The Canon-McMillan School District is committed to affirmative action to assure equal opportunity for all persons regardless of race, color, religion, national origin, ancestry, sex, or handicap. Inquiries should be directed to Mr. Tim McCullough Title IX, Section 504 Coordinator, Administration Office, #1 North Jefferson Avenue, Canonsburg, PA 15317, Phone (724) 746-2940.

PROGRAM OF STUDIES
CANON-McMILLAN HIGH SCHOOL
314 Elm Street Extension
Canonsburg, PA 15317
724-745-1400

PRINCIPAL
Ms. Brittany L. Taylor - extension 5004

ACADEMIC PRINCIPALS
Ms. Jenna L. Handra - extension 5003
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Mf-Se Mrs. Julie Hughes - extension 5020
Sf-Z Mrs. Molly Nuri - extension 5021

PLEASE BE ADVISED THAT THE COURSE OFFERINGS IN THIS BOOK REPRESENT COURSES THAT MAY BE OFFERED DURING THE 2023-2024 SCHOOL YEAR. DUE TO CUTS IN STATE FUNDING, CHANGES IN PROGRAMMING, AND OTHER REASONS, THERE IS A POSSIBILITY THAT COURSES MAY BE CUT FROM THIS LIST OF POSSIBLE OFFERINGS. IN THAT EVENT STUDENTS MAY BE ASKED TO MAKE ALTERNATIVE SELECTIONS TO FULFILL GRADUATION REQUIREMENTS.

Dear Parent(s)/Guardian(s) and Students,

This Program of Studies is distributed to explain the 9th, 10th, 11th, and 12th grade curricula and course options offered at Canon-McMillan High School for the 2023-2024 school year. In addition to the course offerings, the Program of Studies contains descriptions of the courses, graduation requirements, and information about special programs available to our students.

Course selection will be completed online and during school hours. Prior to selection by the student, he/she should consult his/her parents/guardians, teachers and appropriate school personnel. It is imperative that the student ensures all academic requirements are met in order to graduate in a timely fashion.

Please take the opportunity to review the course offerings carefully to be certain that you are selecting courses that are of a personal interest and that will fulfill the graduation requirements established by the Canon-McMillan School District. Be certain that you have met the necessary prerequisite for each course requested. If you have questions about course selections, please consult with your counselor and teachers.

Sincerely,
Brittany L. Taylor, M.S., M.Ed
Principal
Canon-McMillan High School
724-745-1400 x 5014

TABLE OF CONTENTS

Introduction	2
General Graduation Requirements	3
High School Graduation Project	3
Grading Procedures	3
Honor Roll	3
Alternate Graduation Pathways (Act 158)	4
Academic or College Prep Curriculum	4
Advanced Placement Program	4-5
College in High School	5
Dual Enrollment	5
Career and Technology Center Courses of Study	5-7
Scheduling Requirements	7
Schedule Change Information	7
Summer School	7
Learning Support Program	8
Gifted Program	8
High School Media Center	8
NCAA Requirements	9
Course Descriptions:	
Art	11-12
Business Education	13-16
Computer Science	17-18
English	19-22
Family & Consumer Science	23
Fine Arts	24
Health and Physical Education	25-26
Mathematics	27-30
Music	31-32
Science	33-39
Social Studies	40-43
Technology Education	44-46
World Languages	47-49
Arts & Humanities	50-51
Planning and Preparation Guide	52-54

INTRODUCTION

This booklet embodies a variety of information about specific course offerings. The graduation requirements are also specified. They should be read thoroughly by both students and their parents/guardians as they must be fulfilled by every student. Students and their parents/guardians also need to consider the courses that will meet their future professional and/or educational goals. Additionally, a student's ability and motivation are also considerations.

Members of the school counseling department are available to meet as requested or needed with students to discuss educational programming as well as other topics of interest to students. During course scheduling, specific details of the scheduling process will be discussed, and questions will be answered in both small group and individual sessions.

This publication is only one avenue for students in choosing their future courses. Students need to discuss potential course offerings with their current teachers and assigned school counselor regarding future scheduling in specific academic areas. At home, students along with their parents/guardian should thoroughly discuss course planning options and accurately complete a course selection sheet. After review of your students' course selection in PowerSchool, the student and/or his or her parents/guardians should make appointments with the assigned counselor if adjustments are needed. Once the scheduling process is completed, adjustments are seldom granted.

GRADUATION REQUIREMENTS

As per Policy #217, the number of credits needed to graduate is **26** planned course units (credits). Thus, students will need to earn **6.5** planned course units (credits) per year to graduate. The Canon-McMillan School District requires students to complete the minimum planned course units (credits) through successful completion of course requirements established by the Canon-McMillan School District and the Pennsylvania Board of Education. **Students must also satisfactorily complete a Graduation Project and demonstrate proficiency on required standardized tests or complete remedial work prior to graduation.**

English – 4 sequential course credits* - minimum one course per year.

Math – 4 course credits* - Algebra & Geometry units required. Continuous enrollment in Math all 8 semesters in high school.

Social Studies – 4 required course credits.*

Science – 3 full year course credits* - 9th grade PA Science and Biology required.

Physical Education- Total of one (1) course credit in Physical Education

Health – .5 course credits (one (1) semester course)

Arts and Humanities- Two (2) course credits

Freshman Seminar– .5 course credits (one (1) semester course)

All additional courses will be electives.

HIGH SCHOOL GRADUATION PROJECT

As a component of the graduation requirements outlined by the Canon-McMillan School District, all students will complete a Graduation Project in one or more areas of concentrated study under the guidance and direction of the high school faculty. The Graduation Project should be relevant to the student and presented through a medium that is most appropriate to communicate its purpose. The Project must be completed according to the criteria established by the High School Graduation Project Committee. The Graduation Project will have several components, including developing a plan, selecting a presentation format, establishing a set of procedures and setting a time frame.

GRADING PROCEDURES

In all content areas, grades will be determined according to the following percentages:

90-100	A	D	60-69
80-89	B	F	59 and below
70-79	C		

If a final exam is given, the final exam grade for a full year course is counted as 10% of the fourth grading period.

Only grades in AP courses and Honors courses are weighted. Furthermore, only grades of A, B, or C in these courses are weighted.

AP Course Weighting:		**Honors Weighting:**	
A	5 points	A	4.5 points
B	4 points	B	3.5 points
C	3 points	C	2.5 points
D	1 point	D	1 point
F	0 points	F	0 points

HONOR ROLL

Distinguished Honors 4.0 and above

High Honors 3.7 – 3.99

Honors 3.0 – 3.69

THE CANON-McMILLAN SCHOOL DISTRICT DOES NOT MAINTAIN CLASS RANK FOR STUDENTS.

ALTERNATE GRADUATION PATHWAYS (ACT 158)

See Appendix A on Page 55

ACADEMIC/COLLEGE PREPARATORY CURRICULUM

Since the student who is preparing for college admission is faced with a wide variety of admission requirements, it is wise to prepare as fully as possible. Students must make themselves aware of the varying entrance requirements early and plan accordingly.

Colleges and universities are constantly changing admissions requirements. It is no longer possible to make "blanket statements" concerning college admission. A student is encouraged to continue his/her work in the academic courses as long as they are meeting all requirements in their current classes. We do not encourage student selection of inappropriate courses solely for the purpose of "needing it for college admission." All core courses are college preparatory in nature; students are encouraged to take a rigorous course load as agreed upon by parents/guardians and faculty.

For the most part, the minimum college admission requirements are four credits in English, three credits in academic mathematics, three credits in science, two to three credits in the same foreign language area of study, three credits in social studies, and as many electives as possible. The current Canon-McMillan graduation requirements exceed some of these prerequisite college admission requirements. Specific course requirements vary by major and college, it is imperative that you share your post-secondary educational interests with your school counselor as soon as possible.

Admission may also be granted to some post-secondary institutions with less than the minimum requirements indicated. However, any student having less than the minimum requirements has a more narrow selection of career and college choices.

THE ADVANCED PLACEMENT PROGRAM

The Advanced Placement (AP) Program is a cooperative educational endeavor with the College Board and is designed for students to secure college credit while in high school. Entrance into the program is based on a student's grades and teacher recommendations.

AP courses require a great amount of study on the part of the student. They carry one additional full academic quality point and are weighted at 5.0, and normally meet five class periods each week (exception – AP Biology, AP Chemistry, and AP Physics which meet a minimum of seven periods a week). In addition, the student is required to spend at least one hour on homework for each hour in the classroom. **It is the expectation of the Advanced Placement Program and Canon-McMillan High School that students enrolling in AP courses are to take the AP exam at the end of the year.**

Please note: The weighted credit is only given to students earning a C or better in the course. For example, the following point values are assigned, (A=5), (B=4), (C=3), (D=1), (F=0).

Presently, the following AP courses are offered in the following discipline areas at Canon-McMillan High School:

AP Biology	AP English Language & Composition
AP Calculus AB	AP Music Theory
AP Calculus BC	AP Psychology
AP Chemistry	AP Physics 1
AP Computer Science A	AP Physics C
AP Computer Science Principles	AP Spanish
AP Environmental Science	AP Statistics
AP European History	AP Art & Design
AP French	AP United States History
AP Literature and Composition	AP World History

A student interested in scheduling AP courses should meet the following criteria:

Be a conscientious, diligent worker

Demonstrate a high degree of interest in the subject area
Attain the required teachers' recommendations and fulfill course prerequisite
Have the encouragement of his or her parents/guardians
Demonstrate a commitment in taking the Advanced Placement examination in the spring.

Any student enrolled in an Advanced Placement Course will be required to sit for the Advanced Placement exam in the spring. All Advanced Placement exams will be paid at the expense of the Canon-McMillan School District.

COLLEGE IN HIGH SCHOOL

College in High School courses provide high school-age students an intentionally-designed authentic postsecondary experience leading to officially transcripted and transferable college credit towards a recognized postsecondary degree or credential. These rigorous, college-level courses allow students to accrue college credit and aim to prepare students for postsecondary success. Entrance into CHS courses is based on student grades and teacher recommendations. Canon-McMillan High School currently offers CHS courses through Carlow University and the University of Pittsburgh.

DUAL ENROLLMENT

The Dual Enrollment Program provides high school students with the opportunity to take college courses while still in high school. Currently, both AP Computer Science A and AP Computer Science Principles offer dual enrollment through Pittsburgh Technical College. Students seeking to dual enroll with other universities must have a GPA of 3.0 or higher, school district approval, and parent permission. Some courses may require the student to take a placement test before being approved. The type and number of courses will be determined by discussions with the school counselor and University personnel. Students/Families are responsible for all costs related to the Dual Enrollment Program including tuition, fees, books, and transportation. Interested students should schedule a meeting with a school counselor.

CAREER AND TECHNOLOGY CENTER COURSES OF STUDY

Western Area Career and Technology Center

Students who fail to maintain academic and attendance requirements may be subject to Summer School or removed from the CTC.

Course Name	Grade Level	Course# AM PM	Program Years	Credits Issued
Auto Mechanics	10-11-12	1010/4010	3	4.0
Automation and Robotics Engineering Technology	10-11-12	1076/4076	3	4.0
Carpentry	10-11-12	1025/4025	3	4.0
Collision Repair Technology	10-11-12	1005/4005	3	4.0
Cosmetology	10-11-12	1030/4030	3	4.0
Culinary Arts	10-11-12	1065/4065	3	4.0
Electrical Occupation	10-11-12	1045/4045	3	4.0
Emergency Protective Services	10-11-12	1075/4075	3	4.0
Health Assistant	10-11-12	1050/4050	3	4.0
Heating & Air Conditioning	10-11-12	1000/4000	3	4.0
Machine Shop	10-11-12	1055/4055	3	4.0

Masonry	10-11-12	1070/V4070	3	4.0
Networking	10-11-12	1035/V4071	3	4.0
Welding	10-11-12	1060/4060	3	4.0

Parkway West Career and Technology Center

Students who fail to maintain academic and attendance requirements may be subject to Summer School or removed from the CTC.

Course Name	**Grade Level**	**Course# AM PM**	**Program Years**	**Credits Issued**
Diesel Technology	10-11-12	4096	3	4.0
Graphic Arts & Production Technology	10-11-12	4097	3	4.0
Power Motorsports Technology	10-11-12	—-	3	4.0
Sports Management & Therapy Technology (SMARTT)	10-11-12	4098	3	4.0
Veterinarian Technology	10-11-12	4095	3	4.0

EXAMPLE SCHEDULE FOR WACTC/PARKWAY WEST CTC

GRADE 9		GRADE 10		GRADE 11		GRADE 12	
English	1.00	English	1.00	English	1.00	English	1.00
Social Studies	1.00	Biology	1.00	Mathematics	1.00	Science	1.00
Mathematics	1.00	Mathematics	1.00	Social Studies	1.00	Social Studies	1.00
Science	1.00	WACTC	4.00	WACTC	4.00	WACTC	4.00
**Elective	1	Elective	.5	Physical Ed 11/12	.5	Elective	.5
Physical Ed 9/10	.50	**Total**	**7.5**		**7.5**		**7.5**
Health	.50						
Freshman Seminar	.50						
Total	**7.5**						

Total credits needed ……. 26.00

Total credits with proposed schedule … 30.00

COOPERATIVE EDUCATION AT WACTC/PARKWAY WEST CTC

Cooperative Education (Co-op) is an educational work experience for students to relate classroom experience to real world employment. It is available to vocational students in all provided specialized areas at Western Area Career and Technology Center and Parkway West CTC. Students connect classroom learning with work based learning experiences that teach employability skills and support supervised on-the-job training. Co-op provides students an opportunity to work with employers, educators, community leaders, other students and parents. It prepares students for the "real world." This program enables students to match specific career objectives with paid employment experiences while they attend planned periods of related classroom theory during school. This program is only offered to Seniors who are in good academic standing, with good attendance, and who have received the recommendation of their CTC teacher.

SCHEDULING REQUIREMENTS

All students must carry a minimum of 6.50 credits each year and a lunch period.

Students failing a required subject are to include it on their course selection for the following year, or to make plans to take it in an approved summer school program. All students are encouraged to schedule as many courses as possible to enrich their program of study.

In order to take the second year of a sequential subject, students should pass the first year by earning at least a "C" or better unless otherwise indicated by course Prerequisite. Students who earn a "D" and wish to continue in any sequential subject, such as a language or a math course, may improve their skills by repeating the course for no credit.

Special attention should be given to subjects that must be taken concurrently.

SCHEDULE CHANGES

For the 2023-2024 school year, all schedule change requests must be completed via the online form, available on the High School website, prior to the commencement of the first day of school. A form will be made available to students, starting in August, who need to make changes beyond those deadlines and who meet a required set of criteria. During the first seven (7) days of semester two (2), students will be permitted to submit the schedule changes to add and/or drop a course. Requests are considered when space allows and the course change does not impact other scheduled courses. Students cannot request a specific teacher, choose order of classes, or change a lunch period.

TRANSFERRING GRADES

If a student transfers from one section of a course to another, grades earned up to the time of transfer are included as a part of the final course grade.

DROPPING COURSES

Students are not permitted to drop or change courses after the deadline. If a student wishes to withdraw from a course, the student may receive a withdrawal "W" that corresponds with their current grade for the course. For example, if a student has a "C" at the time of the transfer then the transcript will reflect a "WC". If a student wishes to withdraw with no penalty from a course, they must do so before the schedule change deadline. Failure to withdraw before the deadline may result in a "W " grade for the dropped course. The assignment of a "W" would be calculated in determining the student's overall quality point average (QPA).

SUMMER SCHOOL

It is the responsibility of the student to inform counseling personnel when an approved summer school class (or classes) has been completed outside of the Canon-McMillan Summer School Program to ensure classes are scheduled accordingly. Transcripts will remain incorrect if counseling personnel are not informed and if evidence of the completion (i.e., transcripts) are not received by the counseling department. Please note the Canon-McMillan High School Summer School Program is for credit recovery only.

LEARNING SUPPORT PROGRAM

Learning Support services are provided for those students in need of academic or emotional support as identified by an Individualized Education Program (IEP).

Students who meet the eligibility requirements for Learning Support services are enrolled in one or more areas in which specially designed instruction is provided based upon the student's need and the goals and objectives of the IEP.

GIFTED PROGRAM

Gifted support services are provided for those students who meet the eligibility requirements (GIEP) as designated by federal and state guidelines.

HIGH SCHOOL MEDIA CENTER

The Library Science program is integrated throughout the high school curriculum to provide each student with information fluency. The program provides a wide range of resource materials and opportunities to develop information-seeking and management skills to use the selected resources. The high school librarian and classroom teachers plan collaborative learning experiences to achieve the goals articulated in the PA Core and the Common Core. The students develop and apply information literacy skills by exploring, analyzing and evaluating print and non-print resources, school subscription databases, POWER Library resources and Internet pathfinders. The use of Web tools and technology is an integral part of the library information experience. In addition, the program is directed toward developing and promoting lifelong reading by offering fiction and non-fiction materials. Through the use of an online citation tool and excellent reference materials, the Library Science program supports curriculum, research for various class projects, and for the senior graduation project.

NATIONAL COLLEGIATE ATHLETIC ASSOCIATION (NCAA)

ELIGIBILITY STANDARDS

In order to participate in a Division I or Division II sport in college, a student must meet the minimum requirements for core courses as established by the NCAA. Only courses that are deemed NCAA approved in the course catalog will count toward the 16 core-course requirement. If you are planning to participate in a Division I or Division II sport in college, please see your counselor prior to scheduling your courses.

DIVISION I ACADEMIC REQUIREMENTS

Core Course	Years Required
English	4
Math *Algebra I or higher	3
Natural/Physical Science *Including one year of lab	2
Additional *English, math, or natural/physical science	1
Social Science	2
Additional Courses *Any area listed above, foreign language, or comparative religion/philosophy	4

DIVISION II ACADEMIC REQUIREMENTS

Core Course	Years Required
English	3
Math *Algebra I or higher	2
Natural/Physical Science *Including one year of lab	2
Additional *English, math, or natural/physical science	3
Social Science	2
Additional Courses *Any area listed above, foreign language, or comparative religion/philosophy	4

NOTE: If you want to compete in NCAA sports at a Division I school, you need to register with the NCAA Eligibility Center. For both Division I and Division II athletics, there are additional eligibility requirements beyond coursework. Schedule a meeting with Mr. Mike Evans, the NCAA coordinator, to ensure that you meet all of the requirements set forth by the NCAA. All information is subject to change at any time per the NCAA.

COURSE DESCRIPTIONS

The following courses may be taken at Canon-McMillan High School by students having fulfilled the proper prerequisite. Sequential subjects must be taken in order.

ART

ADVANCED ART HONORS **7506**
Grades 11, 12 **Credit 1.00**
Prerequisite: Interview/portfolio review and teacher recommendation.
Advanced Art is designed for high school juniors or seniors who are considering the continuation of their art education at a university or college level pursuant to a career in the visual arts. Weekly presentations and/or critique sessions will take place in front of peers. Students will prepare a traditional and digital portfolio and gain comprehensive exhibit experience by active participation in an annual art show with special senior recognition. **This course requires extensive work outside of class and is recommended for higher level students with the ability to work independently.**

AP ART AND DESIGN (ADVANCED PLACEMENT) **7510**
Grade 12 **Credit 1.50***
Prerequisite: A or B in ADVANCED ART HONORS and teacher recommendation.
The AP Art and Design program is a national standard for performance in the visual arts. This course provides the high school senior with an opportunity to continue the individualized instruction and independent artistic pursuits initiated in Advanced Art Honors. It is blocked as a two period course for intensive studio work and will require extensive work outside of class.

***AP ART AND DESIGN (ADVANCED PLACEMENT) LAB** **9810**
Grade 12
Must be taken concurrently with AP ART AND DESIGN Course 7510.

CHS CERAMICS **7514**
Grades 10, 11, 12 **Credit .50**
Prerequisite: A or B in INTRODUCTION TO CERAMICS
This is an advanced studio course created to allow students the opportunity to further explore the clay medium while improving skills and developing personal styles within ceramic art. Students will work with hand-building techniques, the pottery wheel, underglazes, glazes, and learn about kiln usage. All projects will include exposure to CLAY, various tools, techniques and vocabulary. Students will have the opportunity to elect to take this course for college credit through Carlow University. If the student decides to take the class for college credit, the student is responsible for the cost of the course at Carlow. Carlow determines the cost of the course on an annual basis.

CONCEPT & CREATIVE THINKING **7503**
Grades 10, 11, 12 **Credit 1.00**
Prerequisite: At least a "C" average in MEDIA & TECHNIQUE
"Ideas"—future employers are seeking graduates who think creatively. In this course, students will work with a variety of art media as they develop creative thinking skills. Emphasis will be on providing opportunities that challenge the student to seek new ideas and unique solutions to artistic problems. **This course is recommended for higher level students with the ability to think abstractly.**

FORM AND FUNCTION **7512**
Grades 10, 11, 12 **Credit 1.00**
Prerequisite: MEDIA & TECHNIQUE
Students will explore the form and function of objects, as they design and create useful and/or decorative items in a variety of media. Projects may include batik, book making, lanterns and pitchers. Emphasis will be on design.

INTRO TO ART **7501**
Grades 9, 10, 11, 12 **Credit .50**
This course will provide the student with an understanding of the foundations of art, including aesthetics and art criticism, development of observational skills, composition and creative thinking. Students will work with a wide range of media and study significant works of art to develop both technical skills, and conceptual understanding.

INTRODUCTION TO CERAMICS **7513**

Grades 9, 10, 11, 12 **Credit .50**

In this course, students explore the medium of clay through basic hand-building and wheel-throwing techniques. Hand-built techniques will explore coil, pinch-pot, drape and/or slab as well as sculpture construction. Wheel-throwing techniques will include centering, opening, raising and trimming. Students will also engage in fundamental glazing and firing techniques. All projects will include exposure to clay,, various tools, techniques and vocabulary.

MEDIA & TECHNIQUE **7502**

Grades 9, 10, 11 **Credit 1.00**

Students in this course will explore various two-dimensional and three-dimensional art media from watercolor to clay. Emphasis will be on developing technical skills. **This course is required for advancement in the art program.**

OBSERVATIONAL DRAWING **7509**

Grades 9, 10, 11, 12 **Credit .50**

Drawing and the ability to "see" is necessary to all visual art forms. This is a studio course designed for the serious art student to assist in developing observational skills and the ability to accurately and effectively create drawings from observation of subjects: objects, still-life, portrait, figure and landscape (live and photographed). This course requires additional sketchbook assignments to be completed outside of class.

BUSINESS EDUCATION

BUSINESS DEPARTMENT CURRICULUM

The curriculum of the Business Department at Canon-McMillan High School is designed to provide two pathways which will prepare students for an entry-level position in the workplace or provide them with core courses which will introduce them to careers in business as they further their education at a post-secondary institution.

COMPUTER TECHNOLOGY	BUSINESS CORE
Freshman Seminar **(Required)**	Accounting I, II, & III (Honors)
Advanced Excel – Microsoft Office Specialist (MOS) Certification	Business and Consumer Law
Advanced MS Word with MOS Certification	Business Math
Advanced PowerPoint with MOS Certification	Entrepreneurship I and II
CHS Web Page Design and Development	Investment Strategies
CM Store Partners	Personal Finance
Desktop Publishing	Principles of Marketing
	Sports and Entertainment Management

***Any college bound student interested in majoring in business should take as many of these electives as possible**.

ACCOUNTING I **6601**
Grades 10, 11, 12 **Credit 1.00**
Students in Accounting I will be given an insider's view into the world of accounting. Concepts covered will include the fundamentals of debits and credits, journalizing transactions into the general journal, posting transactions into general and subsidiary ledgers, preparing and analyzing financial statements, as well as categorizing transactions into the cash payments, cash receipts, purchases, and sales journals. Additionally, the accounting career will be explored through research and exploration. Accounting I will supplement textbook activities and assignments with the use of Cengage Mindtap for online computer applications.

ACCOUNTING II **6602**
Grades 11, 12 **Credit 1.00**
Prerequisite: At least a "C" average in Accounting I
Students in Accounting II will further develop accounting skills, with a more in-depth and detailed view than Accounting I. Concepts covered will include preparing payroll records and payroll taxes, uncollectible accounts, adjusting entries and trial balances, as well as corporate accounting practices and principles. Students will be given the opportunity to network and expand their accounting knowledge through multiple career and exploration days at local universities. Accounting II will supplement textbook activities and assignments with the use of Cengage Mindtap for online computer applications. Real-world accounting simulations will also be used at this level.

CHS ACCOUNTING III HONORS **6603**
Grade 12 **Credit 1.00**
Prerequisite: At least a "B" average in Accounting II and teacher recommendation.
Students in Accounting III Honors will develop advanced skills in accounting that build upon those acquired in Accounting II. Students will learn advanced departmentalized accounting, accounting for adjustments and valuations, as well as advanced corporate and management accounting practices and principles. Students will also be introduced to numerous accounting software programs (Excel, QuickBooks, etc.) and will practice real-world scenarios using each program. Students will be given the opportunity to network and expand their accounting knowledge through multiple career and exploration days at local universities. Accounting III Honors will supplement textbook activities and assignments with the use of Cengage Mindtap for online applications. Real-world

accounting simulations will also be used at this level. Students will have the opportunity to elect to take this course for college credit through Carlow University. If the student decides to take the class for college credit, the student is responsible for the cost of the course at Carlow. Carlow determines the cost of the course on an annual basis.

ADVANCED EXCEL – MICROSOFT OFFICE SPECIALIST (MOS) CERTIFICATION **6668**
Grades 10, 11, 12 **Credit .50**
If you plan to go into the business world or are college bound, be prepared! This course will boost your skills in the use of Microsoft Excel through "hands on" applications. Upon successful completion of this course, students can earn Microsoft Office Specialist (MOS) certification. MOS certification is an industry standard certification given by Microsoft Corporation.

ADVANCED MS WORD with MOS CERTIFICATION **6669**
Grades 10, 11, 12 **Credit .50**
Be equipped to enter college or the business world! This course will strengthen your skills in MS Word through the use of integrated software and realistic projects. You will also have the opportunity to take the MOS Certification test which is an industry standard test given by the Microsoft Corporation. If you pass this test, Microsoft certifies you as an Office Specialist which will help you when you are applying for future employment.

ADVANCED POWERPOINT with MOS CERTIFICATION **6671**
Grades 10, 11, 12 **Credit .50**
PowerPoint is the industry standard presentation software being used today. This course will strengthen your skills in PowerPoint through the use of realistic and fun projects. You will also have the opportunity to take the MOS Certification test which is an industry standard test given by the Microsoft Corporation. If you pass this test, Microsoft certifies you as an Office Specialist which will help you when you are applying for future employment.

BUSINESS AND CONSUMER LAW **6667**
Grades 11, 12 *NCAA Approved* **Credit .50**
Business and Consumer Law is a one semester course that familiarizes the student with some of the basic principles of law in personal law and the business field. Some principles that will be studied are, understanding the sources of law, enforcing the law, court structures, and understanding the differences between criminal and civil law. Also included is a short intro to contract law. All material is presented in a manner that the ordinary citizen can understand and use. Students will participate in a mock trial at the end of the semester.

BUSINESS MATH **6305**
Grade 12 - Math credit in Grade 12 **Credit 1.00**
Business Math is a two-part course. During the first semester, students will be introduced to Personal Finance topics such as gross and net pay, taxes, savings and investing, and debt. Students will be required to apply basic math skills to these topics and solve linear equations. Students will also learn how to fill out a basic 1040EZ form for completing their own taxes. The second semester is focused on business topics such as Personnel, Purchasing, Production, Sales, Marketing, and Financial Statements supported by textbook work along with a virtual business simulation. It culminates with each student running a virtual restaurant and virtual hotel. This course is recommended for students with little or no personal finance background and/or students wishing to pursue a business curriculum after graduation or planning to someday operate their own business.

CHS WEB PAGE DESIGN AND DEVELOPMENT **0582**
Grades 11, 12 **Credit .50**
Prerequisite: At least a "B" average in Academic English or teacher recommendation.
This course provides students with a basic understanding of the methods and techniques that are required to develop a website using HTML, of developing a simple to moderately complex website using the standard HTML language, Dreamweaver or comparable programs, and JavaScript. Students also will gain knowledge related to design and layout techniques that are used in web development. Students will be introduced to basic search engine analysis in order to enhance design skills. Students have the potential to individually pay and earn college credit through the University of Pittsburgh; therefore, the rigor of the course will be comparable to that of an Advanced Placement or first-year college course.

CM STORE PARTNERS **0600**
Grades 11, 12 **Credit .50**
Prerequisite: Must have a satisfactory discipline (no Level II or higher offenses) and attendance record for entrance into this course. Successful completion of Entrepreneurship II and participation in an interview with the coordinating teachers.

Students who participate in this class will serve as peer mentors for our students with exceptionalities. Together, the peer mentors and the students with exceptionalities will create products and sell them at the CM Store. This exciting, hands-on course will explore strategies and operations of a real manufacturing enterprise as well as teach individuals how to assist peers and work as a team. This course will promote an inclusive environment for students who are interested in taking on a leadership role, while being engaged in the design and development of diverse products. Some of the greatest benefits for both populations may be the intangible gains made in collaboration, creativity, confidence, compassion and sense of community among everyone involved.

DESKTOP PUBLISHING **6616**
Grades 10, 11, 12 **Credit .50**
Desktop Publishing is a one semester course that is devoted specifically to introducing desktop publishing and communication skills needed in today's business environment. Upon completion of this course, students will be able to effectively demonstrate skills in the areas of desktop publishing, creativity, and decision making. The main emphasis will be the production of brochures, posters, newsletters, reports, etc. Electronic communication methods as well as presentation applications will be explored to supplement the effective use of desktop publishing.

ENTREPRENEURSHIP I **6624**
Grades 9, 10, 11, 12 **Credit .50**
Have you ever dreamed of owning your own business and being the boss? Could you be the next Bill Gates (Microsoft), Oprah Winfrey (Harpo Productions), or Mark Zuckerberg (Facebook)? These famous entrepreneurs started with a great idea. This semester course will familiarize students with the planning, organization, and operation of a business enterprise. During the semester, students will participate in a business ownership simulation, created by the University of Pittsburgh.

ENTREPRENEURSHIP II (THE CM STORE) **6700**
Grades 10, 11, 12 **Credit .50**
Prerequisite: Successful completion of Entrepreneurship I and teacher recommendation.
This one semester course is designed for students who are entrepreneurial minded and want to experience the exciting world of business ownership firsthand. Entrepreneurship II will give students hands-on experience with designing and manufacturing products to be marketed and sold at the CM Store, a small retail store headquartered at Canon-McMillan High School. In conjunction with students enrolled in the CM Store Production class, Entrepreneurship II students will also operate the CM Store on the days it is open for business. Interpersonal skills will be practiced through customer interactions and peer-to-peer collaboration.

FRESHMAN SEMINAR **6620**
Grade 9 (required) **Credit .50**
Students will develop skills in basic financial literacy using EverFi as a supplemental web-based platform. Students will also take steps in building their portfolios regarding the state's career readiness program. These steps involve creating artifacts using word processing, spreadsheet, and presentation applications to assist in the investigation of future career pathways.

INVESTMENT STRATEGIES **6626**
Grades 11, 12 **Credit .50**
Prerequisite: At least a "B" average in Personal Finance.
Investment Strategies is a course designed to evaluate investment options to meet short- and long-term goals. The course will study personal wealth management techniques and evaluate investment instruments such as stocks, bonds, mutual funds, index and exchange traded funds along with the risk and reward associated with each. Speakers from various financial management companies will be invited to talk with the class. Students will complete a stock market simulation as well. This is a great course for students interested in taking more control over their investment options and studying various strategies to become financially wealthy.

PERSONAL FINANCE **6622**
Grades 9, 10, 11, 12 **Credit .50**
Personal Finance will help students better understand basic monetary principles used to manage their finances and plan for the future. The students will study earning and managing income (including managing a checking account), saving and investing (stock market basics) in the long and short term, managing credit, and basic taxes. These principles will be demonstrated through the use of classroom projects and simulations. This is a fast paced course which requires the ability to work independently and demonstrate good time-management skills.

PRINCIPLES OF MARKETING **6623**

Grades 10, 11, 12 **Credit .50**

Principles of Marketing will introduce the students to the concepts of product development, advertising and promotion, distribution, pricing, and basic communication skills. Mastery of these topics will be demonstrated through the completion of classroom projects and simulations.

SPORTS AND ENTERTAINMENT MANAGEMENT **6666**

Grades 10, 11, 12 **Credit .50**

Students will be introduced to the principles of managing a business, with an emphasis on sports and entertainment industries. Other issues affecting the contemporary business will be explored. These include the social and ethical responsibilities of business, legal concerns, and marketing and promotion of a business. Students will utilize discussion, case studies, business simulations, and technology in order to meet the learning objectives of the class.

COMPUTER SCIENCE

AP Computer Science A counts as a math credit for seniors only. All other Computer Science courses count as electives.

AP COMPUTER SCIENCE A (ADVANCED PLACEMENT) **3362**

Grades 10, 11, 12 ***NCAA Approved*** **Credit 1.00**

Prerequisite: CS I in Python and CS II in Python with a "B" average or better and teacher recommendation.

This blended curriculum, in partnership with Amazon Future Engineer, teaches object-oriented programming using the Java language and is meant to be the equivalent of a rigorous first semester, college-level course in computer science. AP CSA emphasizes problem solving and algorithm development and uses hands-on experiences and examples so students can apply programming tools and solve complex problems and is well-suited for students interested in pursuing a career in computer science or engineering. The in-depth study of topics include: built-in and user defined data types, objects, classes, methods, arrays, inheritance, interfaces, abstract classes, searching & sorting, arraylists, recursion, stacks, queues, and AP lab case studies. Students who take this course will be prepared to take the AP Computer Science A exam in May. College credit may be granted for this course for students who enroll in the School of Information Systems & Technology at Pittsburgh Technical College. **Note: AP Computer Science A counts as a math credit for seniors only.**

AP COMPUTER SCIENCE PRINCIPLES (ADVANCED PLACEMENT) **3382**

Grades 9, 10, 11, 12 ***NCAA Approved*** **Credit 1.00**

Prerequisite: At least a "B" average in Algebra 1.

The AP Computer Science Principles curriculum, in partnership with Code.org, is a full-year, rigorous, entry-level course that introduces high school students to the foundations of modern computing. The course covers a broad range of foundational topics including programming in the Javascript language, app design and development, algorithms and functions, the Internet, big data, digital privacy and security, and the global impacts of computing. Students enrolled will complete the Create Performance Task in which they will create their own app to be scored by the CollegeBoard, and will be prepared to take the AP Computer Science Principles exam in May. College credit may be granted for this course for students who enroll in the School of Information Systems & Technology at Pittsburgh Technical College.

COMPUTER PROGRAMMING IN C++ **3351**

Grades 9, 10, 11, 12 ***NCAA Approved*** **Credit .50**

Prerequisite: At least a "C" average in Algebra 1.

This course is designed to introduce students to basic text-based programming in the C++ language. This course is a console-based introductory course in Computer Science and should be taken by any student planning on future studies in Mathematics, Engineering, Science, or Business. The students will study programming methodology, write algorithms, and learn topics in C++ syntax including variables, arrays, input-output, selection, program flow control, repetition, procedures, and functions.

COMPUTER SCIENCE I in PYTHON **3348**

Grades 9, 10, 11, 12 **Credit .50**

Prerequisite: At least a "C" average in Algebra 1 or must be currently enrolled in Algebra 1.

This is the first course in the CMU CS Academy, developed by Carnegie Mellon University's School of Computer Science. Computer Science I in Python is designed to introduce students to basic programming in the Python language in conjunction with CMU's Graphics package which introduces students to programming in a captivating manner while simultaneously building problem-solving skills and an understanding of the thinking methods used by programmers. The topics in CSI Python (units 1-6) include: creating drawings, functions, mouse events & properties, conditionals, helper functions, complex conditionals, key events, groups, step events, motion, local variables, for-loops and random values.

COMPUTER SCIENCE II in PYTHON **3360**

Grades 9, 10, 11, 12 **Credit .50**

Prerequisite: At least a "B" average in CS I in Python. Students who successfully completed units 1-6 of CMU CS Academy CS1 in 8th grade are eligible to take CS II in Python.

This course is a continuation of Computer Science I in Python with CMU CS Academy, developed by Carnegie Mellon University's School of Computer Science. The topics in CS II Python (units 7-12) build upon what students learned in the CS I in Python and include: variables, while-and for-loops, nested loops, randoms, strings, lists, return values, 2D lists, board games, and a creative project with an introduction to images and sounds. This course is the prerequisite for Special Topics in CS.

CYBERSECURITY **3389**

Grades 11, 12 **Credit .50**

Prerequisite: At least a "B" average in any Computer Science course and teacher recommendation.

Cybersecurity, in partnership with Cyber.org, lays a foundation for understanding cyber law and policy, Linux Operating Systems, networking technology basics, risk assessment, cryptography, and a variety of cyber security tools. At the end of this course students will understand the concepts behind cybersecurity, will practice a variety of cybersecurity skills in a safe lab setting, and will have a greater understanding of the history of cybersecurity through case studies. The lab activities are designed for use with a cyber range, a virtual lab environment where students are able to simulate cybersecurity scenarios in a safe, protected online environment. Using the cyber range, students will explore the back end of IT systems used by today's industries using a Kali Linux Machine and a Windows 7 Machine. Students and parents will be required to sign a Cybersecurity Course Acceptable Use policy before participating in this course.

SPECIAL TOPICS IN COMPUTER SCIENCE HONORS **3363**

Grades 10, 11, 12 **Credit .50**

Prerequisite: At least a "B" average in CS I in Python and CS II in Python and teacher recommendation.

This course is built upon the premise that computer science and computational problem solving are fundamental skills for engaging the 21st-century marketplace of ideas and economies. This weighted course is designed for students who have successfully completed both CS I and CS II in Python and includes additional advanced programming and CS topics in the Python language through CMU CS Academy. Students will apply and extend computational problem-solving skills in a variety of application areas such as CS in: art, data analysis, and visualization, object-oriented programming, simulations, game design, web applications, cyber security, machine learning, artificial intelligence, and more.

ENGLISH

AP ENGLISH LANGUAGE AND COMPOSITION (ADVANCED PLACEMENT) **1125**
Grade 11 *NCAA Approved* **Credit 1.00**
Prerequisite: An "A" average in English 10-Honors and a teacher recommendation. Students will be required to complete a summer enrichment assignment.
AP English Language and Composition is an introductory college-level composition course. Students cultivate their understanding of writing and rhetorical arguments through reading, analyzing, and writing texts as they explore topics like rhetorical situations, claims and evidence, reasoning and organization, and style.

AP LITERATURE AND COMPOSITION (ADVANCED PLACEMENT) **1124**
Grade 12 *NCAA Approved* **Credit 1.00**
Prerequisite: An "A" average in English 11-Honors or at least a "B" average in AP Language and Composition and a teacher recommendation. Students will be required to complete a summer enrichment assignment.
This course is meant to improve the student's ability to find meaning and technique in literature by interacting with the text through notes, discussion, and written analyses. Students closely read significant works of literature from the Middle Ages to the present: poems, essays, plays, stories and novels. As they read, they often take notes about an author's rhetorical devices and ideas or take notes that include their own questions and comments. They analyze, interpret, and respond to these works in small and large group discussions. Reading, note taking, and discussions provide a springboard for writing in-class and out-of-class essays. In this course, the students will complete a research paper required for the Graduation Project.

CREATIVE WRITING **1512**
Grades 11, 12 *NCAA Approved* **Credit .50**
Prerequisite: At least a "B" average in English.
Creative writing is a semester course that focuses on assignments that require imaginative thought, descriptive language, and creative presentation. Students will be responsible for the materials necessary to complete their projects.

ENGLISH 9 **1104**
Grade 9 *NCAA Approved* **Credit 1.00**
This course is designed to strengthen and extend communication skills in reading, writing, speaking, and listening. Reading skills are strengthened through the study of short stories, novels, poetry, and drama. Concentration in grammar is on sentence structure and usage through the writing process and research skills.

ENGLISH 9-ACADEMIC **1106**
Grade 9 *NCAA Approved* **Credit 1.00**
Prerequisite: At least a "B" average in English 8 and a teacher recommendation.
English 9-Academic is designed to prepare students for English 10-Academic. Students develop skills in oral and written communication, research, grammar, usage and mechanics, vocabulary in context, and analysis of literature. Students engage in interpretive reading, analytical discussion, and analytical writing.

ENGLISH 9-HONORS **1103**
Grade 9 *NCAA Approved* **Credit 1.00**
Prerequisite: An "A" in English 8 and a teacher recommendation. Students will be required to complete a summer enrichment assignment.
English 9-Honors is designed to prepare students for English 10 Honors and is an in-depth study of oral and written communication, literature, research, grammar, usage and mechanics, and vocabulary. Students engage in more extensive and comprehensive reading, discussion, and writing than in the English 9-Academic curriculum.

ENGLISH 10 **1101**
Grade 10 *NCAA Approved* **Credit 1.00**
English 10 is designed to prepare students for English 11. This course encompasses fundamental skills in research, grammar, oral and written communication, vocabulary, and the study and appreciation of various genres of texts and media. Research, grammar, and usage and mechanics are integrated with reading, writing, and speaking skills.

ENGLISH 10-ACADEMIC **1102**
Grade 10 *NCAA Approved* **Credit 1.00**
Prerequisite: At least a "B" average in English 9-Academic or English 9 with a teacher recommendation.
English 10-Academic is designed to prepare students for English 11-Academic. The course offers a thorough treatment of classic works of literature and requires reading beyond the English 10 curriculum. Skills in research, grammar, usage and mechanics, as well as vocabulary in context are integrated with the study of literature. Emphasis is placed on discussion and writing that develop analytical skills.

ENGLISH 10-HONORS **1130**
Grade 10 *NCAA Approved* **Credit 1.00**
Prerequisite: An "A" average in English 9-Honors or English 9-Academic and a teacher recommendation. Students will be required to complete a summer enrichment assignment.
English 10-Honors is designed to prepare students for English 11-Honors. English 10-Honors includes an intensive study of various genres of classic literature. Special emphasis is placed on interpretive, analytical and evaluative skills through close reading, discussion, research, and writing.

ENGLISH 11 **1111**
Grade 11 *NCAA Approved* **Credit 1.00**
English 11 is designed to prepare students for English 12. The course emphasizes close reading and class discussion as a means to analyze and interpret fiction and non-fiction. Through reading and analyzing texts from various genres, students will develop reading and vocabulary skills. In addition, students will also develop writing skills that emphasize the fundamentals of grammar, research, usage, and mechanics.

ENGLISH 11-ACADEMIC **1112**
Grade 11 *NCAA Approved* **Credit 1.00**
Prerequisite: At least a "B" average in English 10-Academic or English 10 and a teacher recommendation.
English 11-Academic is designed to prepare students for English 12-Academic. The course will offer a thorough treatment of classic novels from literature and will emphasize close reading, class discussion, analysis, and interpretation. Skills in research, grammar, usage and mechanics, as well as vocabulary in context are integrated with the study of literature. Emphasis is also placed on writing that develops analytical skills.

ENGLISH 11-HONORS **1131**
Grade 11 *NCAA Approved* **Credit 1.00**
Prerequisite: An "A" in English 10-Honors or English 10-Academic and a teacher recommendation. Students will be required to complete a summer enrichment assignment.
English 11 Honors offers an in-depth treatment of literature that includes classic novels and selected works from the classroom survey text. Skills in research, grammar, usage and mechanics, as well as vocabulary in context are integrated with the study and appreciation of literature. Special emphasis is placed on discussion and composition that develop analytical skills. A close reading of the works and detailed note taking that includes student responses and questions are required for insightful discussions and effective writing.

ENGLISH 12 **1122**
Grade 12 *NCAA Approved* **Credit 1.00**
English 12 will emphasize close reading, formal and technical writing, and communication skills through the study of various genres of texts and media. Students will be responsible for group work, individual assignments, and class discussion and activities as a means to analyze and interpret fiction and nonfiction. Vocabulary in context is also integrated with the study of the genres studied. In addition, students will develop writing skills that emphasize the fundamentals of grammar, research, usage, and mechanics.
Students will explore various career options through field trips,and presenters coming into the classroom. The students will learn soft skills, interviewing skills, and will discuss job opportunities. In this course, the students will also complete a research paper and presentation required for the Graduation Project.

ENGLISH 12-ACADEMIC **1121**
Grade 12 *NCAA Approved* **Credit 1.00**
Prerequisite: At least a "B" average in English 11-Academic or English 11 and a teacher recommendation.
English 12-Academic is designed to primarily improve analytical reading and formal writing skills. Through a close reading of Western literature, students will analyze, interpret, and respond to both fiction and nonfiction. In addition, the evolution of the English language will be traced while reading poetry, novels, short stories and plays. Students will incorporate grammar, usage, and

documentation skills into a variety of writings. In this course, students will complete a research paper and presentation required for the Graduation Project.

ENGLISH 12-HONORS **1123**
Grade 12 *NCAA Approved* **Credit 1.00**
Prerequisite: At least a "B" in English 11-Honors or a final grade of an "A" in English 11-Academic and a teacher recommendation. Students will be required to complete a summer enrichment assignment.
English 12- Honors is designed to primarily improve analytical reading and formal writing skills. Through a close reading of British and American literature, students will analyze, interpret, and respond to both fiction and nonfiction. Students' ability to compare, contrast, and analyze literature insightfully will be demonstrated through class discussions and in formal literary analysis essays. In addition, students will trace the evolution of the English language while reading poetry, novels, short stories and plays. Students will incorporate grammar, usage, and documentation skills into a variety of writing projects. In this course, students will complete a research paper required for the Graduation Project as well as prepare for the presentation.

EXPLORING POETRY **1543**
Grades 9, 10, 11, 12 *NCAA Approved* **Credit .50**
This course is designed to allow students to explore poetry: to discuss what poetry is, to identify types of poetry, to learn how to read poetry as well as how to write poetry. Students will also search for the meaning and understanding of a poem by answering the who, the what, the when, the where, the why, and the how of a poem. Selected poets will also be researched and studied.

GREAT BOOKS **1522**
Grades 10, 11, 12 *NCAA Approved* **Credit .50**
In this course students follow the reading/discussion program of the Great Books Foundation. They closely read and discuss short, provocative pieces from important philosophers, historians, psychologists, scientists, and writers of imaginative literature, e.g., Aristotle, Locke, Tocqueville, Freud, Kant, Kafka, and Hobbes.

HOLOCAUST AND GENOCIDE STUDIES **1515**
Grades 11 and 12 **Credit .50**
In this course, students will be given a thorough historical background of the Holocaust, the history of antisemitism, the dangers of hate and complicit behavior. They will gain an understanding of the numerous collaborators and participants during the Holocaust, the importance of individual choice and the results of WWII and the Holocaust. Students will also study and research other cases of genocide such as the Cambodian, Bosnian and Rwandan genocides. Students will conduct analysis of non-fiction and fiction literature, propaganda, survivor, victim and perpetrator memoirs and testimonials, film and photography. Students must understand that mature and historical graphic content will be shown.

PREPARATION FOR THE SAT I REASONING TEST **1518**
Grades 10, 11, 12 **Credit .50**
This one semester course is designed to familiarize college bound students with the SAT I Reasoning Exam. The course objective is to focus on time constraints, strategies, and approaches to tackling the essay prompt, the verbal sections, and the math questions on the exam.

PUBLIC SPEAKING I **1519**
Grades 9, 10, 11, 12 *NCAA Approved* (1 Unit Maximum) **Credit .50**
Public speaking does not need to be a scary experience. In fact, it can be fun. In this course students will learn various techniques to improve their public speaking skills. Some of the key objectives of the course are for students to learn to use conversational speaking tones, to maintain positive eye-contact, and to use non-verbal communication skills to augment the effectiveness of any speech. The relaxed and mutually supportive atmosphere sets the tone for a comfortable and a valuable learning experience.

PUBLIC SPEAKING II **1521**
Grades 9, 10, 11, 12 *NCAA Approved* (1 Unit Maximum) **Credit .50**
Prerequisite: Successful completion of Public Speaking I and a teacher recommendation.
This course is an extension of the skills learned in Public Speaking I. Because of the relaxing and supportive atmosphere, students build their skill levels to a much greater degree. This class celebrates the ability that the students have to move away from the lectern towards a more sophisticated style of speaking that involves some memorization. In addition, the use of PowerPoint technology is integrated into the curriculum for this class. Students in Public Speaking II will build upon skills mastered in Public Speaking I and will learn new skills that will be of benefit to students both in future schooling and in career goals.

YOUNG ADULT LITERATURE **1544**

Grades 9, 10, 11, 12 **Credit .50**

This course includes modern young adult literature from various genres including Sci-Fi/Fantasy, Fiction, Thriller and Mystery. The class will focus on these works in a more casual discussion-based format. As part of the course and in addition to discussions, students will compose book reviews of the works read, and participate in other creative writing formats including journaling. The course will primarily cover literature discussing world, social, and modern teen issues. The course will explore how bibliophiles read, discuss, and grow their love of contemporary literature outside the traditional classroom format. This course will appeal to avid readers and promotes reading as a life-long habit, exposes students to themes, concepts, and philosophies that may challenge their current comfort levels, and encourages the acceptance of diverse ideas in an increasingly global environment.

FAMILY AND CONSUMER SCIENCES

BAKING AND PASTRY ARTS **7572**

Grades 9, 10, 11, 12 **Credit .50**

Students in Baking and Pastry Arts take on the world of pastry chefs. Baking principles and procedures will be examined and applied through hands-on practice and regular food labs. Students will also explore safety/sanitation, basic principles in baking, measuring using weight, and use of specialized baking equipment and techniques. Possible cooking units include pastries, pies and tarts, cookies, muffins, basic cakes, cake/cookie decorating, quick breads, yeast breads, and other baked goods of student interest. Successful completion of a food specific FCS course (Global Cuisine or Family & Community Studies) is highly recommended.

EARLY CHILDHOOD EDUCATION I **7567**

Grades 11, 12 **Credit .50**

Prerequisite: Students must have a satisfactory health and discipline record for entrance into this course.

Early Childhood Education I is a study of child development from birth through five years of age. During this course students will learn about theories of child development, best practices for guiding children's behavior, and developmentally appropriate practices for teaching preschool children. The beginning of the course will prepare students for working as teachers in the Canon-McMillan High School Preschool. The preschool is held four days a week at the high school and includes community children between the ages of three and five. Students will work in groups to plan lessons, teach elementary concepts, maintain a clean and safe classroom, and guide children through play activities. Grading will be based on written lesson plans, class projects, teaching experiences, child observations and play interactions with preschool children.

EARLY CHILDHOOD EDUCATION II **7568**

Grades 11, 12 **Credit .50**

Prerequisite: Students must have maintained a "C" average or better in Early Childhood Education I and have a satisfactory health and discipline record for entrance into this course.

Early Childhood Education II is the second level course discussing theories of child development and working in the Canon-McMillan High School Preschool. Students will function as early childhood educators as they plan and implement lessons for children between the ages of three and five. Students will spend four days a week working with preschool children and one day a week studying concepts of child development with an emphasis on curriculum. Students will work in groups to plan lessons, teach elementary concepts, maintain a clean and safe classroom, and guide children through play activities. Grading will be based on written lesson plans, class projects, written assignments, teaching experiences, child observations, and play interactions with preschool children.

FAMILY AND COMMUNITY STUDIES **7569**

Grades 9, 10, 11, 12 **Credit .50**

Family and Community Studies is a course that discusses daily life when living away from home. During this class, we will explore topics of food and government, consumer economics, global food issues, principles of design, and service to the community. We will spend a good portion of class time working in the food lab and the remainder on individual or group projects.

FOODS AND NUTRITION **7565**

Grades 10, 11, 12 **Credit .50**

Prerequisite: Successful completion of Family and Community Studies or Global Cuisine with a "C" average or better.

Foods and Nutrition is a course that will build on the skills and principles learned in Family and Community Studies and/or Global Cuisine. In this course, we will focus on food and nutrition principles that will help students understand the relationship between eating and health. Students will explore issues pertaining to calories and energy, dieting guidelines, the nutrients, healthy eating habits, nutritional needs across the lifespan and current trends in nutrition. Throughout this course students will be working in lab groups to prepare a variety of recipes.

GLOBAL CUISINE **7571**

Grades 9, 10, 11, 12 **Credit .50**

Global Cuisine is an introductory course that focuses on basic preparation and cooking skills while learning how food impacts people all around the world. Students will work in groups and share responsibilities in order to prepare various food products. Students will be able to identify tools, ingredients and techniques to prepare a variety of foods for themselves and others. Throughout the course we will discuss the social aspects of eating, U.S. Regional cuisine and international cuisine.

FINE ARTS

THEATRE STUDIES **1514**

Grades 9, 10, 11 **Credit .50**

Students will learn the fundamentals of theatre including performing, improvisation, and theatre history. They will study plays, participate in live theatre, and be exposed to dramatic literature from a variety of historical time periods. Through this class students will learn to appreciate the creative process that goes into creating a performance from the Ancient Greek time period to present.

ADVANCED THEATRE STUDIES **1447**

Grades 10, 11, 12 **Credit 1.00**

Prerequisite: An "A" or "B" in Theatre Studies (Drama I).

Students in this class will read from Shakespeare, perform Shakespeare, engage in script writing, learn theatre history, and dive into podcast performance and writing. This class will be part of City theatre's young playwrights program and will learn weekly from a teaching artist as well as partake in Pittsburgh Public Theatre's Shakespeare Monologue competition.

CHS ADVANCED ACTING AND THEATRE PERFORMANCE **1446**

Grades 11, 12 **Credit 1.00**

Prerequisite: An "A" or "B" in Advanced Theatre Studies (Drama II).

Students will train their acting skills using many famous techniques. Including: Stanislavsky, Chekhov, Meisner, Suzuki(movement) They will focus on skills for Acting both on stage and for the camera. An intense focus on movement, speech, audition preparation, rehearsal & performance will occur. This course will incorporate all aspects of theatre production but also include performing on stage. Students in this course will work towards activities gearing towards both shows (Fall play and Spring musical). A culminating one act showcase will be their final performance event. This course will also participate in City Theatre's Young Playwright's Festival. Students will have the opportunity to elect to take this course for college credit through Carlow University. If the student decides to take the class for college credit, the student is responsible for the cost of the course at Carlow. Carlow determines the cost of the course on an annual basis.

STAGECRAFT **1520**

Grades 11, 12 **Credit 1.00**

Prerequisite: An "A" or "B" in Advanced Theatre Studies (Drama II).

Stagecraft introduces students to construction techniques, tool & equipment safety by building scenery and props for school plays and musicals. This stage applications class applies technical skill to designs to create original sets for each show. Students will also learn strategies for set painting and set design. In this year-long course, each student will read/research the plays and musicals in preparation to construct a theatre set. This set and design will be best suited for our proscenium stage for two major projects during the year.

TECHNICAL THEATRE **1450**

Grades 9, 10, 11, 12 **Credit .50**

Technical Theatre is an introductory course which explores the world of backstage theatre. Students will explore multiple areas of theatrical production from both a theoretical and practical aspect. Students will be given the opportunity to explore areas of theatre production including, but not limited to lighting and sound design, fly/counterweight systems, and stagehand work. Students will also have the opportunity to employ skills learned in this class in play and musical productions. Participation in the Fall Play and Spring musical will be mandatory for this class. Students enrolled in this class should have the ability to lift 30+ pounds and climb a ladder (required for focusing and hanging light fixtures)

HEALTH & PHYSICAL EDUCATION

A student will be required to take, at a minimum, one 9/10 Physical Education course and one 11/12 Physical Education course. A student must take a total of one credit of PE to meet our graduation requirements.

HEALTH **7006**
Grade 9 **Credit .50**
NOTE: This course is required for graduation.
The purpose of this course is to provide students with the ability to examine their lifestyles, select goals, and make plans to achieve and maintain optimum health and wellness. This involves choosing behaviors that help prevent illness and accidents, promote health for self and others and improve the quality of the environment.

PHYSICAL EDUCATION
Grades 9, 10 **7013 Credit .50**
Grades 11, 12 **7001 Credit .50**
This program of sports is a medium which leads to independent learning of human movement and behavior. The exciting nature of sport serves to increase learning because the cognitive, affective and psychomotor processes of the student participants are engaged. The co-educational/selective program of activities ranges from basic and advanced physical education instruction to lifetime and recreational activities. By offering a varied program and fitness assessments, the general objectives of physical education may be realized in an interesting and challenging manner.

PHYSICAL EDUCATION ELECTIVES

The following courses are for elective credit only and do not count as a physical education credit.

COMPETITIVE P.E. **7017**
Grades 10, 11, 12 **Credit .50**
Prerequisite: Successful completion of P.E. 9/10 with at least a "B" average.
Students will be engaged in competitive team sports or individual competitions/tournaments. Competitive P.E. will promote enjoyable participation in team/individual sports by using active learning strategies, developing students knowledge, confidence, motor skills, and will provide opportunities for a higher level of physical activity. Students can achieve personal success, increase knowledge, improve skills and fitness, and learn the importance of teamwork, cooperation, effort, and sportsmanship.

LIFEGUARDING **7011**
Grades 10, 11, 12 **Credit .50**
Prerequisite: Successful completion of P.E. 9/10 with at least a "B" average, a teacher recommendation, and a minimum age of 15 years by the end of the semester.
Students will be offered the opportunity to earn American Red Cross certification in Lifeguard Training and First Aid and Safety, CPR, and AED training. The topics of disaster preparedness, safety and emergency response will be studied in a variety of situations. Students will develop a greater appreciation for the seriousness of this training by learning about related medical emergencies. Students will also develop analytical skills and the ability to assess safety risks in various settings. All fees for manuals, materials and certifications are included in the course fee. Each student will be responsible for the cost(s) of course certification cards, medical supplies and processing fees. Payment and attendance does not guarantee certification.

LIFETIME SPORTS AND FITNESS **7016**
Grades 10, 11, 12 **Credit .50**
Prerequisite: Successful completion of P.E. 9/10 with at least a "B" average.
The goal of this course is to promote physical fitness through a variety of fitness activities and sport units. In this course students will explore concepts involving personal and group fitness, dual sports, individual and lifetime sports. This course allows students to discover new interests as they experiment with a variety of exercises in a non-competitive atmosphere. By targeting different areas of fitness, students increase their understanding of health habits and practices and improve their overall fitness level.

P.E. PARTNERS **7044**

Grades 11, 12 **Credit .50**

Prerequisite: Must have a satisfactory discipline record (no Level II or higher offenses) and attendance record for entrance into this course. Students must participate in an interview with the coordinating teachers.

Students in this class will act as peer mentors for students with exceptionalities participating in the Physical Education course. This class has the purpose of promoting an inclusive environment as well as building social skills among athletes. Students in this class will be expected to show good sportsmanship, assist peers, and act as role models throughout the class period. Students in this class will be graded on participation and teamwork with others.

STRENGTH AND CONDITIONING **7015**

Grades 9, 10, 11, 12 **Credit: .50**

Prerequisite: An "A" or "B" average in their most recent physical education class.

This course will serve as an introduction to fundamental strength training principles. Students will learn and implement weight room safety as they actively participate in a variety of strength training and conditioning exercises. Students will be instructed on proper technique for a variety of strength training exercises, including but not limited to weight training, body weight training, and cardio exercises.

STRENGTH AND CONDITIONING II **7020**

Grades 10, 11, 12 **Credit: .50**

Prerequisite: An "A" or "B" average in Strength and Conditioning.

This course will be a continuation of Strength and Conditioning. Students will review fundamental strength training principles learned, and will apply those skills throughout the semester as they actively participate in a variety of strength training and conditioning exercises. Students will set measurable goals that they will design individualized workout programs to work towards achieving throughout the semester. They will be expected to monitor their progress throughout the semester, and demonstrate the knowledge to work towards achieving those individual goals. An emphasis will be placed on individual improvement as students progress throughout the semester, with the ultimate goal being for students to take the skills learned in class into their everyday lives.

***ENRICHMENT SUMMER SCHOOL PHYSICAL EDUCATION** **Credit .50**

Grades 9, 10, 11, 12

Students who wish to make room for an additional elective in their academic schedule for the 2021-2022 school year may elect to take Physical Education during the summer of 2022. This program is open to all students at a cost to parents who wish to enroll their student in this program. Enrollment and payment must be completed online at a date yet to be determined. **Proof of online enrollment and payment must be submitted at a date yet to be determined.**

***ENRICHMENT SUMMER SCHOOL HEALTH** **Credit .50**

Grade 9

Students who wish to make room for an additional elective in their academic schedule for the 2021-2022 school year may elect to take Health during the summer of 2022. This program is open to all students at a cost to parents who wish to enroll their students in this program. Enrollment and payment must be completed online at a date yet to be determined. **Proof of online enrollment and payment must be submitted at a date yet to be determined.**

MATHEMATICS

Use the chart to determine your appropriate math placement. Please adhere to the prerequisites and consult with your math teacher.

For current 8th graders:

8th	9th
PA Core Algebra 1	Geometry Honors (must have at least a B average in Algebra 1 and pass the Keystone exam) Geometry Academic (C in PA Core Algebra 1; Students who earned a "B" or higher MUST take Geometry Honors) Algebra 1 Academic
Pre- Algebra Academic	Algebra 1 Academic (must have an A average in Pre-Algebra Academic) Algebra 1 (must have a B average in Pre-Algebra Academic) Algebra 1A
Pre-Algebra	Algebra 1 (must have an A average in Pre-Algebra and teacher recommendation) Algebra 1A

For current high school students:

9th	10th	11th	12th
Geometry Honors Geometry Academic	Algebra 2 Honors Algebra 2 Academic	Pre-Calculus Honors Pre-Calculus AP Statistics (elective) Statistics & Real World Math (elective) Trigonometry	AP Calculus AB AP Calculus BC AP Statistics Calculus Honors Statistics & Real World Math Physics Business Math AP Computer Science A
Algebra 1 Academic Algebra 1	Geometry Honors Geometry Academic Geometry	Algebra 2 Honors Algebra 2 Academic Algebra 2	Pre-Calculus Honors Pre-Calculus Statistics & Real World Math Physics Business Math Trigonometry
Algebra 1* Algebra 1A	Algebra 1B	Geometry	Algebra 2 Business Math

*Please note that an Algebra 1 student would only move into Algebra 1B if they do not successfully pass Algebra 1.

Recommended Calculators for Math Courses:

Students/families are responsible for the purchase of the respective calculator for the course(s) scheduled.

Recommended Calculator	Course
Scientific Calculator: The Texas Instrument, TI-30XIIS	All Algebra 1, Algebra 2, and Geometry courses Calculus Honors Pre-Calculus Pre-Calculus Honors Trigonometry
Graphing Calculator: ANY Texas Instrument model **Graphing Calculator: TI-89 Titanium (will be provided)**	AP Calculus AB AP Calculus BC
Graphing Calculator: Texas Instrument, TI-83+	AP Statistics Statistics and Real World Mathematics

ALGEBRA 1A **3365**

Grade 9 *NCAA Approved* (1 Unit Maximum) **Credit 1.00**

This course is a basic Algebra 1 course for students. The course will begin by covering operations with real numbers and expressions. The students will then receive instruction in basic algebraic concepts including solving linear equations and inequalities, graphing linear equations, and finding the slope of a line. This course will begin to prepare students for the Keystone Algebra Exam. Algebra 1A will be taken immediately following this course.

ALGEBRA 1B **3366**

Grade 10 *NCAA Approved* (1 Unit Maximum) **Credit 1.00**

This course will continue with the concepts from Algebra 1A, covering solving and graphing linear inequalities, and solving systems of equations/inequalities. Students will also learn various data analysis. The course in conjunction with Algebra 1A will prepare students for the Keystone Algebra Exam. Students will take the Keystone Algebra Exam at the end of this course.

ALGEBRA 1 **3304**

Grade 9 *NCAA Approved* **Credit 1.00**

This course is an introduction to the basic concepts and laws of Algebra. The course will begin by covering operations with real numbers and expressions. Then students will write, solve, and graph linear equations and inequalities, including systems of equations/inequalities. Functions will also be discussed with application problems. The course will then move on to various data analysis. This course will prepare students for the Keystone Algebra Exam. Students will take the Keystone Algebra Exam at the end of this course.

ALGEBRA 1 ACADEMIC **3380**

Grade 9 *NCAA Approved* **Credit 1.00**

This course is an introduction to the basic concepts and laws of Algebra. The course will begin by covering operations with real numbers and expressions. Then students will write, solve, and graph linear equations and inequalities, including systems of equations/inequalities. Functions will also be discussed with application problems. The course will then move on to various data analysis. This course will prepare students to take the honors level courses at the high school with increased rigor and limited calculator use. This course will prepare students for the Keystone Algebra Exam as well. Students will take the Keystone Algebra Exam at the end of this course.

ALGEBRA 2 **3383**

Grades 11, 12 *NCAA Approved* **Credit 1.00**

Prerequisite: At least a "C" average in any Geometry course.

Algebra 2 builds upon the skills that were learned in Algebra 1. This course begins with a review of Algebra 1 topics, then students will solve systems of equations and inequalities and solve and graph quadratic equations. Additional topics may include: rational equations, radical equations, exponential equations, logarithmic equations, absolute value equations and inequalities.

ALGEBRA 2 ACADEMIC **3321**

Grades 10, 11 *NCAA Approved* **Credit 1.00**

Prerequisite: At least a "C" average in Geometry Honors, a "B" average in Geometry Academic, or an "A" average in Geometry.

Algebra 2 builds upon the skills that were learned in Algebra 1. This course begins with a brief overview of Algebra 1 topics, then students will solve systems of equations and inequalities, solve and graph quadratic equations, rational equations, radical equations, exponential equations, logarithmic equations and absolute value equations and inequalities.

ALGEBRA 2 HONORS **3381**

Grades 10, 11 *NCAA Approved* **Credit 1.00**

Prerequisite: Students must pass the Keystone Algebra exam prior to taking this course, and have at least a "B" average in Geometry Honors or an "A" average in Geometry Academic.

Students will be required to complete a summer assignment, which will be assessed. Algebra 2 builds upon the skills that were learned in Algebra 1. This course includes solving systems of equations and inequalities, solving and graphing quadratic equations, polynomial equations, rational equations, radical equations, exponential equations, logarithmic equations and absolute value equations and inequalities. Time permitting, additional topics (basic trigonometry, analytical geometry) beyond the above material will also be studied. This course will prepare students to take the honors and AP level courses at the high school with increased rigor and limited calculator use.

AP CALCULUS AB **3340**
Grade 12 *NCAA Approved* **Credit 1.00**
Prerequisite: At least a "B" average in Pre-Calculus Honors or at least a "A" average in Pre-Calculus. Students will be required to complete a summer assignment.
This course is intended for students who have a thorough knowledge of college preparatory mathematics, including algebra, geometry, trigonometry and analytic geometry. The course focuses on differentiation, integration, and various applications within those topics. Students who succeed in this course will be prepared to take the AP exam in May. **NOTE: This course is for seniors only!**

AP CALCULUS BC **3341**
Grade 12 *NCAA Approved* **Credit 1.00**
Prerequisite: An "A" average in Pre-Calculus Honors. Students will be required to complete a summer assignment.
This course is intended for students who have a thorough knowledge of college preparatory mathematics, including algebra, geometry, trigonometry and analytic geometry. The course focuses on differentiation, integration, and various applications within those topics. We will discuss parametric, polar, and vector functions and analyze various sequences and series. Students who succeed in this course will be prepared to take the AP exam in May.

AP STATISTICS **3345**
Grades 11 (as an elective), 12 *NCAA Approved* **Credit 1.00**
Prerequisite: An "A" average in Algebra 2 Honors and Geometry Honors and a recommendation from the teacher of the math and English courses taken immediately prior to this selection. Students will be required to complete a summer assignment.
AP Statistics is divided into these areas of concentration: graphing and analyzing data, probability and probability distributions, observational studies, surveys and experiments, and hypothesis testing and intervals. Students interested in this course must be critical thinkers with strong emphasis in reading and writing skills. This course will enable students to process information and provide supportive conclusions about data. Students will conduct studies and experiments on real world data and evaluate information and write well-organized summaries. This course will enable students to better understand the world of data and statistical claims that surround them and to use higher order thinking to analyze this information critically.

*** BUSINESS MATH**
Grade 12
See Course Description in "Business Education" section (Page 14)

CALCULUS HONORS **3349**
Grade 12 *NCAA Approved* **Credit 1.00**
Prerequisites: At least a "C" average in Pre-Calculus.
This course is a continuation of Pre-Calculus with an emphasis on functions and behaviors. The students will discuss limits, differentials and integrals. Within each topic, students will apply their knowledge to solve problems involving real-world situations. This course is intended to give students exposure to Calculus and will mimic AP Calculus AB without the same pace and rigor.

GEOMETRY **3332**
Grades 10, 11 **Credit 1.00**
Prerequisite: Successful completion of an Algebra 1 course.
This course will include basic geometric concepts such as angles, congruence and similarity theorems, polygons, area and volume of two-dimensional and three-dimensional figures.

GEOMETRY ACADEMIC **3314**
Grades 9, 10, 11 *NCAA Approved* **Credit 1.00**
Prerequisite: At least a "C" average in Algebra 1 Academic or a B average in Algebra 1.
This course will include the study of coordinate systems, transformations, measurement formulas, basic geometric terminology and concepts, three-dimensional figures, surface areas, deductive proofs of congruent and similar figures, circles, and right triangle trigonometry.

GEOMETRY HONORS **3301**
Grades 9, 10 *NCAA Approved* **Credit 1.00**
Prerequisite: An "A" average in Algebra 1 Academic or teacher recommendation from Algebra 1.
Students will be required to complete a summer assignment, which will be assessed. Geometry Honors is a rigorous course with limited calculator use intended for an AP bound student. Topics include the rectangular coordinate system, transformations, measurement of length, area and volume, congruent and similar figures, circles, deductive proofs, polygons, and right triangle trigonometry.

PRE-CALCULUS **3343**
Grades 11, 12 *NCAA Approved* **Credit 1.00**
Prerequisite: At least a "C" average in Algebra 2 Honors or an 85% average in Algebra 2 Academic.
This course begins with a brief review of Algebra 2 skills then moves on to Pre-Calculus topics. These topics include the study of linear, quadratic, radical, rational, exponential and logarithmic functions and their inverses. Trigonometric topics include trigonometric identities, radian measure, right triangle trigonometry, the Laws of Sines and Cosines and trigonometric inverse functions. Applications of trigonometry are included when appropriate. This course will also cover topics from Analytical Geometry.

PRE-CALCULUS HONORS **3344**
Grades 11, 12 *NCAA Approved* **Credit 1.00**
Prerequisite: At least a "B" average in Algebra 2 Honors.
Students will be required to complete a summer assignment, which will be assessed. This course begins with a brief review of Algebra 2 skills then moves on to Pre-Calculus topics. These topics include a rigorous approach to the concept of linear, quadratic, radical, rational, absolute value, exponential and logarithmic functions and their inverses. Trigonometric concepts include trigonometric identities, radian measure, right triangle trigonometry, the Laws of Sines and Cosines and trigonometric inverse functions. Applications of trigonometry such as linear velocity and angular speed are included when appropriate. This course will also cover topics from Analytical Geometry. The intent of this course is to prepare students for AP Calculus BC.

STATISTICS AND REAL WORLD MATHEMATICS **3384**
Grades 11 (as an elective), 12 *NCAA Approved* **Credit 1.00**
Prerequisites: At least a "B" average in any Algebra 2 course.
This course will begin with an exploration of jobs and majors that require some type of statistics course and knowledge. Students will learn how to collect data using various forms of surveys, studies and experiments. Students will then complete their own surveys and experiments. Students will study how to display and analyze data using various graphs (stemplots, box plots, histograms, scatterplots, etc) and various statistical measures including measures of center (mean, median, mode) and spread (range, IQR, standard deviation). Students will determine the association between two variable data by finding the least squares regression line to make predictions. Students will learn how to avoid debt by knowing how it grows exponentially and will better understand how to handle mortgages, car loans and other real world situations. Students will learn the basic rules of probability and simulations and how they are used by insurance agents, the government (census, polls, etc), online advertisers and standardized test companies (SAT, ACT, MCAT) in order to determine costs, winners, representatives, etc.

TRIGONOMETRY **3364**
Grades 11, 12 *NCAA Approved* **Credit 1.00**
Prerequisite: At least a "C" average in Algebra 2.
This course begins with a review of Algebra 2 skills then moves on to Pre-Calculus topics. These topics include the study of linear, quadratic, radical, rational, exponential and logarithmic functions and their inverses. Trigonometric topics include trigonometric identities, radian measure, right triangle trigonometry, the Laws of Sines and Cosines and trigonometric inverse functions. Applications of trigonometry are included when appropriate.

MUSIC

ADVANCED PIANO AND COMPOSITION **9596**

Grades 9, 10, 11, 12 **Credit .50**

Prerequisite: A or B in PIANO LAB

This class will offer an opportunity to further develop piano skills and will integrate keyboard technique, specifically theory, as applied to seeing and playing it on the piano, with songwriting and composition techniques and processes. Songwriting assignments will allow students to learn concepts through creative work. The course will also serve as a survey of basic piano pop rhythmic styles, working with rhythm templates as bases for individual embellishment.

AMERICAN POPULAR MUSIC **9581**

Grades 9, 10, 11, 12 **Credit .50**

Students are presented with the historical development of American popular music that begins with the nineteenth century and continues through the end of the twentieth century. Students study, discuss and listen to various styles including Ragtime, Blues, Jazz, Musical Theater, Rhythm and Blues, Country, Folk, Rock and Roll, the British Invasion, and Today's Sounds. Sound reproduction and the use of electronics in popular music are also discussed.

AP MUSIC THEORY (ADVANCED PLACEMENT) **9586**

Grades 10, 11, 12 **Credit 1.00**

Prerequisite: Must have prior music reading experience.

The goal of the course is to advance the students ability to recognize, understand, and describe the intricate materials and processes of music that are heard or presented in a score. This course will continue to expand the student's study of musicianship, theory, and the procedures which integrate the aspects of melody, harmony, texture, rhythm, form, advanced musical analysis, composition, history and style to the college level. This course utilizes a web based text with differentiated instruction and allows the student to supplement learning with a variety of internet and written resources. Musicianship skills including dictation, listening skills, sight-singing, and keyboard harmony are also required.

BAND HONORS **9582**

Grades 9, 10, 11, 12 **Credit 1.00**

Prerequisite: Previous experience on wind or percussion instruments.

The material studied in this course will include a varied repertoire of concert and marching music, advanced rhythms, harmonies, ensemble performance techniques and dynamic interpretation. A student who schedules band is required to participate in both the "Big Mac" Marching Band and the Canon-McMillan High School Concert Band. Summer and evening rehearsals and performances are required.

BELLA VOCE **9587**

Grades 9, 10, 11, 12 **Credit 1.00**

Prerequisite: Bella Voce membership is attained by audition only.

Bella Voce involves advanced vocal technique and repertoire. A variety of choral styles are presented at numerous school, community, and public events. Bella Voce also performs for adjudications during the school year. A high degree of individual vocal quality, a positive attitude, and a serious group commitment are required of all members. Some morning, evening and weekend hours are required to fulfill performance requests.

CONCERT CHOIR **9588**

Grades 9, 10, 11, 12 **Credit 1.00**

Concert Choir/Treble Choir performs a variety of advanced choral repertoire based upon advanced technique, high performance level, and experience. Important considerations for membership include group commitment and positive individual contribution to goals and objectives. Concert Choir sings at scheduled performances during the school year. After school rehearsals and concerts are mandatory. Grading is based on in-class performance, tests, participation, and attendance at rehearsals and concerts.

JAZZ ENSEMBLE **9593**

Grades 9, 10, 11, 12 **Credit .50**

Prerequisite: An audition is required, and this course must be scheduled concurrently for Honors Band.

This selection is offered in the second semester only. Band members who play saxophone, trumpet, trombone, guitar, bass, guitar, bass guitar, piano or drums and pass and audition are eligible to schedule Jazz Ensemble. This course includes the study of medium difficult to difficult swing, swing ballad, shuffle jazz waltz, rock, rock ballad, funk, bossa and reggae music in a Big Band setting. The history of jazz and the study of advanced improvisation are also included in the curriculum. After school rehearsals, performances and competitions may be required.songwriting.

JAZZ LAB BAND **9592**

Grades 9, 10, 11, 12 **Credit .50**

Prerequisite: An audition is required, and this course must be scheduled concurrently for Honors Band.

This selection is offered in the first semester only. Band members who play saxophone, trumpet, trombone, guitar, bass guitar, piano or drums are eligible to schedule Jazz Lab Band. This course includes the study of medium easy swing, swing ballad, shuffle, jazz waltz, rock, rock ballad, funk, bossa and reggae music in a Big Band setting. The history of jazz and the study of basic improvisation is also included in the curriculum. After school rehearsals and performances may be required.

MARCHING BAND UNITS (CANONETTES, FLAG CORPS, AND MAJORETTES) **7005**

Grades 9, 10, 11, 12 **Credit .25**

Prerequisite: An audition is required to be accepted into the Auxiliary Marching Band.

This Course is for Canon-McMillan High School Marching Band auxiliary members who do not participate in Concert Band. Students will participate in all scheduled marching band activities. Summer, weekend and after school/evening rehearsals are a requirement of the course.

PIANO LAB **9590**

Grades 9, 10, 11, 12 **Credit .50**

This course is a practical course that enables students to develop basic keyboard proficiency at the beginning to intermediate level. Students will begin the course at the level at which they are able and will continue to progress at their own speed throughout. Students with some piano experience should discuss their skills and situation with the teacher so that ample learning can be achieved for each individual. The course content may include, but not be limited to the following: Basic Keyboard Skills; Individual and Ensemble Piano Technique; Music Literacy; Music Theory; Performance Etiquette; Sight Reading and Ear Training; Elements and Characteristics of Music; Performance Analysis and Evaluation

WORLD PERCUSSION ENSEMBLE **9595**

Grades 9, 10, 11, 12 **Credit .50**

Prerequisite: An audition is required, and this course must be scheduled concurrently for Honors Band.

Band members who have an interest in playing a variety of percussion instruments and pass an audition are eligible to schedule World Percussion Ensemble. This course of study will focus on fundamental drumming, mallet percussion, Caribbean steel drums, Brazilian batucada, African drumming and traditional percussion ensemble repertoire. The cultures of Trinidad and Tobago as well as Brazil and Africa will be emphasized throughout the course. After school rehearsals, performances and competition may be required.

SCIENCE

***All science classes include laboratory experiences; however, those courses that have a credit value of 1.50 meet for an additional

lab period every other day. To succeed in any of the Honors or AP Science courses, students should be self-motivated and proactive in seeking assistance from their instructor with concepts or calculations they do not understand. There will be little review time in class. Students should be aware that absences should be kept to a minimum as they will have an adverse effect on grades and the lab experience.**

AP BIOLOGY W/LAB (ADVANCED PLACEMENT) **4421**
Grades 11, 12 *NCAA Approved* **Credit 1.50**
Prerequisite: At least a "B" average in Biology 10 Honors AND a "B" average in Chemistry 1 w/lab. This course requires the completion of a summer enrichment assignment.
Advanced Placement Biology is designed to be the equivalent of a college introductory biology course usually taken by biology majors during the first year. The course centers on the four "big ideas" as prescribed by the College Board: Evolution, Cellular Processes, Energy and Communication (Genetics and Information Transfer) and Interactions. Twenty-five percent of the class is spent and assessed on the performance of laboratory investigations including detailed analysis and application.

AP CHEMISTRY W/LAB (ADVANCED PLACEMENT) **4412**
Grades 11, 12 *NCAA Approved* **Credit 1.50**
Prerequisite: At least a "B" average in Chemistry 1 w/lab, Pre-Calculus Honors, or Pre-Calculus. Students can be currently enrolled in Pre-Calculus Honors or Pre-Calculus. This course requires the completion of a summer enrichment assignment.
The Advanced Placement Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first year of college (General Chemistry 101 and 102). The course contributes to the development of the students' abilities to think clearly and to express their ideas, orally and in writing, with clarity and logic. This course differs qualitatively from the Advanced chemistry course with the kind of textbook used, the topics covered, the emphasis on chemical calculations and the mathematical formulation of principles, and the kind of laboratory work done by the students. This course will prepare students to take the College Board AP Chemistry Exam.

AP ENVIRONMENTAL SCIENCE W/LAB (ADVANCED PLACEMENT) **4444**
Grades 11, 12 *NCAA Approved* **Credit 1.00**
Prerequisite: At least a "B" average in PA Science Honors, Biology 10 Honors, AND Chemistry 1 w/lab or at least an 85% in PA Science Academic, Biology Academic, AND at least a"B" average in Chemistry 1/lab. This course requires the completion of a summer enrichment assignment.
The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems and to examine alternative solutions for resolving and/or preventing them. Topics of the course include: Earth systems and resources, the living world, population, land and water use, energy resources and consumption, pollution, and global changes. This course will prepare students to take the College Board AP Environmental Science Exam.

AP PHYSICS 1 W/LAB (ADVANCED PLACEMENT) **4441**
Grades 11, 12 *NCAA Approved* **Credit 1.50**
Prerequisite: At least a "B" average in Algebra 2 Honors. Students should have completed OR be currently enrolled in a Pre-Calculus course. This course requires the completion of a summer enrichment assignment.
AP Physics 1 is an algebra-based, introductory college level physics course. It explores Newtonian mechanics (force and motion), work and energy, rotational motion, and simple harmonic motion This course is recommended for students who are planning a career in engineering or science. Laboratory work, including the use of computers as a data collection and analysis tool, is a major component of the course. Math principles will be applied to a variety of physical situations, so students should have an excellent command of algebra. Juniors planning to take AP Physic C should take this course as a prerequisite. **Students who have taken Physics Honors as a junior MAY NOT take this course; but they MAY TAKE AP Physics C (if the prerequisites are met).** Seniors may take AP Physics 1 as a math credit IN PLACE OF a science credit. AP Physics 1 MAY NOT be used as both a math and science credit toward graduation requirements.

AP PHYSICS C W/LAB (ADVANCED PLACEMENT) **4404**
Grade 12 *NCAA Approved* **Credit 1.50**

Prerequisite: Completion of AP Physics 1 with an "A" average. Physics Honors students may enroll in this course with an "A" average in Physics Honors and a teacher recommendation. In addition the math requirements for ALL STUDENTS must be a "B" average in Pre-Calculus Honors or "A" average in Pre-Calculus. Students should have completed or be currently enrolled in any Calculus course. This course requires the completion of a summer enrichment assignment.

The AP Physics course is designed for a student planning to enter an engineering, scientific, or physical science education career. It is the equivalent of the first year of a calculus-based college physics course. The aim of the course is to develop the student's ability to interpret physical information, analyze physical problems in a sequence of steps, apply mathematical reasoning to physical situations, and perform and analyze experiments. The topics include motion (kinematics and dynamics), vectors, equilibrium, energy, rotational motion, oscillations, gravitation, electric force and fields, circuits, magnetism, and electromagnetic relationships. Laboratory work, including the use of computers as a data collection and analysis tool, is a major component of the course. Seniors may take AP Physics as a math credit IN PLACE OF a science credit. AP Physics MAY NOT be used as both a math and a science credit toward graduation requirements.

ASTRONOMY AND GEOLOGY W/LAB **4409**

Grades 11, 12 *NCAA Approved* **Credit 1.00**

This course blends the two subjects into one science that explains the threefold connection between humans, Earth, and the universe. Students begin with an introduction to size and distance relationships in the universe, the connection between space and time, the history of cosmology, and the theories explaining the nature of the universe. The course continues by examining theories of stellar formation and evolution and the subsequent formation of planetary systems. Topics addressed include forces, motion, matter, and energy along with practical observations of historic and current astronomical events. Once students are aware of Earth's position in space, they are presented with its composition and dynamics. Included in the Geology portion of the course is a study of tectonics, geologic history, mountain building, earthquakes, volcanoes, and an extensive examination of rocks and minerals. Labs include mineral and rock testing/identification, epicenter location, and interstellar distance calculations. Astro/Geo is a course that builds upon students' understanding of various Earth systems and will give them a deeper understanding of the nature of the universe and Earth's place therein.

BIOLOGY W/LAB **4438**

Grades 10, 11, 12 *NCAA Approved* **Credit 1.00**

Prerequisite: Successful completion of PA Science 9.

Biology Academic is a course designed to address the knowledge and application of living systems, including biochemistry, cells, genetics, molecular biology, evolution and ecology. Laboratory work is integral to the course. A state-mandated Biology Keystone exam is given at the end of this course.

BIOLOGY ACADEMIC W/LAB **4443**

Grades 10, 11, 12 *NCAA Approved* **Credit 1.00**

Prerequisite: At least a "C" in PA Science 9 Academic or an "A" average in PA Science 9.

Biology Academic is a course designed to address the knowledge and application of living systems, including biochemistry, cells, genetics, molecular biology, evolution and ecology. Laboratory work is integral to the course. A state-mandated Biology Keystone exam is given at the end of this course.

BIOLOGY HONORS W/LAB **4437**

Grade 10 (Grade 11 and 12 – Transfer students only) *NCAA Approved* **Credit 1.00**

Prerequisite: A final grade of at least an 85% in PA Science 9 Honors or a 95% in PA Science Academic. This course requires the completion of a summer enrichment assignment.

Honors Biology is a rigorous course designed to address academic, laboratory and communication skills needed to understand and to demonstrate knowledge of living systems. Topics include biochemistry, cells, genetics, molecular biology, evolution, and ecology. Inquiry-based labs, detailed lab write-ups, and supplemental reading are requirements of this course. A state-mandated Biology Keystone exam is given at the end of this course.

CHEMISTRY 1 W/LAB **4445**

Grades 10, 11, 12 *NCAA Approved* **Credit 1.50**

Prerequisite: At least a "B" average in Algebra 1 Academic or Algebra 1 and in Biology 10 Honors or Biology 10

Academic. Sophomores must have completed Algebra 1 Academic with a "B" average or Algebra 1 with an "A" average AND be enrolled in Biology 10 Honors.

CHEMISTRY 1 is intended for students who are planning careers in science, medicine, and engineering. The subject matter of CHEMISTRY 1 is organized for modern theoretical development. There will be a strong emphasis on using a problem solving approach. The presentation of chemical theory is on the structure and periodicity of the existing elements as well as chemical behavior and stoichiometry. All subject matter is further reinforced by practical laboratory application and technique. *Upon completion of this course students can take Advanced Chemistry Honors or AP Chemistry AND/OR any other science electives.*

CHS ACADEMIC ZOOLOGY W/LAB **4440**

Grades 11, 12 ***NCAA Approved*** **Credit .50**

Prerequisite: "A" average in Biology or a "B" average in Biology Academic or Biology Honors.

Zoology is the study of animals, including their classification, structure, physiology, and evolution. This course is intended for those students interested in learning about animal anatomy, adaptations, and behavior. Discussions, supplemental readings, papers, and presentations are requirements of this course. This is a semester course and does not count as one of the three science credits needed to graduate. Students will have the opportunity to elect to take this course for college credit through Carlow University. If the student decides to take the class for college credit, the student is responsible for the cost of the course at Carlow. Carlow determines the cost of the course on an annual basis. **This is equivalent to a first semester college level zoology course.**

CHS ADVANCED CHEMISTRY HONORS W/LAB - (University of Pittsburgh CHS Option) **4402**

Grades 11, 12 ***NCAA Approved*** **Credit 1.50**

Prerequisite: At least a "B" average in Chemistry 1 w/lab, Algebra 2 Honors or Algebra 2. Students can also be currently enrolled in Algebra 2 Honors or Algebra 2. This course requires the completion of a summer enrichment assignment.

The Advanced Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first semester of college (General Chemistry 0101). This course is designed to develop and complete laboratory work on the collegiate level. This course differs qualitatively from AP Chemistry with the kind of textbook used, the topics covered, the emphasis on chemical calculations and the mathematical formulation of principles, and the kind of laboratory work done by the students. This course is intended for the student who wants an additional year of chemistry but not the rigors of an AP course. If the student decides to take the class for college credit, the student is responsible for the cost of the course at Pitt and is required to go to Pitt 3 times per year that extend beyond the normal school day. Pitt determines the tuition cost of the course and the class size.

ENVIRONMENTAL SCIENCE W/LAB **4407**

Grades 11, 12 ***NCAA Approved*** **Credit 1.00**

Prerequisite: Successful completion of Pennsylvania Science and Biology.

Environmental Science focuses on the study of the basic principles of ecology, including food chains/food webs, biomes, and ecosystem relationships and the role and impact of human activities on natural systems. Environmental Science allows students to develop opinions through reasoning and laboratory exercises. Students are required to complete projects and presentations in this course. The course utilizes a variety of presentations, visuals, outdoor activities, and guest speakers.

HUMAN ANATOMY and PHYSIOLOGY HONORS W/LAB **4408**

Grades 11, 12 ***NCAA Approved*** **Credit 1.00**

Prerequisite: At least a "B" average in Biology 10 Honors or Biology 10 Academic AND in Chemistry 1 w/lab.

The class is an advanced course designed to provide a comprehensive study of the anatomy and physiology of the human body. Topics include body organization, homeostasis, cytology, histology, and the integumentary, skeletal, muscular, nervous, cardiovascular, respiratory, digestive, urinary, and reproductive systems. Class includes lectures, discussions, and labs. The course is intended for and geared toward those students interested in medical professions and biological sciences.

INTRODUCTION TO FORENSIC SCIENCE W/LAB **4422**

Grades 11, 12 ***NCAA Approved*** **Credit .50**

Prerequisite: At least a "C" average in Biology Honors, Biology Academic, or Biology.

Forensic Science is the application of science to law. This course is intended for those students interested in learning the discipline of Forensic Science and crime scene investigation. Students enrolled in this course will attain basic scientific knowledge in a wide range of fields including, but not limited to: crime scene analysis, DNA fingerprinting, hair and fiber analysis, forensic serology, fingerprinting identification and handwriting analysis. This is a semester course and does not count as one of the three science credits needed to graduate.

ORGANIC CHEMISTRY HONORS **4439**

Grades 11, 12 *NCAA Approved* **Credit 1.00**

Prerequisite: At least a "B" average in Chemistry 1 w/lab.

Organic Chemistry Honors is a demanding elective course that deals with the chemistry of carbon compounds. This course focuses on four aspects: formula writing, structure, nomenclature, and basic organic reactions. Various types of organic molecules will be studied as well as the reactions that they undergo. This course is recommended for those who are planning to major in chemistry, medicine, pharmacy, biology, nursing or veterinary medicine.

PENNSYLVANIA SCIENCE 9 W/LAB **4436**

Grade 9 *NCAA Approved* **Credit 1.00**

Prerequisite: At least a "C" average in 8th grade science.

Pennsylvania Science 9 integrates the basic principles of scientific methods, data analysis, chemistry, biology, ecology, and environmental science. The overall theme of the course is to apply scientific principles and the scientific method to understanding the natural and man-made processes that affect our environment. This class stresses problem solving through the application of knowledge. The course relies on lectures, discussions, outside reading, guest speakers, laboratory experiences and field work. Pennsylvania Science 9 provides the foundation for continued study in the biological sciences.

PENNSYLVANIA SCIENCE 9 ACADEMIC W/LAB **4442**

Grade 9 *NCAA Approved* **Credit 1.00**

Prerequisite: At least a "B" average in 8th grade science.

Pennsylvania Science 9 Academic integrates the basic principles of scientific methods, data analysis, chemistry, biology, ecology, and environmental science. The overall theme of the course is to apply scientific principles and the scientific method to understanding the natural and man-made processes that affect our environment. This class stresses problem solving through the application of knowledge. The course relies on lectures, discussions, outside reading, guest speakers, in-depth laboratory experiences and field work. Pennsylvania Science 9 Academic provides the foundation for continued study in the biological sciences.

PENNSYLVANIA SCIENCE 9 HONORS W/LAB **4435**

Grade 9 *NCAA Approved* **Credit 1.00**

Prerequisite: An "A" average in 8th grade science AND at least a "B" average in PA Core Algebra 1 OR an "A" average in Pre-Algebra Academic with a teacher recommendation. In addition, the student must have scored Proficient or Advanced on the 8th grade PSSA test. This course requires the completion of a summer enrichment assignment.

Pennsylvania Science Honors has a more in-depth mathematical curriculum along with more extensive writing assignments than the Pennsylvania Science 9 Academic w/Lab course. Pennsylvania Science Honors integrates the basic principles of scientific methods, data analysis, chemistry, biology, ecology, and environmental science. The overall theme of the course is to apply scientific principles and the scientific method to understanding the natural and man-made processes that affect our environment. This class stresses problem solving through the application of knowledge. The course relies on lectures, discussions, outside reading, guest speakers, in-depth laboratory experiences and field work. Pennsylvania Science 9 Honors provides the foundation for continued study in the biological sciences.

PHYSICS HONORS W/LAB **4418**

Grades 11, 12 *NCAA Approved* **Credit 1.50**

Prerequisite: "B" average in Algebra 2 Honors or an "A" average in Algebra 2 Academic or Algebra 2.

Physics is a science which attempts to describe events occurring in nature using the language of mathematics. This course is structured around the concepts of motion, energy, and wave properties. Topics include measurement and analysis of data, motion, force, energy, light, sound, and electricity. Laboratory work, including the use of computers as a data collection and analysis tool, is a major component of the course. Math principles will be applied to a variety of physical situations, so students should have a good command of algebra. Seniors may take Physics Honors as a math credit IN PLACE OF a science credit. Physics Honors MAY NOT be used as both a math and a science credit toward graduation requirements.

Course	Math Requirements	Science Requirements
	GUIDANCE OR MATH TEACHER NEEDS TO CONFIRM	GUIDANCE OR SCIENCE TEACHER NEEDS TO CONFIRM

PA Science Honors w/ LAB	- "B" average in PA Core Algebra 1 - "A" average in Pre-Algebra Academic	- "A" average in 8th grade science AND scored PROFICIENT or ADVANCED on Grade 8 PSSA - Must have 8th grade science teacher approval
PA Science Academic w/ LAB	- "C" average in PA Core Algebra 1 - "B" average in Pre-Algebra Academic	- "B" average in 8th grade science
PA Science w/ LAB	- Successful completion of Pre-Algebra	- "C" average in 8th grade science
Biology Honors w/ LAB	- No Math Requirement	- Students must have an 85% average in PA Science 9 Honors or a 95% in PA Science Academic
Biology Academic w/ LAB	- No Math Requirement	- Students must have a 70% average in PA Science Academic or a 90% in PA Science
Biology w/ LAB	- No Math Requirement	- Passing grade in PA Science
AP Biology w/ LAB	- No Math Requirement	- "B" average in BOTH Biology Honors Honors AND Chemistry 1 w/ lab
Human Anatomy and Physiology Honors w/ LAB	- No Math Requirement	- "B" average in Biology Honors or Academic AND Chemistry 1 w/ lab
Chemistry 1 w/ LAB	- 10th graders "B" average in Algebra 1 Academic OR "A" average in Algebra 1 - 11th and 12th graders "B" average in Algebra 1 Academic or Algebra 1 (This does not include Algebra 1B)	- 10th graders must also be enrolled in Biology Honors - 11th and 12th graders "B" average in Biology Honors or Biology Academic
Advanced Chemistry Honors w/Lab	- "B" average in Algebra 2 Honors or Algebra 2 OR currently enrolled in Algebra 2 Honors o Algebra 2	- "B" average in Chemistry 1 w/ lab
Organic Chemistry Honors	- No Math Requirement	- "B" average in Chemistry 1 w/ lab
AP Chemistry w/ LAB	- "B" average in Pre-Calculus Honors or Pre-Calculus OR currently enrolled in Pre-Calculus Honors or Pre-Calculus	- "B" average in Chemistry 1 w/ lab
Physics Honors w/ LAB	- "B" average in Algebra 2 Honors or "A" in Algebra 2 Academic or Algebra 2 - May be used as a math credit for	- Should be taken after PA Science, Biology, and Chemistry 1 w/ lab *May be taken with Chemistry 1 w/ lab

	seniors only *Cannot be used as both a math and science credit	
AP Physics 1 w/ LAB	- "B" average in Algebra 2 Honors - Should have completed Pre-Calculus OR currently enrolled in Pre-Calculus *Cannot be used as both a math and science credit *Students who have taken Physics Honors as a junior may not take this course	- This course should be taken by a junior who wants to take AP Physics C as a senior
AP Physics C w/ LAB	- "B" average in Pre-Calculus Honors OR "A" average in Pre-Calculus - Should have completed Calculus OR currently enrolled in Calculus - May be used as a math credit for seniors only *Cannot be used as both a math and science credit	- "A" average in APPhysics 1 - "A" average in Physics Honors and current Physics teacher recommendation
Astronomy and Geology w/ LAB	- No Math Requirement	- For the student in the lower level math courses - For the student not interested in an AP track or higher level science electives
AP Environmental Science w/ LAB	- 11th or 12th graders "B" average in Algebra 1 Academic or Algebra 1	- Students must have a "B" average in PA Science Honors, Biology 10 Honors, AND Chemistry 1 w/ lab or at least an 85% in PA Science Academic, Biology Academic, AND at least a "B" average in Chemistry 1 w/ lab
Environmental Science w/ LAB	- No Math Requirement	- For the student in the lower level math courses - For the student not interested in an AP track or higher level science electives *Not a prerequisite for AP Environmental Science
Introduction to Forensic Science w/ LAB	- No Math Requirement	- "C" average in Biology Honors or Academic
CHS Academic Zoology w/ LAB	- No Math Requirement	- "B" average in Biology Honors or "A" average in Biology Academic or Biology

SUGGESTED SCIENCE COURSES FOR VARIOUS CAREER PATHS

Career Path	9th	10th	11th	Electives

Medical Field/ Life Sciences	PA Science Honors*	Biology Honors AND Chem. 1 w/lab	Physics Honors* OR AP Physics 1*	AP Biology Adv. Chem. Honors* AP Chemistry* Anatomy/Phys. Organic Chemistry AP Physics C* AP Environmental Sci. Astronomy/Geology Environmental Sci. Intro to Forensic Science Academic Zoology
Engineering/ Physical Sciences/ Military Academy	PA Science Honors*	Biology Honors AND Chem. 1 w/ lab	Physics Honors* OR AP Physics 1*	Same as above
Technical/Trade/ Enlisted Military	PA Science Honors* OR PA Science	Biology Honors OR Biology	Chem. 1 w/ lab* Physics Honors* Astronomy/Geology Environmental Sci.	Same as above
Science/Math Teacher	PA Science Honors* OR PA Science	Biology Honors OR Biology	Chem. 1 w/ lab* Physics Honors* AP Physics 1* Astronomy/Geology Environmental Sci.	Same as above
Business/ Liberal Arts	PA Science Honors* OR PA Science	Biology Honors OR Biology	Chem. 1 w/ lab Physics Honors* Astronomy/Geology Environmental Sci.	Same as above

***MUST MEET MATH REQUIREMENT. SEE COURSE DESCRIPTIONS.**

SOCIAL STUDIES

AP EUROPEAN HISTORY (ADVANCED PLACEMENT) **2234**
Grades 9, 10, 11, 12 ***NCAA Approved*** **Credit 1.00**
Prerequisite: At least a "B" average in Honors History and Honors English courses. There will also be a mandatory

summer assignment.

The study of European History since 1450 introduces students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which they live. Without this knowledge, we would lack the context for understanding the development of contemporary institutions, the role of continuity and change in present-day society and politics, and the evolution of current forms of artistic expression and intellectual discourse. In addition to providing a basic narrative of events and movements, the goals of the AP program in European History are to develop (a) an understanding of some of the principal themes in modern European History, (b) an ability to analyze historical evidence and historical interpretation, and (c) an ability to express historical understanding in writing.

AP PSYCHOLOGY (ADVANCED PLACEMENT) **2232**

Grades 9, 10, 11, 12 *NCAA Approved* **Credit 1.00**

The goal of this course is to increase the understanding of psychology, its methods, theory and research. The course will explore the psychological facts, principles and phenomena associated with each of the major subfields within psychology. This course is taught at the collegiate level and student study habits and participation should reflect this fact. The basic objective of this course is to introduce the student to the methods, theory and research of psychology. It is hoped that knowledge of psychological inquiry will provide the student with a way of perceiving aspects of the complexity of human behavior. NOTE: Students who take MASH cannot take AP Psychology.

AP UNITED STATES HISTORY (ADVANCED PLACEMENT) **2222**

Grade 10(Core), Grades 11, 12(elective) *NCAA Approved* **Credit 1.00**

Prerequisite: At least a "B" average in Honors History and Honors English courses. There will also be a mandatory summer assignment.

The AP program in United States History is designed to provide students with analytical skills and factual knowledge necessary to deal critically with the problems and materials in U.S. history. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. Students should learn to assess historical materials – their relevance to a given interpretive problem, their reliability, and their importance – and to weigh the evidence and interpretations presented in historical scholarship. AP U.S. History students will develop the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in an essay format. Summer work is required. Students are encouraged to take the AP United States History Exam in May.

AP WORLD HISTORY: Modern, 1200-Present (ADVANCED PLACEMENT) **2209**

Grades 11 (core), 12 (elective) *NCAA Approved* **Credit 1.00**

Prerequisite: At least a "B" average in Honors History and Honors English courses.

AP World History will enable students to develop an understanding of world processes and the evolution of different societies. It emphasizes relevant factual knowledge, interpretive issues, and skills in analyzing historical evidence and research. The course offers a balanced global coverage with Africa, the Americas, Asia, Europe, and Oceania all represented. The timeline will cover 1200C.E. to the present and highlight topics such as philosophy, arts and architecture, religions, trade and commerce, revolutions, and ethnic constructions. Students can expect independent reading assignments, and intensive verbal and written analysis. The course will also correspond to the AP Exam to be facilitated in May.

CHS AMERICAN POLITICS (University of Pittsburgh CHS Option) **2238**

Grades 11 and 12 *NCAA Approved* **Credit 1.00**

Prerequisite: At least a "B" average in Honors History and Honors English courses.

This is an introductory course in American Political Science. The purpose of this course is to teach students about the American political system and about broad concepts used by social scientists to study politics. Topics will include the Constitution, the powers of Congress, the Presidency and Judiciary, Civil Rights and Liberties, Public Opinion, Voting, and Elections. Students have the potential to individually pay and earn college credit through the University of Pittsburgh. Due to this, the rigor of the course will be comparable to that of an Advanced Placement or first-year college course.

CIVIC LEADERSHIP IN ACTION I **2236**

Grades 10, 11, 12 *NCAA Approved* **Credit .50**

A semester course open to 10th, 11th and 12th grade students focused on the history and theory of leadership. Along with the development of communication skills and personal strengths this course will help students research, develop and empower his/her own personal leadership style. Leadership topics that will be developed through small group and large group discussions will

include; organizational culture, influence, persuasion, active listening, time management, goal setting, intrinsic and extrinsic motivation, and empowerment.

CIVIC LEADERSHIP IN ACTION II **2237**
Grades 10, 11, 12 *NCAA Approved* **Credit .50**
Prerequisite: Successful completion of Civic Leadership I.
A semester course open to 10th, 11th and 12th grade students focused on the mission of leadership. As a follow up to Civic Leadership I, this class will enhance a student's personal leadership style and drive vision in implementation. Leadership topics that will be developed will include; group behavior, team building, decision-making, paradigm shifts, and strategic planning. In particular, the following leadership models will be discussed: transactional, transformational, servant, situational, emergent, strategic, and team. Leaders from the business, educational, political, and athletic worlds will speak to the students and have a question and answer session with them. Using majority rules, the students will select a cause and implement what they have learned in Civic Leadership 1 and 2 into a service project.

CONTEMPORARY AMERICAN DEMOCRACY **2221**
Grade 12 *NCAA Approved* **Credit 1.00**
Prerequisite: This course is required for all seniors with the exception of those who are taking CAD-Honors.
The purpose of this course is to provide students with an overview of economics and American government. Students pursue an in-depth study of consumerism and function of government. Written and oral communication skills will be emphasized, in addition to analyzing and interpreting historical and cultural information.

CONTEMPORARY AMERICAN DEMOCRACY HONORS **2220**
Grade 12 *NCAA Approved* **Credit 1.00**
Prerequisite: At least a "B" average in World History Honors or an "A" in World History.
The purpose of this course is to provide the students with an overview of economic principles of a market economy, and the contemporary application of the function of government, each of which will cover one semester. The economics semester will include microeconomic principles for both production and consumerism, macroeconomic principles of our free-market economy, environmental economics, the stock market, and consumer behavior. The government semester will address the contemporary functions of all three branches of government, with an emphasis on politics, congressional procedures, and the Supreme Court. Topics will include campaign restrictions and practices, elections, international diplomacy, changing political influences, and landmark rulings and their effects on current society. Honors students are subject to a more rigorous assessment schedule, a more demanding workload, and a higher expectation of outside reading and writing assignments than general students. Assessments will include news-based quizzes, chapter and multi-chapter exams, presentations, quizzes, and projects. There will be a final exam at the end of each semester.

HISTORY VS HOLLYWOOD **2239**
Grades 11, 12 **Credit .50**
"History vs. Hollywood" will examine movies as works of historical evidence. Students will spend class time viewing various historical films and researching them for inaccuracies and comparing the information to factual history. Class will consist of discussion, in-depth analysis of the film and historical information, research, and writing that movies have on our interpretation of history and on society. Students will learn to distinguish and recognize historical inaccuracies from fact and analyze the motivations for the Hollywood interpretation of those facts. Students will gain experience in critical analysis and research of historical evidence. Students will develop an understanding of the influence and relationship between movies and culture and discuss the effects of cinema on society. This course will have an emphasis on research, critical thinking, interpretation, analysis, and writing skills.
NOTE: All films will be rated PG13-R. Films will cover both World and American History. A parent permission slip must be returned to the teacher at the beginning of the year. The permission slip will apply to every movie viewed.

LAW & CITIZENSHIP: KNOW YOUR RIGHTS! **2235**
Grades 10, 11, 12 *NCAA Approved* **Credit .50**
Know Your Rights is a class designed to teach students about American Constitutional Law as it relates to high school students. In this class, students will be able to read and analyze American case law and evaluate the decisions of the United States Supreme Court. Topics to be discussed include Free Speech, Search and Seizure, and Criminal Rights. The course work will include readings

that may be challenging for an average or below-average reader, and students will be required to write papers or create class presentations as a means of assessment and evaluation. The course will also include a great deal of small and large group discussion.

MENTAL AND SOCIAL HEALTH (MASH) **2231**
Grades 10, 11, 12 **Credit 1.00**
This elective is an introductory course in the basic concepts of general psychology. Among the topics covered are child development, emotions, needs, learning principles and theories, relationships, social problems, mental health, mental illness and therapy. NOTE: Students who take MASH cannot take AP Psychology.

UNITED STATES HISTORY 9 – 1607 to 1900 **2200**
Grade 9 *NCAA Approved* **Credit 1.00**
This United States History course studies the period from colonization to the turn of the century era of events. Written and oral communication skills will be emphasized, in addition to analyzing and interpreting historical and cultural information.

UNITED STATES HISTORY 9 HONORS – 1607 to 1900 **2202**
Grade 9 *NCAA Approved* **Credit 1.00**
Prerequisite: At least a "B" average in 8th grade History.
This United States History course studies the period from colonization to 1900 in America. Written and oral communication skills will be emphasized, in addition to analyzing and interpreting historical and cultural information. The Honors students must accept that he/she will be required to complete additional academic work and extra reading material outside of the classroom and guidelines will be stricter than those for a general history class.

UNITED STATES HISTORY 10 – Contemporary U.S. 1900 to the present **2201**
Grade 10 *NCAA Approved* **Credit 1.00**
This United States History course studies the development of our country from 1900 to the present. Current events are also an integral part of this offering. Written and oral communication skills will be emphasized, in addition to analyzing and interpreting historical and cultural information.

UNITED STATES HISTORY 10 HONORS - Contemporary U.S 1900 to present **2203**
Grade 10 *NCAA Approved* **Credit 1.00**
Prerequisite: At least a "B" average in U.S. History 9 Honors or an "A" in U.S. History 9.
Topics that are emphasized include politics, domestic policy, and foreign relations. Current events are also an integral part of this offering. Written and oral communication skills will be emphasized, in addition to analyzing and interpreting historical and cultural information. The Honors student must accept that he/she will be required to complete additional academic work and extra reading material outside of the classroom and guidelines will be stricter than those for a general history class.

WORLD HISTORY - 1450 C.E. to the present **2211**
Grade 11 *NCAA Approved* **Credit 1.00**
This course will explore the major developments in World History from 1450 C.E. to the present with particular emphasis on political, geographic, cultural, economic as well as historical perspective. Written and oral communication skills will be emphasized, in addition to analyzing and interpreting historical and cultural information.

WORLD HISTORY HONORS - 1450 C.E. to the present **2212**
Grade 11 *NCAA Approved* **Credit 1.00**
Prerequisite: At least a "B" average in U.S. History 10 Honors or an "A" in US History.
This course will explore the major developments in World History from 1450 C.E. to the present with particular emphasis on political, geographic, cultural, economic as well as historical perspective. At the Honors level, the course is an accelerated academic study. Research and independent study will be an integral part of the course. Students will be required to participate in additional activities to complete the program. Written and oral communication skills will be emphasized, in addition to analyzing and interpreting historical and cultural information. The Honors student must accept that he/she will be required to complete additional academic work outside the classroom and that the guidelines will be stricter than those for a general world history class.

Social Studies Course Sequence

Grade Level	Core Courses	Electives	*WACTC
9th Grade	US History 9	AP European History	US History 9

	UP History 9 Honors	AP Psychology	
10th Grade	US History 10 US History 10 Honors AP US History	AP European History AP Psychology Civic Leadership I Civic Leadership II Law and Citizenship	No History Course
11th Grade	World History World History Honors AP World History	AP European History AP Psychology AP US History AP World History CHS American Politics Civic Leadership I Civic Leadership II History vs. Hollywood Law and Citizenship MASH	World History
12th Grade	CAD CAD Honors	AP European History AP Psychology AP US History AP World History Civic Leadership I Civic Leadership II CHS American Politics History vs. Hollywood Law and Citizenship	CAD

TECHNOLOGY EDUCATION

ADVANCED DIGITAL MEDIA DESIGN **0601**
Grades 10, 11, 12 **Credit .50**
Prerequisite: Digital Video Production and teacher recommendation and Approval.

This course is intended to engage student learning in the field of Digital Media with in-depth hands-on projects and "real world" activities that build upon previously learned material in Digital Video Production. Students will develop advanced skills that will be used to produce cinema quality short films, professional photography, and studio quality audio tracks. This course is based upon the development of a specific set of skills that would be required in the field of Digital Media. Three specific competencies, or skills areas, will be covered: photographic design; audio production; and video production. Student evaluations will be based on successful completion of assignments, quizzes, tests, projects and teacher observations.

ARCHITECTURAL DESIGN I **0592**

Grades 9, 10, 11, 12 **Credit .50**

This course prepares students who wish to pursue post high-school education in Architecture or Interior Design. Students will explore the methods and techniques used in designing architectural residences both technically and aesthetically with the use of a wide variety of media. The design and layout of each room of a residence will include a floor plan, elevation and perspective with emphasis upon interior design. This course utilizes professional software such as: Chief Architecture, or AutoCAD. Students will develop realistic models that will visually represent their electronic, or drawn designs. Evaluation will be based upon successful completion of (a set of - remove) working drawings, a model, quizzes, presentations and teacher observations.

ARCHITECTURAL DESIGN II **0596**

Grades: 10, 11, 12 **Credit .50**

Prerequisite: Successful completion of Architectural Design I and teacher recommendation .

Students in Architectural Design II will further explore the methods and techniques used in designing residential and commercial buildings as well as model fabrication to depict realistic views on design. Students will utilize Chief Architecture software and physical model prototyping to explain solutions; students will complete real world problem solving issues. The studio aspect of the course will include spatially abstract exercises to more complex programs that require integrative thinking at various scales and situated on sites of increased complexity, while integrating ecological, landscape, and tectonic demands. In all four stages of the visualization sequence, hand, digital, 2-D, and 3-D methods are explored. Student evaluations will be based on successful completion of assignments, quizzes, tests, projects and teacher observations.

CM STORE PRODUCTION **0586**

Grades 9, 10, 11, 12 **Credit .50**

Students in this class will produce the products sold at the CM School Store. This exciting, hands-on course will explore strategies and operations of a real manufacturing enterprise. Students will be engaged in the design and development of diverse products using CorelDraw software and equipment such as vinyl cutters, heat presses, screen printing, laser engraving and more. Popular products that our students make include t-shirt making and other decorated apparel. Students will collaborate with our sister class, Entrepreneurship II to achieve the ultimate hands-on experience as an Entrepreneur.

CMTV BROADCASTING & PRODUCTION **0580**

Grades 11, 12 **Credit 1.00**

Prerequisite: Successful completion of a digital video course and teacher recommendation.

CMTV classes are designed to further a student's knowledge in the area of television production, broadcast journalism and exposure to the production aspects of a news broadcast from in front of the camera. Students will be responsible for the broadcasting of morning announcements. In this class, students will supervise all aspects of LIVE television broadcasting as well as prepare graphic overlays, offline media, and stand-alone videos for broadcast in house, and later to the community. Students will not work exclusively in the television studio, but will also be expected to produce commercials, promotional videos, etc. Some degree of community involvement will be required. CMTV will be a product oriented course, as students will be expected to produce daily announcements for broadcast throughout the school.

COMMUNICATION DESIGN ENGINEERING **0588**

Grades 9, 10, 11, 12 **Credit 1.00**

Communication Design Engineering introduces students to principles and procedures of graphics and the use of equipment in the world of communication. As the main concepts of CorelDraw and Photoshop are learned, students will produce products like t-shirts, decals, license plates, and various laser engraved items to apply what they have learned. This hands-on course is an engaging and exciting way to round out your school studies.

DESIGN AND INNOVATE **0591**

Grades 9, 10, 11, 12 **Credit .50**

This fun and engaging course offers opportunity for students to cultivate creativity and experience innovation. Students rely on

inquiry and hands-on problem-solving as they integrate lessons from science, technology, engineering, art, and math (STEAM). Project focus will be on sustainable technologies and local/global issues. This environment is fueled by the design process and inquiry-based thinking as students research, exchange ideas, design parts, build models, and make modifications all while collaborating to develop solutions to problems. Students will have the opportunity to use software programs such as CorelDraw, AutoCAD and may also use various equipment like a laser engraver, vinyl cutter, or 3D printing- as the lesson necessitates.

DIGITAL VIDEO PRODUCTION **0578**

Grade 9, 10, 11, 12 **Credit .50**

This course is intended for the student who wishes to gain knowledge in the ideation, development, and production of digital media. Students will learn concepts and techniques associated with the creation of videos and other methods of digital communication. Proper procedures in multimedia will be discussed. Students will be grounded by a strong multimedia theory but will work in a hands-on environment and will be exposed to lighting, audio engineering, filming, producing, and editing of video productions. Students will be exposed to online and offline editors and be trained in the proper use of each. Each student will be responsible for producing a final video as completion of the course requirements.

ELECTRICITY PRINCIPLES AND APPLICATIONS **0598**

Grades 10, 11, 12 **Credit: .50**

In this course, electricity and electronic systems are explored through the study of DC and AC fundamentals. Practical experience in parallel and series circuit analysis is gained by means of electronic bench test equipment and troubleshooting.

ENGINEERING DESIGN I **0593**

Grades 9, 10, 11, 12 **Credit .50**

This course prepares students who wish to pursue post high-school education in Engineering. Students in Engineering Design I will explore the methods and techniques used in designing and producing consumer goods electronically and physically. Students will utilize drawing software and physical model prototyping to explain solutions. Students will explore activities in the areas of transportation, structure, and consumer goods manufacturing. Student evaluations will be based on successful completion of assignments, quizzes, tests, projects and teacher observations.

ENGINEERING DESIGN II **0597**

Grades: 10, 11, 12 **Credit .50**

Prerequisite: Successful completion of Engineering Design I.

Students in Engineering II research, develop, test, and analyze engineering designs using criteria such as design effectiveness, public safety, human factors and ethics. Students will utilize drawing software, lab equipment, and physical model prototyping to explain solutions; students will complete a job shadow as well as on site-real world problem solving. This course will encompass project and research based computer aided drafting and designs that extend the learning experiences. Students will focus on selected disciplines of engineering areas such as: manufacturing, power/energy/transportation, agriculture, bio-medical, robotics, hydraulics, electricity/electronics, communications, construction systems, alternative energy and computer aided design, and problem solving. Student evaluations will be based on successful completion of assignments, quizzes, tests, projects and teacher observations.

EXPLORING DRONE TECHNOLOGY **0599**

Grades 9, 10, 11, 12 **Credit .50**

Students will gain an understanding of the forces of flight, how each affects the others, and how different types achieve and maintain stable flight. Throughout the course students will learn the basic flight maneuvers of various UAS (Unmanned Air System) on the simulators. Also, students will learn how a UAS operates and its components. In addition, students will gain knowledge of the rules and regulations, as well as how to read aeronautical charts and aviation weather reports. By the end of the semester, students will earn the FAA recreational TRUST certificate and can take the FAA Part 107 Unmanned Aircraft Pilots License if they choose (Note: Students must be 16 years of age by completion of the course to obtain a Part 107 license. Cost is the responsibility of the student).

PHYSICAL APPLICATIONS OF TECHNOLOGY I **0587**

Grades 9, 10, 11, 12 **Credit .50**

This course provides students with an introduction to tools, materials, and processes used to solve problems using physical technologies. The content is presented in lecture/discussion and activity based methodologies. The goal is to provide a broad picture of manufacturing tools, materials, and processes and how they can be applied in day to day life, as well as their application in a

career-based on technical skills. Students will complete 1-2 projects to practice the skills and methods learned.

PHYSICAL APPLICATIONS OF TECHNOLOGY II **0595**
Grades 10, 11, 12 **Credit .50**
Prerequisite: Successful completion of Physical Applications of Technology I.
This course will build upon what students learned in Physical Applications of Technology I. The class will discuss and utilize the design process to design a project of their own choosing while using the lab equipment to bring their designs to fruition.

ROBOTICS I **0572**
Grades 9, 10, 11, 12 **Credit .50**
This course will introduce students to Agile Robotics Systems. Students will begin by designing and building a robot to complete a task. This robot will serve as a basic platform to apply both radio control and autonomous programming skills. Throughout the course students will learn and apply problem solving, teamwork, and time management skills. Assessment for the course will be based on tests, completion of projects, programming activities, and class participation.

ROBOTICS II **0573**
Grades 10, 11, 12 **Credit 1.00**
Prerequisite: At least a "C" average in Robotics I.
This rigorous course focuses on advanced robotic topics to create a robot from scratch for competing in the Bots IQ competitions. The Bots IQ competition involves creating a battlebot type robot to compete against other school districts. The course provides a unique, hands-on experience that also aids them in the discovery of career possibilities in engineering, manufacturing, and other STEM related fields. This project involves a partnership with local businesses for assistance in planning and manufacturing the custom parts associated with the project. Students are also provided with the opportunity to visit and network with local engineers at these businesses. A few of the topics that students will learn about consist of: Project Planning and Organization, Robot Design, Material Types, Electronic and Circuitry, Drawing with 3D CADD software, Machining Processes, 3D Printing, Engineering Documentation, and Fasteners. This is the perfect class for the eager and motivated student that wants to build beyond what is offered in standard building kits. Possible after school involvement may be expected for the completion of this project. Assessment for the course will be based on the successful completion of tests, projects, assignments, participation, and teacher observation.

WORLD LANGUAGES

Students who earn an "A" or "B" in Level I cannot repeat that course.*
**** Students must have a "C" average or higher to move onto the next foreign language level ****

FRENCH I **5531**

Grades 9, 10, 11, 12 *NCAA Approved* **Credit 1.00**

Prerequisite: A "C" average in their current English course.

French I is an introduction to the French language and culture. Emphasis is placed on basic vocabulary, grammar, and verb usage. Students will focus on the Present tense of regular verbs. Oral pattern drills, small group conversations and listening comprehension activities help to reinforce the learning process. Writing activities are used on a daily basis in order to support oral patterns. Culture is interwoven throughout the course and allows students to develop an appreciation of the francophone world. Authentic materials and videos will further enrich the student's knowledge of francophone culture.

FRENCH II **5532**

Grades 9, 10, 11, 12 *NCAA Approved* **Credit 1.00**

French II is a continuation of the first level with reinforcement on vocabulary and grammar. Everyday expressions and common idioms will continue to be used in order to strengthen communication skills. The vocabulary base will be broadened and an in-depth study of regular and irregular verbs will be emphasized. Additional tenses will be introduced including the *Passé Composé* and the *Imparfait*. Authentic materials and videos will further enrich the student's knowledge of francophone culture. A "C" average in the current level of study is required in order to register for the next course in the sequence.

FRENCH III **5533**

Grades 10, 11, 12 *NCAA Approved* **Credit 1.00**

French III is a continuation of the previous levels with reinforcement on vocabulary and grammar. Everyday expressions and common idioms will continue to be used in order to strengthen communication skills. The vocabulary base will be broadened and an in-depth study of regular and irregular verbs will be emphasized. Additional tenses/moods will be introduced including the *Futur*, the *Passé Simple, the Conditionnel, and the Subjonctif*. Authentic materials and videos will further enrich the student's knowledge of francophone culture. A "C" average in the current level of study is required in order to register for the next course in the sequence.

FRENCH IV HONORS **5534**

Grades 11, 12 *NCAA Approved* **Credit 1.00**

This advanced French course is intended for the student who wishes to refine his or her ability to use French for communication. A primary goal of this course is to further strengthen the ease and confidence with which the student uses French for self-expression. This course is designed to consolidate the foundation established in levels one, two, and three. The student will become quite knowledgeable about pronunciation that would be acceptable to the ear of a native speaker. The ability to understand French when spoken by a native speaker at a normal rate of speed will be increased during this course. Daily opportunities will be provided for the student to practice self-expression in both spoken and written format. Reading material will include literary works. Finally, this course is the logical bridge to the Advanced Placement French Language course. An A or B in French IV Honors plus teacher recommendation is required to continue to Advanced Placement French.

AP FRENCH (ADVANCED PLACEMENT) **5530**

Grade 12 *NCAA Approved* **Credit 1.00**

The Advanced Placement French language course is designed to meet the needs of students who plan to prepare for the French Language Advanced Placement Examination. Upon completion of the course the student will be able to understand French when spoken by an educated native in both formal and conversational situations. Students will speak with accuracy and fluency using appropriate pronunciation and intonation. They will also read a variety of articles and literary works. Students will periodically present oral reports. Ideas will be expressed accurately and fluently in writing. Instant recollection of a wide range of vocabulary and structure is required to communicate without hesitation in both written and spoken format.

GERMAN I **5546**

Grades 9, 10, 11 *NCAA Approved* **Credit 1.00**

Prerequisite: A "C" average in their current English course.

German I introduces the learner to functional and basic vocabulary and the rich German culture. Everyday expressions and common idioms employing the present tense of verbs will be used to introduce pattern drills of grammar and enhance pronunciation skills. Students will begin to develop the skills of reading and writing in the target language. Through cooperative learning exercises (dialogues, paired drills), the students will gain self-confidence in speaking and reinforce their listening comprehension abilities.

GERMAN II **5547**

Grades 10, 11, 12 *NCAA Approved* **Credit 1.00**

German II will provide the student with reinforcement of the skills learned in German I. The vocabulary base will be broadened and an in-depth study of regular and irregular verb conjugations will be emphasized. Reading comprehension and writing skills will reflect the expanded vocabulary and the concentration on mechanics. The student will be encouraged to focus on pronunciation

and spontaneity by using the language daily in the classroom setting. Authentic materials will further enrich the student's knowledge of culture.

GERMAN III **5548**
Grades 11, 12 *NCAA Approved* **Credit 1.00**
This course will provide daily opportunities for students to use the communication skills they learned in the previous levels of German. Students will expand their vocabulary even further and will concentrate on more difficult grammar and sentence construction. An in-depth study of the past tense and of the dative and accusative cases will be emphasized. Therefore, this course is not recommended for students who do not have a strong command and understanding of grammar. Students will also practice using their reading, writing and listening comprehension skills in German. Finally, this class will integrate the study of language and culture in a way that encourages curiosity and an appreciation for different cultural beliefs.

GERMAN IV HONORS **5549**
Grade 12 *NCAA Approved* **Credit 1.00**
In this advanced course, students will be encouraged to speak in German exclusively. They will use their knowledge of grammar and vocabulary to express themselves effectively. Students will continue to write and perform skills in German to practice their developing communication skills. Students will be introduced to German literature such as short stories, fairy tales, poetry and articles, which will require a more extensive vocabulary. In addition, they will refine their writing skills with personal journal entries, letters, etc. Students will also increase their understanding of German culture, as it is today and was in the past, based on their study of historical and contemporary texts and authentic materials.

LATIN I **5538**
Grades 10, 11, 12 *NCAA Approved* **Credit 1.00**
Prerequisite: An "A" or "B" average in their current Academic or Honors English course.
The student must be willing and able to put forth the required time associated with learning a second or third language. Students enrolled in other foreign languages are encouraged to take Latin I concurrently with their level 3 and 4 classes. This course is intended for the academic and honors student. Students will gain an in-depth knowledge of Latin grammar, vocabulary, and syntax. Their studies will include all five declensions of nouns, all three declensions of adjectives and all four conjugations of verbs. This course will include an intense concentration on translation of Latin stories into English. Cultural and historical events will be included through Latin readings and English lectures.

LATIN II **5539**
Grades 11, 12 *NCAA Approved* **Credit 1.00**
Prerequisite: An "A" or "B" average in Latin I.
Students will finish the study of grammar begun in Latin I. Vocabulary will be augmented and include specialized words used in the writings of Julius Caesar and Cicero. Students will use and manipulate verbs in all tenses, moods, and voices. In Latin II the focus shifts from a grammar based language to one that is read and discussed. Students will, midway through the course, begin reading the authentic Latin Literature of Cicero and Caesar.

ADVANCED LATIN HONORS **5540**
Grades 12 *NCAA Approved* **Credit 1.00**
Prerequisite: An "A" or "B" average in Latin II.
Advanced Latin is a course designed solely with the intent of reading and discussing Latin prose and poetry. Students will read works from such authors as Virgil, Catullus, Horace, Pliny, Martial, and Sallust. Selection of authors will be tailored to the interest of the students, but selections from a variety of authors will be read.

SPANISH I **5542**
Grades 9, 10, 11, 12 *NCAA Approved* **Credit 1.00**
Prerequisite: A "C" average in their current English course.
Spanish I gives the student a general knowledge of basic Spanish grammar and focuses on both regular and irregular forms of the present tense. These principles are applied in mechanical drills, conversation in the target language, basic vocabulary, and Spanish customs and songs. Cultural aspects will be discussed and analyzed. Written practice will be required with special attention to orthography. Class participation will be evaluated. The textbook series **Avancemos** has an online component which allows students to access the online textbook, interactive activities, assignments, and assessments.

SPANISH II **5543**
Grades 9, 10, 11, 12 *NCAA Approved* **Credit 1.00**

The second level course is designed to increase listening and speaking proficiency and to continue the development of reading comprehension and writing skills begun in Spanish I. A more comprehensive view of culture is presented with an aim toward broadening the student's insight and appreciation of Hispanic customs and traditions. The main focus of the grammatical study will be the preterit and imperfect tenses. The textbook series **Avancemos** has an online component which allows students to access the online textbook, interactive activities, assignments, and assessments.

SPANISH III **5544**
Grades 10, 11, 12 *NCAA Approved* **Credit 1.00**
Spanish III is a highly academic, advanced language course which not only provides a comprehensive review of previously studied grammar and vocabulary, but is designed to prepare the student for college level intermediate Spanish. The imperfect and preterit tenses will be compared and contrasted. The subjunctive mood of verbs will be studied as well as the future and conditional tenses and some technical grammatical concepts. Students will be expected to attempt accurate pronunciation in auditory comprehension. The textbook series **Avancemos** has an online component which allows students to access the online textbook, interactive activities, assignments, and assessments.

SPANISH IV HONORS **5545**
Grades 11, 12 *NCAA Approved* **Credit 1.00**
This course is intended for the serious minded student who wishes to refine his or her ability to communicate in Spanish. The student will be required to speak in Spanish during the class. A complete review of all grammatical concepts will be undertaken. The imperfect subjunctive tense will be studied as well as subtle grammatical concepts that will perfect their Spanish. Students will attempt to perfect their grammatical form and vocabulary through creative writing assignments and oral presentations. The abridged version of Cervantes novel "Don Quixote" will be read and discussed. In the 4th quarter the students will prepare and present a 10-minute presentation in the target language

AP SPANISH (ADVANCED PLACEMENT) **5500**
Grade 12 *NCAA Approved* **Credit 1.00**
Prerequisite: An "A" or "B" in Spanish IV Honors and a teacher recommendation.
The Advanced Placement Spanish language course is designed to meet the needs of students who plan to prepare for the Spanish Language Advanced Placement Examination. Upon completion of the course the student will be able to understand Spanish when spoken by an educated native in both formal and conversational situations. Students will speak with accuracy and fluency using appropriate pronunciation and intonation. They will also read a variety of articles and literary works. Students will periodically present oral reports and participate in classroom debates. Ideas will be expressed accurately and fluently in writing. Instant recollection of a wide range of vocabulary and structure is required to communicate without hesitation in both written and spoken format.

ARTS & HUMANITIES COURSES

ART	Advanced Art Honrs*

	AP Art & Design* Concept & Creative Thinking* Form & Function* Introduction to Art* Introduction to Ceramics* Media & Technique* Observational Drawing* Visual Arts Communications*
BUSINESS	Business and Consumer Law CM Store Partners* Desktop Publishing Web Page Design & Development (CHS)*
COMPUTER SCIENCE	AP Computer Science Principles AP Computer Science A
ENGLISH	AP English Language & Composition AP Literature & Composition CMTV Broadcasting* Creative Writing English 9/10/11/12 Honors Exploring Poetry* Great Books Holocaust Literature Public Speaking I/II*
FAMILY CONSUMER SCIENCE	Baking & Pastry Arts* Early Childhood Education I/II* Early Childhood Education Independent Study* Family & Community Studies* Foods & Nutrition* Global Cuisine*
FINE ARTS	Advanced Acting & Theater Performance* Advanced Theater Studies* Theater Studies*
FOREIGN LANGUAGE	AP French AP Spanish French I/II/III/IV German I/II/II/IV Latin I/II Spanish I/II/II/IV
MUSIC	American Popular Music* AP Music Theory* Band Honors* Bella Voce* Concert Choir/Bass Choir* Concert Choir/Treble Choir* Jazz Ensemble* Jazz Lab Band* Piano Lab*

	Songwriting* World Percussion Ensemble*
SOCIAL STUDIES	American Politics (CHS) AP European History AP Psychology AP United States History AP World History Civic Leadership in Action I/II Contemporary American Democracy Honors Law & Citizenship Mental & Social Health U.S. History 9/10 Honors
TECHNOLOGY EDUCATION	CMTV Production* Advanced Digital Media Design* Architectural Design I/II* Communication Design Engineering* Digital Video Production* Engineering Design I/II* Foundations of Technology* Physical Applications of Technology I/II* Robotics I/II

***Fulfills the requirement for Arts and Humanities. All others fulfill the requirement for Humanities only.**

Consultants
Mr. Michael Daniels, Superintendent
Mr. Scott Chambers, Assistant Superintendent
Mr. Kenneth Crowley, Assistant to the Superintendent
Ms. Brittany Taylor, Principal
Ms. Jenna Handra, Academic Principal
Mr. Thomas Orr, Academic Principal

Canon-McMillan High School Counselors
Mrs. Nadia Abbondanza
Mrs. Julie Hughes
Mrs. Susan Humbertson
Mrs. Molly Nuri
Mrs. Karen Rubican

CANON-McMILLAN HIGH SCHOOL
PLANNING AND PREPARATION
From the School Counseling Department

ACADEMIC PROGRESS	Academic progress should be monitored. Please set realistic goals each grading period. Check the school calendar for scheduled dates for progress reports and report cards. Encourage your parents/guardians to attend Open House in September to meet with your teachers and to schedule a conference in November, especially if you're having difficulty in a certain class.
ACCOMMODATIONS	If you receive academic accommodations from CM, you may be eligible to request them for national testing. Be sure to speak about this with your counselor.
ATTENDANCE	Attendance is essential to academic performance and required by state law! Please know when you have three illegal, unexcused absences, you will be referred to BluePrints, the district truancy elimination plan program, a student attendance improvement plan conference will be held, and you may be cited through the magistrate.
COLLEGE APPLICATIONS	All transcript requests must be made through Xello. The transcript release form granting overall permission to release the transcript must be signed by a parent/guardian if you are under the age of 18, will be completed one time and is available in the School Links tab on the high school website. It is imperative that students complete these requests by five school days before your deadlines to ensure that your counselor can complete school forms.
COLLEGE FAIRS	Use this opportunity to meet with many college representatives from across the country. (National College Fair, South Hills Consortium) Make college contacts and request information.
COLLEGE TESTING	Register for the ACT or SAT during your 11th grade spring semester. Test prep information can be found in the School Counseling Resources group. Fee waivers may be available for those who qualify.
COLLEGE VISITS	Three college visits are permitted. Students must have evidence of the visit provided by the college/university and submit to Student Affairs.
COURSE SELECTION	Students will select courses during the third quarter for the following school year. Students are encouraged to speak with teachers, review the course requirements and consider post-secondary plans to develop course requests.
EXTRACURRICULAR ACTIVITIES	Extracurricular activities should be encouraged both in and out of school. Be sure that the activities are not impacting student grades. Colleges like to see that you have good time management skills and can maintain your grades while being involved in other activities. This would be a good time to begin some volunteering in your community as well. Volunteer opportunities are posted in the School Counselor Resources group in Schoology and announced on CMTV.
FINANCIAL AID (FAFSA)	FAFSA stands for Free Application for Federal Student Aid. Be sure to file the FAFSA as soon after October 1st as possible. Check with your applied to colleges for their deadlines. Many post-secondary schools have their own financial aid form that needs to be completed in addition to the FAFSA form. The FAFSA is found at www.fafsa.ed.gov to file electronically. The Counseling Department hosts financial aid events in October.
MILITARY ACADEMIES	If you are interested in attending a military academy, such as West Point or the United States Naval Academy, it is recommended to begin the process early in high school. Utilize the School Counseling Resources group and the Academy

	websites for more information.
NCAA	If you are planning to play sports in college, be sure to check that your courses are marked *NCAA Approved*. You can register with the NCAA at the end of tenth grade at www.eligibility center.org. If you have any questions, please contact Mr. Mike Evans, Associate Athletic Director and NCAA Coordinator, (724)745-1400 ext. 5002.
ORIENTATION	Orientation for ninth grade students is generally held the second week of August before the new school year begins. Please check the school calendar (when it is available) for the date.
PARKWAY WEST CAREER AND TECHNOLOGY CENTER	Parkway West is available to interested students beginning in the sophomore year. A tour will be offered to freshmen students during the third quarter.. If you have any questions about the Parkway West program, please contact your school counselor.
POWERSCHOOL	Powerschool should be checked daily for progress and attendance. Email the teachers if you or your parent/guardian has concerns. Please make sure your email address is up-to-date so you can receive email blasts. If you have a change in address, notify the School Counseling Department of the change via the Inter-District Transfer form available on the website.
PSAT	The PSAT is offered to all tenth and eleventh grades students during the school day in October. Visit www.collegeboard.org for more information on this and other testing and post-secondary resources. For testing accommodations, see your counselor.
PUPIL FOCUS	Students struggling with academics may be recommended to the Pupil Focus team. The team gathers information regarding past and present academic performance, any teacher and family concerns, and develops a plan for improvement.
STUDENT ASSISTANCE PROGRAM (SAP)	SAP is designed to assist Canon-McMillan staff to better respond to students' struggles related to mental health and/or drugs and alcohol. The team is made up of counselors, administrators, other school personnel, and community agencies. Any concerned person is encouraged to refer a student exhibiting behaviors of concern to the SAP team. Referral forms are available on the school website and in the counseling office. Involvement in SAP is confidential.
SCHEDULES	Schedules are made available online in August. Please be sure that you have all the major classes scheduled. Schedule change requests may be submitted using the online form. Changes are limited to necessity, not convenience.
SCHOOL COUNSELING RESOURCE GROUP on SCHOOLOGY	This Schoology group is a great source of information for parents and students. You can find important information on career development, national testing (SAT/ACT), paying for college, volunteer,job, and scholarship opportunities, and much, much more. Students are encouraged to join the group by using the following access code: DB7QW-K4WWP.
WESTERN AREA CAREER AND TECHNOLOGY CENTER	WACTC is available to interested students beginning in the sophomore year. A tour will be offered to freshmen students during the third quarter.. If you have any questions about the WACTC program, please contact your school counselor.

XELLO

Xello is an engaging college and career readiness software that helps students of all backgrounds, abilities, and aspirations to unlock their future potential. Students will be working in Xello throughout high school to complete career-readiness activities. In twelfth grade, students will also utilize Xello for college application services.

Have a question or need more information? Please contact your assigned School Counselor:

Mrs. Karen Rubican, A- Da	rubicank@cmsd.k12.pa.us	ext. 5022
Ms. Susan Humbertson, De - Hi	humbertsons@cmsd.k12.pa.us	ext. 5023
Ms. Nadia Abbondanza, Hj - Me	abbondanzan@cmsd.k12.pa.us	ext. 5027
Mrs. Julie Hughes, Mf - Se	hughesj@cmsd.k12.pa.us	ext. 5020
Ms. Molly Nuri, Sf - Z	nurim@cmsd.k12.pa.us	ext. 5021

Students: Scan this QR code to schedule a meeting!

APPENDIX A: ALTERNATIVE GRADUATION PATHWAYS (ACT 158)