PARENTS/GUARDIANS

The curricula offerings at Chambersburg Area Senior High School are reviewed and revised each year to meet the changing needs of students and society. Your interest and cooperation in preparing your child’s schedule for 2021-2022 will, therefore, possibly be one of the most important activities you complete together this year. The choices you make will impact on your child’s opportunity for further education and future work choices.

The staff and administration at CASHS are committed to providing each student with the best educational program and are available to provide you and your child assistance in reaching that goal. Please feel free to contact any of the staff and administrators listed if you have any questions.

Best wishes for a great 2021-2022 school year.

CASHS Administration

SCHEDULING

Each spring all students have an opportunity to select courses appropriate to their needs and future plans. An evening program is held, and a Program of Studies booklet is made available to students. The Program of Studies booklet can also be found on the Chambersburg Area School District’s website at www.casdonline.org. Members of the counseling department will be meeting with students to discuss their course selections for next year during their English classes and individual student planning conferences are available. Students are constantly encouraged to involve their parents in the course selection process.

In May, a master schedule is finalized for all high school students. After this time, schedule changes become extremely difficult because teachers, supplies, books and classroom spaces and class sizes have been arranged based on the courses students have selected. Thus schedule changes will be limited and only made for valid academic reasons. All schedule change requests must be made before the first day of school. Please consider all decisions carefully.
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Secondary Options:

**CASHS**
- All students are provided 1:1 technology to utilize as an instructional tool.
- Over 100 elective courses are available for students for career exploration.
- Students interested in pursuing Music have the ability to participate in Choristers and Glee Club.
- Students learn entrepreneurship through the student enterprises: student store, student bank and student ran coffee shop. We also strive to provide school to work opportunities for our students prior to graduation.
- On site dedicated College Advisor to guide students through the college selection process.
- Expansive Advance Placement courses offered and International Baccalaureate (IB).
- JROTC, Varsity Sports (23) and over 30 clubs and activities.

**CAVE (Chambersburg Area Virtual Education)**
- Self-Paced classes
- Multi-media rich, interactive courses
- District Diploma, unlike other online programs
- Accessible anytime, anywhere
- Free to CASD students
- PA-Certified Teachers Only
- Student activities available

**Career Magnet**
- Flexible Scheduling
- Online Opportunities for electives and Advance Placement options
- STEM emphasis
- Individualized Instruction
- Smaller Class sizes
- Collaborative environment
- Project based learning
- Technology rich instruction through the use of IPADS for every student
- Possible early graduation through block scheduling
- Business Advisory Board partnership offers unique student learning opportunities

**Franklin County Career and Technology Center (FCCTC)**
- Hands-on learning, project based learning experiences offered in a variety of career and technical fields
- Opportunities for high-skilled, high wage occupations
- Capstone Co-operative Education options for senior students that often lead to full-time employment after graduation.
- Opportunity to participate in student led organizations that support classroom learning
- Potential to earn college credit while in high school through Articulation agreements and College in the High School
- Industry based learning opportunities that can lead to certifications
- Available through CASHS or CMS
The School:
The Chambersburg Area Senior High School is located in a predominately agricultural community in south central Pennsylvania. The school serves to educate approximately 2400 students in grades 9 through 12 and operates with a total of six principals; a head principal, and one assistant principal for each grade level as well as an academic principal. Eight counselors are on staff, 2 per grade level.

Grading System:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage Range</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>92 – 100%</td>
<td>4.0</td>
</tr>
<tr>
<td>B</td>
<td>83 – 91%</td>
<td>4.0</td>
</tr>
<tr>
<td>C</td>
<td>74 – 82%</td>
<td>3.5</td>
</tr>
<tr>
<td>D</td>
<td>65 – 73%</td>
<td>3.0</td>
</tr>
<tr>
<td>F</td>
<td>Below 64%</td>
<td>1.0</td>
</tr>
<tr>
<td>O</td>
<td>Outstanding</td>
<td>0.5</td>
</tr>
<tr>
<td>S</td>
<td>Satisfactory</td>
<td>0.5</td>
</tr>
<tr>
<td>N</td>
<td>Needs Improvement</td>
<td>6.5</td>
</tr>
<tr>
<td>U</td>
<td>Unsatisfactory</td>
<td></td>
</tr>
<tr>
<td>W</td>
<td>Withheld (may be changed to a passing grade with completion of work)</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>Incomplete (assigned for dropped courses only)</td>
<td></td>
</tr>
</tbody>
</table>

Class Rank & Quality Point Average: Both a weighted and unweighted QPA are calculated. Cumulative class rank is computed at the end of each marking period beginning in grade 9 and ending with the third marking period of grade 12. IB, AP, Honors, and College courses are weighted higher for rank and QPA purposes.

Advanced Curriculum:


ADMINISTRATOR AND COUNSELING DIRECTORY
Chambersburg Area Senior High School
Administration

Mr. Brad Ocker, Principal .......................................................... 261-3328
Dr. Stan Shilling, Grade 9 Assistant Principal .......................................................... 261-5621
Mr. Cody Marker, Grade 10 Assistant Principal................................................... 261-3345
Mrs. Lissett Jones, Grade 11 Assistant Principal .................................................... 261-3323
Mr. Luther Green, Grade 12 Assistant Principal .................................................... 262-2283
Dr. Lisa Schoenleber, Academic Assistant Principal .............................................. 709-2326
Mr. Jeremy Flores, Athletic Director ........................................................................ 267-4460

Counseling
2021-2022 Assignments

Ms. Kylie Shaul Grade 9 - student’s last name beginning A-K ...................... 261-3341
Ms. Alecia Nezat-Pyne Grade 9 - student’s last name beginning L-Z ............ 261-3340
Mr. Steven McNew Grade 10 - student’s last name beginning A-K .............. 261-5615
Mrs. Lindsay Leonard Grade 10 - student’s last name beginning L-Z ............ 261-3339
Mrs. Audra Hochreiter Grade 11 – student’s last name beginning A-K .......... 261-3338
Mrs. Lisa Hill Grade 11 – student’s last name beginning L-Z ...................... 261-5623
Mrs. Jamie McMillen Grade 12 – student’s last name beginning A-K .......... 261-3377
Mrs. Jennifer Snitzer Grade 12 – student’s last name beginning L-Z .......... 261-5660

A MESSAGE FROM THE CASHS COUNSELORS
Please read the first section of this book carefully. It contains pertinent information regarding areas such as graduation requirements, reasons for schedule changes, NCAA requirements for athletes and hints for Career Magnet School students. Appropriate course selection by students is a primary concern to us and it involves a cooperative effort. We welcome your input and inquiries. Please contact the Counseling Office if you need additional information on any of our courses or courses of study.
EDUCATIONAL PATHWAYS AT CHAMBERSBURG AREA SENIOR HIGH SCHOOL
The Educational Pathways program is both a process and a structure providing comprehensive information and guidance so students can make informed decisions in career planning and educational course selections.

Starting in eighth grade, the Chambersburg Area School District encourages students to think seriously about their futures and plan an educational program that will provide the necessary knowledge and skills to succeed.

Students learn about current trends in career development and make tentative choices about a chosen career. Then they review courses that make the choice a reality. Long-term career development encourages students and parents to make course selections based on student aptitudes, interests, developed skills, and current career information. Because of this new direction, students must consider curriculum selections and career choices together. Students and school counselors annually review these decisions.

It is a win-win situation for all stakeholders: students, parents, funding sources, community, and faculty. Because parents and students are active participants in the process, constant communication is vital. Students may engage in work-based learning activities such as job shadowing, co-op, and work experiences.

COURSE SELECTION
You may take any course appropriate to your ability and interest. We suggest that you carefully follow the recommended prerequisites and program of studies for your educational pathway. Any student who would like to take any course, but does not meet the recommended prerequisites, must have parents sign a waiver form requesting enrollment in that course.

COURSE CHANGES
Changes to a selected course may be made through the student’s counselor until one week prior to the first day of school. Before the first day of school, changes will be made only for the following scheduling issues: (1) scheduling error; (2) scheduling conflicts (3) academic misplacement. No other changes will be considered unless they are of an extreme circumstance. Final scheduling decisions are subject to the discretion of the counseling and administrative team.

Following the first 10 days of the course, a student may not drop a course without administrative approval. Dropping a course after this time will result in an “Incomplete” grade on the student’s transcript.

COURSE LOAD
It is recommended that all CASHS students carry 6 or 7 credits.
GRADUATION REQUIREMENTS
A total of 23.0 credits in grades 9-12 are required for graduation. Sixteen and one-half of the 23.0 credits must be in major subject areas exclusive of: Band, Instrumental Music, Jazz Band, Symphonic Orchestra, Glee Club, and Elective Physical Education. Additional requirements are Communications Seminar - .50, Wellness & Fitness-1.5 and proficiency on the Keystone Assessments.

Core Courses:
- 4.00 Credit Units English
- 4.00 Credit Units Math
- 3.00 Credit Units Science
- 3.50 Credit Units Social Studies
- 1.00 Credit Units Wellness & Fitness
- .50 Credit Units Health
- 6.50 Credit Units Elective
- .50 Communications Seminar Applications

Total Credits: 23.00

REQUIREMENTS FOR COLLEGE ENTRANCE
Requirements for college admissions vary widely. Consult college catalogs, web sites, college advisor and counselors for specific information.

CASHS EXPANDED EDUCATIONAL OPPORTUNITIES
Chambersburg Senior High School has a commitment to our students to provide an educational experience that will help them to discover their pathway in life. That pathway can lead to the job market, the military, a certificate program in a technical school, a community college or a 4-year college.

Another important piece of this exploration is the opportunity to leave the high school campus and make post-secondary connections before graduation. CASHS strongly encourages students to think beyond the 12th grade and make plans for after graduation.

To this end, CASHS has compiled a list of post-secondary opportunities that students can access while still in high school. We encourage students and their parents to take advantage of these experiences to learn, grow, and plan for the future.

ADVANCED PLACEMENT BACKGROUND
It is imperative that we continue to provide multiple opportunities for students to gain college credentials while in high school, as post-secondary education costs continue to rise.

Chambersburg Area Senior High School currently has four ways for students to gain college credits while still in High School:

1. Students can participate in the Early to College Program (Part Time Early Studies for 11th and 12th grade students; Full Time Early Studies for 12th grade students). Students/parents are responsible for all college costs however many local colleges and universities offer reduced rates for Early to College students. Interested students should discuss with their counselor, contact their grade level principal for approval and contact the college/university they wish to attend to complete an Early to College Application.
2. Students may receive college credit for scoring 3 or higher on Advanced Placement (AP) tests depending upon the college/universities AP policy. The cost to take the AP test is approximately $94.00.

3. Students may receive college credit by scoring a 5, 6, or 7 on an IB Higher Level Exam or by earning the IB Diploma.

**Advanced Placement Exam Fees:**
Students taking AP courses are encouraged to participate in the AP exam for that course in May. The cost of the exam is approximately $94.00, and payment will be due to the AP coordinator. The AP exam will be ordered upon receipt of payment. Chambersburg Area School District will provide assistance with payment for students qualifying for free and reduced lunch.

**INTERNATIONAL BACCALAUREATE (IB)**
The International Baccalaureate is a rigorous, two-year course of study for the 16-19 age range. There is a strong emphasis on international understanding, inquiry based learning, while encouraging students to be caring and open-minded. The Diploma Programme promotes a positive attitude for learning, achievement, and success. Students take IB exams at the conclusion of each course and payment is due at the end of November prior to the Spring testing session.

**EARLY TO COLLEGE**
The Early to College Program offers full-time studies to seniors and part-time studies to juniors and seniors. Students who want to experience college classes may apply to participating local colleges of their choice for admission. Students must meet the full-time or part-time requirements for early studies at the college/university they have selected. The student and/or guardian are responsible for tuition, fees, books, transportation and all other costs.

Students shall be eligible for class rank and coinciding recognition, and shall be eligible to participate in extra-curricular & co-curricular activities. The early studies student may also participate in the high school Baccalaureate and Commencement programs. Course(s) taken at approved college or university programs will appear on the student’s transcripts, will receive high school credit, and will be weighted at the 1.4 level.

**WELLSPAN/SUMMIT HEALTHCARE CAREERS INSTITUTE**
Wellspan/Chambersburg Hospital has designed a state-award winning program, Healthcare Career Institute Program, HCI, to give juniors and seniors an opportunity to explore various health care careers. Selected students will engage in critical thinking, observation, inquiry, assessment and reflection on possible career choices through education presentations, mentor relationships with multiple health care professionals and volunteer service experiences in a variety of health care settings. The Healthcare Career Institute Program, HCI is offered for one semester per year from 7:30 a.m. to 9:30 a.m. Monday through Friday or in the summer for five weeks, Monday through Friday from 8:30 AM – 12 Noon. The experience is free of charge and the student earns .50 credit for the summer or 1.0 credit for the fall. An application and interview are required. Students must first meet certain criteria to apply and there is a selection process. Additional information is available in the Business & Technology section under “Cooperative Education – Healthcare Careers Institute.”
**CAPSTONE COOPERATIVE EDUCATION**

**WORK EXPERIENCE**

All students earn school credit and are paid for work related to their studies.

To qualify for the **Capstone Cooperative Education Work Experience** paid work experience program, students **must** have a recommendation from their guidance counselor, the Co-Op Coordinators and their Assistant Principal. They **must** carry two full-year courses (two credits) in their chosen major in both their junior and senior year. Employment must be directly related to their major; i.e., Business Major—job as an office assistant, in marketing, sales, banking, general office work, etc.

The Co-Op Coordinators will complete scheduled and unannounced supervisory on-site visits regularly. Employer Evaluations are to be completed each marking period by the student’s employer.

Additional information is available in the Business and Technology section of the Program of Studies.

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**DIVERSIFIED OCCUPATIONS COOPERATIVE EDUCATION**

**WORK EXPERIENCE**

Students earn school credit for participating in paid and unpaid learning experiences that relate to the field of study or their career objective they plan to pursue after graduation.

To qualify for the **Diversified Occupations Cooperative Education Work Experience** paid and unpaid work experience program, students must have a recommendation from their guidance counselor, the Co-Op Coordinators and their Assistant Principal. Students are highly encouraged to take additional coursework related to their chosen career objective. **Student Work Experience must** be related to the career that the student wishes to pursue after graduation; i.e., speech therapy, Christian ministry, drafting/engineering, etc.

The Co-Op Coordinator/s will complete scheduled and unannounced supervisory on-site visits regularly. Employer Evaluations are to be completed each marking period by the student’s employer.

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The student must initiate the process of entering the Cooperative Education Program by completing a Resume, the **Co-Op Program Student Recommendation**, and the **Application for Cooperative Education**. Both forms are included in this Scheduling Packet. **All deadlines must be followed.**
ELEMENTARY OR SECONDARY EDUCATION—INTERNSHIP
This is an unpaid work experience for students wishing to enter the field of elementary or secondary education after graduation. Students will be placed in classroom assignments. Students earn school credits for this assignment.

To qualify for the Education – Internship unpaid work experience program, students must have a recommendation from their guidance counselor, the Co-Op Coordinators and their Assistant Principal.

The Co-Op Coordinators will complete scheduled and unannounced supervisory on-site visits regularly. Employer Evaluations are to be completed each marking period by the cooperating teacher. The cooperating teacher will also complete attendance records once a week.

Additional information is available in the Business and Technology section of the Program of Studies.

CHILD DEVELOPMENT—INTERNSHIP
Students in the high school child development program can earn high school credits through this unique unpaid learning experience. All assignments are in a nursery school environment. Upon completion of the classes and work experience, students can earn a Level I childcare certificate. CASHS child development program is recognized by the state to award this certificate.

TINY TROJANS PRE-SCHOOL LEARNING LAB
Students in the high school child development program can earn high school credits through this unique unpaid learning experience. All assignments are in a nursery school environment. Upon completion of the classes and work experience, students can earn a Level I childcare certificate. CASHS child development program is recognized by the state to award this certificate.

Additional information is available in the Family and Consumer Sciences of the Program of Studies.
Dual enrollment is academic programming that enables Chambersburg Area School District sophomores, juniors and seniors to take college courses that satisfy high school graduation and college credit requirements.

Apply at: https://dualenrollment.HarrisburgU.edu/
BIOL 102 General Biology
Course at Harrisburg University
3 Semester Hours
Instructor at Chambersburg Area School District: Elizabeth Casamats
Course at CASD: AP Biology

This course introduces the student to the major themes of biology, including properties of living organisms, comparison of anatomy, physiology, patterns of inheritance, the central nervous system, plants, and animals. The diversity of life is both plants and animals, classification of organisms, evolution, metabolism, photosynthesis, cell structure, basic structure of the body, nervous system, the endocrine system, plant systems, animal systems, and the human body. A broad understanding of biology and living organisms in the environment is developed through hands-on, multimedia, engaged learning opportunities in both the classroom and the companion laboratory component.

BIOL 103 General Biology Laboratory
Course at Harrisburg University
1 Semester Hour
Instructor at Chambersburg Area School District: Bradley Lloyd
Course at CASD: AP Biology

This laboratory component that demonstrates the major themes of biology presented in BIOL 102.

BIOL 214 Anatomy and Physiology I
Course at Harrisburg University
4 Semester Hours
Instructor at Chambersburg Area School District: Suzanne Denny
Course at CASD: AP Anatomy and Physiology

This course discusses the structural and functional makeup of the human body. Medical and anatomical terminology is mastered, and an emphasis is placed on covering the details of development, histology, and the functioning of the muscular, circulatory, respiratory, and digestive systems.

ENGL 105 College Composition
Course at Harrisburg University
3 Semester Hours
Instructor at Chambersburg Area School District: Beth Yoder
Course at CASD: AP Language and Composition

This first-year composition course is an introduction to college-level writing strategies. By reading various writing styles and genres, the student will contemplate how purpose and audience guide the writing process. Writing assignments are to be completed according to a rubric with a goal of improving style, grammar, and clarity.

ENGL 106 College Composition
Course at Harrisburg University
3 Semester Hours
Instructor at Chambersburg Area School District: Andrew Barrier
Course at CASD: AP Literature and Composition

This first-year composition course is an introduction to college-level writing strategies. By reading various writing styles and genres, the student will contemplate how purpose and audience guide the writing process. Writing assignments are to be completed according to a rubric with a goal of improving style, grammar, and clarity.

COMM 110 Speech
Course at Harrisburg University
3 Semester Hours
Instructor at Chambersburg Area School District: Andrew Barrier
Course at CASD: Advanced Communication

This course introduces the skills acquired in ENGL 105 or ENGL 106. The student continues to study the process of effective communication, based on an understanding of purpose and audience using speaking techniques such as organization and modification. The student builds an understanding of the basic skills needed to communicate across disciplines.

ENV 104 Introduction to Environmental Science
Course at Harrisburg University
3 Semester Hours
Instructor at Chambersburg Area School District: John Weyant
Course at CASD: AP Environmental Science

Environmental science is the study of natural ecosystems, human impacts on the environment, and sustainable management of the Earth's resources. Processes of the physical and biological environment are used as a basis for consideration of current environmental topics. Other areas covered include energy consumption and global warming, water and air pollution, waste management, impacts of deforestation in biodiversity and other environmental changes occurring on a global scale.

MATH 220 Calculus I
Course at Harrisburg University
3 Semester Hours
Instructor at Chambersburg Area School District: Methods Defined
Course at CASD: AP Calculus

This course introduces techniques to evaluate limits and covers continuity, special trigonometric limits, absolute value limits, and derivatives of algebraic, trigonometric, and logarithmic functions. The course covers intermediate value theorem, mean value theorem, and extreme value theorem. Other topics for exploration are application and formal definition of derivative average rate of change versus instantaneous rate of change, velocity, and the introduction of the definite integral and its applications. A graphing calculator is required for this course.
Franklin County Career and Technology Center (CareerTech)

Students at CASHS may enroll in courses at CareerTech by applying online at franklinctc.com by January of their 9th grade year. Each year, students spend one semester at CareerTech studying their chosen program and one semester at CASHS taking academic subjects to fulfill graduation requirements. Students will receive technical training, employability skills, and academic proficiency. This will build a firm foundation for a career or pursuing post-secondary education. The following programs are available for students entering grades 10, 11, and 12:

<table>
<thead>
<tr>
<th>Academy</th>
<th>Available Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>Building Construction Trades, Carpentry, Electrical Occupations, Heating Ventilation and Air Conditioning</td>
</tr>
<tr>
<td>Health Sciences</td>
<td>Allied Health, Dental Assisting, Medical Assisting, and Veterinary Assisting</td>
</tr>
<tr>
<td>Sales and Service</td>
<td>Cosmetology, Culinary Arts, Graphic Communications, Landscaping &amp; Horticulture, Marketing/Web Design</td>
</tr>
<tr>
<td>STEM/Manufacturing</td>
<td>Mechatronics, Electronics, Engineering Technology, Information Systems Technology, Computer Integrated Manufacturing, Welding</td>
</tr>
<tr>
<td>Transportation</td>
<td>Agricultural Mechanics, Automotive Collision &amp; Repair, Automotive Technology, Diesel Mechanics.</td>
</tr>
</tbody>
</table>

**Benefits** – Students experience industry based learning that may lead to certifications. The courses allow students to gain high level skills to pursue a high wage occupation. During the senior year, the cooperative education program allows students to work in a paid position to extend and reinforce classroom learning to the real-world environments. In addition, students have the option to participate in student career organizations, as well as earn college credits while in their program.

**College Credit Options** – Students may take advantage of one of the ways to earn college credits:

**Dual Enrollment/College in the High School Programs** – This program allows qualified students to earn credits from the college and the high school at the same time. These college level classes are offered during the school day and are taught by the CareerTech program instructors. College credits count towards a degree program at the college earned or transferred to other colleges. The following programs offer 1 – 18 credits:

<table>
<thead>
<tr>
<th>College</th>
<th>Cost</th>
<th>Program in which you can enroll for dual credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hagerstown Community College</td>
<td>$175/ Credit</td>
<td>Information Systems Technology</td>
</tr>
<tr>
<td>Harrisburg Area Community College</td>
<td>$75/ Credit</td>
<td>Allied Health, Electrical Occupations, Heating Ventilation and Air Conditioning, Mechatronics</td>
</tr>
<tr>
<td>Pennsylvania College of Technology</td>
<td>FREE to all students!</td>
<td>Allied Health (pending), Carpentry, Computer Integrated Manufacturing, Dental (pending), Engineering, Information Systems Technology, Landscaping &amp; Horticulture, Marketing/Web Design, Medical Assisting (pending), Welding</td>
</tr>
</tbody>
</table>
Statewide Articulation Agreements, SOAR - *Students Occupationally and Academically Ready*. SOAR articulates skills and tasks gained at the high school level to course credit earned in a post-secondary college degree, diploma, or certificate program. Qualifying students receive **FREE** credit from the college upon admission. Most CareerTech programs offer this program with 44 Pennsylvania, New York, and Maryland colleges.

Direct Articulation Agreements – CareerTech has 15 programs with agreements with the following: Academy for Media Productions, California University of PA, Culinary Institute of America, Hagerstown Community College, Harcum College, Pittsburgh Technical College, and University of Northwestern Ohio. Students articulate skills and tasks gained at CareerTech to course credit earned in a postsecondary college degree, diploma or certificate program. Qualifying students receive **FREE** credit from the college upon admission.

NOCTI College Credit Recommendation – By meeting the 70% benchmark on the NOCTI assessment, senior students will receive a college credit recommendation report for **FREE** college credit waiver consideration. Most CareerTech programs are involved with 34 colleges participating in PA and over 1500 nationwide.

**Learn More** - To view the CareerTech course catalog, watch program videos, learn about certifications, and find out more about college credit opportunities, visit [www.franklinctc.com](http://www.franklinctc.com).
NCAA Eligibility Rules

What is the NCAA Eligibility Center? Why is it Important?
The NCAA Eligibility Center took over operations for the NCAA Initial-Eligibility Clearinghouse in November 2007. The Eligibility Center certifies the academic and amateur credentials of all students who want to play sports at an NCAA Division I or II institution as freshmen. In order to practice, play and receive an athletics scholarship, students need to meet certain academic benchmarks. An additional certification process exists to make sure the student is still an amateur, which is necessary in order for the student to compete collegially.

Academic Credentials + Amateurism Status = College Eligible

What are the Academic Initial-Eligibility Requirements?
The following requirements must be met in order for a student to be able to practice, play and receive a scholarship at an NCAA Division I or II college or university.

Division I:
1. Graduate from high school;
2. Complete a minimum of 16 core courses;
3. Present the required grade-point average (GPA) (see the sliding scale in the Guide for the College-Bound Student-Athlete for Division I);
4. Present a qualifying test score on either the ACT or SAT (see the sliding scale in the Guide for the College-Bound Student-Athlete); and
5. Complete the amateurism questionnaire and request final amateurism certification.

Division I Core-Course Breakdown (Courses Must Appear on your List of Approved Core Courses)
- 4 years of English
- 3 years of math (Algebra I or higher)
- 2 years of natural or physical science (including one year of lab science if offered by your high school)
- 1 extra year of English, math, or natural or physical science
- 2 years of social science
- 4 years of extra core courses from any category above, or foreign language, non-doctrinal/comparative religion/philosophy

Division II:
1. Graduate from high school;
2. Complete a minimum of 16 core courses;
3. Present a minimum 2.2 core-course grade-point average (GPA).
4. Earn an SAT combined score or ACT sum score that matches core course GPA in Division II Competition sliding scale.
5. Complete the amateurism questionnaire and request final amateurism certification.

Division II Core-Course Breakdown: (Courses Must Appear on your List of Approved Core Courses)
- 3 years of English
- 2 years of math (Algebra I or higher)
- 2 years of natural or physical science (including one year of lab science if offered by your high school);
- 3 additional years of English, math, or natural or physical science
- 2 years of social science
- 4 years of extra core courses from any category above, or foreign language, non-doctrinal/comparative religion/philosophy
DIVISION I ACADEMIC REQUIREMENTS

College-bound student-athletes enrolling at an NCAA Division I school need to meet the following academic requirements to practice, compete and receive an athletics scholarship in their first year of full-time enrollment.

Core-Course Requirement
Complete 16 core courses in the following areas:

- **ENGLISH**: 4 years
- **MATH (Algebra I or higher)**: 3 years
- **NATURAL/PHYSICAL SCIENCE (including one year of lab, if offered)**: 2 years
- **ADDITIONAL (English, math or natural/physical sciences)**: 1 year
- **SOCIAL SCIENCE**: 2 years
- **ADDITIONAL COURSES (Any area listed to the left, foreign language or comparative religion/philosophy)**: 4 years

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

**ACADEMIC REDSHIRT**
- Complete 16 core courses.
  - Earn a core-course GPA of at least 2.000.
  - Earn an SAT combined score or ACT sum score matching the core-course GPA on the Division I sliding scale (see back page).
  - Graduate high school.

**Full Qualifier**
College-bound student-athletes may practice, compete and receive an athletics scholarship during their first year of full-time enrollment at an NCAA Division I school.

**Academic Redshirt**
College-bound student-athletes may receive an athletics scholarship during their first year of full-time enrollment and may practice during their first regular academic term, but may NOT compete during their first year of enrollment.

**Nonqualifier**
College-bound student-athletes will not be able to practice, compete or receive an athletics scholarship during their first year of full-time enrollment at an NCAA Division I school.

**International Students**
Please review the [international initial-eligibility flyer](#) for information and academic requirements specific to international student-athletes.

Click [here](#) for Division II academic requirements.
Test Scores

If a student plans to attend an NCAA Division I college or university in the 2019-20 or 2020-21 academic years, use the following charts to understand the core-course GPA he or she will need to meet NCAA Division I requirements.

A combined SAT score is calculated by adding critical reading and math subscores. An ACT sum score is calculated by adding English, math, reading and science subscores. A student may take the SAT or ACT an unlimited number of times before he or she enrolls full time in college. If a student takes either test more than once, the best subscores from each test are used for the academic certification process.

When a student registers for the SAT or ACT, he or she can use the NCAA Eligibility Center code of 99999 to send their scores directly to the NCAA Eligibility Center from the testing agency. Test scores on transcripts CANNOT be used in an academic certification.

### Division I Full Qualifier Sliding Scale

<table>
<thead>
<tr>
<th>Core GPA</th>
<th>SAT*</th>
<th>ACT Sum*</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.550</td>
<td>400</td>
<td>37</td>
</tr>
<tr>
<td>3.525</td>
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<td>3.100</td>
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<td>57</td>
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<tr>
<td>2.775</td>
<td>800</td>
<td>58</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Core GPA</th>
<th>SAT*</th>
<th>ACT Sum*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.750</td>
<td>810</td>
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<tr>
<td>2.725</td>
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<td>2.675</td>
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</tr>
<tr>
<td>2.000</td>
<td>1100</td>
<td>86</td>
</tr>
</tbody>
</table>

*Final concordance research between the new SAT and ACT is ongoing.*
DIVISION II ACADEMIC REQUIREMENTS

College-bound student-athletes enrolling at an NCAA Division II school need to meet the following academic requirements to practice, compete and receive an athletics scholarship in their first year of full-time enrollment.

Core-Course Requirement
Complete 16 core courses in the following areas:

<table>
<thead>
<tr>
<th>ENGLISH</th>
<th>MATH (Algebra I or higher)</th>
<th>NATURAL/PHYSICAL SCIENCE (including one year of lab, if allowed)</th>
<th>SOCIAL SCIENCE</th>
<th>ADDITIONAL COURSES (Any area listed to the left, foreign language or comparative religion/philosophy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 years</td>
<td>2 years</td>
<td>2 years</td>
<td>3 year</td>
<td>2 years</td>
</tr>
</tbody>
</table>

FULL QUALIFIER

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

PARTIAL QUALIFIER

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

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

Partial Qualifier
College-bound student-athletes may receive an athletics scholarship during their first year of enrollment and may practice during their first year of full-time enrollment at a Division II school, but may NOT compete.

Nonqualifier
College-bound student-athletes will not be able to practice, compete or receive an athletics scholarship during their first year of full-time enrollment at an NCAA Division II school.

International Students
Please review the international initial-eligibility flyer for information and academic requirements specific to international student-athletes.

Click here for Division I academic requirements.
DIVISION II
FULL QUALIFIER SLIDING SCALE

Core GPA | SAT* | ACT Sum*
---|---|---
3.300 & above | 400 | 37
3.275 | 410 | 38
3.250 | 430 | 39
3.225 | 440 | 40
3.200 | 460 | 41
3.175 | 470 | 41
3.150 | 490 | 42
3.125 | 500 | 42
3.100 | 520 | 43
3.075 | 530 | 44
3.050 | 550 | 44
3.025 | 560 | 45
3.000 | 580 | 46
2.975 | 590 | 46
2.950 | 600 | 47
2.925 | 620 | 47
2.900 | 630 | 48
2.875 | 650 | 49
2.850 | 660 | 49
2.825 | 680 | 50
2.800 | 690 | 50
2.775 | 710 | 51
2.750 | 720 | 52
2.725 | 730 | 52
2.700 | 740 | 53
2.675 | 750 | 53
2.650 | 750 | 54
2.625 | 760 | 55
2.600 | 770 | 56
2.575 | 780 | 56
2.550 | 790 | 57
2.525 | 800 | 58
2.500 | 810 | 59
2.475 | 820 | 60
2.450 | 830 | 61
2.425 | 840 | 61
2.400 | 850 | 62
2.375 | 860 | 63
2.350 | 860 | 64
2.325 | 870 | 65
2.300 | 880 | 66
2.275 | 890 | 67
2.250 | 900 | 68
2.225 | 910 | 69
2.200 | 920 | 70 & above

DIVISION II
PARTIAL QUALIFIER SLIDING SCALE

Core GPA | SAT* | ACT Sum*
---|---|---
3.050 & above | 400 | 37
3.025 | 410 | 38
3.000 | 430 | 39
2.975 | 440 | 40
2.950 | 460 | 41
2.925 | 470 | 41
2.900 | 490 | 42
2.875 | 500 | 42
2.850 | 520 | 43
2.825 | 530 | 44
2.800 | 550 | 44
2.775 | 560 | 45
2.750 | 580 | 46
2.725 | 590 | 46
2.700 | 600 | 47
2.675 | 620 | 47
2.650 | 630 | 48
2.625 | 650 | 49
2.600 | 660 | 49
2.575 | 680 | 50
2.550 | 690 | 50
2.525 | 710 | 51
2.500 | 720 | 52
2.475 | 730 | 52
2.450 | 740 | 53
2.425 | 750 | 53
2.400 | 750 | 54
2.375 | 760 | 55
2.350 | 770 | 56
2.325 | 780 | 56
2.300 | 790 | 57
2.275 | 800 | 58
2.250 | 810 | 59
2.225 | 820 | 60
2.200 | 830 | 61
2.175 | 840 | 61
2.150 | 850 | 62
2.125 | 860 | 63
2.100 | 860 | 64
2.075 | 870 | 65
2.050 | 880 | 66
2.025 | 890 | 67
2.000 | 900 | 68 & above

Test Scores

If a student plans to attend an NCAA Division II college or university in the 2019-20 or 2020-21 academic years, use the following charts to understand the core-course GPA he or she will need to meet NCAA Division II requirements.

A combined SAT score is calculated by adding critical reading and math subscores. An ACT sum score is calculated by adding English, math, reading and science subscores. A student may take the SAT or ACT an unlimited number of times before he or she enrolls full time in college. If a student takes either test more than once, the best subscores from each test are used for the academic certification process.

*Final concordance research between the new SAT and ACT is ongoing.
ONE OPPORTUNITY. LIMITLESS POSSIBILITIES.

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

ACADEMIC REQUIREMENTS

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

CORE COURSES

Only courses that appear on your high school’s list of NCAA core courses will count toward the 16 core-course requirement; visit eligibilitycenter.org/courseList for a full list of your high school’s approved core courses. Complete 16 core courses in the following areas:

DIVISION I

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

<table>
<thead>
<tr>
<th>COURSE</th>
<th>Requirement</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td></td>
<td>4 years</td>
</tr>
<tr>
<td>MATH (Algebra I or higher)</td>
<td></td>
<td>3 years</td>
</tr>
<tr>
<td>NATURAL/PHYSICAL SCIENCE (including one year of lab, if offered)</td>
<td></td>
<td>2 years</td>
</tr>
<tr>
<td>ADDITIONAL (English, math or natural/physical science)</td>
<td></td>
<td>1 year</td>
</tr>
<tr>
<td>SOCIAL SCIENCE</td>
<td></td>
<td>2 years</td>
</tr>
<tr>
<td>ADDITIONAL COURSES (Any area listed to the left, foreign language or comparative religion/philosophy)</td>
<td></td>
<td>4 years</td>
</tr>
</tbody>
</table>

DIVISION II

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

<table>
<thead>
<tr>
<th>COURSE</th>
<th>Requirement</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td></td>
<td>3 years</td>
</tr>
<tr>
<td>MATH (Algebra I or higher)</td>
<td></td>
<td>2 years</td>
</tr>
<tr>
<td>NATURAL/PHYSICAL SCIENCE (including one year of lab, if offered)</td>
<td></td>
<td>2 years</td>
</tr>
<tr>
<td>ADDITIONAL (English, math or natural/physical science)</td>
<td></td>
<td>3 years</td>
</tr>
<tr>
<td>SOCIAL SCIENCE</td>
<td></td>
<td>2 years</td>
</tr>
<tr>
<td>ADDITIONAL COURSES (Any area listed to the left, foreign language or comparative religion/philosophy)</td>
<td></td>
<td>4 years</td>
</tr>
</tbody>
</table>

GRADE-POINT AVERAGE

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

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

SLIDING SCALE

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

TEST SCORES

You may take the SAT or ACT an unlimited number of times before you enroll full time in college. Every time you register for the SAT or ACT, use the NCAA Eligibility Center code 9999 to send your scores directly to us from the testing agency. We accept official scores only from the ACT or SAT, and won’t use scores shown on your high school transcript. If you take either test more than once, the best subscore from different tests are used to give you the best possible score.
HIGH SCHOOL TIMELINE

9TH GRADE
- Start planning now! Take the right courses and earn the best grades possible.
- Find your high school’s list of NCAA-approved core courses at eligibilitycenter.org/courselist.
- Sign up for a free Profile Page at eligibilitycenter.org for information on NCAA requirements.

10TH GRADE
- Register for a Profile Page or Certification Account with the NCAA Eligibility Center at eligibilitycenter.org.
- Monitor your Eligibility Center account for next steps.
- At the end of the year, ask your counselor at each high school or program you attended to upload your official transcript to your NCAA Eligibility Center account.

11TH GRADE
- Check with your counselor to make sure you are on track to complete the required number of NCAA-approved courses and graduate on time with your class.
- Take the ACT or SAT and submit your scores to the NCAA Eligibility Center using code 9999.
- Ensure your sports participation information is correct in your Eligibility Center account.
- At the end of the year, ask your counselor at each high school or program you attended to upload your official transcript to your NCAA Eligibility Center account.

12TH GRADE
- Complete your final NCAA-approved core courses as you prepare for graduation.
- Take the ACT or SAT again, if necessary, and submit your scores to the NCAA Eligibility Center using code 9999.
- Request your final amateurism certification beginning April 1 (fall enrollees) or Oct. 1 (winter/spring enrollees) in your NCAA Eligibility Center account at eligibilitycenter.org.
- After you graduate, ask your counselor to upload your final official transcript with proof of graduation to your NCAA Eligibility Center account.
- Reminder: Only students on an NCAA Division I or II school’s institutional request list will receive a certification.

How to plan your high school courses to meet the 16 core-course requirement:

9TH GRADE
1. English
2. Math
3. Science
4. Social Science and/or additional

10TH GRADE
1. English
2. Math
3. Science
4. Social Science and/or additional

11TH GRADE
1. English
2. Math
3. Science
4. Social Science and/or additional

12TH GRADE
1. English
2. Math
3. Science
4. Social Science and/or additional

4 x 4 = 16

For more information: ncaa.org/playcollegesports | eligibilitycenter.org
Search Frequently Asked Questions: ncaa.org/studentfaq
Follow us: @NCAAECC  @playcollegesports  @ncaec

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August 2019
# AGRICULTURE EDUCATION MASTER COURSE LISTING

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Weighted Value</th>
<th>Credit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>G103</td>
<td>Veterinary Science</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>G111</td>
<td>Supervised Agriculture Ed Experience Project I</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>G114</td>
<td>Small Animal Care and Management</td>
<td>1.0</td>
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<tr>
<td>G118</td>
<td>Small Engine Theory and Repair</td>
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<td>0.5</td>
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<tr>
<td>G124</td>
<td>Agriculture Mechanics and Technology</td>
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</tr>
<tr>
<td>G127</td>
<td>Large Animal Science</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>G129</td>
<td>Greenhouse Systems Management</td>
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<tr>
<td>G130</td>
<td>Floral Design and Arrangement</td>
<td>1.0</td>
<td>0.5</td>
</tr>
<tr>
<td>G131</td>
<td>Forest &amp; Wildlife Management</td>
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</tr>
<tr>
<td>G132</td>
<td>Introduction to Modern Horticulture</td>
<td>1.0</td>
<td>0.5</td>
</tr>
<tr>
<td>G134</td>
<td>Supervised Ag Ed. Experience Project II</td>
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<tr>
<td>G135</td>
<td>Supervised Ag Ed. Experience Project III</td>
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<td>1.0</td>
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<tr>
<td>G136</td>
<td>Aquatics and Natural Resource Management</td>
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<tr>
<td>G138</td>
<td>Leadership</td>
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<td>1.0</td>
</tr>
<tr>
<td>G119</td>
<td>Welding I</td>
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<td>0.5</td>
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<tr>
<td>G140</td>
<td>Welding II</td>
<td>1.0</td>
<td>0.5</td>
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<tr>
<td>G141</td>
<td>Advanced Floral Design &amp; Ag Entrepreneurship</td>
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<td>1.0</td>
</tr>
</tbody>
</table>

## Course Schedule Offering

<table>
<thead>
<tr>
<th>Courses Offered Every year</th>
<th>Courses Offered 2021-2022</th>
<th>Courses Offered 2022 – 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veterinary Science</td>
<td>(These courses will be offered beginning in odd years and ending in even years)</td>
<td>(These courses will be offered beginning in even years and ending in odd years)</td>
</tr>
<tr>
<td>Floral Design I &amp; Arrangement</td>
<td></td>
<td>Leadership</td>
</tr>
<tr>
<td>Greenhouse Systems Mgmt.</td>
<td></td>
<td>Introduction To Modern Horticulture</td>
</tr>
<tr>
<td>Large Animal Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Animal Care &amp; Mgmt.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Engine Theory &amp; Repair</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervised Ag Ed. (I, II, &amp; III)</td>
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<tr>
<td>Welding I</td>
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<tr>
<td>Advanced Floral Design</td>
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</tbody>
</table>
AGRICULTURE EDUCATION DEPARTMENT

VETERINARY SCIENCE

G103 1 credit
PREREQUISITE: Recommended for Major/Elective non-major interested in a career in animal science.

This course will investigate more deeply the anatomy and physiology of animal systems and diseases associated with the systems. Also studied will be specific pathogens and preventative management. The course will address guidelines to career opportunities.

AQUATICS AND NATURAL RESOURCE MANAGEMENT

G136 .5 Credit
PREREQUISITE: None

Students interested in utilizing/protecting our natural resources or studying aquatics habitats are encouraged to enroll in this course. The course incorporates wetland projects. The course is designed to appeal to students that are interested in Pennsylvania aquatic ecosystems and outdoor activities. Students will gain hands-on experience while learning the basics about the practical management of fisheries and utilizing various types of natural resources in a sustainable fashion. Careers in land use/planning, soil/resource conservation, and water resources will be explored. The course will address guidelines to career opportunities.

GREENHOUSE SYSTEMS MANAGEMENT

G129 .5 Credit
PREREQUISITE: Recommended that students successfully complete the Introduction to Modern Horticulture course prior to enrolling in this course.

This course is for students interested in growing, using, and marketing plants for both aesthetic and food purposes. Students in this course will learn how to utilize various types of greenhouse production systems to efficiently and correctly produce plant crops. Students will have the opportunity to oversee the production of various greenhouse crops and develop practical skills necessary in the greenhouse production industry. The course will address guidelines to career opportunities.

FLORAL DESIGN & ARRANGEMENT

G130 .5 Credit
PREREQUISITE: None

Recommended for students interested in flower production and designing floral arrangements. Students will learn flower identification and how to construct corsages, boutonnieres, bud vases, centerpieces, symmetric and asymmetric designs, dish gardens, swags, wreaths, and wedding planning and designs. This class focuses on hands-on experience in the construction of flower arrangements. The course will address guidelines to career opportunities.

ADVANCED FLORAL DESIGN & AG ENTREPRENEURSHIP

G141 1 Credit
PREREQUISITE: Floral Design I

This course is designed for students who have successfully passed Floral Design, & have teacher recommendation to further advance their arranging & business skills. It is designed to help prepare them to run any business of their own in the future. This is a year-long course where students obtain clients from in & out of the district for an arrangement of the month club. Students will choose the designs, fill orders, & deliver to their clients. They will also have the
opportunity to grow fresh cut flowers for cash & carry bouquets, create arrangements for sports & club banquets, as well as any other special orders from faculty. Attention will be paid to proper planning, marketing, budgeting, & retaining clients.

**FORESTRY AND WILDLIFE MANAGEMENT**

*G131* .5 Credit  
**PREREQUISITE:** None  
Recommended for students interested in wildlife and forestry. This course is designed to appeal to students who enjoy the environment and outdoor activities such as hunting and hiking. This will be a project based course. Students will be designing projects for wildlife studies. Students will gain hands-on experience while learning the basics about practical management of forests and Pennsylvania wildlife. Topics such as habitat conservation, population management and land use planning will be explored. Careers in forestry, soil conservation, and wildlife law enforcement will be explored. The course will address guidelines to career opportunities.

**SUPERVISED AGRICULTURAL EDUCATIONAL EXPERIENCE PROJECT I**

*G111* 1 Credit  
**PREREQUISITE:** Ag Ed Teacher Recommendation  
This course is designed for the student wishing to study agricultural and environmental subjects in the agriculture community. A student may receive up to one credit per school year. A supervised agricultural experience project record program shall document 180 hours of experience in the agricultural industry, or a combination totaling 180 hours of project experience, community service and leadership activities. The course will address guidelines to career opportunities.

**SUPERVISED AGRICULTURAL EDUCATIONAL EXPERIENCE PROJECT II**

*G134* 1 Credit  
**PREREQUISITE:** Completion of Supervised Agricultural Educational Experience Project I  
As a continuation of or addition to Supervised Agricultural Experience I, this course is designed for the student wishing to study agricultural and environmental subjects in the agricultural community. A student may receive up to one credit per school year. A supervised agricultural experience project record program shall document 180 hours of experience in the agricultural industry, or a combination totaling 180 hours of project experience, community service and leadership activities. The course will address guidelines to career opportunities.

**SUPERVISED AGRICULTURAL PROJECT III**

*G135* 1 Credit  
**PREREQUISITE:** Successful completion of Supervised Agricultural Educational Experience II  
As a continuation of or addition to Supervised Agricultural Experience I and II, this course is designed for the student wishing to study agricultural and environmental subjects in the agriculture community. A student may receive up to one credit per school year. A supervised agricultural experience project record program shall document 180 hours of experience in the agricultural industry, or a combination totaling 180 hours of project experience, community service and leadership activities. The course will address guidelines to career opportunities.

**SMALL ANIMAL CARE AND MANAGEMENT**

*G114* .5 Credit  
**PREREQUISITE:** None  
This course is for students interested in the care and management of pets and companion animals. Study will include mammals, birds and fish. Hands on experiences will come from lab and the
daily maintenance of in-class pets. Health, safety, feeding and careers will be emphasized with each specie studies. The course will address guidelines to career opportunities.

**LARGE ANIMAL SCIENCE**

*G127*  
**1 Credit**  
**PREREQUISITE:** None. Recommended for students interested in production animals including poultry and horses.  
This course is designed to give students a look at all types of livestock & horse production. Includes industry history, careers, safety, environmental considerations, and details of production management, feeding, health, genetics, and unique animal enterprises. Plus, addresses issues in food safety, and animal rights. Hands on experiences including food preparation, dissection, and animal handling are a part of this course.

**WELDING I**

*G119*  
**.5 Credit**  
**PREREQUISITE:** Grades 10, 11 and 12  
In this course, students will study basic theory and concepts regarding modern metalworking and welding. Students will explore career opportunities in the welding industry. The goals of this course are to learn and practice basic methods of arc welding, oxyacetylene cutting, plasma cutting and MIG Welding as well as develop shop management and organization skills. This course is a great introductory course for a career in welding, fabrication, repair, and maintenance.

**WELDING II**

*G140*  
**.5 Credit**  
**PREREQUISITE:** Grades 10, 11 and 12; Students must have passed Welding I and have teacher recommendation to enroll in Welding II.  
In this course, students will apply basic theory and concepts learned in the Welding I course. Students will continue to explore career opportunities in the welding industry. The goal of this course is to utilize previously learned skills in an advanced context, as well as learn and practice basic MIG/TIG welding and plasma cutting. This course is a great follow-up course for students seriously pursuing a career in welding, fabrication, repair, and maintenance.

**SMALL ENGINE THEORY AND REPAIR**

*G118*  
**.5 Credit**  
**PREREQUISITE:** None  
This course is recommended for students interested in the safe operation of small engines widely used in the United States today. In this course, students will study basic engine theory and operation. Students will also practice disassembling/reassembling engines as well as develop shop management and organization skills. This course is a great introductory course for a career in engine design, fabrication, repair, and maintenance.

**AGRICULTURAL MECHANICS AND TECHNOLOGY**

*G124*  
**1 Credit**  
**PREREQUISITE:** None  
This course is designed for students interested in gaining knowledge and skills in agricultural mechanics. The student will gain skills in safe operation and handling of equipment. Students will explore skills in carpentry, building construction, electricity, plumbing, tractors, welding, and metal fabrication. The course will address guidelines to career opportunities.
INTRODUCTION TO MODERN HORTICULTURE

G132  .5 Credit
PREREQUISITE: None; It is suggested that students complete this course before enrolling in the "Greenhouse Systems Management" course.

Designed for students interested in plants, this course will provide a comprehensive view of the modern horticultural industry. Topics such as flower/bedding plant production, food crops, floral design, basic plant science/physiology, and soil science will be addressed. Through various hands-on activities, students will learn valuable skills needed for a career in various components of the horticultural industry.

LEADERSHIP

G138  1 Credit
PREREQUISITE: Grades 10, 11, & 12

This course is designed for students who have an interest in being a leader in their chosen field. The focus is on agriculture, but the course can be applied to many disciplines. Students enrolled in this course will develop individual area of study based around their personal interests while still meeting course guidelines. Students examine highly successful leaders and learn about themselves as developing leaders. Student projects include planning agriculture related lessons and presenting them at area elementary schools in 5th grade classrooms; they will develop and implement budgets, practice public speaking skills, as well as focus their attention on preparing for Career Development Events and Competitions. Leadership within the career and college context is a main focus of this course.
ART MASTER COURSE LISTING

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<td>A109</td>
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<tr>
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SUGGESTED SEQUENCES IN ART

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<td>* Advanced Intro to Art</td>
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<tr>
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<td>Clay II</td>
<td>3-D Design and Sculpture</td>
</tr>
<tr>
<td>3-D Design and Sculpture</td>
<td>*courses that should be taken in sequence for serious art students</td>
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</table>

ART DEPARTMENT

DRAWING AND PAINTING I

A101

PREREQUISITE: None - Grades 10-12 Only

This course is designed for the serious art student who is willing to complete outside assignments, be self-motivated and desires to improve their artistic technique. Fundamentals of representational rendering are emphasized with a focus on creating and analyzing artistic compositions. Students will develop more compositions and complete written critical assessment of artworks to gain a greater understanding of the visual arts. Homework will be assigned in addition to in-class work. Knowledge of the Elements and Principle of Design and how to apply them in your work is an area of great focus in this course. Still-life, landscape, perspective, portraiture, figures and nature are developed in pencil, charcoal, pastel, pen and ink, watercolor.
and acrylic. Units of art appreciation include Renaissance Art, Impressionism. *Ninth Grade students may not enroll in this course.*

**DRAWING AND PAINTING II**

*A102*  
**1 Credit**  
**PREREQUISITE:** Only students who have successfully completed Drawing & Painting I with a grade of “C” or better are eligible to take this class.  
This course emphasizes creativity and developing individuality in artistic style. Media used in Drawing and Painting I will be further explored and additional media experienced, such as oil pastel, scratchboard, airbrush, digital media, and canvas stretching for acrylic painting. Units of art appreciation cover art through the late 19th century through Modern Art.

**3-D DESIGN AND SCULPTURE**

*A109*  
**.5 Credit**  
**PREREQUISITE:** None  
This course is designed for students with a serious interest in exploring sculptural art forms and the thought that goes into them. The course combines making, discussing, and writing about various sculptural approaches with assorted media. Areas of exploration include constructed forms, modeled forms, sculpted forms, and casting. Media include cardboard, foam board, clay, carving media, plaster. Outside drawings are required, critiques and journals are used to teach the language of art and design.

**PORTFOLIO ART**

*A104*  
**2 Credits**  
**PREREQUISITE:** Only students who have successfully completed Drawing & Painting II with a grade of “C” or better are eligible to take this class.  
This course is an independent study course for the art student seriously interested in art and in the development of a portfolio of work for college entrance or job opportunity. Students have a choice of projects, media, and art appreciation reports which meet the variety requirements of the portfolio. There are no project introductions or demonstrations. Individual responsibility for productive work habits in class is required. Instruction is entirely by individual assistance and critical evaluation.

**ART EXPLORATION**

*A105*  
**.5 Credit**  
**PREREQUISITE:** None  
This course is designed as a general overview of Fine Arts. The course will introduce students to a variety of art making materials and techniques. Students will be introduced to art history and art theory. Homework will be assigned and a textbook may be included in the experience. Students should finish the course with a mastery of tool usage and basic drawing/painting/design techniques.

**ADVANCED INTRO TO ART**

*A110*  
**.5 Credit**  
**PREREQUISITE:** None – (recommended for 9th grade students/any student interested in pursuing art in high school)  
This course is designed to challenge creative individuals and is primarily designed for 9th grade students interested in continuing their art studies through high school and beyond. Emphasis is placed on experiences with design principles, drawing techniques and painting skills leading to the development of abilities that are necessary for advanced art courses. Students will be introduced to areas of art & 3-D Design that will be further developed at the high school level. Advanced drawing and design techniques will be taught and developed. Students will be
assigned sketchbooks and will have weekly assignments to work on outside of class. Course will focus on the creation of works of art and the perception and understanding of it.

**CLAY I**

AJ11

**PREREQUISITE:** None

Clay I is a semester-long course. In this hands-on course, students will learn about the fundamentals and principles of clay such as how to control pressure application, maintain/determine/adjust various moisture conditions, glaze application, work with various clay bodies and their stages of moisture content. Students will strengthen their responsibilities, hand dexterity, creativity and patience while making a variety of functional containers through the application of various hand-building and sculptural techniques. Additionally, students will learn to make clay pots with the aid of an electric potter’s wheel.

**CLAY II**

AJ12

**PREREQUISITE:** Only students who have successfully completed Clay I with a grade of “C” or better are eligible to take this class.

Clay II is a semester-long course. Only students who have successfully completed Clay I with a grade of “C” or better are eligible to take this class. Students must be proficient in throwing on the potter’s wheel as the majority of the assignments are wheel thrown. Students will focus on creating various forms on the potter’s wheel in addition to learning complex hand-building techniques. All skills learned in Clay I will be utilized and expanded upon as students develop functional and sculptural artwork. Additionally, students will focus more on the glazing process to refine their fired clay work.

**AP STUDIO ART**

AJ500

**(1.4 Weight)**

**PREREQUISITE:** Only students who have successfully completed Drawing & Painting II with a grade of “C” or better are eligible to take this class.

This course is an independent study program for students seriously committed to studying art. The course follows guidelines and requirements set by the College Board, which includes submitting a portfolio to the College Board for review and grading. This submission requires an Advanced Placement Examination fee. Due to possible scheduling conflicts, students may have to choose among the various AP offerings.
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<th>Course No.</th>
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## SUGGESTED SEQUENCES IN BUSINESS AND TECHNOLOGY

### Accounting

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Follow recommended course selection for pathway.
## SUGGESTED SEQUENCES IN BUSINESS AND TECHNOLOGY

### Business and Information Technology

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### SUGGESTED SEQUENCES IN BUSINESS AND TECHNOLOGY

#### Computer Information Management

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#### BUSINESS AND TECHNOLOGY DEPARTMENT

#### ACCOUNTING I

**B100**  
1 Credit

**PREREQUISITE:** Recommended for 9th and 10th grade students

Accounting is an excellent foundation course for students who plan to enroll in the accounting curriculum or related business programs (accounting, business, finance, law, management, or marketing) in college as well as for those students who plan to enter the business world upon high school graduation. Students learn the theory of accounting and receive practice in recording business transactions. Students will prepare income and expense statements and determine profit earnings of a business. Students will learn the
complete accounting cycles of proprietorships and partnerships. A real life simulation involving the preparation of records for business is included. The use of computer technology is integrated throughout this course.

**ACCOUNTING II**

*B101*  
**PREREQUISITE:** Accounting I  
Accounting II provides advanced level of study of accounting principles, concepts, procedures, and terminology associated with corporations. Students will learn departmentalized accounting and accounting control systems including inventory management. Students will work on accounting simulations and projects to gain competence in this field. The use of computer technology is integrated throughout this course.

**ACCOUNTING III**

*B300*  
**(1.2 Weight)**  
**PREREQUISITE:** Accounting I and II  
Accounting III with Computer Applications is designed for students who are planning to pursue a career in accounting directly upon graduation, or for students who are planning to continue their accounting education at a two or four year institution. This course explores various aspects of accounting, including accounting control systems, accounting adjustments, management accounting, cost accounting, not-for-profit accounting, and financial analysis. The use of computer technology is integrated throughout this course.

**AP COMPUTER SCIENCE PRINCIPLES**

*B301*  
**(1.4 Weight)**  
**PREREQUISITE:** None  
AP Computer Science Principles is an exciting and engaging full-year course that introduces students to the foundations of modern computing. If you like technology, this course is for you. AP CSP covers a broad range of foundational topics such as programming, algorithms, the Internet, big data, digital privacy and security,) and the societal impacts of computing. It is offered in conjunction with Code.org and will prepare students to complete the corresponding AP test, where you can potentially earn college credit.

**BUSINESS LAW**

*B118*  
**PREREQUISITE:** Recommended for 11th and 12th Grade  
Few subjects are as dramatic and challenging as the law. This course is designed to introduce students with the basic legal principles common to business and personal activities. Topics include evaluating contracts, family and consumer issues, credit law, buying and selling, employment contracts, and real estate. Because laws grow from human conflict, lawsuits are often emotional, complex, and costly. An awareness of legal problems that may confront young adults is one of the objectives of this course.
WEB MULTIMEDIA PRODUCTION
(Desktop Publishing & Web Design)

B138 1 Credit

PREREQUISITE: None; Recommended for 11th and 12th Grade

This fun course provides students with the opportunity to learn WEB PAGE DESIGN, creation of DIGITAL GRAPHICS and ANIMATION for the web and DESKTOP PUBLISHING. Students will learn the following software: Adobe Photoshop, HTML programming, Flash & Dreamweaver. Students will publish hands-on projects such as creating, designing and posting web sites, designing magazine covers and music CD’s creating animations and rollover effects.

SPORTS AND ENTERTAINMENT MARKETING

B128 1 Credit

PREREQUISITE: Recommended for 11th and 12 Grade

Sports & Entertainment Marketing will take a hands-on look at the tactics used to promote events and products to fans. You will investigate the resources and means that marketers use to get into the buyers head and convince you that their product is superior. This course will also use Virtual Business Sports software to run and manage a football franchise.

PERSONAL FINANCIAL MANAGEMENT

B109 .5 Credit

PREREQUISITE: Recommended for 10th, 11th and 12th Grade

Students will learn practical money skills. Students will design their own personal financial plan, select between various saving and investment options, find and use investment information, and recognize and victim-proof against investment fraud. Topics of study include budgeting, credit, investing (stocks, bonds, annuities, mutual funds, and pensions), employment benefits, and labor laws. This course will teach students how financial markets work. Students will learn how to successfully manage their money now and in their future.

ENTREPRENEURSHIP

B130 .5 Credit

PREREQUISITE: Recommended for 10th, 11th and 12th Grade

The Entrepreneurship course will teach the students the skills necessary to become a successful entrepreneur through a hands-on approach. Those students with an interest in being his or her own boss someday or have a skill or an idea that could make lots of money, should enroll in this course. Students will develop entrepreneurial knowledge, skills, and attitudes, while learning the process of choosing, researching, planning, and operating a small business of their own design. Students will identify and develop necessary business skills, scan the community for small business opportunities, and prepare a business plan for their own future business idea.
A+ COMPUTER REPAIR AND MAINTENANCE

B110  1 Credit
PREREQUISITE: Recommended for 11th and 12th Grade
The A+ computer hardware and operating systems program is a one-year course. The class allows students to learn what is in the computer and how it works. The first half of the year the students learn all about the hardware in a PC from the motherboard and power supply to the disk drives. The second half of the year the students will learn about the operating systems of the computer (DOS/Windows). Students will be able to apply their knowledge by building and networking computers together. This program prepares the student to sit for their A+ certification. The students who successfully complete this course will get a 50% discount on the price of the test when they take it. Course may be articulated to local post-secondary institutions.

EMPLOYABILITY SKILLS FOR THE 21ST CENTURY

B132  .5 Credit
PREREQUISITE: None
Entering the world of work can be exciting. This one semester (18 week) course is designed to prepare students to meet the needs of the employment community and to develop awareness of trends that are occurring in our global markets. Learning employability skills is an essential investment required for success in the 21st century. This course is required for all students who are enrolled in the Co-Op program at CASHS and CMS.

BUSINESS 101

B135  .5 Credit
PREREQUISITE: Recommended for 9, 10, and 11 Grade
Business 101 is a semester long course designed to teach and guide students with an overview of subjects that the business department teaches. The course will highlight the elements of establishing, operating, and financing a small entrepreneurial business. Marketing, management, accounting, and operation of a small business will be emphasized in the course. Throughout the course work, the students will research all of the above criteria based upon small business for their career path, and begin work designing the framework for their school based enterprise experience. Students will cover materials associated with Human Resources, job search/application, and other employability skills.

MOBILE APPLICATIONS - PROGRAMMING BASICS

B139  .5 Credit
PREREQUISITE: Recommended for 10, 11 and 12 Grade
This course is an introduction to programming and Android object-oriented platforms. This project-based course introduces students to multi-platform digital media and environments. Students will gain an understanding of mobile application development through the study of development platforms, programming languages, and software design standards. Students learn to problem solve, work in project teams, and how to ethically use digital media to solve real-world problems. Course will include business focus on foundational business principles including needs assessment, market research, beta testing, and marketing and selling the product.
MOBILE APPLICATIONS - ADVANCED PROGRAMMING
B143 .5 Credit
PREREQUISITE: Completion of Mobile Application - Programming Basics
This course builds on the material presented in the Mobile Applications - Programming Basics course. A project-based course that will build on the foundations of programming with a focus on the process of developing Android-based applications. Students will work individually and in groups to problem solve and creatively design materials for mobile application. Course will include work within Android Studio and other programs to focus on beta testing and exploration of various programming languages.

COMMUNICATIONS SEMINAR APPLICATIONS
B140 .5 Credit
PREREQUISITE: Grade 9 Only
Communications Seminar is an essential course designed to help students become acclimated to high school. Students will create presentations and deliver them in a variety of formats: multimedia, written, and oral. These presentations are centered around opportunities students have at the high school. Career readiness will be a major focus of this course as students explore careers while analyzing their personal skills and interests. Lastly, digital citizenship and safe online behavior will be emphasized as these 21st century learners navigate through the multitude of social media formats. This semester long course is a graduation requirement.

CAPSTONE COOPERATIVE EDUCATION WORK EXPERIENCE
B119 Up to 3 Credits
PREREQUISITE: Seniors Only; the student must initiate the process of entering the Cooperative Education Program by completing a resume, the Co-op Program Student Recommendation, and the Application for Cooperative Education. Both forms are included in the Co-Op Scheduling Packet. Students also must participate in a formal interview. ALL DEADLINES MUST BE FOLLOWED.

Cooperative Education is one segment of the school-to-work system that enables students to combine academic instruction with occupational instruction through learning on the job in a career area of their choice.

Students have the opportunity to earn school credit in a paid work experience directly related to their educational pathway and career objective in one of the following areas: business, agriculture, construction technology, art or music. Students must carry two full-year courses (two credits) in their chosen career path in both their junior and senior year. ***All programs within Cooperative Education require complete student commitment. Any student starting a program and not completing all curriculum, portfolio and time requirements will receive an “I” grade recorded on their transcript.
COOPERATIVE EDUCATION DIVERSIFIED OCCUPATIONS

B121 Up to 3 Credits
PREREQUISITE: Seniors only; the student must initiate the process of entering the Cooperative Education Program by completing a resume, the Co-op Program Student Recommendation, and the Application for Cooperative Education. Both forms are located in the Co-Op Scheduling Packet. Students earn school credit for participating in paid and unpaid learning experiences that relate to the field of study or their career objective they plan to pursue after graduation. **ALL DEADLINES MUST BE FOLLOWED.**

Cooperative Education is one segment of the school-to-work system that enables students to combine academic instruction with occupational instruction through learning on the job in a career area of their choice.

Seniors have the opportunity to earn school credit in a paid or unpaid work experience and/or internships directly related to their educational pathway and career objective that they wish to pursue after graduation or after completing post-secondary training.

***All programs within Cooperative Education require complete student commitment. Any student starting a program and not completing all curriculum, portfolio and time requirements will receive an “I” grade recorded on their transcript.***

COOPERATIVE EDUCATION - ELEMENTARY INTERNSHIP

B120 Up to 3 Credits
PREREQUISITE: Seniors only; the student must initiate the process of entering the Cooperative Education Program by completing a resume, the Co-Op Program Student Recommendation, and the Application for Cooperative Education.

Both forms are included in the Co-Op Scheduling Packet. Students must also participate in a formal interview. **ALL DEADLINES MUST BE FOLLOWED.** Cooperative Education is one segment of the school-to-work system that enables students to combine academic instruction with occupational instruction through learning on the job in a career area of their choice.

Seniors have the opportunity to earn school credit in an unpaid internship for students who plan to enter the field of elementary education after graduation and after completing post-secondary training. Students will be placed in a classroom assignment.

***All programs within Cooperative Education require complete student commitment. Any student starting a program and not completing all curriculum, portfolio and time requirements will receive an “I” grade recorded on their transcript.***

COOPERATIVE EDUCATION - SECONDARY INTERNSHIP

B142 Up to 3 Credits
PREREQUISITE: Seniors only; the student must initiate the process of entering the Cooperative Education Program by completing a resume, the Co-Op Program Student Recommendation, and the Application for Cooperative Education.
Both forms are included in the Co-Op Scheduling Packet. Students must also participate in a formal interview. **ALL DEADLINES MUST BE FOLLOWED.** Cooperative Education is one segment of the school-to-work system that enables students to combine academic instruction with occupational instruction through learning on the job in a career area of their choice.

Seniors have the opportunity to earn school credit in an unpaid internship for students who plan to enter the field of secondary education after graduation and after completing post-secondary training. Students will be placed in a classroom assignment.

***All programs within Cooperative Education require complete student commitment. Any student starting a program and not completing all curriculum, portfolio and time requirements will receive an “I” grade recorded on their transcript.***

**COOPERATIVE EDUCATION - HEALTHCARE CAREERS INSTITUTE**

B122  
**Up to 1 Credit**

**PREREQUISITE:** Application Process and Interview, Grades 11 and 12  
This course is designed to direct Franklin County freshman, sophomore, juniors and seniors in the exploration of various healthcare careers in real life experience. The 18-week HCI course places emphasis on the development of patient care and responsibility, personal strengths and skills, as well as vital soft skills for employment. Students are required to observe in a minimum of 20 departments of the hospital for a period of one or two days, and then spend a concentrated period of time in the one or two departments for the remainder of the semester hours. Students will also be required to attend orientation and information classes, as well as meet class requirements. The entire program takes place on the site of Chambersburg Hospital or at satellite Summit Healthcare offices. Students are responsible for their own transportation to the facilities. Classes meet from 7:30 a.m. – 9:30 a.m., Monday through Friday. The institute is free of charge and the student earns school credit. An application and interview are required.

***All programs within Cooperative Education require complete student commitment. Any student starting a program and not completing all curriculum, portfolio and time requirements will receive an “I” grade recorded on their transcript.***

**COOPERATIVE EDUCATION**

B131  
**1 Credit**

**PREREQUISITE:** Seniors Only  
Students have the opportunity to gain unpaid work experience and high school credit working in a hospital setting through volunteering at Chambersburg Hospital. Students volunteer to: man information desks, perform messenger services, deliver patient mail and flowers, staff the hospital auxiliary shop, help transport patients in wheelchairs, help in various departments, visiting patients, and help people who need prescription assistance.

***All programs within Cooperative Education require complete student commitment. Any student starting a program and not completing all curriculum, portfolio and time requirements will receive an “I” grade recorded on their transcript.***
COOPERATIVE EDUCATION - COMMUNITY SERVICE LEARNING

B129  Up to 2 Credits

PREREQUISITE: Recommended for 10th, 11th and 12th Grade

Students have the opportunity to earn high school credits and gain valuable experience by integrating community service with academic learning. This experience promotes learning through hands-on participation and provides opportunities to use skills and knowledge in real-life situations such as Healthcare, Athletic Training, U.S. Military, Horticulture, Elementary and Secondary Education and Pre-School, to name a few. This experience fosters a sense of caring for others by providing a service to the community as volunteers. **Specific criteria are required for participation in the Service Learning Program.**

***All programs within Cooperative Education require complete student commitment. Any student starting a program and not completing all curriculum, portfolio and time requirements will receive an “I” grade recorded on their transcript.**

COSTA ACADEMY

B141  Up to 2 Credits

Costa Academy is a subset of the Community Service Learning program that trains students using both virtual classrooms, traditional classrooms, and most importantly by direct hands-on work experience in a “live” fully functioning restaurant and banquet facility. The curriculum is extremely focused on providing work-relevant learning in a way that best fits the abilities, goals and objectives of the individual student. Enrollment is open to students of the Chambersburg Area School District. Graduates will be work-ready and employable from day one of certification by Costa Academy. **Specific criteria are required for participation in the Service Learning Program.**

HISTORY OF GAME DESIGN - GAME DESIGN & ANCIENT CIVILIZATIONS

B114 .5 Credit

PREREQUISITE: None. Recommended for 10, 11, or 12 Grades

History of Game Design is designed to relate games within different civilizations and how they impacted that era. What are the relations to games today and what elements of game design still exist? The course will explore the history of board games and relate them to current business trends. From that business standpoint students will learn how to design, create, and market a prototype board game.

AGRICULTURE WORK EXPERIENCE

G125  1 Credit

PREREQUISITE: Seniors Only

Upon successful completion of the necessary major course work and with staff approval, students may schedule a work or career exploration experience. Specific instruction about who qualifies for these experiences are given by the department. Students must contact a counselor or a member of the appropriate department for information about qualifications and the scheduling process. The course will address guidelines to career opportunities.
JROTC COOP

JROTC COOP is a special program for seniors who have completed at least two years of instruction in JROTC. This program is specifically designed for the students who have settled on a career in the military either an enlisted or commissioning program. Participation in this curriculum will place the student in a position of peer leadership and create opportunities to enhance organizational, management, and instructional skills. Students in this curriculum will be involved in the daily operation of the Company of Cadets, the administration of classroom activities, scheduling and logistics for extracurricular activities, annual recruiting, and other duties assigned by their instructor. COOP enrollment requires advance approval from both the JROTC instructor and the COOP program. COOP enrollment is limited to no more than two students per Naval Science Instructor.
## ENGLISH MASTER COURSE LISTING

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Weighted Value</th>
<th>Credit Value</th>
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<td>B111</td>
<td>Online Yearbook</td>
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<tr>
<td>E106</td>
<td>Creative Writing</td>
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<td>E107</td>
<td>Modern Fiction</td>
<td>1.0</td>
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</tr>
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<td>E108</td>
<td>Dramatics I</td>
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<td>E109</td>
<td>Dramatics II</td>
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<td>E110</td>
<td>Introduction to Video Production</td>
<td>1.0</td>
<td>0.5</td>
</tr>
<tr>
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<td>English 9</td>
<td>1.0</td>
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<td>English 12</td>
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<td>Radio Production 1</td>
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<td>E142</td>
<td>Journalism</td>
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<td>E307</td>
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<td>Advanced Placement English- Literature and Composition</td>
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<td>Advanced Placement English- Language and Composition</td>
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## SUGGESTED SEQUENCES IN ENGLISH

### Traditional Academics

#### Grade 9:
- English 9
- Honors English 9

#### Grade 10:
- English 10
- Honors 10

### Grade 11:

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<th>Course</th>
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<td>Honors English 11</td>
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<td>IB Language A: Literature HL (year one)</td>
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<tr>
<td>AP English – Language and Composition</td>
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#### Electives in English:
- Creative Writing – Grades 10 - 12
- Modern Fiction – Grades 10-12 .5 Credit
- Dramatics I – Grades 10 - 12 .5 Credit
- Dramatics II - Grades 10-12 .5 Credit
- Introduction to Video Production - Grade 10-12
- Journalism – Grades 11-12 .5 Credit
- Radio Production I – Grades 10-12
- Radio Production II – Grades 11-12
ENGLISH DEPARTMENT

ENGLISH 9

E134

PREREQUISITE: None;
This course covers the study, analysis, and comparison of various types of text including novels, articles, biographies, poems, short stories, and dramas. Students will gain understanding of and show mastery in Pennsylvania Core Standards for ELA, Grade 9, which are designed to prepare all students for success in college, career, and life by the time they graduate from high school:

- Students read, understand, and respond to informational text and literature – with an emphasis on comprehension, vocabulary acquisition, and making connections among ideas and between texts with a focus on textual evidence.
- Students write for different purposes and audiences. Students write clear and focused text to convey a well-defined perspective and appropriate content.
- Students present appropriately in formal speaking situations, listen critically, and respond intelligently as individuals or in group discussions.

HONORS ENGLISH 9

E305

(1.2 Weight)

PREREQUISITE: None
In addition to the expectation of English 9, students enrolled in the honors curriculum are expected to apply higher order thinking skills to supplemental and complex selections of literary works. Student motivation and a determined work ethic are key components to success in this course.

ENGLISH 10

E135

PREREQUISITE: None
This course covers the study, analysis, and comparison of various types of text including novels, articles, biographies, poems, short stories, and dramas. Students will gain understanding of and show mastery in Pennsylvania Core Standards for ELA, Grade 10, which are designed to prepare all students for success in college, career, and life by the time they graduate from high school:

- Students read, understand, and respond to informational text and literature – with an emphasis on comprehension, vocabulary acquisition, and making connections among ideas and between texts with a focus on textual evidence.
- Students write for different purposes and audiences. Students write clear and focused text to convey a well-defined perspective and appropriate content.
- Students present appropriately in formal speaking situations, listen critically, and respond intelligently as individuals or in group discussions.

HONORS ENGLISH 10

E306

(1.2 Weight)

PREREQUISITE: None
In addition to the expectation of English 10, students enrolled in the honors curriculum are expected to apply higher order thinking skills to supplemental and complex selections
of literary works. Student motivation and a determined work ethic are key components to success in this course.

**ENGLISH 11**

*E136*  
1 Credit  
**PREREQUISITE:** None  
This course covers the study, analysis, and comparison of various types of text including novels, articles, biographies, poems, short stories, and dramas. Students will gain understanding of and show mastery in Pennsylvania Core Standards for ELA, Grade 11, which are designed to prepare all students for success in college, career, and life by the time they graduate from high school:

- Students read, understand, and respond to informational text and literature – with an emphasis on comprehension, vocabulary acquisition, and making connections among ideas and between texts with a focus on textual evidence.
- Students write for different purposes and audiences. Students write clear and focused text to convey a well-defined perspective and appropriate content.
- Students present appropriately in formal speaking situations, listen critically, and respond intelligently as individuals or in group discussions.

**HONORS ENGLISH 11**

*E307*  
(1.2 Weight)  
1 Credit  
**PREREQUISITE:**  
In addition to the expectation of English 11, students enrolled in the honors curriculum are expected to apply higher order thinking skills to supplemental and complex selections of literary works. Student motivation and a determined work ethic are key components to success in this course.

**ENGLISH 12**

*E137*  
1 Credit  
**PREREQUISITE:** None  
This course covers the study, analysis, and comparison of various types of text including novels, articles, biographies, poems, short stories, and dramas. Students will gain understanding of and show mastery in Pennsylvania Core Standards for ELA, Grade 12, which are designed to prepare all students for success in college, career, and life by the time they graduate from high school:

- Students read, understand, and respond to informational text and literature – with an emphasis on comprehension, vocabulary acquisition, and making connections among ideas and between texts with a focus on textual evidence.
- Students write for different purposes and audiences. Students write clear and focused text to convey a well-defined perspective and appropriate content.
- Students present appropriately in formal speaking situations, listen critically, and respond intelligently as individuals or in group discussions.
HONORS ENGLISH 12

E308

(1.2 Weight) 1 Credit

PREREQUISITE: None

In addition to the expectation of English 12, students enrolled in the honors curriculum are expected to apply higher order thinking skills to supplemental and complex selections of literary works. Student motivation and a determined work ethic are key components to success in this course.

ADVANCED PLACEMENT LITERATURE AND COMPOSITION

E500

(1.4 Weight) 1 Credit

PREREQUISITE: None

This college-level course is offered to seniors with strong competence in reading comprehension, grammar, and composition skills. In this course, students will read and analyze a variety of stimulating and thought-provoking literature in different genres: novels, plays, short stories, and poetry. As this is a composition course, students will do frequent writing and rewriting activities that emphasize critical analysis, structure, and elements of style through various assignments. Students will also complete a variety of creative projects, activities, and presentations that allow them to engage with the texts, fellow students, literary movements, and historical periods. The course work is intense and designed for students who can work independently and are highly motivated. AP students are encouraged to take the AP English Literature and Composition exam in May, which may earn them college credits or registration privileges.

ADVANCED PLACEMENT LANGUAGE AND COMPOSITION (11th or 12th grade)

E501

(1.4 Weight) 1 Credit

PREREQUISITE: None

Students enrolled in this rigorous and challenging college-level course read and carefully analyze a broad range of nonfiction and fictional prose selections in order to deepen their awareness of rhetoric and of language’s influence. Students in this course develop the ability to decipher a text with greater recognition of the author’s purpose, syntax, word choice, and tone. Students work on strengthening their own writing skills, including writing with a purpose, addressing and appealing to an audience, creating effective text structures, and developing an appropriate style while learning to recognize the same in the writing of others. Course readings and materials cover many different genres including essays, letters, speeches, images, films, advertisements, comic strips, music videos, as well as expository, analytical, personal, and argumentative texts from a variety of authors and historical contexts. The course work is intense and designed for highly motivated students who can work independently. AP students are encouraged to take the AP Language and Composition exam in May, which may earn them college credits or registration privileges. Students also have the option to earn college credits for the course through a dual enrollment program with Harrisburg University.

CREATIVE WRITING

E106

1 Credit

PREREQUISITE: Open to 11th and 12th Grade Students

Creative writing focuses on the tools and techniques of writing, how to get ideas and how to apply them creatively in poems, stories, and essays. The course encourages self-discovery, freedom of expression, discipline of form, and attainment of style. Various types of writing will be explored through criticism and modeling of established literary works. Mastery of poetic devices and short story techniques will be followed by an independent writing project. Students will engage in the selection process for CASHS Collections, the high school literary magazine.
MODERN FICTION

E107 .5 Credit
PREREQUISITE: Open to 10th, 11th and 12th Grade Students
Students in grades 10, 11 and 12 who enjoy reading and sharing ideas about a variety of nonfiction and fiction should consider enrolling in Modern Fiction. The major emphasis of the course is reading and discussing outstanding short stories, poems, novels, and plays written from 1900 to the present. Students will also choose books of their own from an assigned fiction genre. A genuine interest in reading and discussing books is required for this course.

DRAMATICS I

E108 .5 Credit
PREREQUISITE: Open to 10th, 11th and 12th Grade Students
Dramatics is offered to students interested in theater. The course offers opportunities to learn and polish basic acting techniques and skills. Class activities include learning stage movement and terminology; developing improvisational technique; acting, writing, and critiquing scenes or short one-act plays; producing, and performing a final play at the end of the course.

DRAMATICS II

E109 .5 Credit
PREREQUISITE: Dramatics I
This class will explore more acting and theatre production than Dramatics I. Students will be expected to perform monologues from memory, participate in stage movement, games, lip-synching and improvisational activities. Students will formalize a resume and cover letter for college programs and perfect auditioning techniques. Students will participate in a stage performance for the general public in a recital format, research new playwrights. This class will be very helpful to students planning on a theater major or minor. If a student is interested in learning more about acting and is eager to participate, this class will engage actors of all levels. Dramatics I is recommended but not necessary as a prerequisite to this class.

INTRODUCTION TO VIDEO PRODUCTION

E110 .5 Credit
PREREQUISITE: Grades 10-12 Only.
This project-based course is designed to teach interested students basic video production techniques. While going through the video making process from pre-production, videotaping, and post-production (editing), students will develop communication, organizational, and critical thinking skills. In this course, students will complete a variety of creative projects, including video scavenger hunts, short commercial advertisements, music videos, green-screen projects, video biographies, and personal choice projects. Students will also extend beyond basic video editing to learn how to build DVD menus and create YouTube channels, as well as experience fundamental techniques of smartphone video production techniques and programs.
ON-LINE YEARBOOK PUBLICATION

B111 1 Credit
PREREQUISITE: Open to 11th and 12th Grade Students. Completion of formal application and interview. Completion of 10th, or 11th grade English.
In this course, students will learn basic yearbook production which includes understanding the basic tenets of publication as it applies to yearbook; recognize and analyze purposes, structure, and coverage of a yearbook; understand basic layout and design of a yearbook; understand and develop the skills involved in writing copy, captions, and headlines for yearbooks; explore basic graphic design using Encore and using the Adobe Suite of software, which includes PhotoShop. Design activities will include creating a portfolio of yearbook layouts to be published in the school yearbook. Students may take this course during their sophomore, junior, and senior year. Maximum credits students can receive are two.

RADIO PRODUCTION I

E141 1 Credit
PREREQUISITE: Grades 10-12; Application & Teacher Recommendation
Radio Production I is a project-based course offered to students with a desire to learn about broadcasting. The course examines the history of radio and the FCC, studio design and setup, production writing, and recording techniques. The bulk of the course, though, is focused on actual on-air announcing and learning to run a live radio broadcast of music and information. Students who excel will be given the opportunity to broadcast their own weekly radio show on the district’s radio station, 92.7 WEMR, from our professional broadcast studio at CASHS.

RADIO PRODUCTION II

E143 1 Credit
PREREQUISITE: Grades 10-12; Radio Production I
Radio Production II is a project-based course offered to students who have successfully completed Radio Production I. The course gives the students the opportunity to take on a role as a student manager of the district radio station, 92.7 WEMR. The bulk of the course, though, is a continued focus on actual on-air announcing and learning to run a live radio broadcast of music and information. Students who take Radio Production II will be given the opportunity to broadcast their own weekly radio show on the district’s radio station, 92.7 WEMR, as well as produce other types of programming (sports, information, news).

JOURNALISM

E142 1 Credit
PREREQUISITE: Grades 11 and 12
Students are introduced to the historical importance of journalism in America. They study the basic principles of print and online journalism as they examine the role of printed news media in our society. They learn investigative skills, responsible reporting, and journalistic writing techniques as they read, respond to, and write their own news and feature articles. Students conduct interviews, research, write, and design their own publications.
### ENGLISH AS A SECOND LANGUAGE (ESL) MASTER COURSE LISTING

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<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
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<th>Weighted Credit Value</th>
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### ENGLISH 9

**E114ESL**  
1 Credit

Designed for students whose first language is another language other than English and who has been in the United States 2 or more years.

This course covers the study, analysis, and comparison of various types of text including novels, articles, biographies, poems, short stories, and dramas. Students will gain understanding of and show mastery in Pennsylvania Core Standards for ELA, Grade 9, which are designed to prepare all students for success in college, career, and life by the time they graduate from high school:

- Students read, understand, and respond to informational text and literature – with an emphasis on comprehension, vocabulary acquisition, and making connections among ideas and between texts with a focus on textual evidence.
- Students write for different purposes and audiences. Students write clear and focused text to convey a well-defined perspective and appropriate content.
- Students present appropriately in formal speaking situations, listen critically, and respond intelligently as individuals or in group discussions.

### ENGLISH 10

**E115ESL**  
1 Credit

Designed for students whose first language is other than English and who has been in the United States 2 or more years.

This course covers the study, analysis, and comparison of various types of text including novels, articles, biographies, poems, short stories, and dramas. Students will gain understanding of and show mastery in Pennsylvania Core Standards for ELA, Grade 10, which are designed to prepare all students for success in college, career, and life by the time they graduate from high school:
• Students read, understand, and respond to informational text and literature – with an emphasis on comprehension, vocabulary acquisition, and making connections among ideas and between texts with a focus on textual evidence.
• Students write for different purposes and audiences. Students write clear and focused text to convey a well-defined perspective and appropriate content.
• Students present appropriately in formal speaking situations, listen critically, and respond intelligently as individuals or in group discussions.

**ENGLISH 11**

*E116 ESL*  
1 Credit

**PREREQUISITE:** Designed for students whose first language is other than English and who has been in the United States 2 or more years.  
This course covers the study, analysis, and comparison of various types of text including novels, articles, biographies, poems, short stories, and dramas. Students will gain understanding of and show mastery in Pennsylvania Core Standards for ELA, Grade 11, which are designed to prepare all students for success in college, career, and life by the time they graduate from high school:
• Students read, understand, and respond to informational text and literature – with an emphasis on comprehension, vocabulary acquisition, and making connections among ideas and between texts with a focus on textual evidence.
• Students write for different purposes and audiences. Students write clear and focused text to convey a well-defined perspective and appropriate content.
• Students present appropriately in formal speaking situations, listen critically, and respond intelligently as individuals or in group discussions.

**ENGLISH 12**

*E121ESL*  
1 Credit

**PREREQUISITE:** None  
Designed for students whose first language is other than English and who has been in the United States 2 or more years.  
This course covers the study, analysis, and comparison of various types of text including novels, articles, biographies, poems, short stories, and dramas. Students will gain understanding of and show mastery in Pennsylvania Core Standards for ELA, Grade 12, which are designed to prepare all students for success in college, career, and life by the time they graduate from high school:
• Students read, understand, and respond to informational text and literature – with an emphasis on comprehension, vocabulary acquisition, and making connections among ideas and between texts with a focus on textual evidence.
• Students write for different purposes and audiences. Students write clear and focused text to convey a well-defined perspective and appropriate content.
• Students present appropriately in formal speaking situations, listen critically, and respond intelligently as individuals or in group discussions.

**ENGLISH AS A SECOND LANGUAGE NEWCOMER**

*E133ESL*  
.5 Credit

**PREREQUISITE:** None  
Designed for those students who are new to the United States with little English ability. Fundamental skills such as school and culture acclimation as well as language basics will be explored.
ENGLISH LANGUAGE – YEAR 1

E177ESL
PREREQUISITE: (9th/12th Grade)
First year EL students enrolled in the Sheltered Instruction Program
Designed for students in their first year of studies in the United States. The four domains of the English language will be stressed at a fundamental level. Focus will be on pronunciation, listening skills, grammatical usage, vocabulary acquisition, writing sentences and guided writing.

ENGLISH LANGUAGE – YEAR 2

E178ESL
PREREQUISITE: (9th/12th Grade)
Second year EL students enrolled in the Sheltered Instruction Program
Designed for students in second year of studies in the United States. The four domains of the English language will be stressed at a fundamental level. Focus will be on pronunciation, listening skills, grammatical usage, vocabulary acquisition, writing sentences and guided writing.

READING 1A

E175ESL
Designed for those students whose home language is not English and whose English language skills are minimal or non-existent. Students learn phonemic awareness, reading comprehension, and vocabulary decoding skills as they read leveled texts of various Science and Social Studies topics.

READING 2B

E176ESL
Designed for those students whose home language is not English and whose English language skills are minimal or non-existent. Students learn phonemic awareness, reading comprehension, and vocabulary decoding skills as they read leveled texts of various Science and Social Studies topics.

BIOLOGY IA

Q101
Students enrolled in Biology will receive instruction in basic biological principles, chemical basis for life, bioenergetics, homeostasis and transport, cell growth and reproduction, genetics, theory of evolution, and ecology.

BIOLOGY IB

Q107
Students enrolled in Biology will receive instruction in basic biological principles, chemical basis for life, bioenergetics, homeostasis and transport, cell growth and reproduction, genetics, theory of evolution, and ecology.

ENVIRONMENTAL SCIENCE

Q125
Environmental Science is an introductory course to ecology and interactions among living organisms. The purpose is to develop and use the scientific method in preparing, conducting and drawing conclusions for experiments. Subjects covered will include the environment, material cycles, energy flow, biodiversity, succession, ecosystems, etc.
ALGEBRA IA

Q103
This course is designed to help students successfully transition from pre-algebraic to algebraic concepts. Topics include constructing, analyzing, and modeling functions, systems of equations and inequalities, operations with polynomials, basic probability, and an introduction to quadratic functions. Problem solving is emphasized throughout all concepts.

ALGEBRA IB

Q114
This course is designed to help students successfully transition from pre-algebraic to algebraic concepts. Topics include constructing, analyzing, and modeling functions, systems of equations and inequalities, operations with polynomials, basic probability, and an introduction to quadratic functions. Problem solving is emphasized throughout all concepts.

MATH 21

Q118
This course is designed to strengthen math skills through practicing and applying concepts from Pre-Algebra, Algebra, and Geometry. Students work online through websites such as: School 21, DreamBox, and Delta Math.

SPANISH FOR NATIVE SPEAKERS

Q124
PREREQUISITE: First year EL students enrolled in the Sheltered Instruction Program whose native language is Spanish

Designed to help students develop, maintain, and enhance their understanding of Spanish grammar and their ability to read and write in Spanish. This course focuses on enhancing literacy skills in Spanish so that students gain a better understanding of Spanish morphology and syntax so that these skills can be applied in assisting students with English acquisition.
FAMILY AND CONSUMER SCIENCES MASTER COURSE LISTING

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Weighted Value</th>
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<td>Child Development I</td>
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<td>C105</td>
<td>Child Development II</td>
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<td>C107</td>
<td>Culinary I</td>
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<tr>
<td>C110</td>
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SUGGESTED SEQUENCES IN FAMILY AND CONSUMER SCIENCES

Traditional Progression of Courses

Grade 9:
- Culinary I
- Child Dev I
- Interior Design

Grade 10:
- Culinary I
- Child Dev I

Grade 11:
- Child Development II
- Culinary II

Grade 12:
- Culinary II
- Child Development Lab
- Child Care Internship

FAMILY AND CONSUMER SCIENCES DEPARTMENT

CHILD DEVELOPMENT I

C104

PREREQUISITE: None

This course will provide an introduction to the study of children and families. Students will also study career opportunities in child development, parenting, prenatal development, pregnancy and the arrival of a baby. Some of the activities will be class projects and the parenting of the Real Care Baby for a weekend.

CHILD DEVELOPMENT II

C105

PREREQUISITE: Child Development I

This course is an in-depth study of infants, toddlers, and preschoolers. Students will study how children develop emotionally, socially, physically and intellectually. Childcare options and early childhood education will be explored. Information relating to careers in childcare and educational services will be incorporated in the course.
CHILD DEVELOPMENT LAB

C103
PREREQUISITE: Child Development I & II, 11th and 12th Grade Only
Students will participate in an on-sight preschool program. Students will plan and prepare lessons for the children under the supervision of the Family and Consumer Science teacher. This is a double period class.

CHILD CARE INTERNSHIP

C106
PREREQUISITE: Seniors Only
This is an unpaid work experience for students in the Child Development Program at CASHS. All assignments are in a nursery school environment. School credit is also earned. Qualifications and supervision for this program is under the direction of the CASHS Child Development Coordinator.

CULINARY ARTS I

C107
PREREQUISITE: None
In this course students will study food preparation, emphasizing baking principals as well as cooking skills in a hands-on setting. Students will gain knowledge in basic nutrition, food science and consumerism. Students will also examine career choices.

CULINARY ARTS II

C108
PREREQUISITE: Successful completion of Culinary I
In addition to using cooking techniques learned in Culinary I, students will learn more complicated skills to prepare more elaborate meals. Students will explore the fundamentals of nutrition, meal planning and preparation for large groups. Activities are designed to help students explore current issues, choices and techniques of food preparation that are compatible with today’s lifestyle. This course is recommended for those who want to learn an independent living skill as well as for those who are considering a food-related career.

INTERIOR DESIGN

C110
PREREQUISITE: Recommended for grades 9 and 10
This is an introductory course which enables students to explore their creativity in the field of Interior Design. This course emphasizes the elements and principals of design. Other topics included are the basics of furniture arrangement, floor plan evaluations, as well as careers.
FITNESS AND WELLNESS
MASTER COURSE LISTING

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<tr>
<td>W140</td>
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<td>W141</td>
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<td>W142</td>
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<td>W143</td>
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<td>W145</td>
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SEQUENCE CHART FOR FITNESS AND WELLNESS

Traditional Progression of Courses

**Grade 9:**
- Team Sports (Skills and Concepts)
- Lifelong Fitness

**Grade 10:**
- Health
- Cardio Endurance/Personal Fitness

**Grade 11:**
- Strength Training and Conditioning
- Exercise Science
- Cardio Endurance/Personal Fitness

**Grade 12:**
- Advanced Team Sports
- Strength Training and Conditioning
- Exercise Science
- Team Sports (Skills and Concepts)
- Cardio Endurance/Personal Fitness
- Lifelong Fitness
FITNESS AND WELLNESS DEPARTMENT

STRENGTH AND CONDITIONING

W140  .5 Credit
PREREQUISITE: None
This course provides an opportunity to further engage in activities designed to achieve peak performance by developing the health and skill related components of fitness, with an emphasis on resistance and cardiovascular training to include the measurement and evaluation of each component. Students will be exposed to more advanced training methods and techniques applying the principles of exercise science. Students will maintain a daily log of workouts and will design an individualized training program to be completed by the end of the first (or third) marking period and performed and evaluated during the second (or fourth) marking period.

PIAA SPORTS/JROTC WAIVER

W141  .5 Credit
PREREQUISITE: Application Required
Students may utilize a PIAA sport or JROTC PT as .5 credit toward their Fitness and Wellness requirement. Sophomores and juniors may have this .5 credits applied toward their following year’s Fitness and Wellness requirement after successful participation in a PIAA team or JROTC PT. This option may only be used one time either during their junior or senior year. PIAA sanctioned sports are: Cross Country, Football, Softball, Basketball, Volleyball, Wrestling, Cheerleading, Track, Baseball, Softball, Golf, Field Hockey, Soccer, Tennis, Swimming, Lacrosse and JROTC PT. PIAA or JROTC PT classes will not be calculated in QPA and class rank.

HEALTH

W142  .5 Credit
PREREQUISITE: None
This is a comprehensive health course that covers a variety of health topics including components of health, nutrition, drug and alcohol use/abuse, preventive violence and abuse, reproductive health, diseases and disorders, and community environment and its effects on health. The course is aimed to promote healthy lifestyles and lifestyle choices by providing students with thorough information on each topic.

EXERCISE SCIENCE

W143  .5 Credit
PREREQUISITE: Must have completed Health successfully. (Recommended for grades 11 and 12)
This is a classroom-based advanced health course that focuses on the study of human movement and of systems, factors, and principals involved in human movement. Students will learn about the effects of physical activity in health and performance, and the factors that influence an individual’s participation in physical activity. This challenging course aims to promote enthusiasm or an active and healthy lifestyle and to emphasize the importance of effective lifestyle practices along with exposing students to various career fields associated with biomechanics and human performance.

CARDIO ENDURANCE/PERSONAL FITNESS

W144  .5 Credit
PREREQUISITE: None
This course’s primary focus is on examining the benefits of and improving cardiovascular endurance and its impact on a healthy lifestyle. Students will learn to set their own goals and develop their own personal fitness plan and learn to assess
that plan. Students will use fitness principles to meet their fitness goals in both cardio exercise but also a variety of circuit training activities. Students will also learn the value and benefits of lifetime fitness activities.

**TEAM SPORTS (SKILLS AND CONCEPTS)**

**W145**

**PREREQUISITE:** None

This course will concentrate on strategies, concepts, terminology, and skill development with an emphasis on teamwork and cooperation. Students will develop a knowledge base of rules for multiple sports including equipment needs. Activities may include, but are not limited to: volleyball, football, softball, soccer, floor hockey, basketball, hardy ball and ultimate Frisbee.

**ADVANCED TEAM SPORTS**

**W146**

**PREREQUISITE:** Must have completed Team Sports successfully.

This course expands on concepts and strategies from Team Sports. Students will be involved in the planning and instruction of activities. Students will develop a team sport lesson plan including instruction and assessment of a sport. Students will also apply coaching strategies within the course.

**LIFELONG FITNESS**

**W147**

**PREREQUISITE:** None

The emphasis of this course is encouraging students to explore and participate in lifelong fitness activities. Students will analyze the history of activities, terminology, and community resources. Students will explore skills necessary for each activity and incorporate fitness testing into chosen activities. Activities may include, but are not limited to: volleyball, tennis, badminton, pickle ball, fitness walking, Frisbee (ultimate and disc), dynamic motion, table tennis and weightlifting.

**ADAPTIVE PHYSICAL EDUCATION**

*Counselors recommend students for this course*

**W139**

**PREREQUISITE:** Adaptive PE must be required in the student’s IEP

The Adaptive Physical Education course applies to all populations with special disabilities. School counselors, in adherence with Special Education requirements, will place students in this course as appropriate. Objectives will be consistent with those of regular physical education. Movement skills, fitness skills and sports should be learned, but class size, equipment, rules, and environmental structure may need to be modified to allow for maximum participation and benefit.
## INDUSTRY BASED LEARNING
### MASTER COURSE LISTING

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<td>B120</td>
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<td>B122</td>
<td>COOP – Healthcare Careers Institute</td>
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<td>B129</td>
<td>COOP – Community Service Learning</td>
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<td>B141</td>
<td>COSTA Academy</td>
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<tr>
<td>B142</td>
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INDUSTRY BASED LEARNING

CAPSTONE COOPERATIVE EDUCATION WORK EXPERIENCE

B119

Up to 3 Credits

PREREQUISITE: Seniors Only; the student must initiate the process of entering the Cooperative Education Program by completing a resume, the Co-op Program Student Recommendation, and the Application for Cooperative Education. Both forms are included in the Co-Op Scheduling Packet. Students also must participate in a formal interview. ALL DEADLINES MUST BE FOLLOWED.

Cooperative Education is one segment of the school-to-work system that enables students to combine academic instruction with occupational instruction through learning on the job in a career area of their choice.

Students have the opportunity to earn school credit in a paid work experience directly related to their educational pathway and career objective in one of the following areas: business, agriculture, construction technology, art or music. Students must carry two full-year courses (two credits) in their chosen career path in both their junior and senior year. ***All programs within Cooperative Education require complete student commitment. Any student starting a program and not completing all curriculum, portfolio and time requirements will receive an “I” grade recorded on their transcript.

COOPERATIVE EDUCATION - ELEMENTARY INTERNSHIP

B120

Up to 3 Credits

PREREQUISITE: Seniors only; the student must initiate the process of entering the Cooperative Education Program by completing a resume, the Co-Op Program Student Recommendation, and the Application for Cooperative Education.

Both forms are included in the Co-Op Scheduling Packet. Students must also participate in a formal interview. ALL DEADLINES MUST BE FOLLOWED. Cooperative Education is one segment of the school-to-work system that enables students to combine academic instruction with occupational instruction through learning on the job in a career area of their choice.

Seniors have the opportunity to earn school credit in an unpaid internship for students who plan to enter the field of elementary education after graduation and after completing post-secondary training. Students will be placed in a classroom assignment.

***All programs within Cooperative Education require complete student commitment. Any student starting a program and not completing all curriculum, portfolio and time requirements will receive an “I” grade recorded on their transcript.
COOPERATIVE EDUCATION DIVERSIFIED OCCUPATIONS

B121  Up to 3 Credits
PREREQUISITE: Seniors only; the student must initiate the process of entering the Cooperative Education Program by completing a resume, the Co-op Program Student Recommendation, and the Application for Cooperative Education. Both forms are located in the Co-Op Scheduling Packet. Students earn school credit for participating in paid and unpaid learning experiences that relate to the field of study or their career objective they plan to pursue after graduation. **ALL DEADLINES MUST BE FOLLOWED.**

Cooperative Education is one segment of the school-to-work system that enables students to combine academic instruction with occupational instruction through learning on the job in a career area of their choice.

Seniors have the opportunity to earn school credit in a paid or unpaid work experience and/or internships directly related to their educational pathway and career objective that they wish to pursue after graduation or after completing post-secondary training.

***All programs within Cooperative Education require complete student commitment. Any student starting a program and not completing all curriculum, portfolio and time requirements will receive an “I” grade recorded on their transcript.***

COOPERATIVE EDUCATION - HEALTHCARE CAREERS INSTITUTE

B122  Up to 1 Credit
PREREQUISITE: Application Process and Interview, Grades 11 and 12
This course is designed to direct Franklin County freshman, sophomore, juniors and seniors in the exploration of various healthcare careers in real life experience. The 18-week HCI course places emphasis on the development of patient care and responsibility, personal strengths and skills, as well as vital soft skills for employment. Students are required to observe in a minimum of 20 departments of the hospital for a period of one or two days, and then spend a concentrated period of time in the one or two departments for the remainder of the semester hours. Students will also be required to attend orientation and information classes, as well as meet class requirements. The entire program takes place on the site of Chambersburg Hospital or at satellite Summit Healthcare offices. Students are responsible for their own transportation to the facilities. Classes meet from 7:30 a.m. – 9:30 a.m., Monday through Friday. The institute is free of charge and the student earns school credit. An application and interview are required.

***All programs within Cooperative Education require complete student commitment. Any student starting a program and not completing all curriculum, portfolio and time requirements will receive an “I” grade recorded on their transcript.***

COOPERATIVE EDUCATION - COMMUNITY SERVICE LEARNING

B129  Up to 2 Credits
PREREQUISITE: Recommended for 10th, 11th and 12th Grade
Students have the opportunity to earn high school credits and gain valuable experience by integrating community service with academic learning.
This experience promotes learning through hands-on participation and provides opportunities to use skills and knowledge in real-life situations such as: Healthcare, Athletic Training, U.S. Military, Horticulture, Elementary and Secondary Education and Pre-School, to name a few. This experience fosters a sense of caring for others by providing a service to the community as volunteers. **Specific criteria are required for participation in the Service Learning Program.**

***All programs within Cooperative Education require complete student commitment. Any student starting a program and not completing all curriculum, portfolio and time requirements will receive an “I” grade recorded on their transcript.***

**COOPERATIVE EDUCATION**

**CHAMBERSBURG HOSPITAL VOLUNTEER PROGRAM**

*B131*  
1 Credit

**PREREQUISITE:** Seniors Only

Students have the opportunity to gain unpaid work experience and high school credit working in a hospital setting through volunteering at Chambersburg Hospital. Students volunteer to: man information desks, perform messenger services, deliver patient mail and flowers, staff the hospital auxiliary shop, help transport patients in wheelchairs, help in various departments, visiting patients, and help people who need prescription assistance.

***All programs within Cooperative Education require complete student commitment. Any student starting a program and not completing all curriculum, portfolio and time requirements will receive an “I” grade recorded on their transcript.***

**COSTA ACADEMY**

*B141*  
Up to 2 Credits

Costa Academy is a subset of the Community Service Learning program that trains students using both virtual classrooms, traditional classrooms, and most importantly by direct hands-on work experience in a “live” fully functioning restaurant and banquet facility. The curriculum is extremely focused on providing work-relevant learning in a way that best fits the abilities, goals and objectives of the individual student. Enrollment is open to students of the Chambersburg Area School District. Graduates will be work-ready and employable from day one of certification by Costa Academy. **Specific criteria are required for participation in the Service Learning Program.**

**COOPERATIVE EDUCATION - SECONDARY INTERNSHIP**

*B142*  
Up to 3 Credits

**PREREQUISITE:** Seniors only; the student must initiate the process of entering the Cooperative Education Program by completing a resume, the Co-Op Program Student Recommendation, and the Application for Cooperative Education.

Both forms are included in the Co-Op Scheduling Packet. Students must also participate in a formal interview. **ALL DEADLINES MUST BE FOLLOWED.**

Cooperative Education is one segment of the school-to-work system that enables students to combine academic instruction with occupational instruction through learning on the job in a career area of their choice.
Seniors have the opportunity to earn school credit in an unpaid internship for students who plan to enter the field of secondary education after graduation and after completing post-secondary training. Students will be placed in a classroom assignment.

***All programs within Cooperative Education require complete student commitment. Any student starting a program and not completing all curriculum, portfolio and time requirements will receive an “I” grade recorded on their transcript.

CHILD CARE INTERNSHIP

*C106  Up to 2 Credits*

**PREREQUISITE:** Seniors Only

This is an unpaid work experience for students in the Child Development Program at CASHS. All assignments are in a nursery school environment. School credit is also earned. Qualifications and supervision for this program is under the direction of the CASHS Child Development Coordinator.

SUPERVISED AGRICULTURAL EDUCATIONAL EXPERIENCE PROJECT I

*G111  1 Credit*

**PREREQUISITE:** Ag Ed Teacher Recommendation

This course is designed for the student wishing to study agricultural and environmental subjects in the agriculture community. A student may receive up to one credit per school year. A supervised agricultural experience project record program shall document 180 hours of experience in the agricultural industry, or a combination totaling 180 hours of project experience, community service and leadership activities. The course will address guidelines to career opportunities.

SUPERVISED AGRICULTURAL EDUCATIONAL EXPERIENCE PROJECT II

*G134  1 Credit*

**PREREQUISITE:** Completion of Supervised Agricultural Educational Experience Project I

As a continuation of or addition to Supervised Agricultural Experience I, this course is designed for the student wishing to study agricultural and environmental subjects in the agricultural community. A student may receive up to one credit per school year. A supervised agricultural experience project record program shall document 180 hours of experience in the agricultural industry, or a combination totaling 180 hours of project experience, community service and leadership activities. The course will address guidelines to career opportunities.

SUPERVISED AGRICULTURAL PROJECT III

*G135  1 Credit*

**PREREQUISITE:** Successful completion of Supervised Agricultural Educational Experience II

As a continuation of or addition to Supervised Agricultural Experience I and II, this course is designed for the student wishing to study agricultural and environmental subjects in the agriculture community. A student may receive up to one credit per school year. A supervised agricultural experience project record program shall document 180 hours of experience in the agricultural industry, or a combination totaling 180 hours of project experience, community service and leadership activities. The course will address guidelines to career opportunities.
PRE-APPRENTICESHIP

IL100

PREREQUISITE: Grade 10

Construction introduces students to the basics of the construction field with a focus on hand tools, power tools, construction drawings, rigging and material handling. Students will learn through practical classroom applications and hands on projects. The Pre-Apprenticeship course will showcase construction math and employment skills for students. Students will gain insight from local construction employers and have the opportunity to network with local business owners. Students who complete the Pre-Apprenticeship course will be prepared to work with local construction employers during the student’s senior year of high school.
# INTERNATIONAL BACCALAUREATE DIPLOMA PROGRAMME
## MASTER COURSE LISTING

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INTERNATIONAL BACCALAUREATE (IB) PROGRAMME

Group 1: Studies in language and literature

**IB LANGUAGE A: LITERATURE HL (2 YEAR COURSE)**

**IB600**  
(1.4 Weight)  
1 Credit per year

**PREREQUISITE:** Honors American Literature and Composition II or teacher recommendation in English 10. The IB Diploma Programme Language A: Literature is a two-year course that promotes the ability to form and support independent literary judgments. This course demands a rigorous reading schedule which will be the vehicle for developing both written and spoken analysis (students will read approximately 6 large works each year). The reading selections are chosen from the IB prescribed list of authors and are suitable for college freshmen in both content and reading level. The works studied include works originally published in English and also translations. Overall, this course promotes a personal appreciation of literature and broadens cultural perspective.

Group 2: Language acquisition

**IB LANGUAGE B SL: SPANISH OR GERMAN (2 YEAR COURSE)**

**IB302**  
(1.2 Weight)  
1 Credit

**PREREQUISITE:** Successful completion of the Honors 1 and 2 levels of language B (German, Spanish)  
The focus of this course is language acquisition and understanding. The language B syllabus approaches the learning of language through meaning. Through the study of the core, students build the necessary skills to reach the assessment objectives of the language B course through the expansion of their receptive, productive and interactive skills. The topics of study are identities, experiences, human ingenuity, social organization, and sharing the planet.

**IB LATIN HL (2 YEAR COURSE)**

**IB303**  
(1.4 Weight)  
1 Credit

**PREREQUISITE:** Honors Latin II with at least a “B” average  
The IB HL course consists of studies in poetry and prose. Students will read, translate, understand, analyze, and interpret selections from Ovid’s Metamorphoses Horace’s Epodes Carmina, and Satire, Maritall’s Epigrams, Sallust’s Bellum Catilinae, Vergils Aeneid,m and Livy’s Ab Urbe Condita. Main themes include love and transromation, social criticism, and villains. In addition, students will complete an IB-required Internal Assessment. The Internal Assessment consists of a research assignment relating to a topic in classical history, literature, language, religion, mythology, art, archaeology, or some aspect of classical influence.

**SPANISH AB INITIO SL (2 YEAR COURSE)**

**IB303**  
(1.2 Weight)  
1 Credit

**PREREQUISITE:** Spanish ab initio is intended for motivated students who have no previous experience in Spanish, or the maximum of one year.  
The IB DP language ab initio course is designed to provide students with the necessary skills and intercultural understanding to enable them to communicate successfully in an environment where Spanish is spoken. The objective of Spanish ab initio is to prepare students to effectively communicate in basic, everyday situations in Spanish. These skills include written and oral expression as well as understanding various forms of literature and speech. This course aims to foster the development of open-minded learners. Students will not only learn to communicate
effectively but also appreciate cultural perspectives different from their own. An independent research paper and an oral assessment are required components of the course.

**Year 1:**
Topics: The individual/identity - self, family, home, celebrations  
Education/social relations - classes, school activities, friends, pastimes  
Travel - maps, directions, transportation, cities and countries  
Food - basic foods, restaurants, markets  
Health - body parts, doctor’s office, daily routine

**Year 2:**
Topics: Leisure/vacations - countryside, city, beach, Spanish-speaking countries, cultural events, directions  
Healthy living - health, diet, visiting the ER  
Food/drink - grocery shopping, cooking at home, restaurant etiquette  
Employment/technology - jobs, salaries, media  
Global challenges - environmental concerns, stereotypes

**Group 3: Individuals and societies**

**IB HISTORY OF THE AMERICAS HL (2 YEAR COURSE)**

**IB601**  
(1.4 Weight)  
1 Credit

**PREREQUISITE:** There are no official prerequisites, but AP World History and/or AP United States History is suggested, as well as the ability to analyze and critique sources, work independently and produce high-level essays. The DP HL history course aims to promote an understanding of history as a discipline, including the nature and diversity of sources, methods, and interpretations. Students are encouraged to comprehend the present by reflecting critically on the past. They are further expected to understand historical developments at national, regional and international levels and learn about their own historical identity through the study of the historical experiences of different cultures.

**Year 1:**
HL Option #1: Emergence of the Americas in Global Affairs (1880-1929)  
Prescribed Subject: The Move to Global War  
HL Option #2: The Second World War and the Americas

**Year 2:**
World History Topic #1: Authoritarian States (20th Century)  

**Assessment:** Throughout the two years, students will be assessed with an internal historical investigation as well as an external examination at the end of the second year.

**IB PSYCHOLOGY HL (2 YEAR COURSE)**

**IB602**  
(1.4 Weight)  
1 Credit

**PREREQUISITE:** "C" or better in Biology

The HL Psychology course aims to develop an awareness of how psychological research can be applied to understand human behavior. There will be a focus on developing an understanding of behaviors through differing perspectives, biological, cognitive, and sociocultural. Students will also understand and use diverse methods of psychological inquiry with sensitivity to the varying ethical issues involved. Topics such as neuroscience, research methods, states of consciousness, sensation, perception, heritability, life-span development, cognition, conditioning and learning, memory, motivation, emotion, personality, health and how culture impacts behavior will be
examined using various perspectives. In addition areas of abnormal psychology, the psychology of human relationships will be studied with more depth. Students will also apply research methodology in the collection of data, analysis of data, testing of hypotheses, and interpretation of complex data and source material. Experimental research methodology will be introduced, along with statistical methods involved in qualitative research in psychology.

**IB INFORMATION TECHNOLOGY IN A GLOBAL SOCIETY SL (1 YEAR COURSE)**

**IB307**

| (1.2 Weight) | 1 Credit |

**PREREQUISITE:** None

Technology plays an increasingly important role in today's global society. In the Information Technology in a Global Society (ITGS) course, students experience first-hand what to expect in a 21st century world that will become increasingly interconnected in technology and the sharing of information. They learn to think critically about the role technology plays in the United States, as well as about its effect on nations and cultures all over the world. The impact and significance of the information age is explored in several social contexts including economic, political, cultural, legal, environmental, historical, ergonomic, and psychological.

**Aims:**

1. To appreciate the key elements of continuity and change that information technology has affected throughout history.
2. To analyze and evaluate social and ethical considerations arising from technology's proliferation in today's society.
3. To understand the various methods and technologies for data collection, description, and analysis used in studies of society and the ways in which complex data can be interpreted.
4. To become familiar with technologies and information tools that enhance communication, facilitate life-long learning, and expand a student's worldview.
5. To demonstrate how technology adds to the integration of disciplines and facilitates the problem-solving process

**Group 4: Sciences**

**IB BIOLOGY HL (2 YEAR COURSE)**

**IB603**

| (1.4 Weight) | 1 Credit |

**PREREQUISITE:** Successful completion of Honors Biology or Biology. High level writing skills suggested.

The IB Curriculum is designed for students with strong critical thinking and problem solving skills. It is an intensive international, inquiry based curriculum that covers all of the material normally covered in the first and second semester of college level biology classes. An independent research project and paper are a required component of the course. The research topic is developed during the first year and must be approved by the instructor by April at the end of the first year. The research and performance of the data collection will take place over the summer and during the 2nd year of the course with completion of the paper reporting the results submitted by the end of February in the second year. A 3-part exam will be conducted in May of the second year. A collaborative Group Project with IB Chemistry and IB Sports, Health, and Exercise Science is also a required component.

**Year 1**

Topics: Cell Biology, Molecular Biology, Genetics, Ecology, Evolution and Biodiversity, Human Physiology, and Independent Research topic development.
Year 2

IB CHEMISTRY HL (2 year course)
IB604
(1.4 Weight) 1 Credit
PREREQUISITE: Successful completion of Honors Chemistry. Completion of Honors or AP Physics are also suggested but not required. Completion of Algebra II with a C or higher. High level writing skills suggested. Students planning on entering the IB Diploma Program must apply for admission. Students do not need to be in the Diploma Program to select IB Chemistry.

The IB Curriculum is designed for students with strong critical thinking and problem solving skills. It is an intensive International, Inquiry based curriculum that covers all of the material normally covered in the first and second semester of college level chemistry classes, plus an in depth introduction to Organic Chemistry and Medicinal Chemistry. An independent research project and paper are a required component of the course. The research topic is developed during the first year and must be approved by the instructor by May at the end of the first year. The research and performance of the data collection will take place over the summer and during the 2nd year of the course with completion of the paper reporting the results submitted by the end of February in the second year. A 3 part exam will be conducted in May of the second year. College credit may be given based on the performance on the research paper, and 3 exams depending on performance. A collaborative Group Project with IB Biology and IB Physiology is also a required component.

Year 1
Topics in year one include Atomic Structure, Quantum electronic configuration, trends of the periodic table, Covalent and Ionic Bonding, Intermolecular forces, hybridization, stoichiometry, thermodynamics, Kinetics, and Independent Research topic development, and equilibrium.

Year 2
Organic Chemistry and spectroscopic determination of organics, Medicinal Chemistry, Redox reactions, Acid and Base reactions, Electrochemistry, completion of Independent research topic which will be a significant portion of the first semester.

Students who drop IB Chemistry after year one will receive a 1.2 weighting instead of the 1.4 weight.

IB SPORTS, EXERCISE AND HEALTH SCIENCE SL (ONE YEAR COURSE)
IB306 (1.2 Weight) 1 credit
PREREQUISITE: No prerequisites required. Successful completion of health education. Exercise Science, and Anatomy and Physiology encouraged.
IB Sports, Exercise and Health Science is an experimental science that combines academic study with the acquisition of practical and investigative skills. The course incorporates the traditional disciplines of anatomy and physiology, biomechanics, psychology and nutrition, which are studied in the context of sports, exercise and health. Throughout the course students will apply scientific principles and critically analyze human performance. The course will also address issues of international dimension and ethics by considering sports, exercise and health relative to the individual and in a global context. Topics of will study include: anatomy, exercise physiology, energy systems, movement analysis, skill in sport and measurement and evaluation of human performance. Additionally, the course will also cover optimizing physiological performance and nutrition for sports, exercise and health. High level writing, analyzing and communication skills are encouraged.
Group 5: Mathematics

**IB MATH APPLICATION AND INTERPRETATION (2 YEAR COURSE)**

*IB305*  
**1 Credit**  
**1.2 Weight**

**PREREQUISITE:** Completion of Algebra II. Personal graphing calculators (TI-83+) are required.  
Math Application and Interpretation is designed for students who enjoy describing the real world and solving practical problems using mathematics. The course is also designed for those who are interested in harnessing the power of technology alongside exploring mathematical models and enjoy the more practical side of mathematics. The syllabus is chosen to provide the students with a wide range of applicable mathematical topics that will serve as a basis for their project. Topics will include Algebra II, Geometry, Trigonometry, Theory/Logic, Probability, Statistics, and some Calculus. Graphing calculators are used extensively in this course. The course also includes the internal assessment of project work; written work based on personal research, guided and supervised by the teacher. The external assessments include Paper 1: a 15 question short-answer exam based on topics from the course syllabus and Paper 2: five extended response questions.

Group 6: Arts

**IB MUSIC SL**

*IB308*  
**1 Credit**  
**1.2 Weight**

**REQUIREMENTS:** In order to complete the performance component of this course, students must enroll or be enrolled in Glee Club, Band, Symphony or study music privately. Students do not need to be enrolled in the IB Program to select IB Music.  
IB Music is designed for the student who wants to know more about the components of music and its historical development. Emphasis is on Theory, Music History, World Music, and Performance. By developing a better understanding of the art of music through studying its basic tools, its historical background, and cultural connections, the student will possess a better aesthetic appreciation for quality music of the past and present.

IB Music is a rigorous elective designed to be of value to all students who are genuinely interested in music. For all students, this course will provide a foundation for future study and an appreciation of a wide variety of music. For students who are active in choral or instrumental performing organizations, this course will provide both historical and theoretical insight into the music they are performing. For students who plan continued study of music after graduation from high school, IB Music should provide the necessary preparation.

**IB MUSIC HL**

*IB312*  
**1 Credit**  
**1.4 Weight**

**REQUIREMENTS:** HL Music students follow the same course of study as SL Music students and, in addition, will additionally study composition. Music Theory I is a prerequisite for students electing HL Music.

DP Core Requirements

**THEORY OF KNOWLEDGE, TOK (2 YEAR COURSE)**

*IB101*  
**.25 Credit**

**Time allotment:** The Theory of Knowledge (TOK) course is designed solely for those students enrolled in the IB Diploma Programme. TOK offers students and their teachers the opportunity to: reflect critically on diverse ways of knowing and on areas of knowledge  
Consider the role and nature of knowledge in their own culture, in the culture of others and in the wider world.
It prompts students to be aware of themselves as thinkers, encouraging them to become more acquainted with the complexity of knowledge.

Helps students recognize the need to act responsibly in an increasingly interconnected but uncertain world.

As a thoughtful and purposeful inquiry into different ways of knowing, and into different kinds of knowledge, TOK is composed almost entirely of questions. The most central of these is "How do we know?" It is a stated aim of TOK that students should become aware of the interpretative nature of knowledge, including personal ideological biases, regardless of whether, ultimately, these biases are retained, revised or rejected. TOK also has an important role to play in providing coherence for the student as it transcends and links academic subject areas, thus demonstrating the ways in which they can apply their knowledge with greater awareness and credibility.

Students are introduced to and become proficient in the 8 Ways of Knowing (WOK): language, reason, sense perception, emotion, faith, intuition, imagination and memory. Additionally, students are given opportunities to explore to what extent the WOKs affect the 8 Areas of Knowledge (AOK): Natural Sciences, Human Sciences, Mathematics, the Arts, Indigenous Knowledge Systems, Religious Knowledge Systems, History and Ethics. Students give a presentation which demonstrates their knowledge of how the WOKs and AOKs are inextricably linked.

Finally, in the last part of the course, students actively engage themselves in various texts, film clips, poetry, debates and other miscellaneous media in order to further build their understanding of the inter-relatedness of the WOKs and the AOKs.

**CREATIVITY, ACTIVITY, SERVICE (CAS)**

*IB100*  
*PREREQUISITE:* None  
Creativity, Activity, Service (CAS) is the heart of the DP, involving students in a range of activities that take place alongside their academic studies. The component’s three strands, often interwoven with particular activities, are characterized as follows:

- **Creativity** – exploring and extending ideas leading to an original or interpretive product or performance. This may include visual and performing arts, digital design, writing, film, culinary arts and crafts.
- **Activity** – physical exertion contributing to a healthy lifestyle. Pursuits may include individual and team sports, dance, outdoor recreation, fitness training, and any other form of physical exertion that purposefully contributes to a healthy lifestyle.
- **Service** – collaborative and reciprocal engagement with the community in response to an authentic need. Through Service, students develop and apply personal and social skills in real-life situations involving decision-making, problem solving, initiative, responsibility, and accountability for their actions.

Students will work with a CAS Advisor (CASHS Faculty member) over a period of 18 months to fulfill the CAS responsibilities.  
*The successful completion of CAS will also fulfill a Diploma Programme student’s ICT graduation requirement for the CASD.*

**EXTENDED ESSAY**

*IB102*  
*PREREQUISITE:* None  
The extended essay is an in-depth study of a focused topic chosen from the list of approved DP subjects. It is a compulsory, externally assessed piece of independent research/investigation.
Presented as a formal piece of scholarship containing no more than 4,000 words, it is the result of approximately 40 hours of independent student work, and concluded with a short interview, with the supervising teacher. The supervising teacher will be a CASHS faculty member who advises the student over the 18 month time period.
## NJROTC

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### NJROTC Curriculum Overview

The Navy Junior Reserve Officers Training Corps is a credit-awarding elective curriculum focused on Citizenship Development and Leadership. It is designed to equip students with the skills needed to succeed in life – as a college student, as a career professional or in a trade. It is a full-year program which students may begin at the beginning of any year in their high school career. By design, the curriculum is progressive and more advanced courses require the completion of pre-requisites as described in the course descriptions. Intentionally designed to challenge each student both mentally and physically, the curriculum outcomes will be based upon each student’s individual performance and level of effort. The program is taught by instructors who are retired Navy, Marine Corps, and Coast Guard officer and enlisted personnel. The NJROTC accredited curriculum emphasizes citizenship and leadership development, as well as our maritime heritage, the significance of sea power, and naval topics such as the fundamentals of naval operations, seamanship, navigation and meteorology. Classroom instruction is augmented throughout the year by extra-curricular activities of community service, academic, athletic, drill and orienteering competitions, field meets, visits to naval or other activities, marksmanship training, and physical fitness training.

The CASHS NJROTC program is constructed to include two days of academics, one day of dedicated physical fitness training, one day of uniform inspection and one day of drill instruction. ALL enrolled students are required to wear issued NJROTC uniforms one day per week (as designated by the instructors) and the issued NJROTC Physical Training (PT) uniform during their class period for PT. At the instructors’ discretion, an additional day may be designated for business casual. Grooming standards apply any time the Cadet is in a prescribed uniform. Grading criteria include, but are not limited to, participation, enthusiasm, military bearing and appearance, compliance with policy (including school rules), and academic and fitness results. As a progressive leadership development program, many aspects of the curriculum are student/peer led and administered. Older, more experienced students will be placed in positions of leadership and authority with the expectation that they will plan and execute unit activities and that they will instruct younger students in basic JROTC knowledge.

All instruction will be grounded in the Navy and Marine Corps Core Values of HONOR, COURAGE, and COMMITMENT.
JROTC I – INTRODUCTION TO LEADERSHIP

JROTC LEADERSHIP I

JROTC I 1 Credit
JROTC I is for students in their first year of the JROTC Program. Enrollment is open to students in grades 9-12 who desire to build a foundation of leadership, character and organizational skills. Curriculum includes an introduction to JROTC, basic military courtesies and customs, wear and care of the JROTC uniform, personal hygiene, military rank and insignia. JROTC I Curriculum is capped at 100 students.

JROTC II & III – INTERMEDIATE LEADERSHIP

JROTC II 1 Credit
JROTC II/III is for students in their second and third years of the NJROTC Program. Enrollment is open to students in grades 10-12 who have previously completed JROTC I. JROTC II/III is an 8 marking period program that is taught on a two-year schedule. JROTC II/III may be taken for one or both years. The JROTC II/III curriculum will further develop the traits of citizenship while introducing Cadets to the technical areas of naval science and the role of the U. S. Navy in maritime history.

JROTC IIIB 1 Credit
JROTC IIIB is a fourth-year cadet program designed for those cadets who are not recommended/selected for JROTC IV. This program will build on the Cadets’ previous experiences through a series of independent study topics, leadership building experiences, and mentoring with the JROTC Instructors. Additionally, JROTC IIIB Cadets will be placed in challenging leadership and administrative roles in the company organization.

JROTC IV – ADVANCED LEADERSHIP STUDIES

JROTC IV 1 Credit
JROTC IV Advanced Leadership Studies is for selected students in their 4th year of enrollment. Enrollment in JROTC IV is restricted to Seniors who have completed JROTC I and both years of JROTC II/III AND are specifically recommended by the Senior Naval Science Instructor. Recommendation will be based on an cumulative assessment of the Cadets progress and performance in JROTC over the preceding 3 years. Selection criteria will include overall academic standing, JROTC aptitude, military appearance and bearing, physical fitness progress and results and disciplinary record. JROTC IV will provide an opportunity for 4th year students to expand their leadership experience by assisting instructors in the administration of the JROTC I and JROTC II/III curricula. The intent is to assist upper classmen in understanding leadership and improve their leadership skills by putting them in positions of authority, under supervision, then helping them analyze the reasons for their varying degrees of success throughout the year. Classroom activities include seminars, reading assignments, classroom presentations, and practical work with younger cadets. Students are mentored/guided in their preparation for life after high school to include college preparation, scholarship applications, and the variety of career choices that are available to them.
JROTC DRILL & CEREMONIES (A.K.A. “DRILL TEAM”)

JROTC Drill is open to students who have completed, at a minimum, JROTC 1. Second year students desiring to participate in JROTC Drill must also be concurrently enrolled in JROTC 2/3. 3rd and 4th year students may obtain a JROTC 2/3 waiver from the Senior Naval Science instructor based upon course load and past performance in JROTC. JROTC Drill enrollment is limited to a maximum of 50 students.

JROTC Drill activities include armed and unarmed platoon drill, exhibition drill, color guard, daily CASHS flag-raising, travelling competitions, parades, and color details for both CASHS sporting events and local civic groups.

NROTC PHYS ED WAIVER

Students may utilize JROTC Waiver as .5 credits toward their Fitness and Wellness requirement. Sophomores and juniors may have this .5 credits applied toward their following year’s Fitness and Wellness requirement after successful participation in JROTC PT. This option may only be used one time either during their junior or senior year and cannot be in conjunction with PIAA Sports. JROTC Waiver classes will not be calculated in QPA and class rank.
<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
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<th>Credit Value</th>
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*Students are selected by the IEP team for the classes listed above*
**MATHEMATICS DEPARTMENT**

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<td>Trigonometry</td>
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<td>M113</td>
<td>Probability &amp; Statistics</td>
<td>1.0</td>
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<td>M115</td>
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<td>Algebra I</td>
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<tr>
<td>M308</td>
<td>Honors Geometry</td>
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<tr>
<td>M309</td>
<td>Honors Algebra 2</td>
<td>1.2</td>
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<td>M500</td>
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<tr>
<td>M504</td>
<td>AP Computer Science A</td>
<td>1.4</td>
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*Students selected by counselors for this course*

**Guidelines for the Mathematics Department**

- Students are required to receive 4 math credits.
- A student will receive 2 CASD math credits for any double period math class; i.e., Algebra 1.
- Any student that takes Algebra I or Algebra II prior to 9th grade and earns a “C” will be able to count this credit toward the graduation requirements.
- Any student that enrolls in a course in which the student receives college credit will receive one CASD math credit.
- In addition, students may take the following as a 4th math credit:
  - Entrepreneurship 0.5 Credit
  - Accounting 1, 2, 3 with Computer Applications 1.0 credit
  - Personal Financial Management 0.5 credit
  - AP Chemistry 1.0 credit
  - AP Physics 1.0 credit
  - AP Macroeconomics 1.0 credit
  - AP Computer Science Principles 1.0 Credit
  - Mobile App Dev– Programming Basics 0.5 Credit
  - Mobile App Dev- Adv Programming 0.5 Credit
## Chambersburg Area School District Mathematics Continuum

<table>
<thead>
<tr>
<th>Traditional Academics</th>
<th>International Baccalaureate (IB)</th>
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<tbody>
<tr>
<td><strong>Grades 9 and 10</strong></td>
<td><strong>Grade 9</strong></td>
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<tr>
<td>Algebra 1 (double period)</td>
<td>Honors Algebra 2</td>
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<td>Algebra 1 (single period)</td>
<td>Honors Geometry</td>
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<tr>
<td>Algebra 2</td>
<td></td>
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<tr>
<td>Geometry</td>
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<tr>
<td>Honors Algebra 2</td>
<td>grade 10</td>
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<tr>
<td>Honors Geometry</td>
<td></td>
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<tr>
<td>Mathematical Approach to Problem Solving</td>
<td>Pre-calculus</td>
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<tr>
<td>Computer Programming</td>
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<td>Conceptual Statistics</td>
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<table>
<thead>
<tr>
<th><strong>Grades 11 and 12</strong></th>
<th><strong>Electives:</strong></th>
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<tbody>
<tr>
<td>Algebra 2</td>
<td>Entrepreneurship .5</td>
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<tr>
<td>Geometry</td>
<td>Accounting 1, 2, 3</td>
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<td>Honors Algebra 2</td>
<td>Personal Financial Management .5</td>
</tr>
<tr>
<td>Honors Geometry</td>
<td>Dollars and Sense .5</td>
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<td>Pre-calculus</td>
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<tr>
<td>Probability and Statistics .5</td>
<td>AP Computer Science A</td>
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<tr>
<td>Trigonometry .5</td>
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</tr>
<tr>
<td>AP Statistics</td>
<td>AP Macroeconomics</td>
</tr>
<tr>
<td>AP Calculus AB</td>
<td>AP Chemistry*</td>
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<td>AP Calculus BC</td>
<td>AP Physics*</td>
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<td>AP Computer Science A</td>
<td>AP Economics*</td>
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<tr>
<td>Mathematical Approach to Problem Solving</td>
<td>Mobile App Dev – Programming Basics</td>
</tr>
<tr>
<td>Conceptual Statistics</td>
<td>Mobile App Dev – Adv Programming</td>
</tr>
</tbody>
</table>

*Electives:*
- Entrepreneurship .5
- Accounting 1, 2, 3
- Personal Financial Management .5
- Dollars and Sense .5
- Computer Programming
- AP Computer Science A
- AP Computer Science Principles
- AP Macroeconomics
- AP Chemistry*
- AP Physics*
- AP Economics*
- Mobile App Dev – Programming Basics
- Mobile App Dev – Adv Programming

*A course cannot simultaneously count toward credits in two departments. For example, a student cannot count AP Physics as both a CASD math and CASD science credit.*
MATHEMATICS DEPARTMENT

ALGEBRA I

M104 1 Credit

PREREQUISITE: Completion of Pre-Algebra
This course is designed to help students successfully transition from pre-algebraic to algebraic concepts. Topics include constructing, analyzing, and modeling functions, systems of equations and inequalities, operations with polynomials, basic probability, and an introduction to quadratic functions. Problem solving is emphasized throughout all concepts.

GEOMETRY

M105 1 Credit

PREREQUISITE: Successful completion of Algebra I
Geometry provides students with experiences that deepen the understanding of two and three-dimensional objects and their properties. Deductive and inductive reasoning as well as investigative strategies in drawing conclusions study of: (1) points, lines, angles and planes; (2) polygons, with a special focus on quadrilaterals, triangles, right triangles and; (3) circles. An understanding of proof and logic is developed.

HONORS GEOMETRY

M308 (1.2 Weight) 1 Credit

PREREQUISITE: Successful completion of Algebra I
Geometry provides students with experiences that deepen the understanding of two and three-dimensional objects and their properties, and develops logical reasoning skills. Topics analyzed in this Proof-Based Honors Geometry course will include the following: basic foundations of Geometry; polygons, with a special focus on quadrilaterals, triangles, and right triangles; relationships between similar and congruent figures; circles and their characteristics and relationships to triangles and trigonometric functions, and logical reasoning through the use of both inductive and deductive reasoning. Students will apply their understanding to real worlds and career situations. This course is intended for the higher-level students who plan to pursue college and STEM careers. Topics in the Honors Geometry course will be discussed at an accelerated pace, with higher academic student expectations, and a focus on students using their understanding to prove geometry relationships as well as apply them to real world situations.

ALGEBRA II

M106 1 Credit

PREREQUISITE: Successful completion of Algebra I
Algebra II builds on the foundation of Algebra I. Interdisciplinary connections show how math is related to other areas of study. Students will relate algebraic models to the real world, analyze nonlinear equations/inequalities, relate exponential and logarithmic functions, perform operations with radicals and complex numbers, study quadratic functions and equations and complex numbers.
HONORS ALGEBRA II

M309
(1.2 Weight) 1 Credit

PREREQUISITE: Successful completion of Algebra I

Algebra II builds on the foundation of Algebra I. Interdisciplinary connections show how math is related to other areas of study. Students will relate algebraic models to the real world, analyze nonlinear equations/inequalities, relate exponential and logarithmic functions, perform operations with radicals and complex numbers and study relations, functions, rational expressions, quadratic functions and equations, complex numbers, independent/dependent/compound probability, and sequences and series. This course is for the higher-level math students who have established an in-depth understanding of Algebra I and will consist of minimal review of Algebra I skills. Topics in this one-year honors course will be discussed at an accelerated pace, with higher academic expectations of the students. Students will both apply their understanding to real world situations as well as explore a more in-depth theoretical understanding. Students who intend to enter college and pursue a STEM related career should select this Algebra II Course.

CONCEPTUAL STATISTICS

M311
(1.2 Weight) 1 Credit

PREREQUISITE: Successful completion of Algebra I

This course integrates previous mathematical knowledge in order to provide students with deeper learning experiences of Statistics that include collecting, describing and summarizing data, experimental design, drawing valid samples, and creating surveys. Students will also use rules of probability to find the likelihood that certain events or combinations of events occur and interpret the results of their findings. This course is a highly specialized statistics course that prepares students to compete in the real world for the increasing number of available STEM careers.

TRIGONOMETRY

M112
.5 Credit

PREREQUISITE: Successful completion of Algebra II and Geometry

The primary objective of this course is to develop a full understanding of the fundamental concepts of trigonometry and to show how trigonometry can be used to model real-life problems. This course covers trigonometric functions, their basic properties and graphs, identities, inverse trigonometric functions, solving trigonometric equations, and solutions of triangle.

PROBABILITY & STATISTICS

M113
.5 Credit

PREREQUISITE: Successful completion of Algebra I

This course is an introduction to elementary methods and techniques in probability and statistics. Topics include sampling, frequency distributions, elementary probability, discrete and continuous probability distributions, interval estimation, hypothesis testing, and simple correlation.
MATHEMATICAL APPROACH TO PROBLEM SOLVING

M115  
1 Credit

PREREQUISITE: None

This course emphasizes mathematical reasoning and problem solving skills needed for students to become informed citizens and productive members of the workforce. Authentic, project-based learning activities embedded into real world situations and current events incorporate algebraic, geometric and statistical concepts as well as academic standards for career and work readiness.

COMPUTER PROGRAMMING AND SOFTWARE DEVELOPMENT

M107  
1 Credit

PREREQUISITE: Algebra I

This course will teach the basics of the computer programming language to high school level students. The students will learn to write programs and complete programming tasks in the Python programming language mainly through animation and graphics. Students will use algorithms and logic to write code using variables, functions and arguments, conditional statements (decision-making), methods, and lists and loops. Students will learn how to write readable code, identify errors, and debug their programs. Projects and hands-on programming will be a major part of the course.

PRE-CALCULUS

M302  
(1.2 weight)  
1 Credit

PREREQUISITE: Successful completion of Honors Geometry and Honors Algebra II

This course is intended to prepare the student for Calculus and covers advanced mathematical concepts. Topics in the curriculum include: systems of equations and inequalities, rational functions, continuity of functions, polynomial functions, trigonometry, polar coordinates and complex numbers, exponential and logarithmic functions, vectors, parametric equations, conic sections and derivatives. A graphing calculator is required for this course.

AP CALCULUS AB

M500  
(1.4 Weight)  
1 Credit

PREREQUISITE: Successful Completion of Pre-Calculus

The major concepts in differential and integral calculus will be illustrated and interrelated; the many types of problems evolving from these concepts will be presented and practiced. A goal of the course is to provide an opportunity to successfully complete the AP exam, and possibly receive advanced placement and/or credit in college. Toward this end, additional review, practice and help sessions may be scheduled for out-of-class time. Practice through homework completion is necessary. Due to possible scheduling conflicts, students may have to choose among the various AP offerings. Taking an AP course does not automatically guarantee that a student will score high enough to receive AP credit on the college level. Check with individual colleges for their policy on AP exam scores. A graphing calculator is required for this course and should be brought to class every day. The TI-84, TI-84 plus, TI-86, or TI-89 are all good choices.

AP CALCULUS BC

M502  
(1.4 Weight)  
1 Credit

PREREQUISITE: Successful Completion of AP Calculus AB

AP Calculus BC is designed for the able and diligent mathematics student who has successfully completed coursework through College Calculus and/or AP Calculus AB. Material covered includes: a review of all AB topics and further topics involving continuity, differentiation, integration, infinite series, and polar/parametric/vector functions. Students completing this course are prepared, and expected, to take the BC level of the Advanced Placement Examination. A
A graphing calculator is required for this course and should be brought to class every day. The TI-84, TI-84 plus, TI-86, or TI-89 are all good choices.

**AP Computer Science A**

*M504*  
**1 Credit**  
**PREREQUISITE:** Successful completion of Algebra I

AP Computer Science A is equivalent to a first-semester, college-level course in computer science. A goal of the course is to provide an opportunity to successfully complete the AP exam, and possibly receive advanced placement and/or credit in college. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java language. The course is project intensive throughout the curriculum.

**AP Statistics**

*M501*  
**1 Credit**  
**PREREQUISITE:** Successful Completion of Probability and Statistics and/or successful completion of Pre-Calculus

The purpose of the AP course in statistics is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students will be exposed to four broad conceptual themes: 1) observing patterns and departures from patterns; 2) deciding what and how to measure treatments or statistics, 3) producing models using probability theory; and 4) simulation and confirming statistical models. Due to possible scheduling conflicts, students may have to choose among the various AP offerings. Taking an AP course does not automatically guarantee that a student will score high enough to receive AP credit on the college level. Check with individual colleges for their policy on AP exam scores. A graphing calculator is required for this course and should be brought to class every day. The TI-84, TI-84 plus (recommended), TI-86, or TI-89 are all good choices.
### MUSIC MASTER COURSE LISTING

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<tr>
<td>J103</td>
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<tr>
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<td>Bell Choir</td>
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<tr>
<td>J119</td>
<td>Guitar Ensemble</td>
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<tr>
<td>J120</td>
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<td>J303</td>
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</table>

### SUGGESTED SEQUENCE IN MUSIC

**Grade 9:**
- Band
- Symphony
- Glee Club – 9/10
- Jazz Band – 9/10
- Electives

**Grade 10:**
- Glee Club – 9/10
- Band
- Symphony
- Jazz Band – 9/10
- Electives

**Grade 11:**
- Glee Club – 11/12
- Jazz Band – 11/12
- Band
- Symphony
- Electives

**Grade 12:**
- Glee Club 11/12
- Jazz Band – 11/12
- Band
- Symphony
- Electives

*Career Magnet School and Career Tech students may enroll in Band and/or Symphony only.*
MUSIC DEPARTMENT

BAND A

J105

1 Credit

PREREQUISITE: Instrumental Ability and Audition

Members of the band are selected by audition with the band director. Band rehearses each morning from 7:25 to 8:04. Participation in other instrumental ensembles requires being in band. Participation includes band camp, football games, parades, formal concerts, and exhibitions. Some extra rehearsals are required. Students in grades 9, 10, 11 and 12 are eligible. Career Technology and Career Magnet students may be scheduled in the band.

BAND B

J106

.75 Credit

PREREQUISITE: Instrumental Ability and Audition

Members of the band are selected by audition with the band director. Band rehearses each morning from 7:25 to 8:04. Participation in other instrumental ensembles requires being in band. This band course is designed solely for Fall athletes. Given the demands and rigor of athletic participation, the extra-curricular component of regular marching band is complicated and difficult to fulfill. Students electing this course may attend and participate in travel, games, and parades as their schedules permit, pending approval of the director. Participation includes 2nd, 3rd, and 4th marking periods along with respective parades, formal concerts, and exhibitions. Some extra rehearsals are required. Students in grades 9, 10, 11 and 12 are eligible. Career Technology and Career Magnet students may be scheduled in the band.

BAND C

J119

.5 Credit

PREREQUISITE: Audition into Guard or Auxiliary Units

Members of the band are selected by audition with the band director and guard advisors. Band rehearses each morning from 7:25 to 8:04. Participation in other instrumental ensembles requires being in band. This band course is designed solely for Guard and Auxiliary Units that participate in Fall and Spring Marching but not the indoor season. Career Technology and Career Magnet students may be scheduled in the band.

JAZZ BAND – GRADES 9/10

J107

1 Credit

PREREQUISITE: Band A or Band B, instrumental ability, audition, proper instrumentation

Membership in the jazz band is determined by audition. Only those instruments used in such an ensemble are screened and students must show an above-average ability in reading, sight-reading, and overall ability.

JAZZ BAND – GRADES 11/12

J107

1 Credit

PREREQUISITE: Band A or Band B, instrumental ability, audition, proper instrumentation

Membership in the jazz band is determined by audition. Only those instruments used in such an ensemble are screened and students must show an above-average ability in reading, sight-reading, and overall ability.
GLEE CLUB 11th and 12th

J103

PREREQUISITE: See Mrs. Stahl
This chorus class is open to all interested singers. Glee Club is a scheduled class during the school day with concerts in December and May. Students learn and perform a wide variety of music including Classical, Multicultural, Jazz, and Pop while gaining vocal and music reading skills.

GLEE CLUB 9th and 10th

J111

PREREQUISITE: See Mrs. Stahl
This chorus class is open to all interested singers. Chorus is a scheduled class during the school day with concerts in December and May. Students learn and perform a wide variety of music including Classical, Multicultural, Jazz, and Pop while gaining vocal and music reading skills.

MUSIC THEORY I

J300

(1.2 Weight)

PREREQUISITE: Grades 9, 10, 11, 12
Students must also be currently enrolled in band, chorus, or orchestra or studying music privately with an approved performance concentration taught by an approved certified instructor. The ability to read and perform music is essential for development in this class. Guitar students that read tabulature only will find this class very difficult.

Previously titled Music Sight-Singing & Dictation, this course is designed for students that want to strengthen basic music fundamental skills and improve their ability to sing music at sight. Dictation is used as part of the course to help with aural skills and the reading of melody, harmony and rhythm. This course is of great value to students involved in musical organizations in or out of school and those students planning to pursue further training in music after graduation. Fundamentals of Music Theory I are essential components of university auditions and placement exams.

AP MUSIC THEORY

J501

(1.4 Weight)

PREREQUISITE: Music Theory I or Music Supervisor Approval
Students must have an approved performance concentration which includes daily application of theoretical knowledge through music notation. Guitar tablature and “playing by ear” are not acceptable. Suitable concentrations include singing in chorus or performing on a musical instrument in band, orchestra, or studio lessons. It is highly recommended that CASHS Music Theory I is taken prior to scheduling this class. If that is not possible, CASHS has supplementary workbooks that can prepare musically literate students for AP Music Theory.

Objectives:

- To learn basic musical language and grammar including notation, harmonic analysis, and part writing which will lead to thorough audiation skills. This will enable music composition and advanced music theory knowledge.

- To obtain and practice the dictation/ listening skills required for sight reading musical literature.
➢ To recognize the development of music from an historical and cultural perspective and extend musical awareness beyond music currently familiar to the student.

➢ To prepare for the AP Music Theory Exam taken upon completion of the course.

**MUSIC THEORY II**  
*J303*  
*(1.2 Weight)*  
1 Credit

**PREREQUISITE:** Music Theory I or AP Music Theory. Students must also be currently enrolled in band, chorus, or orchestra or studying music privately with an approved performance concentration taught by an approved certified instructor. The ability to read and perform music is essential for development in this class.

Previously titled Music Technology and Music Theory III. This course the highest level of the music learning sequence. It is all about music composition and an introduction to various elements of music technology, including synthesizer performance and programming and MIDI (musical instrument digital interface), and using notation and sequencing software to create compositions and arrangements. This is a "hands on" lab course. Students use computers, synthesizers and recording equipment to create individual and class projects. Recommended for students going into college music programs. The number of computers and synthesizers available limits class size.

**SYMPHONY**  
*J109*  
1 Credit

**PREREQUISITE:** Instrumental Ability and Audition

Members of the orchestra are selected by audition with the orchestra director. Symphony Orchestra rehearses on Thursday’s after school from 3:30 – 5:10 p.m. and string players attend a group lesson for one full period each week. Students in grades 9, 10, 11 and 12 are eligible. Career Technical students may be scheduled for orchestra.

**GENERAL MUSIC**  
*J115*  
*.5 Credit

**PREREQUISITE:** None

Students will study music through the ages, world music, popular music, and learn to play the piano and write a melody.

**Music through the ages** – Students will create a “radio show” from a time period in history, play music and announce events from that time. Through this, students will learn what music was popular at a particular time.

**World Music**- Students will sing and play music of Latin America, African, African-American, Native American and Japanese cultures. Drumming and singing will be a large part of this.

**Popular Music** – Students will choose a style, artist, or group to research and present to the class.

**Piano** – Students will learn to play basic songs on the piano, using the keyboards, and will write their own melody.

Students will gain a broad understanding of many music topics in a largely participation-based class.
BELL CHOIR  
J104  .5 Credit  
PREREQUISITE:  Glee Club membership, musical ability, willingness to rehearse during lunch  
Membership is capped at 12 ringers in each choir to play three octaves of handbells. Members are selected by the director from Glee Club Membership based on ability, experience and musicianship.

INTRODUCTION TO PIANO  
J113  .5 Credit  
PREREQUISITE: None  
Students will learn to play the piano from a beginner level. Within a given lesson, students will be able to progress at their own pace. Students will receive group and individual instruction while practicing individually on the keyboards with headsets. Students will learn to read music and play for the teacher. Students will also perform individually and in groups.. This course is not for experienced piano students.

ADVANCED PIANO  
J110  1 Credit  
PREREQUISITE: Students must be currently enrolled in band, chorus, or orchestra or earned an “A” in Introduction to Piano or has taken private lessons from a qualified teacher. The ability to read and perform music is essential for this class. It is designed to strengthen the advanced beginner to intermediate student’s keyboard skills. Students will study hand positions, fingering, rhythm, sight-reading, intervals, chords and scales. Students will perform in class recitals.

BEGINNING GUITAR  
J114  .5 Credit  
PREREQUISITE: None  
Students will learn to play the guitar from a beginner and intermediate level. Within a given lesson, students will be able to progress at their own pace. Guitarists will receive group and individual instruction while practicing individually. Students will participate in performance assessments and recitals, performing individually and in groups. Upon completion of this course, students will be able to play proficiently using chords and individual treble clef notes in first and second position. Students will also gain an understanding of basic music theory applicable to the guitar. Experienced players should not take this class.

GUITAR ENSEMBLE  
J119  1 Credit  
PREREQUISITE: Beginning Guitar or Teacher Approval  
Students will learn to play guitars with other players in a musical performing ensemble at an intermediate to advanced level. Students must have their own guitars and optional amps. This is a performance based ensemble. Students must know how to read music. Concerts and recitals will be scheduled as well as limited engagements in the community. Experienced players should take this class.

PERFORMING ENSEMBLES  
PREREQUISITE: Auditions in Band, Glee Club, Symphony  
Membership in Choristers, Pep Band, Steel Cantamos Band, Bell Choir, Combo, and Symphonette is determined by the directors of Band, Glee Club and Symphony. Members of these groups should contact the director if interested in a performing ensemble.
SCIENCE MASTER COURSE LISTING

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<td>S104</td>
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<td>S105</td>
<td>Chemistry</td>
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SUGGESTED SEQUENCES IN SCIENCE

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<td>Environmental Science</td>
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<td>Chemistry or Honors Chemistry</td>
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<tr>
<td>AP Electives</td>
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<tr>
<td>Honors Human Anatomy and Physiology</td>
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*Higher level courses available based on prerequisites*
SCIENCE DEPARTMENT

BIOLOGY

S101  
1 Credit

PREREQUISITE: None; Grade 10 only
Students enrolled in Biology will receive instruction in basic biological principles, chemical basis for life, bioenergetics, homeostasis and transport, cell growth and reproduction, genetics, theory of evolution, and ecology. A course in biology and successful completion of the Biology Keystone Exam is required for graduation.

HONORS BIOLOGY

S301  
(1.2 weight)  
1 Credit

PREREQUISITE: None
Students enrolled in Honors Biology will receive instruction in basic biological principles, the chemical basis for life, bioenergetics, homeostasis and transport, cell growth and reproduction, genetics, the theory of evolution, and ecology. Topics in this one year honors class will be covered at an accelerated pace and with higher academic expectations of the student. Students
who intend to enter college and pursue a STEM related career should select this biology course. The Biology Keystone Exam will be administered at the conclusion of this course. Scoring proficient or advanced on the Biology Keystone Exam is a graduation requirement.

**HONORS HUMAN ANATOMY & PHYSIOLOGY**

*S303*  
*(1.2 weight)*  
*1 Credit*  

**PREREQUISITE:** Satisfactory completion of Biology. Completion of a chemistry course is strongly recommended, may be concurrent.

The Human Anatomy and Physiology course is designed for students who want to learn more about the human body and how it works. Organization of the human body is discussed using anatomical and physiological terminology. The eleven major human body systems are examined with a particular emphasis on structure and function as well as disorders. The course applies principles of Anatomy and Physiology to real world medical conditions and incorporates inquiry based labs. The course is designed to develop critical thinking and analyzing skills consistent with an introductory college style experience. Students interested in medically related careers, exercise, or health would benefit from the content of this course.

**AP BIOLOGY**

*S500*  
*(1.4 weight)*  
*1.5 Credit*  

**PREREQUISITE:** Completion of Honors Biology; completion of a Chemistry course, may be concurrent.

The AP Biology course is a college-level biology course designed to be the equivalent of a two-semester college introductory biology course usually taken by Biology majors during their first year. Students cultivate their understanding of biology through inquiry-based investigations as they explore the topics of evolution, cellular processes, genetics, information transfer, ecology, and interactions. This course requires that twenty-five percent of the instructional time be devoted to hands-on laboratory work with an emphasis on inquiry-based investigations.

**AP ENVIRONMENTAL STUDIES**

*S503*  
*(1.4 weight)*  
*1 Credit*  

**PREREQUISITE:** Teacher Recommendation.

The AP Environmental Science course is designed to be the equivalent of a one-semester, introductory college course in environmental science, through which students engage with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risk associated with these problems, and examine alternative solutions for resolving or preventing them. Environmental Studies is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography.

**PHYSICS**

*S102*  
*1 Credit*  

**PREREQUISITE:** Satisfactory completion of Algebra I

The intent of this course is to help students better understand the “why” of things in science and provide information on a variety of physical topics. The course includes a conceptual and mathematical based study of motion, forces, energy, and waves. Demonstrations and laboratory exercises are used to help students understand the concepts and relationships between ideas. This course, with both descriptive and mathematical aspects, requires the student to have mastery of
the solution processes involved with algebraic equations, successful experience in solving “word” problems, as well as abstract & critical thinking skills. Additional mathematical and manipulation skills such as use of trigonometry and experimental data analysis are included as a part of this course.

**HONORS PHYSICS**

**S300**

*(1.2 weight)*

**1 Credit**

**PREREQUISITE:** Satisfactory completion of Algebra II; concurrent Geometry or higher

The intent of this course is to provide the higher-level math/science student comprehensive coverage of Newtonian mechanics. Students must demonstrate critical thinking and problem solving abilities along with effective organizational skills. Due to the pace of the course, the student must be mathematically strong and able to solve symbolic algebraic equations and “word” problems with ease. Major topics include: kinematics, forces and momentum, work and energy, waves, light and sound properties. Demonstrations and laboratory exercises are used to help students understand the concepts and relationships between ideas. The use of a calculator is required.

**CHEMISTRY**

**S105**

**1 Credit**

**PREREQUISITES:** Satisfactory completion of Algebra I; Geometry (may be concurrent); completion of Physics is recommended

Intriguing activities introduce students to the world of chemistry. Students learn chemical facts and concepts using an application-based approach to learning. One of the goals of the course is to foster educated and informed decisions regarding chemical issues facing today’s society. Demonstrations and laboratory activities link abstract concepts to concrete observations. Topics of study include: matter & measurement; atomic structure; nomenclature; chemical reactions; solutions; stoichiometry; chemical bonding; gases; thermo chemistry; petroleum; food chemistry; and nuclear chemistry.

**HONORS CHEMISTRY**

**S302**

*(1.2 weight)*

**1 Credit**

**PREREQUISITES:** Honor’s Physics (may be concurrent), concurrent Algebra II

The Honors Chemistry course is designed to give students an understanding of the basic principles of chemistry. It does so with emphasis upon the most enjoyable aspect of chemistry-the laboratory experience. Chemical principles and descriptive chemistry are carefully balanced and illustrated by demonstrations and laboratory activities. A meaningful and coherent course includes kinetic theory, bonding, acid-base chemistry, redox chemistry, chemical equations, atomic & electronic structure, thermochemistry, intermolecular forces, and the behavior of gases. Additional topics may be introduced at appropriate times.

**EARTH SCIENCE**

**S103**

**1 Credit**

**PREREQUISITES:** Completion of Biology

The earth science course is divided into four basic areas of study: astronomy, geology, meteorology, and hydrology and oceanography. A general review of each area is explored. An emphasis is placed on relating these Earth Science concepts to our Pennsylvania environment and composition.
**PHYSICAL SCIENCE**

*S111*  
1 Credit  
PREREQUISITE: Grades 11 and 12 Only  
Physical science is a survey of Physics and Chemistry. The purpose is to develop and use the scientific method in preparing, conducting and drawing conclusions for experiments. Students learn to manipulate and interpret mathematical procedures used in scientific data and analysis. Subjects include scientific measurements, force and motion, classification of matter, changes in matter, and various forms of energy.

**ENVIRONMENTAL SCIENCE**

*S104*  
1 Credit  
PREREQUISITE: Grade 9 Only  
Data provided by administration will be considered.  
Environmental Science is an introductory course to ecology and interactions among living organisms. The purpose is to develop and use the scientific method in preparing, conducting and drawing conclusions for experiments. Subjects covered will include the environment, material cycles, energy flow, biodiversity, succession, ecosystems, etc.

**ORGANIC CHEMISTRY**

*S113*  
.5 Credit  
PREREQUISITES: Completion of Honors Chemistry - Seniors Only  
Introduction to Organic Chemistry is designed to provide students with concepts and fundamentals taught in the first-year organic chemistry course at the college level. This course is designed for students intending to pursue a career in medicine, chemistry or biology, engineering, pharmacology, or research.

Topics may include: nomenclature, reaction mechanism, synthesis, chirality, functional groups, Lewis model, hybridization, structural formulas, bonding, nucleophiles and electrophiles.

**AP CHEMISTRY**

*S501*  
1.5 Credit

(PREREQUISITE: Completion of Honors Chemistry)  
The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first year of college. The course should attain a depth of understanding of fundamentals and a reasonable competence in dealing with chemical problems. The course should contribute to the development of a student’s ability to think clearly and express ideas, orally and in writing, with clarity and logic. Check with college and universities regarding policy on AP exam scores.

**AP PHYSICS 1**

*S502*  
1.5 Credit

(PREREQUISITE: Completion of Honors Biology, Honors Physics, and/or Honors Chemistry)  
The College Board describes AP Physics 1 as “an algebra-based, introductory college-level physics course that explores topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. Through inquiry-based learning, students will develop scientific critical thinking and reasoning skills.”

This is an extremely fast paced course geared towards the advanced, motivated learner. Equal emphasis is placed on high level mathematical and verbal reasoning skills. Laboratory
assignments are a critical component of the course and students are required to write formal labs maintained in a scientific portfolio.

**AP PHYSICS 2**

* S504  

1 Credit

**PREREQUISITE:** Completion of AP Physics 1

The College Board describes AP Physics 2 as “an algebra-based, introductory college-level physics course that explores topics such as fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics; electric circuits with capacitors; magnetic fields; electromagnetism; physical and geometric optics; and quantum, atomic, and nuclear physics. Through inquiry-based learning, students will develop scientific critical thinking and reasoning skills.”

This is an extremely fast paced course which builds on concepts and scientific skills learned in AP Physics 1 and geared towards the advanced, motivated learner. Equal emphasis is placed on high level mathematical and verbal reasoning skills. Laboratory assignments are a critical component of the course and students are required to write formal labs kept in a scientific portfolio.
## SOCIAL STUDIES MASTER COURSE LISTING

<table>
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<th>Course No.</th>
<th>Course Title</th>
<th>Weighted Value</th>
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<tr>
<td>H102</td>
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<td>H104</td>
<td>Economics</td>
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## SOCIAL STUDIES ORDER OF COURSE SEQUENCING

**Grade 9:**
- Early American History, Honors Early American History

**Grade 10:**
- Modern American, Honors Modern American, AP US History, AP World History, or AP European History

**Grade 11:**
- IB Psychology Part A (Students are recommended to have taken an AP course in 10th grade)
- IB History of the Americas Part A (Students are recommended to have taken an AP course in 10th grade)

**Grade 12:**
- IB Psychology Part B (If students enrolled in the IB Diploma Programme or if a student is following a blended IB/AP Pathway)
- IB History of the Americas Part B (If students are enrolled in the IP Diploma Programme or if a student is following a blended IB/AP Pathway)

*Electives in Social Studies:*
- AP American Government
- AP Psychology
- Economics
- Sociology
- Psychology
SOCIAL STUDIES DEPARTMENT

EARLY AMERICAN HISTORY

H116 1 Credit
PREREQUISITE: None
Early American History is a ninth grade course that covers the history of America from colonial times through the early 1900s. Students will use a variety of sources, including an assigned textbook, in order to learn about these time periods. Students will be expected to demonstrate their knowledge through the creation of projects, writing responses, and traditional tests/quizzes.

H301 (1.2 Weight) 1 Credit
PREREQUISITE: None
Honors Early American History is a ninth grade course that covers the history of America from colonial times through the revolution and into the early 1900s. Students must be able to read and interpret various primary and secondary sources as well as factual information and express those findings in writing with clarity. The emphasis will be on analysis, interpretation, and written expression of relevant events in early American history. This course will prepare students who wish to take AP courses in the future. Students will be expected to participate in the National History Day event.

MODERN AMERICAN HISTORY

H102 1 Credit
PREREQUISITE: None
Modern American History is a tenth grade course that covers the history of America from the early 1900s through the present day. Students will use a variety of sources, including an assigned textbook, in order to learn about these time periods. Students will be expected to demonstrate their knowledge through the creation of projects, writing responses, and traditional tests/quizzes.

H302 (1.2 Weight) 1 Credit
PREREQUISITE: None
Honors Modern American History is a tenth grade course that covers the history of America from the early 1900s to present day. Students must be able to read and interpret various primary and secondary sources as well as factual information and express those findings in writing with clarity. The emphasis will be on analysis, interpretation, and written expression of relevant events in modern American history. This course will prepare students who wish to take AP courses in the future.

WORLD HISTORY

H100 1 Credit
PREREQUISITE: None
World history provides an in-depth examination of the modern histories of Europe, Africa, The Middle East, and Asia since 1450 A.D. Students will examine traditional life, the impact of global connections, and the modern era in each of these regions. Students will be exposed to diverse historical perspectives on major events in world history.
HONORS WORLD HISTORY  
H303  
(1.2 Weight)  
1 Credit  
PREREQUISITE: None  
Honors World History is an eleventh grade course that covers the history of the world from 1400s to present day. Students must be able to read and interpret various primary and secondary sources as well as factual information and express those findings in writing with clarity. The emphasis will be on analysis, interpretation, and written expression of relevant events in world history. This course will prepare students who wish to take AP courses in the future.

AP WORLD HISTORY  
H505  
(1.4 weight)  
1 Credit  
PREREQUISITES: None  
Advanced Placement World History is designed to be an entry level college course. This course provides an in-depth study of the foundations of world historical patterns, major historical developments across cultures, and in-depth analysis of their impact on modern day society. Students will be expected to think critically, utilize analytical skills, and complete college level readings and assignments to gain an understanding of how the world’s history has come to shape today’s world. Students will be required to complete numerous reading and writing assignments. A satisfactory grade on this exam can earn up to three credits that are transferable to most colleges and universities.  
Students enrolled in an AP course are encouraged to take the AP exam.

AP UNITED STATES HISTORY  
H500  
(1.4 weight)  
1 Credit  
PREREQUISITE: None  
The Advanced Placement United States History course is designed to be a college level history course. College credit can be attained by achieving a qualifying grade on the AP exam administered nationwide in May. The course requires both knowledge of the entirety of United States History and clear writing ability. As such, having a strong work ethic is also recommended. Taking an AP course does not automatically guarantee that a student will score high enough to receive AP credit on the college level. Check with individual colleges for their policy on AP exam scores.  
Students enrolled in an AP course are encouraged to take the AP exam.

AP EUROPEAN HISTORY  
H501  
(1.4 weight)  
1 Credit  
PREREQUISITE: None  
Advanced Placement European History is designed to be an entry level college course. This course provides an in-depth analysis of the factors and ideologies which fueled the formation of the current European continent from the emergence of the Black Death in the 14th century to the formation of the modern European Union. Students will be expected to think critically, utilize analytical skills, and complete college level readings and assignments to gain an understanding of how Europe’s global interactions have come to shape today’s world. Students will be required to complete numerous reading and writing assignments. Taking an AP course does not automatically guarantee that a student will score high enough to receive AP credit on the college level. Check with individual colleges for their policy on AP exam scores.  
Students enrolled in an AP course are encouraged to take the AP exam.
ECONOMICS

H104  .5 Credit

PREREQUISITE: None

The purpose of this course is to provide the student with an introduction to the basic principles of economics. In a world where most of the contemporary problems confronting mankind are essentially economic in nature, an understanding of analytical tools and general economic principles is a fundamental part of sound academic preparation. The course will provide the student with information that is practically useful both in the conduct of his personal affairs and in his general role as a citizen. Topics and issues to be presented include production and consumption activities in a modified capitalistic system, forms of business enterprise--from proprietorship to corporation, the role of labor and government, money and banking functions and specialized economic problems of contemporary society.

SOCIOLOGY

H105  .5 Credit

PREREQUISITE: None; Juniors and Seniors have priority in scheduling

Sociology is an elective course. The course provides a general introduction to sociology. This course is designed to acquaint students with people's behavior in society through the study of patterns of group behavior. Areas of study include a wide range of topics to include culture, deviance (acts against societal norms), aging, gender, poverty. Students will gain some insight into the major trends, theories, important individuals and vocabulary associated with the field as we look at different approaches to the question of why people act as they do. The emphasis will be on interpretation, analysis, and evaluation of current events and trends.

PSYCHOLOGY

H106  .5 Credit

PREREQUISITE: None - Juniors and seniors have priority in scheduling.

Psychology is an elective course. The course provides a general introduction to psychology. Areas of study encompass a wide range of topics including the psychology of sensation and perception, intelligence, behaviorism, dreams and dream theory, abnormal behavior, life span psychology, stress and theories of personality. Students will gain insight into the major trends, theories, important individuals and vocabulary associated with the field as we look at different approaches to the question of why people act as they do.

CIVICS

H109  .5 Credit

PREREQUISITE: None - Juniors and Seniors have priority in scheduling

This course will cover the early formation of the United States government with an emphasis on the United States Constitution, the three branches of government and the election process. This course will also allow a forum to discuss monumental pieces of social and civil rights based legislation throughout the course of American history. Students are required to attend a local government meeting. There will also be a current events component incorporated into the course throughout the semester.

AP PSYCHOLOGY

H502  (1.4 Weight)  1 Credit

PREREQUISITE: None

AP Psychology is an elective survey course for students who intend to take the Advanced Placement test or who want to acquire helpful background in preparation for academic careers in which some basic understanding of psychology is necessary – nursing, law enforcement, physical/occupational therapy, education, law, etc. The course is approached as a discipline and follows the suggested guidelines promoted by the College Board and the American Psychological
Association, which states the purpose of the course, should be “To introduce the AP student to the systemic and scientific study of the behavioral and mental processes of human beings and other animals.” Areas of study are the same as those in General Psychology, but are more concentrated. Students are expected to become conversant with the vocabulary, history, and theory and practice of psychology. In-depth readings, reaction/analysis assignments and practice essays will contribute to the acquisition of that knowledge. Due to possible scheduling conflicts, students may have to choose among the various AP offerings. **Students enrolled in an AP course are encouraged to take the AP exam.**

**AP AMERICAN GOVERNMENT AND POLITICS**

\[ H503 \]
\[ (1.4 \text{ Weight}) \quad 1 \text{ Credit} \]

**PREREQUISITE:** None

This AP course is designed to allow the student to develop a better understanding of our government through: examining how our government was established; the three branches of our government and their roles; the role of political parties, interest groups and the mass media; public policy making; the role of citizens within the government; and civil right and liberties. Students will need to check with individual colleges and universities for policies involving AP exam scores and credit. The Social Studies department offers various AP courses, which may create scheduling conflicts causing the student to choose from the courses offered. **Students enrolled in an AP course are encouraged to take the AP exam.**
TECHNOLOGY EDUCATION MASTER COURSE LISTING

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Weighted Value</th>
<th>Credit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>T100</td>
<td>Wood Technology I</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>T101</td>
<td>Wood Technology II</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>T102</td>
<td>Wood Technology III</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>T103</td>
<td>Manufacturing and Enterprise</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>T107</td>
<td>Residential Architectural Drawing</td>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td>T108</td>
<td>Commercial Design Architectural</td>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td>T109</td>
<td>Computer Graphics</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>T110</td>
<td>Photography</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>T111</td>
<td>Electricity and Electronics</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>T113</td>
<td>Robotics I</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>T115</td>
<td>Technical Design and Prototyping</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>T116</td>
<td>Graphic Communications</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>T117</td>
<td>Intro to Drafting and CAD Drawing</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>T118</td>
<td>Advanced Computer Assisted Drawing</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>T119</td>
<td>Photography II</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>T120</td>
<td>Engineering Principles and Practices</td>
<td>1</td>
<td>0.5</td>
</tr>
</tbody>
</table>

SUGGESTED SEQUENCES IN TECHNOLOGY EDUCATION

**Traditional Progression**

**Grade 9:**
- Technical Design & Prototyping
- Intro to Drafting and CAD Drawing
- Wood Technology I
- Graphic Communications
- Computer Graphics

**Grade 10:**
- Technical Design & Prototyping
- Intro to Drafting and CAD Drawing
- Intro to Architectural Drawing
- Wood Technology I
- Graphic Communications
- Computer Graphics

**Grade 11:**
- Intro to Architectural Drawing
- Photography I
- Wood Technology II
- Manufacturing and Enterprise
- Computer Graphics
- Intro to Drafting and CAD Drawing
- Advanced Computer Assisted Drawing
- Graphic Communications

**Grade 12:**
- Advanced Architectural Drawing
- Advanced Computer Assisted Drawing
- Manufacturing and Enterprise
- Computer Graphics
- Photography II
- Wood Technology III
- Graphic Communications
WOOD TECHNOLOGY - Level I

**T100**

**PREREQUISITE:** None

A project centered course in basic woodworking offered to all students. Opportunities for design and problem solving skills are part of the experience with an emphasis placed on applied mathematics. Students will develop basic knowledge, skills, and safety practices using contemporary woodworking equipment. Students build their projects from plans, which include: wall shelves, puzzles, picture frames, jewelry boxes and other similar products.

WOOD TECHNOLOGY – Level II

**T101**

**PREREQUISITE:** Wood Technology I with a minimum grade of “C”

A project centered course in woodworking for students interested in advancing their skills beyond the first level course. Project work is focused on small scale cabinet construction with an emphasis on design and engineering of wood products.

WOOD TECHNOLOGY – Level III

**T102**

**PREREQUISITE:** Wood Technology II with a minimum of a “C”

A project centered course in woodworking for students interested in advancing their skills beyond the second level course. Project work is focused on service learning and production techniques. Students will design and build tooling that will be used to make their projects.

**MANUFACTURING & ENTERPRISE**

**T103**

**PREREQUISITE:** Wood Technology I. Recommended Tech CAD I be taken previously or concurrently.

Students learn how manufacturing technology is applied in industry. Working in teams, students design/build, test and mass-produce a marketable product. Various aspects of manufacturing will be explored such as: safety, management, research and development, production and marketing. Students will also be exposed to the world of automation and role of robotics in manufacturing.

**INTRO TO DRAFTING AND COMPUTER ASSISTED DRAWING (CAD)**

**T117**

**PREREQUISITE:** None

An introductory course for all students. Measurement, forms of engineering expression, technical drawing instruments and methods, Computer Assisted Drawing (CAD). Emphasis is placed on applying engineering drawing techniques as a form of communication.

**ADVANCED COMPUTER ASSISTED DRAWING**

**T118**

**PREREQUISITE:** Intro to Drafting and Computer Assisted Drawing (CAD) with a minimum of a “C”

This course is designed for the student interested in a career as a designer, architect, engineer or other technical design professions. The activities in this course build upon the skills learned in Intro to Architectural Drawing. Students will design structures and create physical models of their designs that include the use of a 3D printer. Students will redesign existing structures to meet requirements for people with disabilities.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisite</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T107</td>
<td>Residential Architectural Drawing</td>
<td>1 Credit</td>
<td>None – recommended Tech CAD 1</td>
<td>An introductory course in architectural drawing for all students. Topics include: basic technical drawing, scale measurement, room planning, basic house construction. Students will create technical drawings using AutoCAD software. Emphasis will be placed on understanding technical drawing as it applies to architectural design.</td>
</tr>
<tr>
<td>T108</td>
<td>Commercial Design Architectural</td>
<td>1 Credit</td>
<td>Residential Architectural Drawing</td>
<td>This course is designed for the student interested in a career as a designer, architect, engineer, or other technical design professions. The activities in this course build upon skills students learned in residential architectural drawing. Students will build scale models of the designs they draw using AutoCAD REVIT architectural design software.</td>
</tr>
<tr>
<td>T109</td>
<td>Computer Graphics</td>
<td>.5 Credit</td>
<td>None</td>
<td>A course in graphic design, students will develop computer skills using: Adobe Photoshop, Illustrator and InDesign software. Applied design projects include designing advertisements, promotional brochures, CD case booklets, calendars, posters, flyers, newsletter and magazine layouts.</td>
</tr>
<tr>
<td>T116</td>
<td>Graphic Communications</td>
<td>.5 Credit</td>
<td>None</td>
<td>A course in the graphic arts. Students learn how screen printing technology and offset lithography is used in a production environment. Project work includes teacher assigned design work, students own design work and service production work for other school organizations.</td>
</tr>
<tr>
<td>T115</td>
<td>Technical Design and Prototyping</td>
<td>.5 Credit</td>
<td>None</td>
<td>An introductory course in applied design and engineering. Activities in this course involve solving technical problems, sketching and drawing designs of their solutions, building prototypes from their drawings and testing their prototypes to see if their solutions worked. Project work closely follows the activities of the Technology Student Association and may include designing, building, and testing model bridges, towers and cranes; and also designing, building, and testing model cars, boats, planes and other vehicles. Students will use high-tech methods including 3-D printing and computer numerical control technologies.</td>
</tr>
<tr>
<td>T110</td>
<td>Photography I</td>
<td>.5 Credit</td>
<td>Juniors and Seniors Only</td>
<td>This course is designed to equip the student with the basic skills needed in all phases of the photographic process. Camera operation, with emphasis on proper exposure and composition, will be stressed. Students will develop darkroom skills by completing various assignments using black and white film. Digital photography and Adobe PhotoShop will also be explored.</td>
</tr>
</tbody>
</table>
PHOTOGRAPHY II

T119 .5 Credit
PREREQUISITE: Juniors and Seniors Only
Photography II is a semester course. Students who have successfully completed Photography I are eligible to take Photography II. Students will apply and enhance skills developed in all phases of the photographic process. Attention will be placed on the areas of light/exposure, camera technique, finishing and mounting prints. Students will also create and evaluate work concentration in the areas of artificial light photography, digital image capture, manipulations, output and special techniques. Students will be engaged in various laboratory exercises and the development of a student portfolio.

ROBOTICS I

T113 .5 Credit
PREREQUISITE: None
This course exposes students to building college level educational robots to specification. Students will learn the basics of robotics programming language as well as gain experience using a series of robotic sensors to navigate their individually built robots through various tasks from a performance checklist.

ELECTRICITY & ELECTRONICS

T111 .5 Credit
PREREQUISITE: None
This is an introductory course for students interested in learning about electronics used in consumer products and engineering. Topics include: AC and DC circuits, motors, controls and power supply units will be explored. Students will also be briefly exposed to the world of HVAC technology, automation and the role electronics plays and industrial robotics. Emphasis will be placed on circuit calculation, testing, wiring and troubleshooting. This course is highly recommended for students contemplating a career in science, engineering or industrial related fields.

ENGINEERING PRINCIPLES AND PRACTICES

T120 .5 Credit
PREREQUISITE: None
This course is designed to utilize “STEM Concepts” in inquiry based, hands on projects while incorporating them into the various specialties of engineering such as, but not limited to: Civil, Mechanical, Robotic, Electrical, Biotechnological, Chemical, and Software applications. Emphasis will be placed on the often overlooked “Soft Skill” aspects of Engineering such as: Project Management, Planning, Professional and Technical Communication, Documentation, Time Management, Accountability, and Efficiency. Mechatronics will also be emphasized.
## WORLD LANGUAGE MASTER COURSE LISTING

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Weighted Value</th>
<th>Credit Value</th>
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</thead>
<tbody>
<tr>
<td>F102</td>
<td>German I</td>
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<td>1.0</td>
</tr>
<tr>
<td>F103</td>
<td>German II</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>F104</td>
<td>Spanish I</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>F105</td>
<td>Spanish II</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>F112</td>
<td>Medical and Legal Terminology</td>
<td>1.0</td>
<td>0.5</td>
</tr>
<tr>
<td>F300</td>
<td>Honors Latin I</td>
<td>1.2</td>
<td>1.0</td>
</tr>
<tr>
<td>F301</td>
<td>Honors Latin II</td>
<td>1.2</td>
<td>1.0</td>
</tr>
<tr>
<td>F306</td>
<td>Honors German I</td>
<td>1.2</td>
<td>1.0</td>
</tr>
<tr>
<td>F307</td>
<td>Honors German II</td>
<td>1.2</td>
<td>1.0</td>
</tr>
<tr>
<td>F308</td>
<td>Honors German III</td>
<td>1.2</td>
<td>1.0</td>
</tr>
<tr>
<td>F309</td>
<td>Honors Spanish I</td>
<td>1.2</td>
<td>1.0</td>
</tr>
<tr>
<td>F310</td>
<td>Honors Spanish II</td>
<td>1.2</td>
<td>1.0</td>
</tr>
<tr>
<td>F311</td>
<td>Honors Spanish III</td>
<td>1.2</td>
<td>1.0</td>
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<tr>
<td>F502</td>
<td>AP German</td>
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<tr>
<td>F503</td>
<td>AP Spanish</td>
<td>1.4</td>
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<tr>
<td>IB101</td>
<td>IB Theory of Knowledge</td>
<td>1.0</td>
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<tr>
<td>IB102</td>
<td>IB Extended Essay</td>
<td>1.0</td>
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<tr>
<td>IB300</td>
<td>IB Language B: Spanish SL</td>
<td>1.2</td>
<td>1.0</td>
</tr>
<tr>
<td>IB301</td>
<td>IB Language B: German SL</td>
<td>1.2</td>
<td>1.0</td>
</tr>
<tr>
<td>IB302</td>
<td>IB HL Latin I</td>
<td>1.4</td>
<td>1.0</td>
</tr>
<tr>
<td>IB303</td>
<td>IB Spanish ab initio</td>
<td>1.2</td>
<td>1.0</td>
</tr>
<tr>
<td>IB606</td>
<td>IB HL Latin II</td>
<td>1.4</td>
<td>1.0</td>
</tr>
</tbody>
</table>

### SUGGESTED SEQUENCES IN WORLD LANGUAGE

#### Traditional Academics

**Grade 9:**

- Spanish I or Honors Spanish I
- German I or Honors German I
- Honors Latin I

**Grade 10:**

- Spanish I or II or Honors Spanish I or II
- German I or II or Honors German I or II
- Honors Latin I or II

**Grade 11:**

- Honors Spanish I or II or III
- Honors German I or II or III
- Honors Latin I or II or IB Latin

**Grade 12:**

- AP Spanish or German or Latin or IB Latin
- Elective (based on graduation requirements)
  Language courses may be continued or a new language may be started in these years.
WORLD LANGUAGE DEPARTMENT

MODERN WORLD LANGUAGES
GERMAN, SPANISH

LEVEL I
PREREQUISITE: None
This course introduces the student to the basic vocabulary and expressions, the rules of pronunciation, and the grammatical structures of the language. An introduction to the culture of the people is also covered.

LEVEL II
PREREQUISITE: Level I
This course reviews the basic vocabulary and grammar learned in the first level of the language. Grammar and vocabulary are expanded through work with reading selections. More emphasis is placed on the student's reading and writing ability and the culture of the people is also stressed.

HONORS LEVEL I
(1.2 Weight)
PREREQUISITE: English or Honors English requirement or native speaker
This course introduces the student to the vocabulary and expressions, the rules of pronunciation, and the grammatical structures of the language. An introduction to the culture of the people is also covered. The course is designed to present the material in greater depth at a faster pace for the language learner who intends to continue language study during multiple years culminating in AP study.

HONORS LEVEL II MODERN WORLD LANGUAGES
(1.2 Weight)
PREREQUISITE: Honors I or General Level II or native speaker
This course reviews the vocabulary and grammar learned in the first level of the language. Grammar and vocabulary are expanded through work with reading selections. More emphasis is placed on the student's reading and writing ability and the culture of the people is also stressed. The course is designed to present the material in greater depth at a faster pace for the language learner who intends to continue language study during multiple years culminating in AP study.

HONORS LEVEL III
(1.2 Weight)
PREREQUISITE: Honors II
This course reviews the vocabulary and grammar learned in Honors I and II of the language. Additional grammar points and vocabulary are studied in greater depth and detail. Students will read longer selections that include cultural material. Students are encouraged to express themselves through speaking and writing. This level is designed to continue the acceleration of language study in preparation for the AP study.

AP GERMAN
F502
(1.4 Weight)
PREREQUISITE: Recommend Honors German III
The AP German course emphasizes the use of language for active communication through the development of the following competencies: having a strong command of vocabulary and structures; understanding spoken German in various conversational situations; reading newspaper and magazine articles, contemporary fiction, and non-technical writings without the use of a dictionary; and fluently and accurately expressing ideas orally and in writing. The course work is intense and designed for students who are independent and highly motivated. Although taking
the AP course does not guarantee that a student will score high enough to receive AP credit at the college level. Students should check with individual colleges for their policy on AP exam scores. **Taking an AP course requires payment for the AP exam and all students enrolled in an AP course are encouraged to take the AP exam. Reimbursement is available as per school policy.**

**AP SPANISH**

F503  
(1.4 Weight)  
1 Credit  

**PREREQUISITE:** Recommend Honors Spanish III  
The AP Spanish Language course emphasizes the use of language for active communication through the development of: the ability to comprehend formal and informal spoken Spanish; the acquisition of vocabulary and a grasp of structure to allow the easy, accurate reading of newspaper and magazine articles, as well as Hispanic literature; the ability to compose expository passages; and the ability to express ideas who are independent and highly motivated. **Students enrolled in an AP course are encouraged to take the AP exam.**

**IB LANGUAGE B SL: SPANISH AND GERMAN (2 YEAR COURSE)**  
These courses take the place of Honors 3 and AP language  
(1.2 Weight)  
1 Credit  

**PREREQUISITE:** Successful completion of the Honors 1 and 2 levels of language B (German, Spanish)  
The focus of this course is language acquisition and intercultural understanding. The language B syllabus approaches the learning of language through meaning. Through the study of the core, students build the necessary skills to reach the assessment objectives of the language B course through the expansion of their receptive, productive and interactive skills. The core is divided into three areas and is a required area of study: Communication and media, Global issues and Social relationships, In addition, teachers select two from the following five options: Cultural Diversity, Customs and Traditions, Health, Leisure, Science and Technology.

**IB LATIN HL (2 YEAR COURSE)**

IB302  
(1.4 Weight)  
1 Credit  

**PREREQUISITE:** Honors Latin II with at least a “B” average  
The IB HL course consists of studies in poetry and prose. Students will read, translate, understand, analyze, and interpret selections from Ovid’s Metamorphoses Horace’s Epodes Carmina, and Satire, Maritall’s Epigrams, Sallust’s Bellum Catilinae, Vergils Aeneid, and Livy’s Ab Urbe Condita. Main themes include love and transromation, social criticism, and villains. In addition, students will complete an IB-required Internal Assessment. The Internal Assessment consists of a research assignment relating to a topic in classical history, literature, language, religion, mythology, art, archaeology, or some aspect of classical influence.

**CLASSICAL LANGUAGES**

**LATIN**

**HONORS LATIN I**

F300  
(1.2 Weight)  
1 Credit  

**PREREQUISITE:** CP English (8th grade) or Honors English (9th, 10th, 11th grade)  
Honors Latin I emphasizes the basic grammar, vocabulary, and culture of classical Latin. Translation and discussion involves classical mythology, Roman entertainments, family culture, and the city of Rome.
HONORS LATIN II

F301
(1.2 Weight) 1 Credit

PREREQUISITE: Honors Latin I
Honors Latin II reviews the basic grammar and vocabulary learned in Honors Latin I and a strong emphasis is placed on learning new verb forms. The course is designed to continue the acceleration of language study in preparation for the IB course.

MEDICAL AND LEGAL TERMINOLOGY

F112 .5 Credit

PREREQUISITE: None
Medical and Legal Terminology Course Description The Medical and Legal Terminology Course focuses on prefixes, roots, and suffixes of words and phrases commonly used in the medical and legal fields that are directly related to the classical languages of Latin and Greek. Students who intend to pursue a career in any medical or legal field will greatly benefit from the career-oriented terminology and knowledge gained from study in this course. Study in this course is vocabulary heavy and many projects are career oriented. Students will be well prepared for introductory learning in the medical and legal fields upon completion of this course.

NON-DISCRIMINATION POLICY

It is the policy of the Chambersburg Area School District not to discriminate on the basis of race, age, color, religion, sex, handicap, disability or national origin in its admission, educational programs, activities or employment policies. For further information regarding these policies or if you need assistance in completing any forms or applications, please contact:

Director of Human Resources at 261-3303 (TDD 261-3317).

Si Vd no habla inglés y no hay nadie que pueda llamar en su lugar, favor de llamar a 261-3316 (TDD 261-3317), y dejar su numero de telefono. Comicaremos con Vd, en español lo más pronto posible.

REVISED: January 2021