, apparent motions of the planets and the sun, telescopes and accompanying technology, basic structure and behavior of atoms, origin and analysis of light, origin of the solar system, internal structure and behavior of the sun, lifecycle of all stellar classes, origin and structure of galaxies, and cosmology. Throughout the course, emphasis is placed on the implementation of the scientific method, the evidence that astronomers use to support their conclusions, and the importance of astronomy.

Recommendation: "B" in Algebra II

Students will be required to purchase their own textbook and lab book. Students who elect the DE option will receive college credits with a grade of "C" or higher through Montgomery County Community College.

4223 ACADEMIC CONSERVATION SCIENCE

The foundation of this course is conservation and the related outdoor recreation that funds the North American Model of Wildlife Conservation: Hunting, fishing, trapping, shooting sports and boating. The purpose of the course is to recruit, engage and educate the next generation of conservationists. The curriculum for this course is designed to be adaptive in order to be relevant to learners, reflect current topics of conservation and respond to the input from instructors. Students will build an understanding of science content and learn scientific techniques taught through the lens of conservation with an emphasis on hands-on, real-world activities. The curriculum will center on wildlife conservation and the outdoor recreational activities that financially support the North American Model of Wildlife Conservation, such as hunting, fishing, trapping, conservation work, shooting sports and boating, and how they directly benefit habitat enhancement and protection, and wildlife management, including game, non-game and endangered species.

SOCIAL STUDIES

Course	Course Name	Sem	Grade	Credits	Pds. Per Cycle	Prerequisites/Recommendations
2092	Academic U.S. History II	Y	9	1	6	
2093	Honors U.S. History II	Y	9	1	6	'A' in previous S.S. courses, teacher rec.
2094	AP U.S. History	Y	9, 10, 11, 12	1	6	'A' in previous S.S. courses, teacher rec. 10th, 11th and 12th may take as an elective
2102	Academic Mod. World Studies	Y	10	1	6	
2103	Honors Mod. World Studies	Y	10	1	6	'A' in previous S.S. courses, teacher rec.
2105	AP Modern World History	Y	10, 11, 12	1	6	'A' in previous S.S. courses, teacher rec., 11th and 12th may take as an elective
2112	Academic Govt & Economics	Y	11	1	6	
2113	Honors Govt & Economics	Y	11	1	6	'A' in previous S.S. courses, teacher rec.
2114	AP Economics	Y	11,12	1	6	'A' in previous S.S. courses, teacher rec.
2115	AP US Government/Comparative Government	Y	11, 12	1	6	
2117	DE Macroeconomics	Y	11,12	1	6	Teacher Recommendation
2118	DE US National Government	Y	11,12	1	6	Teacher Recommendation
2119	DE Microeconomics	Y	12	1	6	DE Macroeconomics
2220	Sociology	Y	12	1	6	
2221	Conflicts and Consequences	Y	12	1	6	
2222	Pennsylvania and Local History	Y	12	1	6	
2223	Contemporary Global Issues	Y	12	1	6	
2230	Honors Sociology	Y	12	1	6	
2240	AP Psychology	Y	12	1	6	'A' in previous S.S. courses
2241	AP Human Geography	Y	11,12	1	6	

2092: US HISTORY II **(NCAA Approved Course)**

2093: HONORS US HISTORY II **(NCAA Approved Course)**

This is a multi-disciplined survey course of the development of the United States with an emphasis on the 20th century. Special attention is given to our development as a world power, economic and industrial development, political trends, and societal and cultural problems and achievements. Students will also study Pennsylvania's contributions as well.

Recommendation for all social studies honors courses: 'A' in past academic social studies classes or an 'A' or 'B' in honors, teacher recommendation.

2094: AP U.S. HISTORY **(NCAA Approved Course)**

This class offers an in-depth study of the entire range of American history (1491-present) and requires students to showcase an extensive understanding and comprehension of certain themes and trends throughout American history. As an Advanced Placement (AP) course, the rigor of this class is equivalent to that of a first-year college survey course in American history and will be treated as such. To succeed in AP United States history, students must possess excellent critical reading and writing skills and be willing to invest significant time in outside preparation in the form of secondary and primary source reading and analysis. In class, students will participate in hybrid learning stations which will require them to work in collaborative groups, independently, and directly with the teacher on various assignments on a daily basis. Additionally, this class is heavily reliant on the use of technology and student management of various online applications. As such, **students must bring charged laptops and headphones to class every day!**

2102: ACADEMIC MOD WORLD STUDIES **(NCAA Approved Course)**
2103: HONORS MOD WORLD STUDIES **(NCAA Approved Course)**

This is a multi-disciplined survey course that studies the history of man; the course starts (after a review of the Renaissance, Reformation, Age of Exploration, Absolutism, Scientific Revolution and Enlightenment) in the 1700's with the French Revolution and concludes with the Present. It includes the development of economics, society, religion, government, education, technology, the arts and influence of geography.

Recommendation for all social studies honor's courses: 'A' in past academic social studies classes or an 'A' or 'B' in honors, teacher recommendation.

2105: AP MODERN WORLD HISTORY **(NCAA Approved Course)**

In AP Modern World History, students investigate significant events, individuals, developments, and processes from 1200 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change over time. The course provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places: humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation.

Recommendation: 'A' average in previous social studies classes and teacher recommendation (11th and 12th grade may take as an Elective Only).

2112: ACADEMIC GOVT AND ECONOMICS **(NCAA Approved Course)**
2113: HONORS GOVT AND ECONOMICS **(NCAA Approved Course)**

This is a required course for all 11th grade students. The course is designed to give the student a comprehensive study of government and economics. The student will examine the functions of the government and rights and responsibilities of citizens. The student will study the role of the government in the economy as well as the economy's impact on the world.

Recommendation for all social studies honor's courses: 'A' in past academic social studies classes or an 'A' or 'B' in honors, teacher recommendation. The First Marking Period Benchmark Assessment fulfills the PA House Bill 564 requirement for Civics Exam.

2114: AP ECONOMICS **(NCAA Approved Course)**

The course is an in-depth study of microeconomics and a survey of macroeconomics. This course is designed to prepare the student to take the A.P. Exam in Microeconomics with the option of taking the Macroeconomics test. An assignment in Macroeconomics will be required during the summer prior to taking the Advanced Placement course. The class will include both Macro and Micro concepts at an accelerated pace.

Recommendation: 'A' average in past social studies courses, teacher recommendation.

2115: AP U.S. GOVERNMENT/COMPARATIVE GOVERNMENT (NCAA Approved Course)

The study of the US Government covers the basic structure and organization of the US government as well as individual rights, campaigns, elections, the role of the media, and public policy. Comparative government compares the United States to six other governments and government systems around the globe. Knowledge gained in this course will help students develop an understanding of contemporary institutions in present day society and an understanding of domestic and international politics. Knowledge of history is helpful, but the course only requires knowledge of the modern era (1945-present). Finally, students will be required to complete a current events assignment during the summer, and they will be assessed on their understanding of current events throughout the year.

2117: DE MACROECONOMICS (Dual Enrollment offering- MCCC) 11,12 (NCAA Approved Course)

Students are introduced to the basic economic problem, the study of economics, and the American capitalist market system. Macroeconomic topics discussed are the business cycle, inflation, unemployment, economic growth, and government policies for stability and growth. Upon successful completion of the course with a 'C' or better, students will earn three semester-hours of college credit through Montgomery County Community College. ***Book and materials fee.***

Prerequisite: Teacher Recommendation will be required- May require Community College Placement Test.

2118: DE US AMERICAN NATIONAL GOVERNMENT (Dual Enrollment offering- MCCC) (NCAA Approved Course)

An examination of the basic structure and functions of American National Government, with emphasis on the power relationships between the Congress, the President, and the Judiciary. Political parties, pressure groups, civil rights, and the federal structure of our government will be stressed. Summer work will be required, and students must purchase their own course materials. Upon successful completion of the course with a 'C' or better, students will earn college credits that can be applied to Montgomery County Community College as **POL 124 American National Government** or any school in the state system of higher education. ***Possible book and materials fee. Prerequisite: Teacher Recommendation will be required.***

2119: DE MICROECONOMICS (Dual Enrollment offering- MCCC) 12 (NCAA Approved Course)

Students are introduced to the American capitalist market system. Microeconomic topics discussed are markets, pricing, competition, and resource allocation both domestically and internationally. Also discussed are government policies directed at solving problems in these areas. Upon successful completion of the course with a 'C' or better, students will earn three semester-hours of college credit through Montgomery County Community College. ***Book and materials fee.***

Prerequisite: DE Macroeconomics AND Teacher Recommendation will be required- May require Community College Placement Test.

2220: SOCIOLOGY 12th GRADE

This introductory course in behavioral sciences is appropriate for all 12th grade students. Topics to be discussed will include: The work of sociologists, cultural values and norms, social groups, social stratification, minorities in the social structure, social institutions (such as the family, education, religion, and government), social problems (ecology, crime, poverty, and aging), and the individual's relationship to society. The course will emphasize class discussion and practical experiences in sociology. The course will meet 6 periods per cycle for a year.

2221: CONFLICTS AND CONSEQUENCES 12th GRADE

Students will explore the philosophy of conflict, origins of the modern military, and survey U.S. military actions since 1860. Although the course analyzes military actions, this class covers a diverse number of historical themes. This class evaluates military actions from political, economic, social, and technological perspectives. Students will analyze primary sources, debate critical topics, and conduct original research using local sources.

2222: PENNSYLVANIA AND LOCAL HISTORY 12th GRADE

The Pennsylvania and Local History course is designed to foster a deeper interest and respect for the most basic aspect of the American story for Boyertown students - the history of Pennsylvania, Berks/Montgomery County, and the local Boyertown community. During the course of the school year, students will study how Pennsylvania and their local communities played an instrumental role in and were influenced by the many chapters of American history. Emphasis will be placed on the geographic, cultural, social, political, and economic topics that also help to define Pennsylvania from the rest of the United States as well as what unique historical contributions help to make Berks/Montgomery County and Boyertown a unique and interesting place within our home state. Special emphasis will also be given to original student-led projects and individual research that focuses on a unique aspect of Pennsylvania or local history.

2223: CONTEMPORARY GLOBAL ISSUES – 12th GRADE **(NCAA Approved Course)**

Contemporary Global Issues introduces students to various issues facing the world today. Students will explore the role of the United States in a changing world. This course focuses on large global issues such as immigration, conflicts in the Middle East, nuclear weapons, human rights, climate change and more. In addition to these topics, students will learn about global geography and international current events. This class is designed to allow students to form their own opinions on matters that affect their world. Students will evaluate the issues and propose solutions from a variety of perspectives.

2230: HONORS SOCIOLOGY – 12th GRADE

This introductory course in the behavioral sciences is appropriate for all 12th grade students. Topics to be discussed will include: The work of sociologists, cultural values and norms, social groups, social stratification, minorities in the social structure, social institutions (such as the family, education, religion, and government), social problems (ecology, crime, poverty, and aging), and the individual's relationship to society. The course will emphasize class discussion and practical experiences in sociology. The course will meet 6 periods per cycle for a year.

Recommendation for all social studies honors' courses: 'A' in past academic social studies classes or an 'A' or 'B' in honors and teacher recommendation.

2240: AP PSYCHOLOGY – 12th GRADE **(NCAA Approved Course)**

This course is an intensive evaluation of the systematic and scientific study of human behavior and mental processes. Students will explore and apply psychological theories, key concepts, and phenomena associated with the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior, and social psychology. This course, like all AP courses, will require a deep commitment of time and effort on the part of the student. Emphasis is placed on critical and evaluative skills. Students in this course are expected to take the Advanced Placement examination in May. There is an AP Exam fee and a summer assignment for this course.
Recommendation: 'A' average in past social studies courses, and teacher recommendation.

2241: AP HUMAN GEOGRAPHY – 11th and 12th GRADE

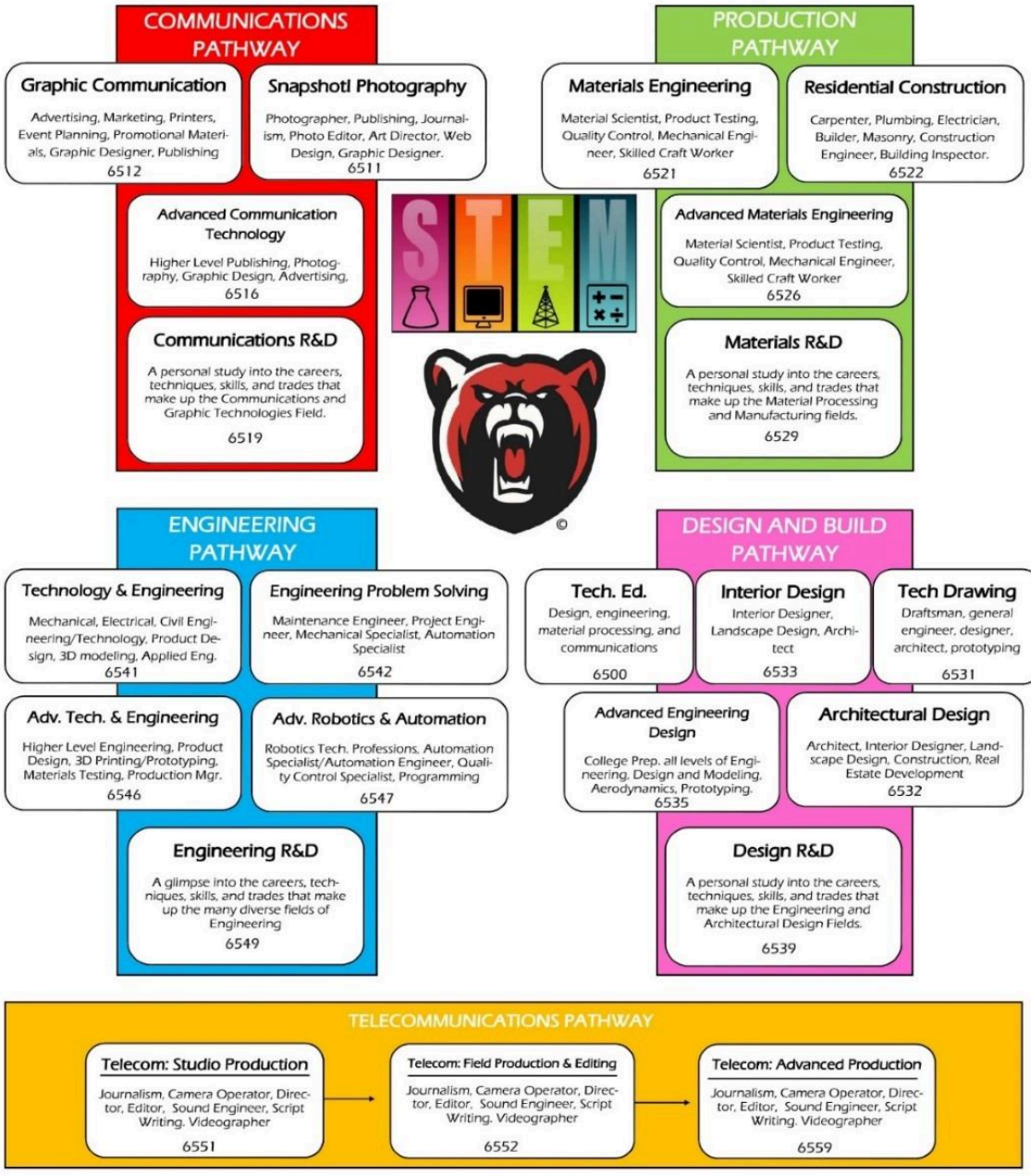
The year-long AP Human Geography course is equivalent to an introductory college-level course in human geography. The course will introduce students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of earth's surface. Human Geography incorporates the concepts and methods associated with several of the disciplines within the social sciences, including economics, geography, history, and sociology. Topics included in this course include: the study of problems of economic development and cultural change; consequences of population growth, changing fertility rates, and international migration; impacts of technological innovation on transportation, communication, industrialization, and other aspects of human life. There is an emphasis on understanding the world in which students live today. By the end of this course students will be more geo-literate, more engaged in contemporary global issues, and more multicultural in their viewpoints. Students will learn to see geography as a discipline relevant to the world in which they live, as a source of ideas for identifying, clarifying, and solving problems, and as a key component in building global citizenship, and environmental stewardship.

Recommendation: 'A' average in past social studies courses, and teacher recommendation.

TECHNOLOGY AND ENGINEERING

Technology and Engineering Course and Career Guide

The course offerings for the Technology and Engineering Department are listed below. Class selections are organized by introductory, intermediate, advanced, and capstone courses; along with a listing of careers and job opportunities that those classes relate to.



Course	Course Name	Sem	Grade	Credits	Pds. Per Cycle	Prerequisites/Recommendations
5662	Adaptive Technology Education	S	9,10,11,12	0.5	6	Life Skills or Learning Support Students Only
6500	Tech Ed	S	9,10,11,12	0.5	6	
6511	Photography	S	9,10,11,12	0.5	6	
6512	Graphic Communications	Y	9,10,11,12	1	6	
6516	Advanced Communication Technology	Y	10,11,12	1	6	6511,6512 or 6551
6519	Technology: R & D: Communications	Y	11,12	1	6	6516
6521	Materials Engineering	Y	9,10,11,12	1	6	
6522	Residential Construction	Y	9,10,11,12	1	6	
6526	Advanced Materials Engineering	Y	10,11,12	1	6	6521, 6522
6529	Technology: R & D: Materials	Y	11,12	1	6	6526
6531	Technical Drawing	Y	9,10,11,12	1	6	
6532	Architectural Design	Y	9,10,11,12	1	6	
6533	Interior Design	S	9,10,11,12	0.5	6	
6535	Advanced Engineering Design	Y	10,11,12	1	6	6531
6539	Technology: R & D: Design	Y	11,12	1	6	6532, 6535, or 6546
6541	Technology & Engineering	Y	9,10,11,12	1	6	
6542	Engineering Problem Solving	S	9,10,11,12	0.5	6	
6546	Advanced Technology & Engineering	Y	10,11,12	1	6	6541
6547	Advanced Robotics & Automation	Y	10,11,12	1	6	6521 OR 6541
6549	Technology: R & D: Engineering	Y	11,12	1	6	6546,6547,6535,6531 or 6500
6551	Telecommunications: Studio Production	Y	9,10,11,12	0.5	3	
6552	Telecommunications: Field Production and Editing	Y	9,10,11,12	1	6	
6559	Telecommunications: Advanced Production	Y	10,11,12	1	6	Telecom. Editing & teacher rec.
6561	Esports: Gaming Concepts and Equipment	S	9,10,11,12	0.5	6	

6500: TECH ED (.5 credit)

Designing and building your own creation with your own hands is one of the most gratifying experiences one can have. In Tech Ed, you will explore the concepts of 3D modeling, engineering, materials processing, photography and metalworking while creating personalized projects. Our rigorous pace will show you just how productive you can be even in unfamiliar surroundings and how rewarding it is to try new things. The focus of this class changes multiple times within the semester keeping things fresh and interesting for all students. This is an excellent course for surveying the other various Technology Education classes offered here at BASH.

COMMUNICATIONS COURSES

6511: PHOTOGRAPHY (.5 credit)

We all love to share pictures of the things that are important to us, and taking high quality photos of our family, friends, and places we love to go are fun to do! In this exciting, hands-on course we will learn how to take photos of the things we love but create images on a whole new level of quality and detail than we see on our phones. You will use innovative digital photography equipment and photo editing software to capture and produce vivid images using many new photography techniques. You will be learning to use cutting-edge Nikon digital cameras and the Adobe Suite programs in this class to make projects perfect for print or to use online. This class also provides opportunities to explore careers in graphic arts, photography, advertising, and marketing.

6512: GRAPHIC COMMUNICATIONS (1 credit)

In this class you will learn how to create the graphics and digital images that you see all around you, every single day. You will design and print your own T-shirts, etch and cut designs into materials using a laser engraving machine, design album covers for your favorite bands and artists, print large format posters with professional looking designs that you create, and so much more! Learn how to market your ideas and products using graphic design software from the Adobe Suite of programs and create amazing looking products that you will love to take home with you in this hands-on class! If you ever wanted to learn about careers in graphic design, publishing, marketing, advertising, or product development; this is the perfect class for you!

6516: ADVANCED COMMUNICATION TECHNOLOGY (1 credit)

Take your graphic communication and photography skills to the next level in this dynamic, hands-on course. We will build on the skills learned in Photography and Graphic Communications classes, as well as Telecommunications, to push your skills to the limit while working with exciting equipment and learning many new and very cool techniques. Topics include multi-color screen printing, HDR Photography, Board Game Design, graphic layout and design, printing technologies, as well as forming design teams to create and market your own product! The course is structured around small design teams, collaboration, and competitive business and marketing assignments against other classmates.

Prerequisites: Photography, Graphic Communications, or Telecom.

6519: TECHNOLOGY RESEARCH AND DEVELOPMENT: COMMUNICATIONS (1 credit)

Students with a strong interest in the communications fields (digital imaging, photo imaging, desktop publishing, audio/video) can go further in this class. Building upon concepts from the Advanced Multi-media Communications course, Technology Research and Development: Communications will allow you to choose an area of study and push the envelope further than before. Go on assignment and capture digital photos of school events, develop your digital photo retouching and output skills, combine photos and graphics into advertisements and pamphlets to promote school events, and use cutting-edge audio-visual technology to produce professional- quality video/audio clips, podcasts, and webcasts. The skills you learn here will translate into skills that colleges and employers look for in every person!

MATERIALS & CONSTRUCTION COURSES

6521: MATERIALS ENGINEERING (1 credit)

Materials Engineering is a fun, highly engaging technology education class centered on making things and understanding the qualities and characteristics of the materials being used. You will use wood, metal, plastics, glass, and composites to produce a wide variety of items. These products will teach you processes such as molding and casting, bending, making precise cuts, turning, welding, and applying finishes. You will work individually and cooperatively with other classmates during the year. This class is an excellent choice if you are contemplating a career as a materials engineer, manufacturing technician, plant manager, or related technical professional or simply enjoy the creative process of making things!

6522: RESIDENTIAL CONSTRUCTION (1 credit)

This class revolves around the processes and trades involved in building houses and other structures. Learning experiences include activities in surveying and site preparation, rough and finish carpentry, electrical wiring, plumbing, cabinetmaking, and more. In many of the activities, you will build valuable teamwork skills as you work with your classmates to complete highly relevant challenges. For those considering a career as a carpenter, construction project manager, builder, architect, electrician, civil engineer, plumber, or if you plan to own a home, this course is an excellent starting point!

6526: ADVANCED MATERIALS ENGINEERING (1 credit)

This class is for those students who want to further their skills and understanding of manufacturing or construction. You will have the opportunity to design and build more complex objects and dig deeper into the processes used to create products. Explore innovative technologies such as CNC machining and 3D printing, as you hone your skills as a maker.

Prerequisite: Materials Engineering, Residential Construction

6529: TECHNOLOGY RESEARCH AND DEVELOPMENT: MATERIALS (1 credit)

As the capstone class in our Materials Lab, this class is designed for students to take a project (or projects) from the initial concept and design on through fabrication and finishing. The end result should be an item (or items) worthy of inclusion in a portfolio and the skills developed should be a real asset for the student as he or she moves forward with future plans.

Prerequisite: Advanced Materials Engineering

ENGINEERING DRAWING, DESIGN & ARCHITECTURE COURSES

6531: TECH DRAWING (1 credit)

Further your skills in SolidWorks and 3D design as you use the Technical Design Process to create solutions to exciting challenges within this class. Understand how 3D assemblies allow you to become more efficient in the building of your design while saving time, energy and supplies. Explore some of the more specialized aspects of 3D modeling as you work collaboratively with your classmates. You will design and build a personalized creation that you will be able to take home and use and with proper care that could last you a lifetime. This class will also help prepare you for success in one of our advanced offerings. Many of our Boyertown alumni have returned to tell us that their enrollment in this class helped them to be successful in a variety of engineering majors at the college level.

6532: ARCHITECTURAL DESIGN (1 credit)

If you have a desire to be an architect, designer, engineer, or be the owner of a home someday, this course is a must. In Architectural Design you will use Chief Architect, a 3-D architectural design program, to solve problems related to architecture. This course is intended to help students develop general knowledge of interior and exterior residential design. You will explore architectural concepts including land development, environmental design factors, community planning; site planning, residential/commercial area planning, and landscape design. With each project, you will develop professional-looking architectural plans that showcase your ideas. The course culminates with building a scaled architectural model.

6533: INTERIOR DESIGN (.5 credit)

Have you ever watched a home remodeling show and wondered how they generate those 3D computer simulations of the new plan prior to the demolition? In this class, you will have the opportunity to learn the basics of architectural design with an emphasis on the 3D modeling of the structure's interior spaces. From basic interior design principles to advanced concepts such as 3D walkthroughs and importing custom materials, this class will provide you with the same skills that are used by the professionals who work on TV shows like Fixer Upper, Flip or Flop, Love it or List and Curb Appeal. This class is an excellent opportunity to further your abilities in preparation for our other course, Architectural Design.

6535: ADVANCED ENGINEERING DESIGN (1 credit)

If you desire to be a designer, engineer, architect, or related technical professional this course is a must. In Engineering Design, you will use the basic skills learned in Technical Drawing to design solutions to related engineering problems. The engineering method, a design development process, will be used as you create innovative working prototypes. Examples of possible activities are using SolidWorks to design an automobile, 3-D print a scaled model of the automobile and test its aerodynamics in a wind tunnel. You will use ergonomics to design a product of your choice that fits the human body.
Prerequisite: Technical Drawing and Design

6539: TECHNOLOGY RESEARCH AND DEVELOPMENT: DESIGN (1 credit)

Technology Research and Development: Design is an independent study course for students who have successfully completed advanced technology education classes in the STEM design area. Technology Research and Development: Design provides you with the opportunity to concentrate in an area of selected study. In this synthesis level class, you will follow the technological method including defining the problem, conducting research, developing a plan, fabricating a model/prototype, testing/redesigning, and presenting your findings. In addition, you will maintain field notes; submit a proposal, quarter reports, and a final report.
Prerequisite: Architectural Design or Advanced Engineering Design or Advanced Technology & Engineering

ENGINEERING COURSES

6541: TECHNOLOGY & ENGINEERING (1 credit)

Are you interested in problem solving and engineering? In this hands-on class, you will be exploring a variety of fun, challenging activities in topics related to applied engineering, structural engineering, mechanical engineering, civil engineering and transportation, electrical and computer engineering, and robotics. Explore topics in structural and civil engineering technology by designing strong structures capable of supporting enormous weight using weak materials. Explore robotics, automation, and programming by building robots to compete in our exciting class competitions that include Capture the Flag, Bomb Disposal, and more! Learn product engineering by using 3D modeling software to design and 3D print/prototype a product you can take with you when you complete the class! Study mechanics using K'nex to build a car that will race down a track to collide with another in a demolition derby, and more. Put the power of teamwork to work by collaborating with your classmates to build solutions to the exciting engineering, problem solving, and critical thinking activities in this class. You will learn a lot, and have fun, too!

**This class is an excellent opportunity to further your abilities in preparation for our other course, Advanced Technology & Engineering or Advanced Robotics & Automation.

6542: ENGINEERING PROBLEM SOLVING (.5 credit)

Introduction to Engineering Problem Solving is a hands-on course for students interested in learning about mechanical/engineering design, problem solving, and experimenting with using electronics to control both user-controlled robots, semi-autonomous robots, and automated robots. In this class you will incorporate STEM concepts as you learn about engineering, applied engineering, and technology problem solving components. You will design solutions to interesting, and challenging engineering problems, then build your solution using a hands-on approach to learning.

6546: ADVANCED TECHNOLOGY & ENGINEERING (1 credit)

Take your problem solving and engineering knowledge to the next level in Advanced Technology & Engineering. Push your teamwork, knowledge, and critical thinking skills to the test as you use Solidworks and a 3D printer to design and build a coin machine that separates, sorts, and counts coins, design a robotic arm assembly to pick defective parts off an assembly line, program an advanced traffic light at a busy intersection, design and build your own remote-controlled airplane, and build hands-on projects to show off what you're learning. Work together in multidisciplinary teams with Advanced Robotics & Automation to develop and build a remote-controlled airplane or drone that you will actually FLY! You will leave class with final projects that you can take with you and talk about for years to come! Students will follow the Engineering Design Process as they document their work and solve problems. The class studies mechanical engineering design, digital electronics, product design and development, 3D prototyping, and may include others in electronics and programming microcontrollers, robotics, engineering design, and modular construction.

Prerequisite: Technology and Engineering

6547: ADVANCED ROBOTICS & AUTOMATION (1 credit)

In this class you will learn to design, build, program, control, and test user-controlled, semi-autonomous, and fully autonomous robotic devices. Start off with a robot that you design, build, and program from scratch to retrieve objects by remote control; design a robot with autonomous safety features that prevents it from colliding with objects and people; and move on to create a self-driving robot that navigates throughout the school. Solve challenges or get more in depth by designing and 3D printing parts that are not provided in your robot kit. To finish the course, you will work together in multidisciplinary teams with Advanced Technology & Automation to design and build a remote-controlled airplane or drone that you will be able to FLY. Coursework focuses on activities in mechanics, energy, analog/digital electronics, forces, drive-train assemblies, sensors, actuators, motors, prototyping, and programming. Students will follow the Engineering Design Process as they document their work and solve problems. Engineering, industrial automation, and robotics career opportunities will be discussed.

Prerequisite: Technology and Engineering

6549: TECHNOLOGY RESEARCH AND DEVELOPMENT: ENGINEERING (1 credit)

For the student with a strong interest in engineering and problem solving, this class offers the opportunity to use a hands-on approach through practical application in areas of technology such as engineering, fabrication, materials requisition, collaboration, power systems, mechanics, and product design. Real-world equipment, tools, materials, and software provide students with the chance to experience current technologies being used within industry and gain a real appreciation for the collaboration that must occur in order to be successful in the workplace. The possibilities are only limited by the scope of your own imagination. Those headed into a technical field such as engineering should apply.

Prerequisite: Advanced Engineering Design or Advanced Technology & Engineering or Tech Systems 1 and Tech. Drawing and Design

TELECOMMUNICATIONS COURSES

6551: TELECOMMUNICATIONS: STUDIO PRODUCTION (meet 3 times a cycle .5 credit)

This course introduces students to multi-camera studio television production. It includes hands- on training in camera, sound, lighting, graphics, directing, recording, editing, script writing and on-air talent, along with basic communication theory and concepts of mass media and society. Students will work on all the equipment and jobs of studio television production and produce a number of programs including talk shows, news programs and short features.

6552: TELECOMMUNICATIONS: FIELD PRODUCTION & EDITING (meet 6 times a Cycle 1 credit)

This course introduces students to single-camera field production. Students learn planning and production strategies for single-camera field productions including short films, advertisements, music videos and television programs. Emphasis is placed on shot composition and capturing sound. Students are also introduced to the fundamentals of non-linear editing using Adobe Premiere and Prelude.

6559: TELECOMMUNICATIONS: ADVANCED PRODUCTION (meet 6 times a cycle 1 credit)
This course is an advanced, applied program of study in studio television and field production, including work in program development, videography, lighting, audio production, and computer and special effects editing. Students work independently and in small groups in the TV studio to produce original videos and work with district faculty to create programs and complete video assignments for BASH-TV and BASD-TV, Boyertown School District's cable access channel.
Prerequisite: Studio Production or Field Production & Editing and teacher recommendation

SPECIALTY COURSES

5662: ADAPTIVE TECHNOLOGY EDUCATION
This class is restricted to students enrolled in the life skills and or learning support programs. In an adapted format, this class will present technological concepts and skills to students in a manner appropriate to student abilities. Activities will encompass transportation, communication, construction, and manufacturing areas.
PLEASE NOTE: If your schedule does not allow you to take one of these courses for six days of the cycle and you would like to take a particular course, talk to one of the technology education teachers. We may be able to plan to adapt your schedule and allow you to take the class with an adapted schedule.

6561: ESPORTS: GAMING CONCEPTS and EQUIPMENT
When is a game more than just a game? Esports is more than playing video games, this innovative course teaches how to operate as part of a winning team, effective communication, and how to do your part as a member of the competitive team. We will also explore gaming machines and even learn how to build your own gaming computer! We will explore how to gain the edge on your opponent from all aspects…gaming theory, gaming devices, being a healthy competitor, and even look at how the skills that you gain from this class could lead to a job in the future! Are you ready to accept the challenge? This is your first step.

WORLD LANGUAGE

Course	Course Name	Sem.	Grade	Credits	Pds. Per Cycle	Prerequisites/Recommendations
1600	Fundamentals of Spanish	S	9,10,11,12	0.5	6	
1612	Spanish I	Y	9,10,11,12	1	6	
1622	Spanish II	Y	0,11,12	1	6	Recommend 'C' in Spanish I
1623	Honors Spanish II	Y	0,11,12	1	6	A' in Spanish I and/or teacher recommendation
1632	Spanish III	Y	1,12	1	6	Recommend 'C' in Spanish II
1637	DE Spanish III	Y	1,12	1	6	B' in Spanish II/'C' or better in Hrs. Spanish II
1642	Spanish IV	Y	12	1	6	C' in DE Spanish III or 'B' or better in Spanish III
1647	DE Spanish IV	Y	12	1	6	B' in DE Spanish III or 'A' in Spanish III
1800	Fundamentals of German	S	9,10,11,12	0.5	6	
1812	German I	Y	9,10,11,12	1	6	
1822	German II	Y	10,11,12	1	6	Recommend 'C' in German I
1832	German III	Y	11,12	1	6	Recommend 'C' in German II
1842	German IV	Y	12	1	6	C' in German III

The World Language Department recommends that students take at least three (3) years of the same foreign language in order to achieve basic proficiency in that language as well as to ensure adequate preparation for foreign language study beyond high school. Students planning foreign language related careers should also consider taking one to two years of a second foreign language.

1600: FUNDAMENTALS OF SPANISH **(NCAA Approved Course)**

Conversational Spanish is an introductory language course which emphasizes listening, comprehension and speaking. The course will run for one semester. Reading and writing may be done as reinforcement to oral communications skills. The course is less comprehensive than Spanish I. It is particularly for those who wish to acquire introductory conversational skills for travel or the workplace, or those who would benefit from a slower paced introduction to Spanish I. This course is not recommended to be used as remediation if student failed a Spanish Level I course. This course is not open to students whose first language is Spanish, and it counts toward the district world language requirement. This course cannot be taken if student has already passed a Spanish Level I course.

1612: SPANISH I **(NCAA Approved Course)**

This course provides an introduction to basic conversational expressions and the development of vocabulary and basic grammatical structures. The main emphasis is on listening and speaking skills with a basic introduction to reading and writing skills. Cultural aspects of many Spanish speaking countries are introduced throughout the course.

1622: SPANISH II **(NCAA Approved Course)**

This course concentrates on increased vocabulary and grammar development with emphasis on verb tenses and their usage. There is continued emphasis on listening and speaking skills with increased reading and writing activities. The culture of many Spanish speaking countries is discussed.
Recommendation: 'C' or better in Spanish I

1623: HONORS SPANISH II **(NCAA Approved Course)**

This course concentrates on increased vocabulary and grammar development at an accelerated pace with emphasis on verb tenses and their usage. There is increased emphasis on listening, speaking, reading and writing activities. The culture of many Spanish speaking countries is discussed.

Recommendation: 'A' in Spanish I and/or teacher recommendation

1632: SPANISH III **(NCAA Approved Course)**

This course provides increased vocabulary development. There will be an intense and thorough review of grammatical structures along with the introduction of some advanced structures. There will be further development of reading and listening skills and a continued development of writing skills through guided practice exercises.

Recommendation: 'C' or better in Spanish II

1637: DE SPANISH III (Dual Enrollment offering- MCCC) (NCAA Approved Course)

In the first semester, the focus will be a study of fundamental Spanish grammar topics including exercises in speaking, reading and composition. Spanish will be spoken for the majority of class. In the second semester, more advanced grammar topics will be learned. Exercises in conversation, reading and writing will be more extensive. Students will be expected to work at a college-level pace and to devote a significant amount of time outside of class to studying and reviewing.

Recommendation: 'B' or better in Spanish II/'C' or better in Honors Spanish II

There is a summer assignment for this course. You are required to earn a 'C' or better in both semesters to get-(change to "earn") Montgomery County Community College credits for each semester.

1642: SPANISH IV **(NCAA Approved Course)**

Students will increase their Spanish vocabulary. They will participate in an intense and thorough review of grammatical structures including a focus on advanced structures. They will further develop their reading and listening skills. They will also continue their development of writing skills through guided practice exercises.

Recommendation: 'C' or better in Spanish III DE or 'B' or better in Spanish III

1642: SPANISH IV **(NCAA Approved Course)**

Students will increase their Spanish vocabulary. They will participate in an intense and thorough review of grammatical structures including a focus on advanced structures. They will further develop their reading and listening skills. They will also continue their development of writing skills through guided practice exercises.

Recommendation: 'C' or better in Spanish III DE or 'B' or better in Spanish III

1647: DE SPANISH IV (Dual Enrollment offering- MCCC) (NCAA Approved Course)

A concentrated review of Spanish grammar as well as exercises in speaking, reading and composition will be the primary focus of this class. The majority of class is spoken in Spanish. Selected readings on Spanish culture and literature as a basis for developing skills will be used. In the second semester there will be extensive practice in selected readings, composition and conversation on a more advanced level. Students should expect to be working at a college-level pace and will be expected to devote a significant amount of time outside of class studying and reviewing.

Recommendation: 'A' in Spanish III, 'B' or better in Spanish III DE

There is a summer assignment for this course. You are required to earn a 'C' or better in both semesters to get(change to "earn") Montgomery County Community College credits for each semester.

1800: FUNDAMENTALS OF GERMAN **(NCAA Approved Course)**

Conversational German is an introductory language course which emphasizes listening, comprehension and speaking. The course will run for one semester. Reading and writing may be done as reinforcement to oral communications skills. The course is less comprehensive than German I. It is particularly for those who wish to acquire introductory conversational skills for travel or the workplace, or those who would benefit from a slower paced introduction to German I. This course is not recommended to be used as remediation if student failed a German Level I course. This course is not open to students whose first language is German, and it counts toward the district world language requirement. This course cannot be taken if student has already passed a German Level I course.

1812: GERMAN I **(NCAA Approved Course)**

This course introduces basic conversational expressions and the development of vocabulary and basic grammatical structures. The main emphasis is on listening and speaking skills with a basic introduction to reading and writing skills. Cultural aspects of many Spanish speaking countries are introduced throughout the course.

1822: GERMAN II **(NCAA Approved Course)**

Students will continue the development of listening and speaking skills. They will continue to study the grammar of the spoken language. Special emphasis on the German culture as seen in the daily lives of young people will be a focus.

Recommendation: 'C' or better in German I

1832: GERMAN III **(NCAA Approved Course)**

Students will focus on developing their listening, speaking, and reading skills. They will also develop writing skills and their understanding of various grammatical structures. A study of the German culture will continue.

Recommendation: 'C' or better in German II

1842: GERMAN IV **(NCAA Approved Course)**

Students will focus on developing their listening, speaking, and reading skills. They will also develop writing skills and their understanding of various grammatical structures. Greater emphasis will be placed on reading and writing skills by using longer and more difficult readings. They will continue to study grammar and the German culture.

Recommendation: 'C' or better in German

NON-CREDIT ACTIVITIES DURING REGULAR SCHOOL HOURS

Course	Course Name	Sem.	Grade	Credits	Pds. Per Cycle	Prerequisites/Recommendations
1250	BEAR – Yearbook	Y	9,10,11,12	0	6	
1251	CUB – School Newspaper	Y	9,10,11,12	0	6	

The offerings described in this section are given on a non-credit basis and may be scheduled as a class on your regular school day. These activities are designed to broaden and enlarge the curriculum by adding topics of current or special interest to students today. If you find an activity in which you would like to participate, please enroll. Keep in mind that these non-credit electives are for your enjoyment and participation. If you do not plan to participate, you should not enroll. Activities can be successful only if members are active participants.

1250: BEAR – Yearbook

Staff members of the Bear, the senior high school yearbook, come from all grades of the high school. The Bear is a member of the American Scholastic Press Association and is published in October of each year. Students who are interested in computers, photography, art, or writing and who are prepared to meet deadlines are welcome. The staff meets six periods a week, occasionally after school, and during the summer if needed. Staff members will be selected by the advisors. Editorial positions are assigned based on experience. The Bear is reducing staff since moving to desktop publishing, therefore, applicants should apply to the advisors, by mid-May of each year. The maximum number of Bear yearbook staff will be limited.
Prerequisite: Apply to advisors

1251: CUB – School Newspaper

The Cub is a monthly newspaper published by students at BASH. Students interested in journalism, news writing, feature writing, sports writing, cartooning, photography, and advertising can learn about the newspaper business and see their work published by the Cub. Staff meetings, when necessary, are held after school. The newspaper is a member of the Pennsylvania School Press Association and Quill and Scroll, an international honorary society for scholastic journalism students.

INTERNSHIP PROGRAM

The BASH Internship Program involves exposure to a particular career and release time from school for structured work experience in a business, a non-profit organization, an educational setting, or some other workplace. Students are encouraged and, in some cases, responsible for securing their Internship Placement. The purpose of this program is to prepare our students for the world of work and to have them examine their career interests and opportunities for continuing education. Students are released from school for one or more periods each day to complete their internship. Academic credit will be awarded based on the hours worked per week.

INDEPENDENT STUDY PORTFOLIO GUIDELINES

At the completion of an independent study course*, the student must submit portfolio that may contain the following contents:

1. Index - Identifying the sections of the Portfolio
2. Syllabus - Goals/Objectives of the Independent Study Program
3. Weekly Journal/Weekly Self Evaluation
4. Three reflective pieces of an article on your independent subject area (1-2 pages)
5. Completed & Graded Assignments/Tests/Quizzes/Projects w/ Rubrics
6. Pictures of any projects or activities completed during your independent study period.
7. Research paper - Annotated Bibliography (3-5 pages) - MLA Format
8. Reflection Piece - “What have you gained from your independent study course? (2-3 pages)

It is the student’s responsibility to meet with their instructor at least once a week to review the syllabus, determine the contents of the portfolio and monitor the completion of the course objectives. The instructor will assess or review all materials and provide the completed portfolio to the school counselor’s office at the end of each semester. Grades for the course will be entered by Department leaders at the end of each semester.

*Independent study courses that are for the whole year must adjust the portfolio content requirements to justify the extended time for completion of the course.
**Students may take a BASH independent study course for credit as long as it falls within the maximum credit limit.