

# Moon Area High School

Program of Studies  
2021-2022



**MOON AREA HIGH SCHOOL**  
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# Table of Contents

<b>Introduction .....</b>	<b>1</b>
Our Mission .....	1
Vision .....	1
Philosophy and Beliefs .....	1
Belief Statements .....	1
Course Selection Requirements .....	2
Graduation Requirements .....	2
Requirements for Grade Advancement .....	2
Honor Roll .....	3
Criteria for Determining Graduation Ceremony Speakers .....	3
Miscellaneous Information .....	3
NCAA Eligibility - Student Athletes .....	4
College Testing Terms .....	5
<b>Course Offerings and Selections .....</b>	<b>7</b>
<b>Art Department .....</b>	<b>7</b>
Art 1 .....	7
Art 2 .....	7
Art 3 .....	7
Art 4 .....	7
Creative Art .....	7
Photography 1 .....	7
Photography 2 .....	7
Digital Imaging 1 .....	8
Digital Imaging 2 .....	8
Digital Imaging 3 .....	8
Advanced Placement Art History .....	8
Art Therapy .....	8
Functional Ceramic Art .....	8
Hands-On Art .....	8
<b>Business and Marketing Department .....</b>	<b>9</b>
Accounting 1 .....	9
College in High School, Financial Accounting .....	9
Intro to Business & Marketing Essentials .....	9
Personal Finance .....	9
Entrepreneurship .....	9
Sports and Entertainment Management .....	10
International Business/Business Management .....	10
<b>Computer Science Department .....</b>	<b>10</b>
Java Programming 1 .....	10
Java Programming 2 .....	10
AP Computer Science Principles .....	10
Information Technology 1 .....	11
Information Technology 2 .....	11
Visual Basic Programming 1 .....	11
Visual Basic Programming 2 .....	11
Microsoft Office Applications .....	11
Web Page Design .....	11
<b>English Language Arts Department .....</b>	<b>12</b>
English 9 .....	12

English 9 – Pre AP.....	12
English 10.....	12
English 10 - Pre AP.....	12
English 11.....	13
English 11 College Prep.....	13
English 11 Advanced Placement Language & Composition.....	13
English 12.....	13
English 12 Advanced Placement Literature & Composition.....	13
Contemporary Fiction and Literary Theory.....	13
Poetry.....	14
Survey of British Literature.....	14
Survey of World Literature.....	14
Theatre and Dramatic Arts.....	14
Contemporary Nonfiction.....	14
Creative Nonfiction Writing Workshop.....	14
Writing Beyond the Classroom.....	14
Film as Literature.....	15
<b>English Language Arts Electives.....</b>	<b>15</b>
Communications and Public Speaking.....	15
Multimedia Journalism 1.....	15
Print Journalism 2-3.....	15
Print Journalism 4.....	15
Photo Journalism 2Y.....	15
Photo Journalism 3Y.....	15
Photo Journalism 4Y.....	16
Contemporary Issues.....	16
<b>Family and Consumer Science Department.....</b>	<b>16</b>
Personal Nutrition and Wellness.....	16
Exploration of Cooking and Nutrition.....	16
Mastery of Cooking.....	16
The Art of Baking.....	17
Child Development 1.....	17
Advanced Child Development.....	17
Lifetime Readiness.....	17
<b>Mathematics Department.....</b>	<b>18</b>
Algebra Linear 1.....	18
Algebra 1 - Quadratics.....	18
Algebra 1.....	18
Core Geometry.....	18
Geometry.....	19
Geometry Honors.....	19
Algebra 2.....	19
Algebra 2 – Honors.....	19
Algebra 2A.....	19
Algebra 2B.....	20
Trigonometry/Pre-Calculus.....	20
Trigonometry/Pre-Calculus Honors.....	20
Calculus.....	20
Advanced Placement Calculus AB.....	20
Advanced Placement Calculus BC.....	20
Advanced Placement/College in High School - Basic Statistics*.....	21
Mathematics with Business Applications.....	21

Math Lab .....	21
<b>Math Sequence Chart.....</b>	<b>21</b>
<b>Music Department .....</b>	<b>22</b>
Brass Class.....	22
Woodwind Class.....	22
Symphonic Band Honors.....	22
Concert Band .....	22
Percussion Ensemble .....	22
Percussion Ensemble - Honors.....	23
String Ensemble .....	23
Chamber String Ensemble - Honors.....	23
Comprehensive Musicianship I.....	23
Comprehensive Musicianship II.....	23
Concert Choir .....	24
Honors Choir .....	24
<b>Health and Physical Education Department .....</b>	<b>24</b>
Physical Education .....	25
Adaptive Physical Education .....	25
Beginning Swimming.....	25
Health & Wellness.....	25
Health Education.....	25
Lifetime Fitness .....	25
Team Sports .....	26
Athletic Conditioning .....	26
Partners in Physical Education.....	26
Independent Study Physical Education.....	26
<b>Science Department.....</b>	<b>27</b>
The Earth and Its Environment .....	27
Biology .....	27
Biology - Honors.....	27
Human Anatomy and Physiology – Honors.....	27
Physical Science .....	28
Chemistry.....	28
Chemistry – Honors .....	28
Physics.....	28
Advanced Placement Physics 1 .....	28
Earth and Space Science .....	28
Advanced Placement Chemistry .....	28
Advanced Placement Chemistry Lab.....	29
College in High School Physics .....	29
Advanced Placement Biology.....	29
Advanced Placement Biology Lab .....	29
<b>Social Studies Department.....</b>	<b>30</b>
U.S. History 1865 to 1945 .....	30
U.S. History 1865 to 1945- Honors .....	30
Comparative World History .....	30
Comparative World History - Honors.....	30
Advanced Placement European History .....	31
Contemporary Global History & Current Events.....	31
Contemporary Global History & Current Events - Honors.....	31
Advanced Placement U.S. History.....	31
Civics and Economics .....	31

Advanced Placement U.S. Government/Politics.....	31
<b>Social Studies Electives .....</b>	<b>32</b>
Ethics.....	32
Practical Justice.....	32
Psychology .....	32
Sociology .....	32
<b>Special Education Department .....</b>	<b>33</b>
Algebra 1 Linear .....	33
Algebra 1 – Quadratics.....	33
Core Geometry Concepts and Skills .....	33
Consumer Math .....	33
Reading Strategies .....	33
Executive Functioning Skills/Study Skills.....	33
<b>Additional Special Education Courses .....</b>	<b>34</b>
<b>Technology Education Department.....</b>	<b>34</b>
Integrated Technology.....	34
Manufacturing 1 .....	34
Materials Fabrication .....	34
Invention Laboratory .....	34
Advanced Manufacturing.....	35
Computer Aided Drafting and Design (CADD) .....	35
Engineering Design 1/2 Honors .....	35
Architectural Drawing and Design .....	35
Television Studio and Media Production 1 .....	35
Television Studio and Media Production 2/3.....	35
MAHS-TV.....	36
<b>World Language Department .....</b>	<b>36</b>
French 1 .....	36
French 2 .....	36
French 3 .....	36
French 4 .....	36
French 4 – Honors.....	36
French 5 .....	37
French 5 – Honors.....	37
German 1 .....	37
German 2 .....	37
German 3 .....	37
German 4 .....	37
German 4 – Honors.....	37
German 5 .....	37
German 5 – Honors.....	38
Spanish 1.....	38
Spanish 2.....	38
Spanish 3.....	38
Spanish 4.....	38
Spanish 4 – Honors .....	38
Spanish 5.....	38
Spanish 5 – Honors .....	38
<b>Parkway West Career &amp; Technology Center.....</b>	<b>39</b>
<b>Parkway West Career Majors.....</b>	<b>39</b>
Auto Body Repair .....	39

Automotive Technology .....	39
Cyber Security & Network Technology .....	39
Culinary Arts 1 .....	39
Culinary Arts 2 .....	39
Culinary Arts 3 .....	39
Cosmetology 1 .....	40
Cosmetology 2 .....	40
Cosmetology 3 .....	40
Nail Technician License .....	40
Cosmetology Teacher’s License .....	40
Construction Technology Cluster .....	40
Carpentry .....	40
Electrical Systems Technology .....	40
HVAC/R .....	41
Welding Technology .....	41
Health Occupations Technology .....	41
Phlebotomy Technician Certification (CPT) .....	41
Pharmacy Technician Certification (CPhT) .....	41
Graphic Arts & Production Technology.....	41
Veterinary Technology.....	41
Public Safety Technology .....	42
Sports Medicine & Rehabilitation Therapy Technology (SMARTT).....	42
Diesel Technology .....	42
<b>Parkway West Academic Course Offerings.....</b>	<b>42</b>
Principles of Technology .....	42
Chemical Properties in Practice .....	42
U.S. History 1.....	43
World Cultures .....	43
U.S. History 2.....	43
Civics .....	43
<b>Summary of Additional Dual Enrollment Opportunities.....</b>	<b>44</b>
<b>Course and Credit Planning Guide .....</b>	<b>45</b>

# Introduction

This Program of Studies is distributed to explain the curriculum and course options at Moon Area High School for the 2021-2022 school year. It has been prepared to assist you in planning an effective and realistic high school program. In addition to the course offerings, the Program of Studies contains descriptions of courses, graduation, and scheduling requirements. Plan to refer to this throughout the year for future planning.

The high school Counselors will meet with all students to review this Program of Studies. They will further explain the scheduling process. Students must activate their Skyward account in order to request courses for the 2021-22 school year. Students and parents will be able to review these courses online through Skyward. Every attempt will be made to schedule students for the courses they select; however, some courses have limited availability. Schedules will be posted in the summer.

Please take the opportunity to carefully review the course offerings to be certain that you are selecting courses that are both of a personal interest and will fulfill the graduation requirements established by the Moon Area School District. Be certain that you have met the necessary prerequisites for each course that is requested. Please feel free to consult with counselors, teachers, and administrators to have other questions and concerns addressed.

## **Our Mission**

The mission of Moon Area High School is to educate every student in a respectful, safe, enriching environment through comprehensive programs that inspire excellence, life-long learning and responsibility.

The Moon Area School District is an equal opportunity education institution and will not discriminate on the basis of race, color, national origin, sex and handicap in its activities, programs or employment practices as required by Title VI, Title IX and Section 504.

For information regarding civil rights, grievance procedures or services, activities and facilities that are accessible to and usable by handicapped persons, contact Dr. Maureen Ungarean, Title IX/Section 504 Coordinator at 8353 University Blvd, Moon Township, PA 15108 (412) 264-9440



## **Vision**

**Future Ready:** With purpose, innovation, and excellence, we support and guide Moon Area School District students as they choose their pathway to prepare for college and career success.

## **Philosophy and Beliefs**

Moon Area High School recognizes each individual's potential and unique capabilities and accepts the challenge of providing a stimulating environment for all students to develop into inquisitive and informed life-long learners.

Respect, integrity, trust, cooperation, and tolerance are important personal attributes that foster a positive and productive school environment. Moon Area High School encourages acquisition and daily application of these traits in conjunction with academic excellence, personal accountability, and effort.

Moon Area High School will capitalize on strengths and effectively address weaknesses through ongoing evaluation and adjustment of curricula, technology, extracurricular activities, and community outreach programs to meet the diverse needs of students in a dynamic, global society. Moon Area High School continually encourages a Tradition of Excellence in academics, the arts, activities, and athletics.

## **Belief Statements**

- Every person is unique and has intrinsic worth.
- Fostering understanding and appreciation of cultural diversity enriches lives.
- Recognition and encouragement inspire motivation and dedication.
- Students, staff, and guests have a right to feel safe and secure.



- An academic and work environment free of discrimination and harassment encourages a comfortable and productive learning atmosphere.
- Honest and open communication among the school population is essential for understanding and trust.
- Education is a shared responsibility of the student, faculty, family, and community.
- A quality education is basis for success and the most valuable asset for the future.
- Higher expectations promote greater achievement.
- A challenging education builds critical thinking and problem-solving skills for tomorrow's work force.
- Relevance is an important catalyst for learning.
- Rigorous curricula and challenging assessments reflect high expectations.
- Teamwork and leadership opportunities allow for personal growth.
- School pride and spirit motivate students and staff.
- Good sportsmanship reflects the character of Moon Area High School.
- Communities thrive when all individuals contribute.

### Course Selection Requirements

All freshmen and sophomores will request 7.0 credits per year. Juniors and seniors will request a minimum of 6.5 credits per year. However, juniors and seniors are encouraged to take a full schedule. (Every effort will be made to schedule requested courses.)

### Graduation Requirements

In compliance with Chapter 4 regulations of the Pennsylvania Department of Education and Moon Area School District policy, Moon Area High School graduation requirements shall include:

1. Completion of 24 credits as outlined in each subject listed below:

4.0	English	2.5	Health & Physical Ed
4.0	Social Studies	2.0	Arts and Humanities
3.0	Science	5.5	Electives
3.0	Mathematics		

(Arts and Humanities include World Languages, Art, Fine Arts, Business, Family and Consumer Sciences, Technology Education and Elective Social Studies).

2. Satisfactory completion of a career readiness project planned for junior year; information is available on the school website

3. And demonstrate one of the following:

Demonstrate proficient or better achievement on the Keystone Algebra 1, Literature and Biology Assessments, or

Completion of a portfolio showing mastery of state standards in Literature, Biology, and Algebra

### Requirements for Grade Advancement

A student must have earned 5.0 credits to enter grade 10, 11.0 credits to enter grade 11, and 17.0 credits to enter grade 12. No student will be classified as a senior unless they have earned 17.0 credits and is a confirmed candidate for graduation by the end of the school year.

### Grading System

(Letter Grades, Their Percentages, and Grade Points)

Grading Scale	1 Credit Unweighted GP	.5 Credit Unweighted GP	Honors Weighted GP	AP/CHS Weighted GP
A = 90-100	4.0	2.0	4.5	5.0
B = 80-89	3.0	1.5	3.5	4.0
C = 70-79	2.0	1.0	2.5	3.0
D = 60-69	1.0	0.5	1.5	2.0
F = 0-59	0	0	0	0

The Grade Point Average (GPA) is computed using grades earned in courses taken at Moon Area High School. Total grade points earned in all courses are divided by total attempted credits. Both current (year-end) and cumulative GPA's are reflected on transcripts. Cumulative GPA's are recalculated at the end of each semester.

## **Honor Roll**

Any student who earns a 3.25 grade point average will be listed on the quarterly Honor Roll. A grade of "F" in any course will automatically eliminate the student from the Honor Roll regardless of grade point average.

### **High Honor Roll**

Any student who earns a 4.0 grade point average will be listed on the quarterly High Honor Roll.

### **Graduation**

For the determination of Honors and High Honors status for the graduation ceremony, written program, plaques, and chords, cumulative GPA will be calculated at the end of the first semester of the senior year.

### **Graduation Chords**

- National Honor Society – Silver
- Exemplary (4.0 and higher cumulative GPA) – Double Gold
- Presidential (3.5 – 3.99 cumulative GPA) – Single Gold

### **GPA Calculation**

The grade point average is determined by adding the total number of grade points earned in completed courses divided by the total number of credits attempted.

## **Criteria for Determining Graduation Ceremony Speakers**

Up to 3 graduation ceremony speakers shall be selected each year by a committee headed by the principal based on the criteria listed below:

- Students must demonstrate academic excellence by being in the top decile measure of the senior class
- Students must demonstrate an acceptable level of involvement in school activities
- Students must demonstrate an acceptable level of verifiable community service
- Students must demonstrate verifiable, sustained leadership as a MAHS student

A completed application is required and must include an essay answering the question of why he/she should speak at the graduation ceremonies.

## **Miscellaneous Information**

### **Advanced Courses – Requirements**

Students are scheduled into Honors, CHS and AP courses on the basis of successful completion of prerequisite courses, their grade point average, and/or teacher recommendation. *All students taking an AP course will be **required** to take the corresponding AP exam, in order to receive the weighted grade point.*

### **Dual Enrollment Early Release Program**

Students wishing to participate in the Dual Enrollment Early Release Program may enroll in college level courses at the Community College of Allegheny County, Robert Morris University, or Penn State Beaver. Senior and junior students must meet an approved set of requirements and must submit an application signed by a parent, a school counselor and the principal. Applications are available in the Counseling Office. Questions regarding this program can be answered by counselors and principals.

### **Homework**

On average, homework shall not exceed 90 minutes per class per week. Homework for Accelerated, Honors, and AP classes will exceed the typical times due to the rigor of the course(s). Average homework time is listed in the course descriptions for these courses.

### **Independent Studies**

All independent studies must be approved by a principal and will be graded on a pass/fail basis only.

### **Mathematics**

Students requesting the next math course in sequence must have a 70% or higher in their current math course and the approval of the current teacher and counselor. A grade of 96% or higher is required for students moving from Algebra 1 into Geometry Honors and Geometry to Algebra 2 Honors. A grade of 90% or higher is required for students moving from Algebra 1 - Quadratics to academic Geometry.

### **Medical Exemptions from P.E.**

A student may be excused from regular physical education only upon a physician's written recommendation for reasons of health or physical incapacity. For such circumstances, an alternative research paper will be assigned. Exempted students will be screened for possible placement in an alternative physical education program, within limitations set by a physician.

### **Procedures for Course Changes**

Considerable time is spent each year with students to ensure that their course selections are meaningful and enhance the program of their choice. Student schedules resulting from the course selection process will be considered final. It is essential that requests for schedule reviews be held to a minimum (e.g. completion of summer school, failures, or inability to meet prerequisites).

Below is a list of practices and procedures the high school will use for responding to schedule review requests:

- Priority will be given to changes made necessary because of computer errors, adjustment in class size, and other reasons of an administrative nature.
- Requests for course changes that follow the examples mentioned above, or similar situations, will be considered next. All requests for changes must be initiated in writing using the proper form through the Counseling Office. Students are responsible to complete the required form and must include all necessary teacher and parent signatures. Approval of any requests will be made based upon the advice of teachers, counselors and principals.
- When selecting a course not previously taken, it will **NOT** be possible to change a schedule due to specific teacher preference.
- No course may be dropped after the first two weeks of school without receiving a failing grade for the remainder of the year. Any exception (e.g. medical reasons) to the drop procedure shall rest with the school administrators.
- No course may be added after the first two weeks except upon the advice of a counselor and approval of school administrators. The final decision for granting changes requested after this time shall rest with school administrators.
- These procedures apply to all courses taken at Moon Area High School including those courses taken at the Parkway West Career and Technology Center. They also apply to courses that begin meeting during the second semester.
- Courses without a sufficient level of student enrollment, as determined by administrators, may be dropped from the master schedule and therefore also from student schedules.

### **World Languages**

Students requesting a world language must earn a 70% or higher in English. Students earning below 70% in the current language course will be required to repeat the course to strengthen background.

### **NCAA Eligibility - Student Athletes**

Prospective student-athletes are able to access information needed to understand the Division I and Division II eligibility requirements at [www.eligibilitycenter.org](http://www.eligibilitycenter.org). Please view the MAHS list of approved courses as it frequently changes. **All prospective student-athletes MUST register online at the Eligibility Center website.** You will be instructed from there as to the process to have your transcripts sent from your high school.

The NCAA requires all prospective student-athletes who are planning to attend either a Division I or Division II school to supply SAT and ACT scores to the Eligibility Center **directly from the testing agencies**. You must use the code "9999" when making the request with the agencies. No scores will be accepted from the high school transcript.

***It is the responsibility of the parent and student to make sure that they are scheduling appropriate courses in high school that meet NCAA eligibility requirements. Please refer to comprehensive information through the following link: [http://fs.ncaa.org/Docs/eligibility\\_center/Quick\\_Reference\\_Sheet.pdf](http://fs.ncaa.org/Docs/eligibility_center/Quick_Reference_Sheet.pdf)***

### **NCAA APPROVED COURSES**

College bound student athletes who want to compete in NCAA Division I or II sports, need to meet certain division-wide requirements. Students who plan to attend a Division III school need to meet the eligibility requirements set forth by their schools. In general, for DI and II initial eligibility, students must take 16 specific and approved core courses as well as meeting specific GPA and ACT/SAT score requirements. **It is the student's responsibility to review NCAA policies to ensure that he/she is taking the correct classes and fulfilling the requirements.** More information can be found at [www.ncaa.org/student-athletes](http://www.ncaa.org/student-athletes).

## NCAA Approved Courses at Moon Area High School

### ENGLISH

English 9A  
 English 10A  
 English 11A  
 English 12A  
 AP English Language  
 AP English Literature  
 Contemporary Fiction  
 Contemporary Issues  
 Contemporary Non-fiction  
 Creative Non-fiction Writing  
 English 9  
 English 10  
 English 11 College Prep  
 English 12  
 Honors English 9  
 Honors English 10  
 Poetry  
 Pre-AP English 9  
 Pre-AP English 10  
 CP English 11  
 Survey of British Literature  
 Survey of World Literature  
 Theatre and the Dramatic Arts  
 Writing Beyond the Classroom  
 Film as Lit

### SOCIAL STUDIES

AP European History  
 AP US Government and Politics  
 AP US History  
 Civics and Economics  
 Comparative World History 10  
 Honors Comp. World History 10

Contemporary Global History  
 Honors Contemp. Global History  
 Ethics  
 Practical Justice  
 Psychology  
 Sociology  
 US History 1865-1945  
 Honors US History 1865-1945

### NATURAL/PHYSICAL SCIENCE

AP Biology  
 AP Chemistry  
 Biology  
 Honors Biology  
 Chemistry  
 Honors Chemistry  
 Earth and Its Environment  
 Earth/Space Science  
 Honors Human Anatomy & Physiology  
 Physical Science  
 Physics  
 CHS Physics  
 AP Physics 1

### MATHEMATICS

Algebra 1 Linear (.5 credit max)  
 Algebra 1 Quadratics (.5 credit max)  
 Algebra 1  
 Algebra 2  
 Algebra 2A (.5 credit max)  
 Algebra 2B (.5 credit max)  
 AP Calculus AB  
 AP Calculus BC

Honors Algebra 2  
 Calculus  
 CHS/AP Applied Statistics  
 Geometry  
 Honors Geometry  
 Trig/Pre-Calculus  
 Honors Trig/Pre-Calculus

### ADDITIONAL CORE COURSES

French I  
 French II  
 French III  
 French IV  
 Honors French IV  
 French V  
 Honors French V  
 German I  
 German II  
 German III  
 German IV  
 Honors German IV  
 German V  
 Honors German V  
 Spanish I  
 Spanish II

Spanish III  
 Spanish IV  
 Honors Spanish IV  
 Spanish V  
 Honors Spanish V

#### **NCAA awards .5 credit for:**

Algebra I Linear  
 Algebra I Quadratics  
 Algebra 2A  
 Algebra 2B

#### **The following courses are not approved:**

English 11  
 English 12  
 Core Geometry  
 Applied Biology

## **College Testing Terms**

### **ADVANCED PLACEMENT EXAMS (AP)**

There are over 30 examinations offered by The College Board in the Advanced Placement (AP) Program. All AP Exams, except for Studio Art, contain both multiple-choice questions and free-response questions that require essay-writing, problem-solving, and other skills. AP Exams are given every year at the high school during two weeks in May.

Every examination receives an overall grade on a five-point scale: 5 (extremely well-qualified), 4 (well-qualified), 3 (qualified), 2 (possibly qualified), and 1 (no recommendation). Upon student request, Grade Reports are sent in early July to each student's home address, school, and to his/her college. Many colleges grant credit and/or advanced placement to students whose AP examination grades are considered acceptable. Students who choose to take an AP examination must register to do so and

assume the related costs. *Students in AP classes are required to take the exams in order to receive the additional grade points on their transcripts.*

## **ACT**

The ACT measures a student's ability in the subject areas of English, Mathematics, Reading, and Science Reasoning. ACT scores are reported on a standard scale that ranges from 1 to 36. The arithmetic average of the scores on the four tests is the ACT composite score, which is often used as a measure of overall academic ability. Scores are organized into Individual Student Profile Reports, which are sent to the students and to colleges.

- The English Test measures students' understanding and use of the basic elements of correct and effective writing in usage/mechanics and rhetorical skills.
- Mathematics Test measures students' mathematical reasons and problem-solving abilities.
- The Reading Test measures reading comprehension abilities in the following areas: Social Studies/Science, Arts/Literature.
- The Science Reasoning Test measure students' critical reasoning and problem-solving skills required in the natural sciences.
- The Writing Test is an optional essay test that measures writing skills emphasized in high school English classes and in entry level college composition courses. The test consists of one writing prompt that describes two points of view on an issue, and students write a response about their position on the issue.

The ACT is given in September, October, December, February, April, June, and July of each year. Juniors and seniors are encouraged to take the test. Students who choose to take the ACT Assessment must register to do so and assume the related costs. Registration can be completed online at [www.actstudent.org](http://www.actstudent.org)

## **PSAT AND THE NATIONAL MERIT SCHOLARSHIP QUALIFYING TEST (NMSQT)**

The PSAT is a multiple-choice examination. It measures verbal and mathematical abilities important for academic performance in college. The questions test ability to reason with facts and concepts rather than recall them. The test is given annually in October, and may be useful as a practice test for the SAT. The PSAT also serves as the National Merit Scholarship Qualifying Test for juniors in a nationwide competition for recognition, awards, and scholarships. High school juniors are encouraged to take the PSAT/NMSQT in October. Tenth graders may elect to take the test for practice; however, their scores are not applicable to the NMSQT.

Students who choose to take the PSAT/NMSQT must register to do so and assume the related costs.

## **SAT**

The SAT is an entrance examination used by colleges and universities. There are three sections on the SAT: Evidenced-Based Reading and Writing, Math, and an optional Essay test. The Reading and Math sections are scored 200-800, with a perfect score being 1600. The Essay test will be scored 6-24.

- The Evidenced-Based Reading and Writing test measures a range of skills including: command of evidence, words in context, analysis in social studies and the sciences, expression of ideas, and standard English conversations. All questions are multiple choice and based on passages. Informational graphics such as tables, graphs, and charts accompany some passages, but no math is required.
- The Math test will focus in-depth on three areas: heart of algebra, problem solving and data analysis, and passport to advanced math. This test also draws on additional topics in math, including geometry and trigonometry. Most math questions will be multiple choice, but some (called grid-ins) will ask students to arrive at the answer rather than select the answer. The test is divided into two portions, one with a calculator and one without a calculator.
- The optional Essay test will show how well students understand the passage and use it as the basis for a well-written, thought-out discussion. The essay prompt will always be the same, but the topic will change.

The SAT Reasoning Test is typically given to high school juniors and seniors. It is offered in August, October, November, December, March, May, and June. Students who choose to take this exam must register to do so and assume the related costs. Registration can be completed online at [www.collegeboard.org](http://www.collegeboard.org).

***The optional ACT and SAT essays are required at less than 16 colleges across the country. Check with schools you may apply to, before signing up for the essay (and spending the additional money).***

# Course Offerings and Selections

## Art Department

Art 1-2-3-4	Photography 2*
Digital Imaging 1-2-3*	Functional Ceramic Art*
Creative Art*	AP Art History
Hands-On Art*	Art Therapy
Photography 1*	
*indicates that a course is a one-semester course	

### **Art 1**

Course 3500

Gr. 9, 10, 11, 12

1 Credit

This course is designed as the beginning of a sequential art program and exposes the beginning student to all areas of art. Students will work with a variety of 2-D and 3-D mediums including, but not limited to: drawing, clay, painting, sand block sculpture, and copper enamel.

### **Art 2**

Course 3505

Gr. 10, 11, 12

1 Credit

Any student who has completed Art 1 may select this course. Students will use knowledge from Art 1 to build upon understanding in all areas of art. Projects for this course include, but are not limited to: pastel, watercolor painting, drawing, plaster sculpture, clay, and metalwork.

*Prerequisite: 70% or higher in Art 1 and teacher recommendation*

### **Art 3**

Course 3510

Gr. 11, 12

1 Credit

Any student who has completed two full years of Art (Art 1 and Art 2) may elect this course. This course is designed for advanced students to further their understanding of art by working independently in the classroom in several areas of art. Students will work with such mediums as acrylic and oil paints, drawing, pastel, wood sculpture, and clay.

*Prerequisite: 70% or higher in Art 2 and teacher recommendation*

### **Art 4**

Course 3510

Gr. 12

1 Credit

Any student who successfully completed three full years of Art (Art 1, Art 2, and Art 3) may elect this course. This course is designed for advanced students to further their understanding of art while expressing themselves more independently. Students will work with acrylic and oil paints, colored pencil and pencil drawing, the pottery wheel, and more.

*Prerequisite: 70% or higher in Art 3 and teacher recommendation*

### **Creative Art**

Course 3520

Gr. 9, 10, 11, 12

.5 Credit

This one-semester course explores the visual arts through a series of activities including drawing, painting, collage, CD design, optical art, tie-dye and more.

### **Photography 1**

Course 3525

Gr. 9, 10, 11, 12

.5 Credit

This one-semester course explores the visual arts through a series of activities including drawing, painting, collage, CD design, optical art, tie-dye and more.

### **Photography 2**

Course 3530

Gr. 9, 10, 11, 12

.5 Credit

This is a one-semester course which will build on the fundamentals learned in Photography I. Students will continue to work on composition and editing while applying these skills to new projects. Some project themes include portrait lighting, calendar design, abstract photography, and more. A digital camera is required for this course.

*Prerequisite: 80% or higher in Photography I and teacher recommendation*

## **Digital Imaging 1**

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Course 3545

Gr. 9, 10, 11, 12

.5 Credit

This is a one-semester course designed for students who want to explore the visual arts through digitally produced images using the software programs Photoshop and Illustrator. Students taking the course will acquire the necessary skills to manipulate photographs, create 2D artwork, model 3 dimensionally and apply to web-based ideas.

## **Digital Imaging 2**

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Course 3550

Gr. 9, 10, 11, 12

.5 Credit

This is a one-semester course that is an extension of Digital Imaging 1. This course will explore various software plug-ins for Adobe Photo Shop and Illustrator, 3D modeling, animation multimedia presentations and beginning Web Page design.

***Prerequisite:*** 80% or higher in *Digital 1 and teacher recommendation*

## **Digital Imaging 3**

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Course 3555

Gr. 10, 11, 12

.5 Credit

This is a one-semester course which will build on knowledge and skills formed in Digital Imaging II. Students will become familiar with the Lightwave program, which exposes them to the world of 3D through print, video gaming, movies and TV. Students will acquire the skills necessary to model three dimensionally and animate.

## **Advanced Placement Art History**

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Course 3516

Gr. 11, 12

1 Credit

A year-long course, AP Art History is designed as a chance to analyze and interpret art from Prehistoric to Post Modern periods as well as its relation to ideas such as politics, religion, history, culture and more. This class will enable students to appreciate and understand art in all of its forms and functions. Students of AP Art History will apply critical thinking skills and develop the means to communicate concepts about art both verbally and through written compositions.

***Average hours of homework per week: 2***

## **Art Therapy**

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Course 3517

Gr. 9, 10, 11, 12

1 Credit

Art therapy is a year-long course designed to build various motor and cognitive skills for individual students within an environment that promotes their safety and growth. Students will have ongoing opportunities to develop hand-eye coordination and will engage in sensory experiences through manipulation of various art mediums. Assignments ranging from 2D to 3D will center on fine motor skills while enhancing recall and retention skills.

***Prerequisite:*** *students will not be able to request this course, and will be placed through teacher recommendation only*

## **Functional Ceramic Art**

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Course 3537

Gr. 9, 10, 11, 12

.5 Credit

This is a one-semester course designed for students who are interested in exploring clay as a functional form of art. Functional art is the process of creating ceramic art that serves a specific purpose. Examples of functional art include clocks, lamps, cookie jars and soap dispensers. Students will learn the various hand building techniques such as coil, slab and sculpting, as well as explore the process of slip casting molds. Mixed media such as metals and leather will be incorporated into the students' clay work to enrich his/her ceramic experience.

## **Hands-On Art**

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Course 3535

Gr. 9, 10, 11, 12

.5 Credit

Hands-On Art is a one semester course designed for students who are interested in exploring the art of 3D sculpture design. Students will be exposed to a variety of art projects that emphasize 3 dimensional sculpture and design using various mediums. Mediums that will be included, but not limited to: clay, plexiglass, wire, wood, and paper mache. This class is designed for all levels of learning.

# Business and Marketing Department

Accounting 1	Entrepreneurship*
College in High School, Financial Accounting	International Business/Management*
Introduction to Business & Marketing Essentials*	Sports & Entertainment Management*
Personal Finance*	

\*Indicates a one-semester course

## Accounting 1

**Course 4000**

**Gr. 9, 10, 11, 12**

**1 Credit**

This course is a study of accounting principles and procedures with an emphasis on financial accounting. Students will learn accounting concepts using a manual system, but an automated accounting package is used to reinforce manual concepts. This course is highly recommended for students who intend to enter a university business administration program, such as accounting, management, finance, or marketing.

## College in High School, Financial Accounting

**Course 4005**

**Gr. 10, 11, 12**

**1 Credit**

Students will learn principals of accounting theory and practice currently used in accounting information systems. Topics covered include accounting for service and merchandising business enterprises. The processes of analyzing, journalizing, and posting are covered in-depth, as well as adjusting accounts, preparing financial statements, and completing the accounting cycle. Deferrals, accruals, accounting for merchandise inventory, ethics and internal controls, cash and receivables are also covered. Three college credits and one high school credit will be awarded for successful completion.

*Prerequisite: 70% or higher in Accounting 1 and teacher recommendation*

*Average hours of homework per week: 3-5*

## Intro to Business & Marketing Essentials

**Course 4010**

**Gr. 9, 10, 11, 12**

**.5 Credit**

If you are looking for an exciting course that tackles issues such as current business topics, e-commerce, and the use of Web 2.0 and information technology in the business world, then this course is for you! Intro to Business and Marketing Essentials allows the students to discover how the American business economy operates and helps them prepare to make decisions as consumers, workers, and citizens. This course is also a study of the fundamental skills, principles and knowledge in marketing, advertising, and merchandising activities. The marketing mix is explored, and these principles are applied to business simulations and projects where they participate in team-building, competitive, decision-making activities. The principles and practices of contemporary advertising and public relations are taught. Students will explore these roles in the marketplace, the elements of a successful advertisement, advertising production, and tasks accomplished by media professionals. Other topics of study will include business communications, professional social networking, career research, and business etiquette. This course provides a strong business foundation for students and allows them to discover if they are interested in further studying business. This is the keystone course which serves as the prerequisite for business courses.

## Personal Finance

**Course 4015**

**Gr. 9, 10, 11, 12**

**.5 Credit**

This course prepares students to manage personal finances to make effective consumer decisions. Students will learn to make wise spending, saving, and credit decisions, and effective use of income to achieve personal financial success. Students will explore and study personal applications of money management to understand financial opportunities affecting their daily lives, such as: setting financial goals, using money management strategies, selecting bank checking/savings accounts, protecting credit, filing tax returns, trading investments, renting property, purchasing of both a car and home, evaluating risk management, and planning for retirement.

## Entrepreneurship

**Course 4017**

**Gr. 9, 10, 11, 12**

**.5 Credit**

Have you ever dreamed of owning and operating your own business? Would you like to be the decision maker and the boss? In this one semester course, students learn the basics of business ownership starting with a concept and then developing that idea into an actual business plan. Some of the topics covered include forms of business ownership, site



location, promoting the product or service, and employee relations. Learn what it takes to be a successful entrepreneur. The success stories of Mark Zuckerberg (Facebook), Dave Thomas (Wendy's) and Jack Dorsey (Twitter) all began with an idea, a plan, and entrepreneurial know-how.

**Prerequisite:** *Intro to Business & Marketing Essentials and teacher recommendation*

### **Sports and Entertainment Management**

**Course 4020**

**Gr. 9, 10, 11, 12**

**.5 Credit**

This course was developed in response to national and regional growth in the sports and entertainment sector of the economy and the recognition of its inclusion in over 100 college and university business programs. The course is interdisciplinary in nature with a focus on the management of venues, sports, musicians, artists, and events. The course will develop critical thinking, decision-making, and communication skills through real-world applications aimed at preparing students to handle specific tasks associated with the industries. Collaboration with Moon's athletic teams and athletic director, along with field trips and speakers, will provide future managers with a solid business foundation as well as knowledge of the unique facets of the sports and entertainment industries.

**Prerequisite:** *Intro to Business & Marketing Essentials and teacher recommendation*

### **International Business/Business Management**

**Course 4025**

**Gr. 9, 10, 11, 12**

**.5 Credit**

No matter where your future interests lie, a solid foundation in business can help you reach your personal and career goals. Knowledge of business and how it operates empowers you to make better decisions for managing a business or for your own personal financial well-being. Students will examine the problems and challenges of business operating in a global environment. Mergers and acquisitions, ethical issues, cultural differences, the securities marketing and current trends in the workplace will be researched and investigated. This course is recommended for those who are planning to study business.

**Prerequisite:** *Intro to Business & Marketing Essentials and teacher recommendation*

## **Computer Science Department**

JAVA Programming 1*	Visual Basic 1*
JAVA Programming 2*	Visual Basic 2*
AP Computer Science Principles	Microsoft Office Applications*
Information Technology 1*	Web Page Design*
Information Technology 2*	

\*Indicates a one-semester course

### **Java Programming 1**

**Course 4045**

**Gr. 9 10, 11, 12**

**.5 Credit**

This one-semester, introductory course is designed to provide computer-savvy students with skills to develop Windows applications using computer programming. Students in this course will use Microsoft Visual Basic software to design apps for both professional and personal use. Problem-solving, logic, and math skills will be utilized as students design user-interfaces, write code, and debug various apps. No computer programming experience is necessary.

**Prerequisite:** *80% or higher in Linear Algebra*

### **Java Programming 2**

**Course 4050**

**Gr. 9 10, 11, 12**

**.5 Credit**

This one-semester, advanced-level course utilizes Microsoft Visual Basic programming skills to create complex computer applications. Diverse apps will be developed using decision structures, algebraic functions, error trapping, and other various components.

**Prerequisite:** *70% or higher in Java Programming 1 and teacher recommendation*

### **AP Computer Science Principles**

**Course 4053**

**Gr. 10, 11, 12**

**1 Credit**

This is an advanced computing course focusing on computational thinking practices. The major areas of study in this course are organized around seven big ideas: creativity in computing, abstraction, data and information, algorithms, programming, the internet, and global impacts of computing and cybersecurity. This course meets the requirements for preparation for

the AP Computer Science Principles exam. Part of this exam will be completed as in-class performance tasks for which students submit digital artifacts to demonstrate the skills they have developed.

*Prerequisite: 85% or higher in Algebra*

*Average hours of homework per week: 5*

### **Information Technology 1**

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**Course 4055**

**Gr. 10, 11, 12**

**.5 Credit**

The Information Technology I class is structured around the A+ certification exam. Students will study computer components, PC troubleshooting, and Microsoft Windows configuration and setup.

### **Information Technology 2**

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**Course 4060**

**Gr. 11, 12**

**.5 Credits**

The Information Technology 2 class is structured around the Network+ certification exam. The class will focus on networking terminology, protocols, Ethernet, Internet Protocol (IP) addressing, design and documentation of basic network cabling, and network to network communications.

*Prerequisite: 70% or higher in Information Technology 1 and teacher recommendation*

### **Visual Basic Programming 1**

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**Course 4035**

**Gr. 9, 10, 11, 12**

**.5 Credit**

This one-semester course is hands-on and designed to provide essential skills and experience with the development of computer apps. This course is an introductory programming course for beginners. Students in this course will explore and design business and personal apps on a variety of topics using the Visual Basic software. Problem solving, object-oriented programming, and algorithm development skills will be used as students design, write code, and debug programs. Students planning on pursuing a career in business, information technology, or computers should consider taking this course. It is also for those who are simply curious and interested about learning programming. No computer programming experience is necessary.

### **Visual Basic Programming 2**

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**Course 4040**

**Gr. 9, 10, 11, 12**

**.5 Credit**

Students will use Microsoft Visual Basic.net at an advanced level to develop and debug Windows applications. Diverse applications will be developed using decision structures, public functions, data arrangement with sub procedures, complex algebraic functions, error trapping, and other various components.

*Prerequisite: 70% or higher in Visual Basic 1 and teacher recommendation*

### **Microsoft Office Applications**

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**Course 4080**

**Gr. 10, 11, 12**

**.5 Credit**

In our technology-driven society, companies want computer-savvy employees. Students taking this one-semester course will utilize Microsoft Office skills to prepare them for college and the workplace. Students will create and format various professional documents, spreadsheets, publications, and slideshows using four components of the Microsoft Office suite: Excel, PowerPoint, Publisher, and Word. This course is recommended for all students who want to enhance their computer software skills.

\* Students in grades 10-12, with a minimum grade point average of 3.0, can apply for three college credits through La Roche University's Dual Enrollment Program. This is optional and students must earn a grade of 70% or higher to receive college credits.

### **Web Page Design**

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**Course 4085**

**Gr. 9, 10, 11, 12**

**.5 Credits**

Are you interested in learning how to create your own website? This one-semester course will introduce students to the process of planning, creating, and maintaining eye-pleasing and content-rich websites for both professional and personal use. Adobe's Dreamweaver Creative Cloud will be the central program utilized in this class as students go from creating basic one-page websites to elaborate multi-page sites with all the bells and whistles! No webpage design skills are necessary, but students considering this course should be computer-savvy.

# English Language Arts Department

<u>Required Courses</u>	<u>Elective Courses</u>
English 9	Communications and Public Speaking*
English 9 – Pre AP	Multimedia Journalism 1
English 10	Print Journalism 2, 3, 4
English 10 – Pre AP	Photo Journalism 2, 3, 4
English 11	Contemporary Issues*
English 11 - College Prep	
English 11 – AP Language & Composition	
English 12	
English 12 – College Prep (two semester courses)	
English 12 – AP Literature & Composition	

\*Indicates a one-semester course

## English 9

**Course 1000**

**Gr. 9**

**1 Credit**

This literature-based course helps students develop a broad range of language skills including reading, writing, speaking and listening. Students will read important literary selections such as Romeo and Juliet, Lord of the Flies and The Odyssey, in addition to short stories, non-fiction and poetry. Composition and public speaking activities will integrate research skills, grammar and usage, vocabulary and reading comprehension. Students will be expected to complete a research project.

## English 9 – Pre AP

**Course 1005**

**Gr. 9**

**1 Credit**

This is a rigorous course for students planning to take the advanced English courses in High School. Students will work on developing and refining the skill of close reading of complex texts, identifying and valuing evidence, and focusing on attention to language use. They will engage in analytical writing, effective speaking and communications, research skills and analysis and evaluation of a variety of literature genres. The course is designed to integrate reading, writing, language study, research, and speaking and listening at an advanced level.

*Prerequisite: Students are required to have 85% or higher in 8th grade ELA and teacher's recommendation to enroll in this course*

*Average hours of homework per week: 2-3*

## English 10

**Course 1010**

**Gr. 10**

**1 Credit**

This course is designed to give students an overview of communication skills. This study will include grammar and usage, writing, speaking, listening and reading. The literature includes poetry, short stories, drama and novels. Such works as Of Mice and Men, and Medea will be read.

**Students are required to take the Keystone Exam upon completion of this course.**

## English 10 - Pre AP

**Course 1015**

**Gr. 10**

**1 Credit**

This rigorous course extends the initial principles studied in Pre-AP English 9. The course emphasizes critical reading, research analysis and composition. Students will continue to develop their close reading and evidence analysis skills. They will engage in reading a variety of genres and correlating literary techniques and terminology to a deeper understanding of the texts. The course is designed to integrate reading, writing, language study, research, and speaking and listening at an advanced level.

**Students are required to take the Keystone Exam upon completion of this course.**

*Prerequisite: Students are required to have 85% or higher in 9th grade English, or 80% or higher in Pre-AP 9, and teacher's recommendation to enroll in this course*

*Average hours of homework per week: 2-3*

## **English 11**

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Course 1020

Gr. 11

1 Credit

This English class is designed for students to achieve grade-level performance in grammar and usage, writing, reading, literature and non-fiction, and vocabulary usage. This course includes a chronological study of American Literature and its impact on American culture while honing personal literacy skills. A research paper, writing for the workplace, other writing assignments, discussion, and formal speaking opportunities will all be a part of this course.

**Failure to complete junior Career Project will result in repeating your 11<sup>th</sup> grade English class.**

## **English 11 College Prep**

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Course 1025

Gr. 11

1 Credit

This rigorous course is designed for students to prepare for college. Students will study grammar and usage, analytical research, writing, American literature, and vocabulary to enhance academic literacy. This course an in-depth study of American literature with emphasis placed on major authors, their works, and their unique contribution to American culture. A research-based analysis, writing assignments, discussion, project-based, and critical and personal evaluation are an integral part of this course. This course will also include preparation for the verbal section of the SAT.

**Failure to complete junior Career Project will result in repeating your 11<sup>th</sup> grade English class.**

## **English 11 Advanced Placement Language & Composition**

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Course 1032

Gr. 11

1 Credit

This introductory college-level composition course is designed to prepare 11<sup>th</sup> grade students for the AP Language and Composition exam. With a focus on rhetoric, students will analyze language as it is used in non-fiction argument and examine the relationships between rhetorical situation, claims and evidence, reasoning and organization, and style. Students should be able to read and analyze complex texts (pre-20th century to modern). Understanding of rhetorical techniques is employed in their own composition to demonstrate critical thinking, synthesis, and academic research skills on various topics. The composition skills of each student should reflect an exemplary display of organization, control of language, and grammatical mechanics. Reading and writing assignments will be of high rigor and volume. It is recommended that students who enroll in this course have a background that includes Pre-AP courses.

**Failure to complete junior Career Project will result in repeating your 11<sup>th</sup> grade English class.**

*Prerequisite: Students should have been in Pre AP English for two years and should have an A/B average in English 10 Pre-AP.*

*Average hours of homework per week: 3-4*

## **English 12**

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Course 1035

Gr. 12

1 Credit

This course is designed as a continuation of English 11. Students will read selections of contemporary fiction, non-fiction, and classic literature. It will further reinforce communications skills in career preparation. Students will examine career and educational opportunities.

## **English 12 Advanced Placement Literature & Composition**

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Course 1048

Gr. 12

1 Credit

This is a college-level course designed to prepare students for the Advanced Placement Exam in English Literature and Composition, and to provide college-bound students with the type of reading, writing and research experiences that they will encounter in college. Students read several novels, along with numerous short fiction pieces, study poetry and at least two major dramas, including one Shakespearean play. Students write several analytical and research-based papers. Class participation is extremely important, as much of the class time is devoted to interpretive discussion of the works studied and is a significant part of the student's grade.

*Prerequisite: Students should have taken English 9 Pre AP and English 10 Pre AP and had an A/B average.*

*Average hours of homework per week: 3-4*

**Students not selecting English 12 or English 12 AP must choose two of the following:**

**(Number of classes for semester courses offered will be determined by student requests.)**

## **Contemporary Fiction and Literary Theory**

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Course 1040

Gr. 12

.5 Credit

In this course designed for the college-bound student, students will read several pieces of contemporary fiction. A literary analysis model will be used to read, analyze and write about critically acclaimed works of twentieth and twenty-first century fiction. Analytical and research-based writing skills are emphasized.

## **Poetry**

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**Course 1041**

**Gr. 12**

**.5 Credit**

This course, designed for the college-bound student, will introduce the student to contemporary poetry as well as involving the student in a close study of the classics. Students will read and interpret multiple forms of poetry from several time periods. In order to better understand the unique genre of poetry, students will write their own poetry. Written analyses and research-based study of poetry will also be included in this course.

## **Survey of British Literature**

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**Course 1042**

**Gr. 12**

**.5 Credit**

In this survey course designed for the college-bound student, students will read, discuss and analyze literature that traces the origins and development of the English language. Students will begin their study with the popular epic Beowulf and continue through to 21st century contemporary British literature including drama, poetry, and even comedic British writing. Students will prepare for post-secondary education through the completion of reading, writing, research, speaking, and listening skills based on British literature. Classic literature will be paired with contemporary selections as students engage in analysis of the English language.

## **Survey of World Literature**

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**Course 1043**

**Gr. 12**

**.5 Credit**

Designed for the college-bound student, in this survey course students will study classic and contemporary literature from around the globe. Selections may include mythology, drama, essays, stories, and poetry. Students will prepare for post-secondary education through the completion of reading, writing, speaking, research, and listening skills based on world literature selections. Often classic and contemporary selections will be paired

## **Theatre and Dramatic Arts**

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**Course 1045**

**Gr. 12**

**.5 Credit**

Designed for the college-bound student, this course focuses on an analytical reading of several contemporary and historical plays and includes 1-2 field trips: one to the City Theater's Playwriting Competition and one to a theatre production. Either Shakespeare's Othello or Macbeth will be studied using a hands-on, active participation approach, where the students will read, interpret, evaluate, and act out various parts. Also, focusing on various genres, students will study structure, theme, character motivation, tone and symbolism, and students will be encouraged to try their hand at writing a one-act play and will be encouraged to submit them to the City Theatre's playwriting competition. Literary essays and research-based will be written.

## **Contemporary Nonfiction**

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**Course 1046**

**Gr. 12**

**.5 Credit**

This course provides a survey of contemporary non-fiction designed to intrigue, teach, motivate, and inspire its readers to enhanced awareness of self and society. Students analyze the work of modern authors whose writing encompasses the feature article, personal essay, review, commentary, memoir, humor, science-medical writing, or other forms. In learning to understand and analyze non-fiction, students will develop critical reading and literary study skills for use in other literature courses at the high school or college level. Analytical and research-based writing skills are emphasized.

## **Creative Nonfiction Writing Workshop**

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**Course 1047**

**Gr. 12**

**.5 Credit**

This course will concentrate on writing two principle types of creative nonfiction: 1) that which seeks to represent the personal experience of the author (diary, autobiography, travel writing, meditative essays, cultural criticism), and 2) that which seeks to document the experience of others (journalism, documentary, biography, profiles). Coursework will include a mixture of reading discussions, drafting workshops, media analysis, style and editing exercises, and peer reviews. Goals of the course are to gain a greater understanding of creative non-fiction, sharpen writing and reading skills, and create a supportive, critically engaged space for the creation, discussion, and publishing of student works.

## **Writing Beyond the Classroom**

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**Course 1039**

**Gr. 12**

**.5 Credit**

This is an introduction to the fundamental speaking and writing skills necessary for the business environment outside of the academic setting. This course will provide students with the skills needed to understand and create the different documents required in a typical business environment. The students will be given the opportunity to hone these skills through a variety of assessments including effective email writing, resume writing, proofreading, journal writing, grammar, and essential presentation strategies.

## **Film as Literature**

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Course 1044

.5 Credit

Gr. 12

In this senior English class, students will examine story elements as well as cinematic techniques and analyze their application to film. An introduction to film vocabulary, genre characteristics, and film history will be included in the course. Students will view both classic and contemporary films and engage in a variety of written and research-based projects as well as discussion. Hands-on film projects are also a part of the course. Students will ultimately work to develop sophisticated analysis and an engaging writing style in response to film.

## **English Language Arts Electives**

### **Communications and Public Speaking**

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Course 1050

.5 Credit

Gr. 9, 10, 11, 12

This is a one-semester elective course designed to help students who desire training and experience in public speaking, as well as to enrich talented students who enjoy opportunities to speak and to read aloud. The students will deal with audience analysis, library research, role-playing, listening skills, extemporaneous speaking, original oratory, oral interpretation, debate, problem-solving discussion, dramatic interpretation, and advertising.

### **Multimedia Journalism 1**

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Course 1055

1 Credit

Gr. 9, 10, 11, 12

This course is a one-credit elective that meets for the entire year and provides students with a basic overview of the fundamentals of journalism in the digital age. Students will study general news gathering and reporting, journalistic style and editing, advertising, and layout & design. Students also can create their own newspapers with hands-on production techniques using Adobe's CS3 InDesign software program. This course is recommended for students who are interested in pursuing a career in journalism, broadcasting, or communications. It is also a prerequisite for students who wish to be on the newspaper or yearbook staff. Students should have a sincere interest in writing.

### **Print Journalism 2-3**

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Course 1060

1 Credit

Gr. 10, 11, 12

This is an elective course in which students continue to learn and apply their knowledge and skills in the production of the Moon Area High School newspaper, Moon Beams. Students will become broadly engaged in all aspects of scholastic newspaper production.

*Prerequisite: Multimedia Journalism 1 and teacher recommendation*

### **Print Journalism 4**

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Course 1060

1 Credit

Gr. 12

This elective is for seniors who have dedicated themselves to the production of the school newspaper. Seniors will be expected to assume leadership roles as they continue to learn and apply print journalism knowledge and skills at the highest levels of scholastic newspaper production.

*Prerequisites: Multimedia Journalism 1, Print Journalism 2 and 3, teacher recommendation*

### **Photo Journalism 2Y**

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Course 1070

1 Credit

Gr. 10, 11, 12

This course is a one-credit elective through which students will continue to learn and apply the knowledge and skill required to produce The Flame, the Moon Area High School yearbook. The course will teach the fundamentals of producing a yearbook including: layout, design, advertising, budgeting, teamwork and creative reporting. Students will be responsible for specific assignments and must be able to meet deadlines. After school time/at home computer time is necessary for this class.

*Prerequisite: Journalism 1 or Photography 1 and teacher recommendation*

### **Photo Journalism 3Y**

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Course 1070

1 Credit

Gr. 11, 12

This one-credit course is a continuation of Photo Journalism 2Y where students will continue to learn and develop knowledge and skills required to produce high school yearbooks. Students' primary job is to contribute to creating The Flame, the Moon Area High School yearbook. The course will expand and sharpen students' knowledge, skills and aptitudes for producing a high school yearbook.

*Prerequisite: Photo Journalism 1 and 2, teacher recommendation*

## Photo Journalism 4Y

Course 1070

1 Credit

Gr. 12

This one-credit elective course is for seniors who have dedicated themselves to the production of the school yearbook. Seniors will be expected to assume leadership roles as they continue to learn and apply photo-journalism knowledge and skills at the highest levels of scholastic yearbook production.

*Prerequisite: Photo Journalism 3, teacher recommendation*

## Contemporary Issues

Course 1080

.5 Credit

Gr. 10, 11, 12

In this course, students in grades 10-12 will develop deep knowledge of a current topic of their choice, while building 21st century research skills. This process will be structured around research, informational writing and argument, and will incorporate the use of technology to both gather information and to present. Students will spend the semester building literacy skills aligned with college and career expectations to produce writing for various audiences and purposes. Class participation, including debate, discussion, and daily writing are all requirements for success in this course.

# Family and Consumer Science Department

Personal Nutrition & Wellness*	The Art of Baking*
Exploration of Cooking & Nutrition*	Child Development 1-2-3
Mastery of Cooking*	

\*Indicates a one-semester course

## Personal Nutrition and Wellness

Course 4535

.5 Credit

Gr. 9, 10, 11, 12

This is a one-semester course that utilizes nutrition and meal management principles to create healthy and balanced meals. The emphasis in this course will be to balance nutrients which contribute to personal wellness as well as examining personal eating habits and exercise routines to become overall healthier teens. This course will provide students the opportunity to participate in labs and demonstrations as well as to develop personal goals, analyze personal decisions, modify recipes to create a happier, healthier lifestyle. Topics will include nutrients, eating disorders, weight control, eggs, dairy, grains, etiquette, meal planning, salads, sandwiches, fad diets, eating out nutritiously, budgeting, and nutrition-oriented diseases when time permits. Students will learn basic concepts of cooking and utilize techniques to prepare a variety of dishes that will peak their culinary curiosity while honing tangible life skills. While students do cook, the instructional focus will be lecture and discussion.

## Exploration of Cooking and Nutrition

Course 4536

.5 Credit

Gr. 9, 10, 11, 12

This is a one-semester course that introduces basic food preparation principles while focusing on healthy food choices. Students will learn common skills that will include measuring, kitchen tools and equipment, safety and sanitation, and cooking terms while identifying how to use objectives presented to complete various foods labs. Key concepts will include My Plate, fruits, vegetables, protein foods, sandwiches, salads, meal planning and budgeting. Students will be exposed to lessons which can be applied into their daily lives. This course is good for any novice cook that wants to learn the basics of food preparation, while maintaining an educational environment. While students do cook the instructional focus will be lecture and discussion.

## Mastery of Cooking

Course 4536

.5 Credit

Gr. 9, 10, 11, 12

This is a one-semester course that focuses on advanced cooking techniques and recipes while exploring worldly cultures and customs. Students will start by creating a strong foundation of basic cooking skills and build upon them throughout the semester. Students will have the opportunity to master new cooking methods, understand the importance of food appearance, and learn the importance of budgeting. Students will also discover the cultures of foreign lands while grasping the complexities of their cuisines through detailed lesson and hands on labs.

## **The Art of Baking**

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**Course 4545**

**Gr. 9, 10, 11, 12**

**.5 Credit**

This is a one-semester course that focuses on the fundamentals and science involved in the making of quick and yeast breads, pies, pastries, cakes, cake decorating, and seasonal items. Students will explore the lost art of baking from scratch. The focus on this course will be for students to analyze how to bake on a budget and to limit preservatives used. Emphasis will be placed on the functions of ingredients, the science involved with baking, importance of accurate measuring, and baking terminology. This course is designed to strengthen communication, organizational, teamwork, and conversational skills as well as teach the students how to make healthy substitutions where available as they become expert bakers. The emphasis of this class is in lab experience and constructive critiques, and not as much on lecture and discussion.

## **Child Development 1**

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**Course 4550**

**Gr. 9, 10, 11, 12**

**1 Credit**

This is a full year, one-credit class offered to 9th-12th grade students. This course emphasizes parenting skills and child development from conception to school age. This is an excellent course for all students preparing for the most important role that they may ever have in life – that of being a parent. During the first semester, this course will cover the physical, social, emotional, and intellectual development of infants, toddlers, and preschoolers. The first semester will also include the study of the different areas of child development, parenting skills, and caring for children. The second semester will offer practical experiences in teaching and observing actual three to five-year-old children from the Moon/Crescent community in a fourteen-week pre-school laboratory that is located here on the school premises. The high school students will plan and execute developmentally appropriate learning experiences for the pre-school children and will observe the stages of development in children. This course is designed to greatly benefit both the high school students and the preschool children enrolled in our program.

## **Advanced Child Development**

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**Course 4555**

**Gr. 10, 11, 12**

**1 Credit**

This is a full year, one credit class offered to 10-12th grade students. This is an excellent course for all students preparing for the most important role that they may ever have in life – that of being a parent. This advanced course is designed for students interested in extensive hands-on experience with children and a possible career working with children. Students in this class will accumulate practical experiences in teaching and observing actual three to five-year-old children from the Moon/Crescent community in a full year preschool laboratory that is located here on the school premises. The high school students will plan and execute developmentally appropriate learning experiences for the preschool children and observe the stages of development in children. Students in this advanced course will also be responsible for the maintenance of the preschool classroom including bulletin boards, calendars, prop boxes, etc. Child Development 3 students will have more responsibilities in the day to day management of the preschool lab and will design developmentally appropriate games to be used by the preschool children.

**Prerequisite: 70% or higher in Child Development 1 and teacher recommendation**

## **Lifetime Readiness**

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**Course 4560**

**Gr. 9, 10, 11, 12**

**.5 Credit**

A one semester course that will prepare the students to adapt to living post-graduation. The course will explore cooking and other household tasks that will improve fine motor, social and mathematical skills, while creating a real-life environment and setting for students to prepare for real world situations. Students will work on measuring ingredients, budgeting, safety, and sanitation practices while working both individually and in group settings to prepare simple recipes.

**Prerequisite: student will not be able to request this course, and will be placed through teacher recommendation only**



# Mathematics Department

Algebra 1 Linear	Trigonometry/Pre-calculus
Algebra 1 Quadratics	Trigonometry/Pre-calculus Honors
Algebra 1	Calculus
Core Geometry	AP Calculus AB
Geometry	AP Calculus BC
Geometry - Honors	College in High School Basic Applied Statistics
Algebra 2	Math with Business Applications
Algebra 2 - Honors	Math Lab*
Algebra 2A	
Algebra 2B	*Indicates a one-semester course

## Algebra Linear 1

**Course 2000**  
**1 credit**

**Gr. 9**

This year long course focuses on linear relationships. The content will emphasize the algebraic manipulation of linear expressions, equations, and inequalities. Students will also solve systems of linear equations, represent linear equations and inequalities, and graph linear functions. Students taking Algebra 1-Linear must take Algebra 1-Quadratics the following year to be prepared for the Keystone exam.

TI-83+ calculators are used and will be provided by the teacher for classwork.

**Prerequisite:** *Students will not be able to request this course, but will be enrolled via teacher recommendation and administrative placement*

## Algebra 1 - Quadratics

**Course 2002**  
**1 credit**

**Gr. 9, 10**

This year long course focuses on quadratic relationships. The content will include a review of linear equations and inequalities followed by a focus on quadratics. The quadratic portion will emphasize quadratic and exponential expressions, equations, and relationships. Students are required to take the Keystone Exam upon completion of this course.

TI-83+ calculators are used and will be provided by the teacher for classwork.

**Prerequisite:** *70% or higher in Algebra One - Linear and a teacher recommendation*

## Algebra 1

**Course 2005**  
**1 credit**

**Gr. 9, 10**

This year long course focuses on linear and quadratic relationships. The linear portion will emphasize the algebraic manipulation of linear expressions, equations, and inequalities. Students will also solve systems of linear equations, represent linear equations and inequalities, and graph linear functions. The quadratic portion will emphasize quadratic and exponential expressions, equations, and relationships. Students are required to take the Keystone Exam upon completion of this course.

TI-83+ calculators are used and will be provided by the teacher for classwork.

**Prerequisite:** *final grade below 70% in Algebra One and a teacher recommendation*

## Core Geometry

**Course 2010**  
**1 Credit**

**Gr. 10, 11**

Core Geometry is a standards-based course with some proofs. Topics covered in this course are parallel and perpendicular lines, the congruence, similarity, and transformation of triangles, circles, and three-dimensional figures, right triangle trigonometry, and applications of probability. Fundamental geometric topics such as perimeter, area, volume, and density will also be covered. Students will learn to model real-world situations and apply geometric theorems to solve problems arising from those situations. Activities include group work, lecture, exploration, and problem solving.

TI-83+ calculators are used and will be provided by the teacher for classwork.

**Prerequisite:** *70% or higher in Algebra Quadratics and a teacher recommendation*

## Geometry

Course 2015

1 Credit

Gr. 9, 10, 11

Geometry is a standards-based course with an emphasis on written and coordinate proof. Topics covered in this course are parallel and perpendicular lines, the congruence, similarity, and transformation of triangles, circles, and three-dimensional figures, geometric constructions and right triangle trigonometry. Fundamental geometric topics such as perimeter, area and volume, will also be covered. Students will learn to model real-world situations and apply geometric theorems to solve problems arising from those situations. Activities include group work, lecture, exploration, and problem solving.

TI-83+ calculators are used occasionally and will be provided by the teacher for classwork.

**Prerequisite: 70% or higher in Algebra 1 and teacher recommendation; 95% or higher in Algebra 1-Quadratics and teacher recommendation**

## Geometry Honors

Course 2020

1 Credit

Gr. 9

Honors Geometry is a standards-based course with an emphasis on written and coordinate proof. Topics covered in this course are: parallel and perpendicular lines, the congruence, similarity, and transformation of triangles, circles, and three-dimensional figures, geometric constructions and right triangle trigonometry. Fundamental geometric topics such as perimeter, area and volume will also be covered. Students will learn to model real-world situations and apply geometric theorems to solve problems arising from those situations. Activities include group work, lecture, exploration, and problem solving. Because honors courses require mathematical understanding that is deeper and more complex than the core curriculum, students are expected to respond at an advanced level, work at a faster pace, and spend more time on exploration and enrichment topics.

Students are required to have a TI-83+ or TI-84+ calculator for this course.

**Prerequisite: 90% in Algebra 1 and teacher recommendation**

**Average hours of homework per week: 5**

## Algebra 2

Course 2025

1 Credit

Gr. 9, 10, 11, 12

This course is intended for those students who have successfully completed Core Geometry. The content of Algebra 2 is organized around families of functions, including linear, quadratic, and radical and rational functions. Students will learn to represent each function in multiple ways – as verbal descriptions, equations, tables, and graphs. Topics such as probability, data analysis, statistics, and basic trigonometry will also be covered.

TI-83+ calculators are occasionally used and will be provided by the teacher for classwork.

**Prerequisite: 70% or higher in Geometry and teacher recommendation**

**(Advanced students entering 9th grade must have earned an 80% or higher)**

## Algebra 2 – Honors

Course 2030

1 Credit

Gr. 9, 10, 11, 12

This is the third course in the honors sequence of mathematics and is designed for the students who have completed Geometry Honors with a grade of “B” or better. The content of Algebra 2 is organized around families of functions, including linear, quadratic, exponential, logarithmic, and radical and rational functions. Students will learn to represent each function in multiple ways – as verbal descriptions, equations, tables, and graphs. Topics such as probability, data analysis, statistics, and basic trigonometry will also be covered. Each section in this honors course will be extended to cover a more complex array of material.

Students are required to have a TI-83+ or TI-84+ calculator for this course.

**Prerequisite: 80% or higher in Geometry Honors and teacher recommendation; 95% or higher in Academic Geometry and teacher recommendation. (Advanced students entering 9th grade must have earned a 90% or higher)**

**Average hours of homework per week: 5**

## Algebra 2A

Course 2035

1 Credit

Gr. 11, 12

This course is intended for students who have successfully completed Core Geometry. This is the first of a series of two classes that combined will cover all the Algebra 2 concepts over two years. It is designed to provide more Algebra skill development while continuing to work on more advanced mathematics skills.

TI-83+ calculators are used and will be provided by the teacher for classwork.

**Prerequisite: 70% or higher in Core Geometry and teacher recommendation**

## Algebra 2B

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Course 2040

1 Credit

Gr. 12

This course is intended for students who have successfully completed Algebra 2A. This is the second of a series of two classes that combined will cover all of the Algebra 2 concepts over two years. This course will provide more Algebra skill development. By the end of this course, you will have covered all Algebra 2 topics.

TI-83+ calculators are used and will be provided by the teacher for classwork.

*Prerequisite: 70% or higher in Algebra 2A and teacher recommendation*

## Trigonometry/Pre-Calculus

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Course 2050

1 Credit

Gr. 10, 11, 12

This course is designed to prepare students for work in calculus. In the first semester, students will study Trigonometry from the circular and right triangle perspective. The second semester will focus on Pre-Calculus skills, specifically algebraic concepts and analysis of functions.

TI-83+ calculators are occasionally used and will be provided by the teacher for classwork, although it would be beneficial for students to have their own.

*Prerequisite: 70% or higher in Algebra 2 and teacher recommendation*

## Trigonometry/Pre-Calculus Honors

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Course 2055

1 Credit

Gr. 10, 11, 12

This is a rigorous math course geared for the accelerated math student. It moves at a fast pace and requires a strong background in Geometry and Algebra. In the first semester students will study Trigonometry from the circular and right triangle perspective. The second semester will work on Pre-Calculus skills. Here the focus will be on algebraic concepts, analysis of functions, and conic sections. This is an honors course meant to prepare students for Advanced Placement Calculus AB.

TI-83+ calculators are used and will be provided by the teacher for classwork, although it would be beneficial for students to have their own.

*Prerequisite: 80% or higher in Honors Geometry AND an 80% or higher in Honors Algebra 2 along with a teacher recommendation.*

*Average hours of homework per week: 6-7*

## Calculus

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Course 2060

1 Credit

Gr. 11, 12

This course is an introduction to fundamental calculus. It covers (a) limit of functions, (b) differentiation, (c) application of differentiation and (d) integration.

TI-83+ calculators are rarely used and will be provided by the teacher for classwork when necessary.

*Prerequisite: 70% or higher in Trig/Pre-Calc and a teacher recommendation*

## Advanced Placement Calculus AB

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Course 2065

1 credit

Gr. 11, 12

This course in sequence with Honors Pre-Calculus will enable the student to take the AP exam (AB) for college credit and/or placement. Because of the rigor and fast pace, only those students with a high level of achievement in previous math courses and the recommendation of the Pre-Calculus Math teacher will be accepted. This course will cover elementary functions, limits, derivatives of algebraic and transcendental functions, and basic integration with some application to area and volume.

*Prerequisite: 80% or higher in ALL previous honors math courses and teacher recommendation*

*Average hours of homework per week: 8-10*

## Advanced Placement Calculus BC

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Course 2070

1 credit

Gr. 11, 12

This course in sequence with Honors Pre-Calculus, Calculus, and AB Calculus will enable the student to take the AP exam (level BC) for college credit and/or placement. Because of the rigor and fast pace, only those students with the highest level of achievement in previous math courses and the recommendation of the previous year math teacher will be accepted. This course will cover elementary vector, parametric, and polar functions and rigorous definitions of limits, derivatives of algebraic, transcendental, and vector, parametric and polar functions, integration involving area, volume, trigonometric substitution, integration by parts, and by partial fractions, as well as sequences and series.

Teacher will issue the TI-Nspire to each student at the start of the year.

*Prerequisite: 70% or better in Calculus AB, or a 90% better in Academic Calculus, and recommendation of previous mathematics teacher*

*Average hours of homework per week: 8-10*

## Advanced Placement/College in High School - Basic Statistics\*

Course 2080

Gr. 11, 12

1 Credit

This course teaches methods and terminology of descriptive and inferential statistics. Students who complete this course will be able to conduct their own analyses of standard one-sample or two-sample data sets, follow statistical reasoning and read statistical reports with understanding. Topics include data collection and description, data production, hypothesis testing, correlation and regression, the analysis of variance and contingency tables (chi square). Four college credits and one high school credit will be awarded for successful completion.

Students are required to have any version of a TI-84+ calculator for this course.

**Prerequisite:** 80% or higher in Algebra 2; 70% or higher in Trig/PC, and teacher recommendation

\*Course #2080 is offered through the University of Pittsburgh and provide an opportunity for our students to earn college credit for course work taken in high school. Most colleges and universities in the nation will honor successful completion of these courses and award credit. There is a tuition charge of approximately \$300.00. These courses are available for juniors and seniors.

\*Students enrolled in this class are expected to take the AP exam or enroll in the CHS class through the University of Pittsburgh. If a student chooses not to take the AP exam OR does not enroll in the CHS class through the University of Pittsburgh, the student will not earn the additional weight for the class.

**Average hours of homework per week: 3**

## Mathematics with Business Applications

Course 2085

Gr. 12

1 Credit

This course teaches applications of mathematical concepts related to personal and business finance. Topics included in this course are: savings, investing, the dangers of debt, consumer awareness, budgeting, careers and employment taxes, insurance, real estate and mortgages. This course is designed for students who are interested in learning how to successfully manage their money and build wealth.

A Scientific calculator is required for this course and will be provided by the teacher for class work.

**Prerequisite:** Teacher Recommendation

## Math Lab

Course 2090

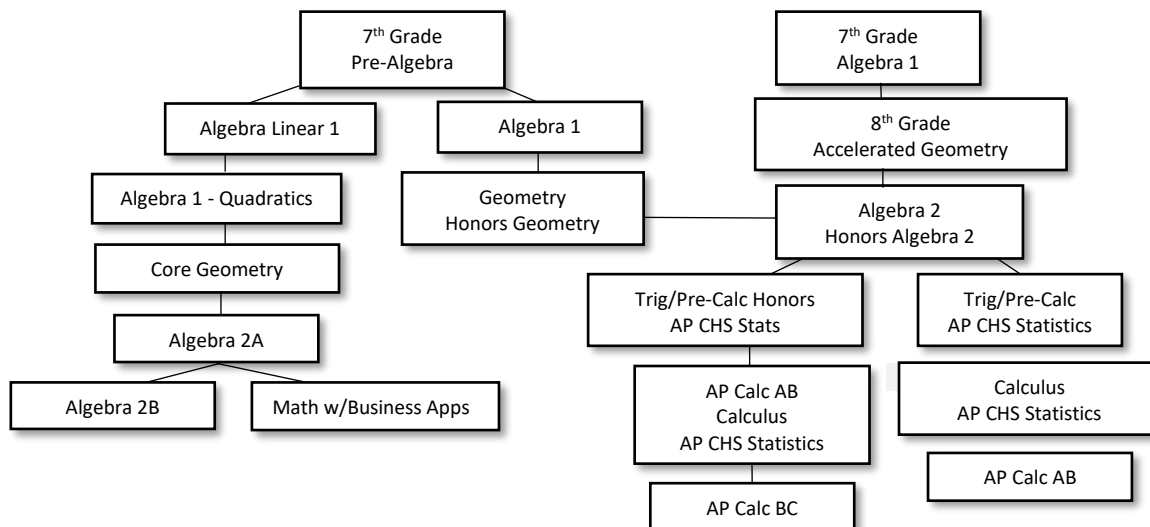
Gr. 9, 10

.5 Credit

This pass/fail, semester-long course is designed to strengthen Algebra 1 skills and provide additional preparation for the Algebra Keystone Exam. Students will be recommended for this course based on teachers' observations of their performance in class and on assessments, as well as their scores on previously taken Keystone Exams.

**Prerequisite:** Students will not be able to request this course but will be enrolled via teacher recommendation and administrative placement.

# Math Sequence Chart



# Music Department

Brass, Woodwind, Concert Band	Comprehensive Musicianship I *
Symphonic Band-Honors	Comprehensive Musicianship II
Percussion Ensemble	Concert Choir
Percussion Ensemble-Honors	Honors Choir
Chamber String Ensemble-Honors	

\*Indicates a one-semester course

## **Brass Class**

**Course 3560**

**1 Credit**

**Gr. 9, 10, 11, 12**

This year-long, one-credit course deals with the development of the brass section of the concert band. Instruments in this class include trumpet, French horn, trombone, euphonium/baritone horn, and tuba. Students will learn intermediate and advanced brass techniques as well as musicianship skills. Activities include school and community concerts, varsity football games, band festivals/competitions, and parades. All students electing this course will participate in all facets of the high school's marching band. All freshmen brass students not in Symphonic Band will elect this course.

**Prerequisite:** *Participation in the Middle School Band or by audition*

## **Woodwind Class**

**Course 3561**

**1 Credit**

**Gr. 9, 10, 11, 12**

This year long, one credit course deals with the development of the woodwind section of the concert band. Instruments in this class include flute, oboe, clarinet, bassoon, and saxophone (alto, tenor and baritone). Students will learn intermediate and advanced woodwind techniques as well as musicianship skills. Activities include school and community concerts, varsity football games, band festivals/competitions, and parades. All students electing this course will participate in all facets of the high school's marching band. All freshmen woodwind students not in Symphonic Band will elect this course.

**Prerequisite:** *Participation in the Middle School Band or by audition*

## **Symphonic Band Honors**

**Course 3570**

**1 Credit**

**Gr. 9, 10, 11, 12**

This select group of musicians will perform and study intermediate to advanced band literature, as well-written and non-written music theory assignments. All students wishing to perform in this ensemble must do so by audition only which will occur in March/April of the proceeding school year. Audition criteria will be based upon standard PMEA Solo/Ensemble Judging Rubrics. Activities include school and community concerts, PMEA/MENC Concert Band Adjudications, all marching band activities such as football games and parades, and after-school rehearsals, both Concert and Marching Band. Students will be required to practice and prepare musical selections independently. All students electing this course will be members of the school's marching band. Additional concert attire may need to be purchased for this class. This is a year-long, honors credit course.

**Prerequisite:** *By audition only*

**Average hours of homework per week: 2.5**

## **Concert Band**

**Course 3565**

**1 Credit**

**Gr. 9, 10, 11, 12**

This year long course is for band students who seek an alternative to participation in marching band. Students will study music theory concepts and will learn how to integrate and apply those concepts in their repertoire. Students will learn intermediate and advanced woodwind, brass, and percussion techniques. Students will be expected to engage in scheduled rehearsals and performance opportunities, which occur beyond the normal school day and on weekends. Activities include rehearsals, school and community concerts.

## **Percussion Ensemble**

**Course 3575**

**1 Credit**

**Gr. 9, 10, 11, 12**

This year-long, one-credit course provides interested students with experience in the percussion idiom. This class will serve as the percussion section for the Concert Band and Marching Band. Placement auditions for Marching Band and those interested in Honors Percussion/Symphonic Band take place in late April/May. Audition criteria will be based upon the standard Marching Band/ Concert Band placement rubric passed out before the audition. Activities include percussion

ensemble concerts, school and community concerts, varsity football games, band festivals and parades. All students electing this course will participate in all facets of the high school's marching band. All percussionists must take this course.

**Prerequisite:** *Participation in Middle School Band or by audition*

### **Percussion Ensemble - Honors**

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**Course 3576**

**Gr. 9, 10, 11, 12**

**1 Credit**

This select group of musicians will perform and study intermediate to advanced band and percussion literature, as well as written and non-written music theory assignments. Percussionists in this ensemble perform primarily with the High School Symphonic Band, and also have opportunities to play with many other ensembles at the high school requiring percussion. All students wishing to perform in this ensemble must do so by audition only. Audition criteria will be based upon the standard Marching Band/Concert Band placement rubric in late April/May. Activities include school and community concerts, percussion ensemble concerts, PMEA/MENC Concert Band Adjudications, all marching band activities such as football games and parades, after-school rehearsals, and both concert and marching band. Students will be required to practice and prepare musical selections independently. All students electing this course will be member of the school's marching band. Additional concert attire may need to be purchased for this class. This is a year-long, honors credit course.

**Prerequisite:** *By audition only*

**Average hours of homework per week: 2.5**

### **String Ensemble**

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**Course 3580**

**Gr. 9, 10, 11, 12**

**1 Credit**

This year long, one-credit course provides strings (violin, viola, cello, and bass) students with a variety of musical experiences designed to improve their technical playing proficiency as well as their musicianship skills. Students will have the opportunities to play age/skill level appropriate orchestral literature at the highest possible standard. Students will develop advanced playing skills and advanced bowing techniques. Outside of the school day, students may elect to participate in festival competition and/or various other outings related to the goals of the class. Activities include school and community concerts and rehearsals, which may occur beyond the normal school day and on weekends. Additional concert attire may need to be purchased for this class.

### **Chamber String Ensemble - Honors**

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**Course 3581**

**Gr. 9, 10, 11, 12**

**1 Credit**

This year-long honors course is designed for students interested in performing and studying advanced orchestral literature. Entrance into this string ensemble will be by audition only and will be held in March/April of the preceding school year. Audition criteria will be based upon standard PMEA Solo/Ensemble Judging Rubrics. Students will learn and perform a variety of styles of music at an accelerated pace. The Honors Chamber String students will also be required to participate in the MAHS String Orchestra. These students will be responsible for learning a great deal of the MAHS String Orchestra music individually and will also be the foundation of the MAHS String Ensemble. They will be looked upon as mentors to the younger, less experienced members, and therefore will have the opportunity to be promoted to leadership roles within the MAHS String Ensemble. Activities will include community concerts, PMEA/MENC Orchestra Ensemble Adjudications, all MAHS String Ensemble activities, and after school rehearsals. Additional concert attire may need to be purchased for this class.

**Prerequisite:** *By audition only*

**Average hours of homework per week: 2.5**

### **Comprehensive Musicianship I**

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**Course 3582**

**Gr. 9, 10, 11, 12**

**.5 Credit**

This one semester course includes the study of music theory, music aural skills, introduction to composition, basic two-handed piano performance, and study of computers in music. Students will be required to play piano daily, sing, notate music, and manipulate the appropriate music technology programs to complete assignments. Technology programs may include, but are not limited to: Sibelius, Finale, Garage Band, and Pro Tools. This course is designed to combine music technology and the study of music theory. Students will be required to use their primary instrument in this class.

**Prerequisites:** *Students must be currently enrolled in a performance based musical ensemble (Band, Orchestra or Choir), and be proficient on their primary instrument*

### **Comprehensive Musicianship II**

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**Course 3583**

**Gr. 10, 11, 12**

**1 Credit**

This full-year course is a continuation of CMI. CMII will include advance studies in reading and analyzing notated music. In-depth studies of compositional tools such as melodic and harmonic structure, rhythmic development, form, and score

analysis will be an integral part of this course. Sight singing and rhythmic and melodic dictation will be included. Piano will be integrated as it applies to theory/compositional elements studies. Students will also study digital sampling and live multi-track recording with other technology devices. These will be used in conjunction with learning music theory concepts. Musical styles and periods will be discussed with their relevance to world history. Work in this course will emphasize preparation for the AP Music Theory Test.

**Prerequisites:** *Students must be currently enrolled in a performance based musical ensemble (Band, Orchestra or Choir), and be proficient on their primary instrument. In addition, the student must have passed CMI with an average of a B (80%) or higher*

### **Concert Choir**

**Course 3589**

**Gr. 9, 10, 11, 12**

**1 Credit**

The focus of this year-long, one-credit course will be students learning to develop their vocal music skills on a daily basis through emphasis on healthy vocal technique. The development of aural skills will include sight reading and music theory. These skills will be integrated into rehearsal and applied to the performance of quality choral repertoire of varied genre. Members of Concert Choir are required to participate in two (2) annual concerts and two (2) dress rehearsals in addition to other performance opportunities that may occur beyond the school day timeline. Members of Concert Choir are encouraged to audition for Vocality, an SATB ensemble that specializes in vocal jazz and a Capella repertoire. Concert Choir members can also audition for Bel Canto, an SSA women’s ensemble and the Moon Area Men’s Ensemble Bro Canto. These two ensembles rehearse after school once a week and have additional performance opportunities.

### **Honors Choir**

**Course 3590**

**Gr. 10, 11, 12**

**1 Credit**

This year-long course is designed for students who possess exceptional skill in vocal music and the determination to learn at an advanced pace. Students who desire to perform in Honors Choir must audition in the spring of the previous school year. An audition criterion includes demonstration of developed vocal technique, music reading skills and a commitment to exceptional ensemble singing. The audition rubric will be based on standard vocal skill rubrics as used by PMEA. Students will study and perform a wide range of intermediate and advanced choral literature at accelerated pace. Aural skill development, music theory and sight-reading skills will be incorporated into the class. Students are expected to practice and prepare musical selections through IP (Individual Practice) and in daily full ensemble rehearsals. Individual and quartet singing assessments and will be part of quarterly grades. Performances include school and community concerts, PMEA sponsored events and extra-curricular performances that occur beyond the school day and on weekends. In addition, Honors Choir members are strongly encouraged to participate in travel experiences on scheduled years. Travel experiences will be based on the educational value of the travel as well as high quality performance opportunity in exceptional venues. Students participating in Honors Choir embody the core of the MAHS Choral Program and therefore, perform in multiple MAHS choral ensembles to include Bel Canto and Men’s Ensemble. Additional concert attire will need to be purchased by the student for this ensemble.

**Prerequisites:** *By audition only*

**Average hours of homework per week: 2.5**

## **Health and Physical Education Department**

Physical Education* 9-10	Health Education 10*
Adaptive Physical Education* 9-10-11-12	Lifetime Fitness 11-12*
Beginning Swimming* 9-10	Team Sports 11-12*
Health & Wellness Education 9*	Athletic Conditioning 11-12*
	Independent Physical Education 11-12*

\*Indicates a one-semester course

*The PA standards for Health Education are met through participation in both Health & Wellness 9 & Health 10.*

## Physical Education

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Gr. 9

Course 0500

Gr. 10

Course 0505

.5 Credit Each

Physical Education courses are designed to provide students with instruction and experience in a wide variety of individual and team physical activities. Emphasis is placed on attaining skills and knowledge necessary to pursue a health-enhancing level of physical fitness as an adult. This will be facilitated through an emphasis on the development of positive self-image, leadership, teamwork and cooperation with others, and other skills necessary for transferring class experiences to life-long participation in athletic and leisure-time recreational activities. The ninth-grade program is focused mainly on fitness-based physical activity. Units include but are not limited to: Fitness training and testing, aquatics (stroke development, conditioning swim), Cardio Sports, Volleyball, Weight Training, Dance and Cooperative Games. The tenth-grade course also includes an introduction to Lifetime Sports including: Tennis, Golf, Canoe/Kayak and Water Sports. Students in grades 11-12 will be given the opportunity to choose the activities they would like to participate in through our PE elective system.

P. E. – Grades 9 and 10 – Materials Needed: red, white, black, or grey athletic shorts, t-shirt and/or sweats, athletic shoes, swimsuit, towel, and lock for gym locker.

## Adaptive Physical Education

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Gr. 9

Course 0530

Gr. 11

Course 0540

Gr. 10

Course 0535

Gr. 12

Course 0545

## Beginning Swimming

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PE 9/Beginning Swim

Course 0550

PE 10/Beginning Swim

Course 0552

.5 Credit Each

This course is designed to help students develop and strengthen basic swim skills and confidence in the water. Any student who is unable to complete our eighth grade Swim Assessment (jump into the deep, tread for 15 seconds, swim freestyle for 25 yards) will be scheduled for this course. Basic skills including: breathing techniques, water safety, floating, treading, kicking and stroke development are taught and reinforced. Students will participate in a minimum of 2 swimming units throughout the year. When not in the pool, the class will engage in all the same lessons as PE 9/10.

## Health & Wellness

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Course 0520

Gr. 9

.5 Credit

This course is required of all freshman students. It will provide information, instruction and experiences that will enable freshmen to gain the basic knowledge and essential skills and attitudes they will need to be successful in high school and beyond. Components of the course will include: Communicating Effectively, Assessing/Evaluating Your Health/Wellness, Goal Setting, Coping with Loss & Stress, Suicide Prevention, Physical Fitness, Practicing Wellness, Health Professionals/Agencies, Healthy Relationships, the Reproductive System, and Abstinence/STD Education. This course emphasizes intelligent decision-making and the need to be responsible for one's own health. Concepts are also reinforced through the Seven Habits of Highly Effective Teens (Be Proactive, Begin with the End in Mind, Put First Things First, Think Win-Win, Seek First to Understand, then to be Understood, Synergize, Sharpen the Saw)

\*Special note: H&W classes will alternate with P. E. 9 classes on a 4 ½ week cycle

## Health Education

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Course 0525

Gr. 10

.5 Credit

Health is a year-long course for all 10th grade students and is a requirement for graduation. It is designed to provide students with a basic framework of knowledge necessary to develop positive attitudes and practices. Units of study will include, but are not limited to: Nutrition, Eating Disorders, Understanding Drugs and Medicine, Mental Health, Preventing Violence and Abuse, Preventing Infectious Diseases, Lifestyle Diseases, Other Diseases and Disabilities and First Aid/CPR. This course will make use of a combination of lectures, power point presentations, class discussions, student oral presentations, demonstrations, guest speakers, student activities and a Life Issues research paper.

\*Special Note: Health 10 classes will alternate with PE 10 on a 4 ½ week cycle

## Lifetime Fitness

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Course 0510

Gr. 11, 12

.5 Credit

Materials needed: red, white, black or grey athletic shorts, t-shirt and/or sweats, athletic shoes, swimsuit, towel, and lock for gym locker. Course outline: canoeing & kayaking, swim & water games, fitness training & testing, cardio games, ultimate frisbee, weight lifting, archery, golf, soccer, volleyball, racquet sports-tennis, badminton, pickleball, table tennis, softball,



fitness training and testing, yoga, Pilates, strength training, circuit training/stations, weight training, paddle boarding, spinning, and power walking.

## **Team Sports**

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**Course 0515**

**Gr. 11, 12**

**.5 Credit**

Materials Needed: red, white, black or grey t-shirts, athletic shorts and/or sweats, athletic shoes, swimsuit, towel, and lock for gym locker. Course Outline: Fitness conditioning & testing, lax, softball, floor hockey, basketball, flag football, volleyball, ultimate frisbee, soccer, pickleball, tchoukball, angleball, water games, and cardio games.

## **Athletic Conditioning**

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**Gr. 11, 12 – Fall**

**Course 0517**

**Gr. 11, 12 - Spring**

**Course 0518**

**.5 Credit**

Juniors and Seniors may select this course as PE 11-12 credit. Sophomores may take this in addition to PE 9-10 as an elective. The primary emphasis of this course is to provide instruction in muscular development, by allowing committed student athletes to develop muscular strength, muscular endurance, cardio endurance, flexibility, speed, and agility through a prescribed workout schedule. This schedule will be developed to meet each student's individual needs, based on the specific sports that he or she will be participating in throughout the year. To reach each student's needs, we will use a variety of exercises including: free weights, weight machines, exercise bands, kettle bells, and partner-assisted and resisted movements. The course will also focus on injury prevention and taking care of the body during pre- and post-workouts. The primary area of instruction will be in the Field House weight room, occasionally on the HS football field and in the pool. Students should take this course during the semester that is opposite of their sport.

Materials Needed: red, white, black or grey t-shirts, athletic shorts and/or sweats, athletic shoes, towel, swimsuit, and lock for gym locker

**Prerequisite:** *Students must be a current athlete, who has also completed an entire season in an interscholastic sport prior to the beginning of the school year in which this course will be taken.*

## **Partners in Physical Education**

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**Course 0534/0535**

**Gr. 11, 12**

**.5 Credit**

Partners in PE is an inclusive approach to physical education that pairs students with special needs with their general education peers (peer partner). Class activities include, but are not limited to, weight training, fitness, dance, team sports, racquet sports and team building. The goal of the course is to facilitate an appreciation for lifelong skills of fitness and wellness through positive peer relationships. Additionally, peer students will learn to plan and carry out their own dynamic lessons that engage their partners and provide a post-lesson reflection. Admittance to the Partners in PE course is contingent on an application process which includes a letter of interest and a brief interview. This course may be taken in place of PE 11 or PE 12 and may be repeated for credit. Special consideration may be given to members of the Unified Sports Bocce Team partners and members of the Forever Friends Club.

**Prerequisites:** *PE 9, PE 10*

## **Independent Study Physical Education**

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**Course 0565**

**Gr. 11, 12**

**.5 Credit**

1. Student must carry a FULL SCHEDULE each semester, no Study Hall.
2. Student must be taking a minimum of two advanced courses. Other unusual circumstances may be considered by the principal.
3. Student must submit a letter explaining the request and have principal's approval prior to beginning an alternate P.E. program. The Principal must give final approval to receive credit.
4. Student must clearly identify the nature and scope of planned alternative physical activities (cannot be a MAHS interscholastic sport). Alternative physical activities must reflect appreciable coherence with PA. State standards in P.E.
5. Student must participate in an approved or recognized program and must be supervised by a certified physical activity instructor or supervisor. The instructor's or supervisor's name, address, phone number and proof of certification must be provided.
6. Student must complete 72 hours of physical activity and maintain a weekly log that show what state standards in Physical Education are being met by the first week of May.
7. Activities must include all the following: aerobic exercise (20 hours minimum), muscle and limb stretching activity (10 hours minimum), muscle strengthening activity (10 hours minimum), water safety activity (5 hours minimum), dance (5 hours minimum)
8. Student must submit signed log to the Athletic Director's office every 4.5 weeks (Log must be signed and dated by the instructor or supervisor). Student must submit final signed log/report signed by student, parent and activity supervisor.

9. Please note that the TOTAL hours needed exceeds the MINIMUM hours required.

## Science Department

Earth & Its Environment	Physics
Applied Biology	AP Physics 1
Biology	Earth and Space Science
Biology – Honors	AP Chemistry
Human Anatomy & Physiology-Honors	AP Chemistry Lab
Physical Science	College in High School Physics
Chemistry	AP Biology
Chemistry – Honors	AP Biology Lab

### The Earth and Its Environment

**Course 2505**

**Gr. 9**

**1 Credit**

This is a full-year course in which students will study aspects of Earth and Environmental Sciences. In this laboratory-based course, students will explore concepts in the earth’s processes including the composition and reshaping of the earth’s surface and atmosphere. The students will also examine the world and local environment as it relates to: agriculture, watersheds, wetlands, integrated pest management, climate, energy resources, and waste management. Students will be expected to analyze, interpret, and make predictions based on given data. This is an academic level science course.

**Prerequisite: Recommendation from 8th grade science teacher**

### Biology

**Course 2515**

**Gr. 10, 11, 12**

**1 Credit**

This course is designed to introduce the student to basic biological theories, vocabulary, and laboratory practice. Through the process of demonstrations, discussions, cooperative and individual laboratory investigations and assignments, the unity, continuity and interaction of living systems are emphasized. Students can investigate: the characteristics of life, cell biology, genetics and heredity, evolution, classification of life, ecology, and a survey of the animal kingdom. The course is designed for both college and non-college bound students. Students are also encouraged to explore current science topics in this course. Students are required to take the Keystone Exam upon completion of this course.

**Prerequisite: Successful completion of The Earth and Its Environment**

### Biology - Honors

**Course 2520**

**Gr. 9, 10**

**1 Credit**

This course is designed for the superior science student who has demonstrated academic success. The pace of learning is accelerated, the level of expectation is high and student independence to accept individual responsibility and effort is essential. The course provides a student with an opportunity to investigate all levels of biological organization with an emphasis on the cellular level. Topics covered include: tools of biological investigation, biochemistry, cell structure and function, photosynthesis, respiration, nucleic acid structure and function, genetics, evolution, study of microbes, invertebrates, ecology, environment, and limited vertebrate study. **Students are required to take the Keystone Exam upon completion of this course.**

**Prerequisite: 90% in 8th grade Science and teacher recommendation**

**Average hours of homework per week: 2**

### Human Anatomy and Physiology – Honors

**Course 2525**

**Gr. 11, 12**

**1 Credit**

This course is designed for students who are seeking a firm foundation in the physical and chemical structures of the human body and the physiology that supports them. It is a rigorous course that engages and prepares students who are interested in the human body and health/medical fields. Content and labs will reinforce and enhance concepts of Biology and apply them to how the human body works. The work ethic required of students to study and understand the textbook, depth of topics covered, and laboratory work, mirrors that of a course taken by freshmen anatomy students in college.

**Prerequisite: Completion of Biology, Chemistry (Students may concurrently take Physics and Human Anatomy & Physiology)**

**Average hours of homework per week: 2**

## Physical Science

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Course 2530

1 Credit

Gr. 11, 12

This is a full-year course in which students will study chemistry and physics. A multi-disciplinary approach will be used to reinforce concepts of matter and energy. Topics include: states and structure of matter, chemical reactions, thermodynamics, motion, and force.

*Prerequisite: Successful completion of Biology or Applied Biology*

## Chemistry

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Course 2535

1 Credit

Gr. 10, 11, 12

This is a course designed for the student seeking a laboratory science credit for college admission or for the student interested in learning more of the chemical nature of his/her environment. The course is an introduction to the discipline of chemistry. The program will examine laws and concepts related to chemistry. Supporting descriptions of matter and the mathematics that apply will also be studied. Laboratory activities to support the classroom studies will be chosen. The student can expect to become involved with the elementary aspects of first year Algebra. Scientific calculators are used in this course.

*Prerequisite: Students must be taking at least Algebra 2A and have a C or better in current math class; recommendation from current science teacher and math teacher is required*

## Chemistry – Honors

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Course 2540

1 Credit

Gr. 10, 11, 12

This is an honors course designed for the above average student seeking or requiring a challenge or for the students that will likely concentrate on a scientific or technological career. The course deals with the theory of chemistry and material descriptions. This course involves an emphasis on mathematical applications of the concepts, theories, and principles. An extensive amount of material is covered, and the student is expected to accept the responsibility of individual effort and study. Scientific calculators are used in this course.

*Prerequisite: Biology or Biology-Honors*

*Average hours of homework per week: 2*

## Physics

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Course 2545

1 Credit

Gr. 10, 11, 12

This course will be a college-prep course and will rely heavily on mathematical principles. The course will cover topics in mechanics, waves, optics, electricity, and it will be Trigonometry/Algebra II based. Students will be required to complete laboratories on the above topics and submit student generated laboratory reports by the required dates.

*Prerequisite: Chemistry or taking Chemistry concurrently; taking at least Algebra 2 concurrently*

## Advanced Placement Physics 1

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Course 2550

1 Credit

Gr. 10, 11, 12

The AP Physics 1 course is equivalent to the first semester of a typical introductory, algebra-based course. The course and the AP exam are organized around six underlying principles called the big ideas, which encompass the core scientific principles, theories and processes of physics. There will be an emphasis on experimentation and students will be required to complete laboratories on physics topics and submit student generated laboratory reports. An extensive amount of material is covered, and the student is expected to accept the responsibility of individual effort and study.

*Prerequisite: Science: Academic/Honors Chemistry or taking concurrently; Mathematic: Completion of Algebra 2/Honors Algebra 2.*

*Average hours of homework per week: 2*

## Earth and Space Science

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Course 2555

1 Credit

Gr. 11, 12

This is a full-year course in which students will study aspects of Earth and Space Science. Although other topics will be explored, the main emphasis of this course will be on Astronomy, Geology, Oceanography, and Meteorology. Hands-on activities will be used to give students the opportunity to further explore key concepts in Earth and Space Science. This course is an elective and may not be used to take the place of the required eleventh grade science course.

*Prerequisite: Physical Science or Chemistry (students may take this course with Physical Science or Chemistry), and recommendation from current science teacher*

## Advanced Placement Chemistry

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Course 2560

1 Credit

Gr. 11, 12

This is a rigorous course designed to prepare the student to successfully take the Advanced Placement exam and thereby gain college credit. There is a heavy emphasis on the problem-solving aspects of atomic and molecular structure,

thermodynamics, reaction kinetics, equilibrium and electro-chemistry. Extensive laboratory work will accompany and amplify the theoretical aspects of the course.

**Prerequisite:** Honors Chemistry and Physics courses, taking at least Trig/Pre-Calc concurrently, proven ability to function independently, and instructor approval. This course requires an additional daily period for lab work

**Average hours of homework per week:** 2.5

### Advanced Placement Chemistry Lab

Course 2561  
.5 Credit

Gr. 11, 12

This course must be selected to accompany the Advanced Placement Chemistry course.

### College in High School Physics

Course 2565  
1 Credit

Gr. 11, 12

This course will be a second-year physics course offered to students interested in a career in science, specifically physics or engineering. The course will cover advanced topics in mechanics and will be taught as a first-year college physics course. Students must be concurrently taking Calculus and will have the opportunity to earn 4 college credits from the University of Pittsburgh.

**Prerequisite:** Physics; at least Calculus concurrently

**Average hours of homework per week:** 2

### Advanced Placement Biology

Course 2570  
1 Credit

Gr. 11, 12

AP Biology is designed to be the equivalent of a college introductory biology course. The textbook, depth of topics covered, laboratory work, and work ethic required of students mirrors that of a course taken by biology majors in college. The goal of this class is to support the conceptual framework of modern biology through application of content using science practices. The course prioritizes situational use of concepts and doing science through inquiry rather than memorizing terms and technical facts. The big ideas covered in the course are 1) the process of evolution driving diversity of life, 2) biological systems and energy, 3) genetic processes as living systems essential to life, and 4) interactions among biological systems and the environment. Students taking this course will be required to take the AP Exam in May. This course requires an additional daily period for lab work.

**Prerequisite:** Completion of Biology, Chemistry (Students may concurrently take Physics and AP Biology)

**Average hours of homework per week:** 2

### Advanced Placement Biology Lab

Course 2571  
.5 Credit

Gr. 11, 12

This year long course must be selected to accompany the Advanced Placement Biology course.

Recommended Science Sequence			
Grade 9	Grade 10	Grade 11	Grade 12
<u>Honors Biology</u>	<u>Honors Chemistry</u> <u>Chemistry</u>	<i>Electives</i>	<i>Electives</i>
		AP Physics 1 Physics Physical Science Human Anatomy & Physiology AP Chemistry AP Biology	AP Chemistry AP Biology CHS Physics Human Anatomy & Physiology Earth/Space Science
<u>Earth &amp; Its Environment</u>	<u>Biology</u> <u>Honors Biology</u>	<u>Chemistry</u>	<i>Electives</i>
		<u>Honors Chemistry</u> <u>Physical Science</u>	Physics AP Physics 1 AP Chemistry AP Biology
		<i>Electives</i> Human Anatomy & Physiology Earth/Space Science	Human Anatomy & Physiology Earth/Space Science
<u>Earth &amp; Its Environment</u>	<u>Applied Biology</u> <u>Biology</u>	<u>Physical Science</u>	<i>Electives</i>
		<u>Chemistry</u>	Earth/Space Science Chemistry Physics

In order to meet the Pennsylvania State Standards for Science & Technology and Environmental Science, students must select one of the core science courses offered each academic year in grades 9 – 11. Students choosing an elective in grade 11 must also concurrently enroll in a core science course for that year. Core science courses are underlined and are located under the grade level on the chart.

**All science course selections must have the approval of the student's current science teacher.**  
**Please Note: These are recommended, not required, sequences.**

## Social Studies Department

Social Studies Grade 9	<b>*1-semester [.5 Credit] Elective Courses</b>
Social Studies Grade 9 - Honors	Ethics*
Social Studies Grade 10	Practical Justice*
Social Studies Grade 10 - Honors	Psychology*
AP European History	Sociology*
Social Studies Grade 11	
Social Studies Grade 11 - Honors	
AP U.S. History	
Social Studies Grade 12	
AP Government & Politics	

\*Indicates a one-semester course

### U.S. History 1865 to 1945

**Course 1500**  
**1 Credit**

Gr. 9

This course is an in-depth look at US History from the Reconstruction Era through the close of World War II. The focus is on the political, social and economic development of the United States, including Pennsylvania's role. There is heavy emphasis on accurately completing homework, note taking and organizational skills.

### U.S. History 1865 to 1945- Honors

**Course 1505**  
**1 Credit**

Gr. 9

This course (which includes the same topics as described in the academic 9th grade course) is intended for students who have an interest in social studies and desire a more demanding course offering. In addition to the normal prerequisite, students will write essays, at least one persuasive essay, and do additional readings and activities designed to enhance critical thinking skills. Students are required to contribute in greater detail to class discussion.

**Prerequisite: 90% or higher in 8th grade social studies, and/or teacher recommendation**

**Average hours of homework per week: 2-3**

### Comparative World History

**Course 1510**  
**1 Credit**

Gr. 10

Credit The first semester of Comparative World History is an analysis of economic, social, cultural, and political history of the Post-Classical world and the Early Modern Era in Europe, the Middle East, and China. The second semester highlights include comparisons of Europe, India and China during the Late Modern Era to the Post-Modern Era in India, China, and the Middle East.

### Comparative World History - Honors

**Course 1515**  
**1 Credit**

Gr. 10

This course (which includes the same topics as described in the academic 10th grade course) is intended for students who have an interest in social studies and desire a more demanding course offering. In addition to the normal prerequisites, students will write essays, do additional readings and activities designed to enhance communication, research, and critical thinking skills.

**Prerequisite: 90% or higher in 9th grade social studies, and/or teacher recommendation**

**Average hours of homework per week: 3-5**

## **Advanced Placement European History**

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**Course 1535**

**1 Credit**

**Gr. 10**

This course is for academically advanced sophomores. This rigorous college level course leads to an exam through which students can earn college credit. The course focuses on the events, movements, institutions, and people that shaped Western European history between 1450 and the present. Students will explore the social, intellectual, political, economic, cultural, and diplomatic forces of European development. Students are evaluated on their progress through quizzes, tests, essays, book reviews, and projects. It is a rigorous college level course, which can lead to college credit or advanced placement based on the results of the Advanced Placement Exam which is given here annually.

*Prerequisite: 90% or higher in 9th grade social studies, and/or teacher recommendation*

*Average hours of homework per week: 4-5*

## **Contemporary Global History & Current Events**

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**Course 1525**

**1 Credit**

**Gr. 11**

Contemporary Global History is an analysis of the cultural, economic, social, and political history of the United States and the world from the end of World War II to the present day. Course topics include the Truman Era, Cold War, 1950s, the Civil Rights Movement, the Vietnam Era, 1960s, Watergate, the turbulent 70s, Conservatism and the end of the Cold War, global terrorism, 1990s, technology, 2000s, and current events/ issues.

## **Contemporary Global History & Current Events - Honors**

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**Course 1530**

**1 Credit**

**Gr. 11**

This course (which includes the same topics as described in the academic 11th grade course) is intended for students who have an interest in social studies and desire a more demanding course offering. In addition to the normal prerequisite, students will write essays, at least one persuasive essay, do additional readings and activities designed to enhance critical thinking skills. Students are required to contribute in greater detail to class discussion and to analyze primary and secondary sources. There are several required research projects.

*Prerequisite: 90% or higher in 10th grade social studies, and/or teacher recommendation*

*Average hours of homework per week: 3-5*

## **Advanced Placement U.S. History**

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**Course 1520**

**1 Credit**

**Gr. 11**

This year long course is designed for academically talented juniors. The course examines the history of the United States from discovery to the present. It is a rigorous college level course, which can lead to college credit or advanced placement based on the results of the Advanced Placement Exam, which is given here annually. This course requires extensive summer work and homework nearly every evening. It is necessary for students in this course to have a high level of competence in writing and be self-motivated to cover a myriad of material.

*Prerequisite: 90% or higher in 10th grade social studies, and/or teacher recommendation*

*Average hours of homework per week: 4-6*

## **Civics and Economics**

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**Course 1540**

**1 Credit**

**Gr. 12**

This course is designed to examine how participation in government and analysis of current economic situations will allow students to become more effective citizens of the United States. Students in this course will specifically examine the concepts of constitutional freedom, public policy and participation in government, as well as analyze their state and local governing bodies. Students will also spend time analyzing economics from the perspective of the consumer, economic policy and how it relates to the world economy will be a major focus. Significant amount of time will also be spent on the personal economics of each learner and how understanding this information will positively impact their future.

## **Advanced Placement U.S. Government/Politics**

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**Course 1545**

**1 Credit**

**Gr. 12**

This course is for academically talented and highly motivated seniors. One of the major outcomes of the course is to give students an analytical perspective on government and politics in the United States. This course will include both the study of general concepts used to interpret U.S. politics and the analysis of specific examples. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. politics. Students will have a comprehensive look at the U.S. Constitution, the development of individual liberties and the political process. Students will study from a number of source materials, participate in discussions about past and current political issues, prepare and conduct class presentations,

write short essays, and complete nightly readings and assignments. It is a rigorous college level course, which can lead to college credit based on the results of the Advanced Placement Exam.

*Prerequisite: 90% or higher in 11th grade social studies and teacher recommendation*

*Average hours of homework per week: 4-6*

## Social Studies Electives

### Ethics

**Course 1550**

**.5 Credit**

**Gr. 11, 12**

This is a one-semester elective course that provides students with historical, philosophical, theoretical, and practical knowledge of ethical situations and moral dilemmas that are present in society. Students will be able to analyze how ethical principles have developed over time, as well as how different societies and cultures deal with ethical situations. The course will also focus on decision-making and how using ethical principles can lead to effective decision-making strategies. A significant portion of the class will be used to analyze current ethical questions plaguing American society and how resolutions might be reached. The desire and ability to participate in classroom discussions is essential to success in this class. As a final evaluation, students will be required to compose a research paper that explores specific ethical theories and applies these theories to the behavior of characters from film and literature.

### Practical Justice

**Course 1555**

**.5 Credit**

**Gr. 11, 12**

This is a one-semester elective course that will provide students with practical information and problem-solving opportunities that develop the knowledge and skills necessary for survival in our law-saturated society. Students will leave this course with the ability to analyze, evaluate and resolve legal disputes and will be challenged to consider legal aspects of some of the most difficult issues facing our democracy today. A significant portion of the course will be dedicated to identifying and analyzing current legal issues in American society. Case studies, mock trials, role plays, small group activities, intense discussions and visual analysis activities will also be used to provide a framework for learning. Students will be required to research, analyze and present an actual case study as a final evaluation for the course.

### Psychology

**Course 1560**

**.5 Credit**

**Gr. 11, 12**

This is a one-semester elective course that will introduce students to the scientific study of human and animal behavior. Students will gain a better understanding of their own behavior and the behavior of others. Topics covered will examine the psychological perspectives, the history of psychology, learning and cognition, intelligence, adolescent behavior and psychological disorders. Students will be required to participate in class group activities and complete and in-depth research project on a psychological issue of their choice.

### Sociology

**Course 1565**

**.5 Credit**

**Gr. 11, 12**

This is a one-semester elective course that will introduce students to the study of society and society's problems. Students will gain a better understanding of themselves and their social world. Topics covered will examine: sociological perspective, cultural socialization, groups and organizations, stratification, inequality and gender, race and ethnicity, and the American Value System. Sociology seeks to describe and explain various aspects of social life, particularly how the groups and the society of which we are a part influence our lives and how we in turn may bring about changes in our times. Students will be required to participate in class groups activities and complete an in-depth research project on a social issue of their choice.

# Special Education Department

These courses are offered as special education courses that are scheduled for students by special education teachers based upon Individual Education Programs. These courses are not open to the general student body and must be scheduled and approved by a special education teacher and a counselor. Other Special Education courses not listed will be scheduled by a special education teacher and/or counselor as needed or when circumstances require.

## Algebra 1 Linear

Course 6200

Gr. 9

1 Credit

This year long course focuses on linear relationships. The content will emphasize the algebraic manipulation of linear expressions, equations, and inequalities. Students will also solve systems of linear equations, represent linear equations and inequalities, and graph linear functions. Students taking Algebra 1-Linear must take Algebra 1-Quadratics the following year to be prepared for the Keystone exam.

TI-83+ calculators are used and will be provided by the teacher for classwork.

## Algebra 1 – Quadratics

Course 6205

Gr. 9

1 Credit

This year long course focuses on quadratic relationships. This course will include a review of linear equations and inequalities followed by a focus on quadratic and exponential expressions, equations and relationships. The course will provide the means to distinguish between linear and nonlinear relationships. The course is intended for students in the Learning Support Math Program grade 9. **Students are required to take the Keystone Exam upon completion of this course.**

## Core Geometry Concepts and Skills

Course 6210

Gr. 10

1 Credit

This course focuses on the key topics that provide a strong foundation in the essentials of geometry. Geometry C.S. is intended for students in the Learning Support Math Program who have completed Algebra One Quadratics. Students in grades 10 or 11 Learning Support Math program.

## Consumer Math

Course 6215

Gr. 10, 11, 12

1 Credit

This course will give students a general understanding of math used in real-life situations. There is a two-year cycle between Consumer Math and Math for the World of Work. Any student in 10th, 11th or 12th grade learning support math may take this course for one or two years.

## Reading Strategies

Course 6405

Gr. 9, 10, 11, 12

1 Credit

This class will improve fundamental reading skills, including word-attack skills, vocabulary development, reading comprehension, fluency, and interpretation. Topics include identifying main idea and supporting details, determining author's purpose and tone, distinguishing between fact and opinion, identifying patterns of organization in a paragraph or passage and the transition words associated with each pattern, recognizing the relationships between sentences, identifying and using context clues to determine the meanings of words, identifying logical inferences and conclusions, and recognizing the point and support of an argument. Extensive opportunities for applying reading strategies for before, during, and after reading will be provided. Critical analysis skills in relationship to various texts will be introduced to guide students to improve their reading skills.

## Executive Functioning Skills/Study Skills

Course 6407

Gr. 9, 10, 11, 12

1 Credit

This course is designed for students who desire to develop study skills and test taking strategies. This course will ultimately help students to set and achieve both educational and life goals. Students will leave this class with a better understanding of their individual strengths and weaknesses, and the information and skills to improve their own understanding, learning, and retention across disciplines. This course not only teaches students how to go about becoming better students but also arms them with the tools to become high achievers in all aspects of their lives.



## **Additional Special Education Courses**

The following one credit courses follow the curriculum described in the English Section:

English 9A - Course 6000	English 11a – Course 6010
English 10A – Course 6005	English 12A - Course 6015

The following one credit course is offered for Keystone Remediation:

Keystone Remediation - Course 6410

The following one credit courses are offered to students in our Life Skills Support Program:

Basic English - Course 6300	Basic Math – Course 6310
Basic Social Studies – Course 6305	Basic Science - Course 6315
Vocational Education – Course 6320	

## **Technology Education Department**

Integrated Technology*	Computer Aided Drafting & Design
Manufacturing 1	Engineering Design 1/2 Honors
Materials Fabrication	Architectural Drawing & Design
Advanced Manufacturing	TV Studio & Media Production
Invention Laboratory*	MAHS TV*

\*Indicates a one-semester course

### **Integrated Technology**

**Course 4500**

**Gr. 9, 10, 11, 12**

**.5 Credit**

This semester course is designed to provide students with knowledge and hands-on experience exploring the development, use and impacts of technology in the areas of manufacturing, construction, transportation, and communication. Students, working alone and in groups, will problem solve, design, develop, construct, and test projects, such as 3D deck modeling, CO2 car racing, and tower construction, just to name a few.

### **Manufacturing 1**

**Course 4505**

**Gr. 9, 10, 11, 12**

**1 Credit**

This one-year course is designed to develop the students' planning skills for designing items constructed of wood. The instruction in this course is centered on power machinery and safety. Emphasis is placed on operational procedure, design, problem-solving, creativity, and safety. Students will use all the tools and machines in the lab including the Laser Engraver and the NC Router.

### **Materials Fabrication**

**Course 4510**

**Gr. 9, 10, 11, 12**

**1 Credit**

**Limit 3 years**

This one-year course consists of sheet metal fabrication, forging, gas, arc, TIG and MIG welding, plasma cutting and foundry technologies. Machine-tool technology includes operational techniques of the engine lathe, vertical mill and other power equipment. Advanced metal fabricating techniques are included to develop and relate aesthetic expression with industrial fabrication techniques. Computer numerical control (CNC) applications and programming will be incorporated with the use of a CNC mill and plasma cutting.

### **Invention Laboratory**

**Course 4502**

**Gr. 11, 12**

**.5 Credit**

Students will develop solutions to real world problems requiring a wide range of skills and creative thinking using design thinking curriculum in cooperation with local businesses and organizations. This course will provide an interdisciplinary approach to integrating disciplines within real world applications. The course will require students to participate in

problem-based and project-based learning activities, inquiry learning tasks, and technology will be used to share and display information.

*Prerequisite: Engineering Design or Engineering Design 2*

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### **Advanced Manufacturing**

**Course 4515**

**Gr. 10, 11, 12**

**1 Credit**

This one-year advanced study course designed to provide and develop abilities and skills in students in the areas of complex case design, furniture construction, and mass production. The instruction in this course is centered on power machinery, manual layout and design, laser engraving and CNC machining individual projects. Emphasis is placed on safety, creativity, and design. Students will use all the tools and machines in the lab including the NC Router and the Laser Engraver.

*Prerequisite: Manufacturing*

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### **Computer Aided Drafting and Design (CADD)**

**Course 4520**

**Gr. 9, 10, 11, 12**

**1 Credit**

This basic one-year course in drafting gives the student a good understanding and background in technical illustration and enables the student to become proficient. The student will learn concepts from basic two-dimensional representations to complex three-dimensional solids. Students will gain experience in both traditional board drawing to computer-aided design using AutoCAD software.

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### **Engineering Design 1/2 Honors**

**Course 4525**

**Gr. 10, 11, 12**

**1 Credit**

#### **Limit 2 years**

Engineering Drawing and Design is a course that develops problem-solving skills with emphasis on 3D modeling or solid rendering of an object. Students focus on the application of visualization processes and tools using the Inventor software. The course emphasizes the design-development process of a product and how a model of that product is produced, analyzed, and evaluated, using a Computer-Aided Design System. Various design applications are explored with discussion of possible career opportunities.

*Engineering Design 1 Co-requisite: Algebra 2*

*Engineering Design 2, Gr. 11, 12 Prerequisite: Pass Engineering Design 1 with 90% or better*

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### **Architectural Drawing and Design**

**Course 4530**

**Gr. 10, 11, 12**

**1 Credit**

This one-year course gives students experience in basic house design. The fundamental sequences in designing and drawing are stressed as the student completes the architectural drawings necessary for the construction of a house. Elements of the course include architectural styles, area planning, structural detailing, and building specifications. Several computer software packages will be used to create detailed plans, drawings, and scaled models.

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### **Television Studio and Media Production 1**

**Course 4531**

**Gr. 9, 10, 11, 12**

**1 Credit**

This course covers the foundations in theory and practice of television studio and media production. In this course, students learn to operate professional television studio equipment and will develop, examine, and practice approaches to all phases of production through writing, shooting, and editing a variety of video productions and short film style projects. Students also learn to operate digital post-production and image manipulation software. This course will include laboratory activities and student-generated projects. Assessments will include projects, portfolio pieces, tests, and quizzes. Students in this course must be highly motivated, attentive, and willing to accept challenges.

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### **Television Studio and Media Production 2/3**

**Course 4532**

**Gr. 10, 11, 12**

**1 Credit**

This course is open to students who have successfully completed Television Studio and Media Production 1. In TV 2, students will be required to operate studio production equipment, develop new skills, while refining the skills gained from TV 1. The students will be responsible for writing, directing, producing, and editing a wide variety of programs. Students will also be assigned school related media productions by their instructor. Assessments will include projects, portfolio pieces, tests, quizzes formal critiques, as well as after school events. Students in this course must be organized, highly motivated, and ready to accept new challenges.

*Prerequisite: Television Studio and Media Production 1*

## MAHS-TV

Course 4533

.5 Credit

Gr. 9, 10, 11, 12

A semester course where students will create and present student, school, and community news programs. The main thrust of the class will focus on our live morning news show. Students will have the opportunity to learn the workings of a TV Broadcast control room, as well as write, graphically design, shoot, and organize the creation of daily productions and other school related programs. This is a hands-on participation class where students will work in front of and behind the television camera.

## World Language Department

French 1	German 1	Spanish 1
French 2	German 2	Spanish 2
French 3	German 3	Spanish 3
French 4	German 4	Spanish 4
French 4-Honors	German 4-Honors	Spanish 4-Honors
French 5	German 5	Spanish 5
French 5-Honors	German 5-Honors	Spanish 5-Honors

### French 1

Course 3000

1 Credit

Gr. 9, 10, 11, 12

Students begin their study of French with the emphasis on oral communication. Using conversation, students learn vocabulary, culture and basic grammar. Other learning activities include puzzles, songs, readings, and multimedia resources. The culture and lifestyles of French-speaking people are also covered.

*Prerequisite: 70% or higher in English*

### French 2

Course 3005

1 Credit

Gr. 9, 10, 11, 12

Students continue to develop their language skills as they read, write, and practice speaking in a variety of situations. Students learn to express themselves in the past tense. Writing skills are developed as knowledge of vocabulary and sentence structure increases. French culture is interwoven using games, and multimedia resources.

*Prerequisite: 70% or higher in French 1*

### French 3

Course 3010

1 Credit

Gr. 9, 10, 11, 12

Students develop a more thorough knowledge of vocabulary, grammar, and French culture. They communicate in French daily, developing conversational skills in a wide variety of situations. Writing skills are also stressed. The cultures of French-speaking countries in Europe and Africa are studied.

*Prerequisite: 70% or higher in French 2*

### French 4

Course 3015

1 Credit

Gr. 9, 10, 11, 12

Through various interactive activities and projects, students improve their speaking and writing skills. Grammatical concepts are reviewed as students read and discuss short stories, poems, and articles. In addition, students will add to their understanding of French culture through slides, films, and other authentic materials.

*Prerequisite: 70% or higher in French 3*

### French 4 – Honors

Course 3020

1 Credit

Gr. 9, 10, 11, 12

This course is designed for students who demonstrate outstanding ability in grammar, writing, reading and speaking skills. In addition to the regular course work, the student will be required to complete one independent project for each grading period and will have additional questions and/or sections on some tests and quizzes.

*Prerequisite: 90% or higher in French 3 and teacher recommendation*

*Average hours of homework per week: 3-5*

## **French 5**

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**Course 3025**

**1 Credit**

**Gr. 9, 10, 11, 12**

Students enhance their communication skills as they read and discuss selected literary works, review grammatical structures, and engage in activities focusing on expressing their ideas. Composition, creative writing, and letter writing are included.

*Prerequisite: 70% or higher in French 4*

## **French 5 – Honors**

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**Course 3030**

**1 Credit**

**Gr. 9, 10, 11, 12**

This course is designed for students who demonstrate outstanding ability in grammar, writing, reading and speaking skills. In addition to the regular course work, the student will be required to complete one independent project for each grading period and will have additional questions and/or sections on some tests and quizzes.

*Prerequisite: 90% or higher in French 4 and teacher recommendation*

*Average hours of homework per week: 4-6*

## **German 1**

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**Course 3035**

**1 Credit**

**Gr. 9, 10, 11, 12**

Students begin their study of German with the emphasis on oral communication. Through oral and written activities, students learn vocabulary, culture, and basic grammar. Additionally, they begin to read authentic texts, such as: school and train schedules, menus, maps and advertisements. Games, dialogues, videos, and skits are used to practice new skills.

*Prerequisite: 70% or higher in English*

## **German 2**

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**Course 3040**

**1 Credit**

**Gr. 9, 10, 11, 12**

Students further develop their language skills as they read and write stories and dialogues and practice speaking in a variety of situations. Students learn the geography of Europe and Germany as they plan trips to German-speaking countries. German culture is interwoven through the use of games, hands-on activities and multimedia resources.

*Prerequisite: 70% or higher in German 1*

## **German 3**

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**Course 3045**

**1 Credit**

**Gr. 9, 10, 11, 12**

Students continue to expand their communication skills through the acquisition of new vocabulary and grammar as well as hands-on activities including simulations games, reading, and writing activities. Students develop an increased understanding of the German-speaking countries and cultures through authentic readings, music, and videos.

*Prerequisite: 70% or higher in German 2*

## **German 4**

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**Course 3050**

**1 Credit**

**Gr. 9, 10, 11, 12**

Through various interactive activities and projects, students begin to tone their skills particularly in the areas of speaking and writing. Grammatical concepts are reviewed as students read and discuss short stories, poems, and articles. Students practice more sophisticated ways of expressing themselves as they explore topics of contemporary life in Germany. Students further enhance their knowledge of German-speaking countries through videos, films, and other forms of authentic materials.

*Prerequisite: 70% or higher in German 3*

## **German 4 – Honors**

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**Course 3055**

**1 Credit**

**Gr. 9, 10, 11, 12**

This course is designed for students who demonstrate outstanding ability in grammar, writing, reading and speaking skills. In addition to the regular course work, the student will be required to complete one independent project for each grading period and will have additional questions and/or sections on some tests and quizzes.

*Prerequisite: 90% or higher in German 3 and teacher recommendation*

*Average hours of homework per week: 3-5*

## **German 5**

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**Course 3060**

**1 Credit**

**Gr. 9, 10, 11, 12.**

Students enhance their communication skills as they read and discuss selected literary works, review grammatical structures for communication, and engage in activities focused on expressing their ideas. Students will learn idiomatic patterns of the language. They will write stories, letters, poems, articles, and analyze selections of German literature.

*Prerequisite: 70% or higher in German 4*

## **German 5 – Honors**

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**Course.3065**  
**1 Credit**

**Gr. 9, 10, 11, 12**

This course is designed for students who demonstrate outstanding ability in grammar, writing, reading and speaking skills. In addition to the regular course work, the student will be required to complete one independent project for each grading period and will have additional questions and/or sections on some tests and quizzes.

**Prerequisite: 90% or higher in German 4 and teacher recommendation**

**Average hours of homework per week: 4-6**

## **Spanish 1**

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**Course 3070**  
**1 Credit**

**Gr. 9, 10, 11, 12**

Students begin with an emphasis on oral communication. Through oral, listening, and written activities, students learn vocabulary, basic grammar, and culture of the Spanish-speaking countries. Videos, games, multimedia resources are used to practice the four basic skills of speaking, listening, reading and writing.

**Prerequisite: 70% or higher in English**

## **Spanish 2**

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**Course 3075**  
**1 Credit**

**Gr. 9, 10, 11, 12**

Students continue to develop their language skills as they read, and practice speaking in various situations and continue to study the geography and culture of the Spanish-speaking areas of the world. Videos, multimedia resources, games, role-playing and other activities enhance their ability to communicate in Spanish.

**Prerequisite: 70% or higher in Spanish 1**

## **Spanish 3**

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**Course 3080**  
**1 Credit**

**Gr. 9, 10, 11, 12**

Students further expand their communication skills through practicing old and learning new vocabulary and grammar. Conversation, role-play simulations, listening practice, and reading and writing practice are included. Authentic readings, movies, videos, games, interviews, and tapes are used.

**Prerequisite: 70% or higher in Spanish 2**

## **Spanish 4**

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**Course 3085**  
**1 Credit**

**Gr. 9, 10, 11, 12**

Emphasis is placed on speaking and writing skills. Reading of short stories, poems, etc. is included. Students further enhance their knowledge of cultural aspects through their exposure to art, music, and other humanities.

**Prerequisite: 70% or higher in Spanish 3**

## **Spanish 4 – Honors**

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**Course 3090**  
**1 Credit**

**Gr. 9, 10, 11, 12**

This course is designed for students who demonstrate outstanding ability in grammar, writing, reading and speaking skills. In addition to the regular course work, students will be required to complete one independent project for each grading period and have additional questions and/or sections on some tests and quizzes.

**Prerequisite: 90% or higher in Spanish 3 and teacher recommendation**

**Average hours of homework per week: 3-5**

## **Spanish 5**

---

**Course 3095**  
**1 Credit**

**Gr. 9, 10, 11, 12**

Students enhance their communication skills as they read and discuss selected literary work, review grammatical structures, and engage in activities focusing on expressing their ideas. Composition, creative writing, and letter writing are included.

**Prerequisite: 70% or higher in Spanish 4**

## **Spanish 5 – Honors**

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**Course 3100**  
**1 Credit**

**Gr. 9, 10, 11, 12**

This course is designed for students who demonstrate outstanding ability in grammar, writing, reading and speaking skills. In addition to the regular course work, the student will be required to complete one independent project for each grading period and will have additional questions and/or sections on some tests and quizzes.

**Prerequisite: 90% or higher in Spanish 4 and teacher recommendation**

**Average hours of homework per week: 4-6**

# Parkway West Career & Technology Center

## Parkway West Career Majors

Students will attend Parkway West Area Career & Technology Center for a half-day. The other half of the day is spent at MAHS, where students will complete academic requirements and participate in co-curricular activities. Transportation is provided by Moon Area School District.

Several programs offer a tech-prep option in which the four-year Parkway students are assured a three-year program. The fourth year can consist of an internship in the area of the student's technical program. Students can receive advanced credit toward an Associate Degree at CCAC for work completed at Parkway West in several programs upon meeting the requirements of the articulation agreement.

*Students must be in good academic standing and making adequate progress toward graduation requirements in order to enroll and remain in a Parkway program.*

### Auto Body Repair

Course 5030

Gr. 9, 10, 11, 12

3 Credits

The Auto Body Repair program is certified by the National Automotive Technology Education Foundation (NATEF) and provides instruction in the most current techniques for repair and replacement of damaged automobile parts. Students learn to repair collision damage and to replace quarter panels, door skins, and fenders. The curriculum also includes painting, MIG welding, collision repair, frame straightening, and damage analysis. Students gain experience in mixing and tinting paint, custom painting, computerized estimating, and auto detailing. Practical experience is also provided through a full-service auto body repair shop. Students can earn **PPG Blue Level Paint** and **I-Car MIG** Welding certifications. They are also eligible to earn **I-Car Points**.

### Automotive Technology

Course 5035

Gr. 9, 10, 11, 12

3 Credits

Automotive Technology is certified by the National Automotive Technology Education Foundation (NATEF) and affiliated with all of the major automotive manufacturers through Automotive Youth Educational Systems (AYES). Students prepare to take the Pennsylvania State Inspection License examination. Students learn basic vehicle maintenance, repair, and replacement of drive trains, brake systems, chassis components, and fuel and electrical systems. Special emphasis is placed on troubleshooting and engine performance via the use of state-of-the-art electronic diagnostic equipment. Practical experience is also provided in the auto repair shop. Under the **Automotive Youth Educational Systems (AYES)** apprenticeship program, students may qualify to become an apprentice working under mentor technicians. Students can earn certifications from **AYES**, the **National Institute for Automotive Service Excellence (ASE)**, and the **Coordinating Committee for Automotive Repair (CCAR)**.

### Cyber Security & Network Technology

Course 5024

Gr. 9, 10, 11, 12

3 Credits

The program prepares students who are interested in networking and computer diagnostics. It begins with Cisco IT Essentials, PC hardware and software, and network operating systems. Students initially prepare for **CompTIAA+** and **Comp TIA Server+** certifications and then, through the Cisco CCNA Discovery course, students learn networking concepts based on typical networks that one might encounter in a home or small office, or in larger, more complex enterprise models. Finally, students can prepare for the **Cisco CCENT** and **Cisco CCNA** certifications.

### Culinary Arts 1

Course 5021

### Culinary Arts 2

PM Course 5011/AM Course 5056

### Culinary Arts 3

Course 5012

Gr. 9, 10, 11, 12

3 Credits

The Culinary Arts Program provides practical instruction in the preparation of banquet, buffet, and a la carte styles of food preparation. Practical experience is provided through the operation and management of an in-house, full-service restaurant and beyond the restaurant environment to provide goods and services for Parkway's food store, where pastries and select meats are sold. Students learn to design cakes, sculpt ice, and prepare many different types of cuisine. First-year students spend one school year in Culinary Arts Level I. Second and third-year students will advance into Culinary Arts

Levels II and III. Senior students who have completed at least two years of Culinary Arts will have the opportunity to earn both the **National Restaurant Association's ServSafe** certification and the **American Culinary Federation** certification.

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**Cosmetology 1** Course 5040

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**Cosmetology 2** PM Course 5045/AM Course 5046

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**Cosmetology 3** Course 5050

Gr. 9, 10, 11, 12 3 Credits

The Cosmetology Program prepares students to perform technical services including all aspects of hair, skin/nail beautification, and personal maintenance. These skills are supported and reinforced with theoretical background including sanitation, chemistry, anatomy, and physiology, as well as structure, function, and disorders of the hair, skin, nails, and scalp. The Cosmetology Program helps students develop into well-rounded professionals, who practice real-world services in Parkway's salon, which is open to the public two days a week. Utilizing an integrated approach to teaching and learning, students learn about interpersonal relations, professional attitude, and career fundamentals along with technical knowledge and skills. Techniques and abilities are practiced and tested on mannequins, classmates, and the general public. Students attending this program for three years will have the opportunity to earn the 1,250 hours of state-regulated course requirements to take the state licensing exam to be a licensed cosmetologist, which encompasses providing services to the public for hair, skin, and nails.

*Students who complete one or two years of instruction in this program may choose from the following specialized licensed fields:*

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**Nail Technician License** Course 5051

Gr. 11, 12 3 Credits

This license requires 200 hours of instruction and can be completed within one year. An individual holding a nail technician license is qualified to perform nail technology services only.

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**Cosmetology Teacher's License** Course 5052

Gr. 12 3 Credits

The prerequisite for this course is to have successfully passed either the Nail Technician License or the State Cosmetology Licensure. This license requires 500 hours of required studies and can be completed within one year. An individual holding a teacher's license is qualified to perform the functions of a teacher in whichever specialized area the individual has obtained licensure.

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**Construction Technology Cluster** Course 5000

Gr. 9, 10, 11, 12 3 Credits

During a student's first year at Parkway West CTC, he/she will select one program that he/she would like to participate in for one quarter. This program will be guaranteed to occur at some point during the student's first year. Students will then be randomly scheduled for the remainder of the school year. The construction cluster programs include: Carpentry, Electrical Systems Technology, HVAC/R, and Welding Technology. If a student is interested in exploring the fifth construction-related program, they will have the opportunity to do so during the first quarter of their second year at Parkway West CTC.

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**Carpentry** Course 5003

Gr. 10, 11, 12 3 Credits

Students will apply technical knowledge and skills to layout, fabricate, erect, install and repair structures and fixtures using hand and power tools, scaffolding, and specialty tools used in the construction trade. This program includes instruction in common systems of framing, construction materials, estimating, blueprint reading and finish carpentry techniques. Students will be given the opportunity to earn a **10-hour Occupational Safety and Health Administration (OSHA) Construction** card.

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**Electrical Systems Technology** Course

Gr. 10, 11, 12 3 Credits

The Electrical Systems Technology Program teaches students the integral components of the electrical industry for entry level employment in residential, commercial, and/or light industrial locations. The basis of instruction is in the layout, assembly, installation, wiring, maintenance, and troubleshooting of electrical systems. Understanding programmable logistical controls (PLC's) and how transformers operate are also covered.

## **HVAC/R**

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**Course 5006**

**3 Credits**

**Gr. 12**

This course focuses on Heating, Ventilation, Air-Conditioning and Refrigeration in a setting that has been newly renovated with state-of-the-industry equipment. Students will learn basic and advanced electrical theory, troubleshooting and repair of residential and commercial heating, air-conditioning and refrigeration systems. Students will be given the opportunity to earn a 10-hour **Occupational Safety and Health Administration (OSHA) Construction** card.

## **Welding Technology**

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**Course 5075**

**3 Credits**

**Gr. 10, 11, 12**

The Welding Technology program covers several types of welding processes by which metal may be bent, cut, or welded together, including oxy-fuel, shielded metal arc, gas metal arc, gas tungsten arc, flux core welding, carbon arc, plasma cutting, and oxy-fuel brazing. Students will learn the importance of industry safety, measuring instruments, hand tools, grinders, metallurgy, blueprint reading, electrical principles, layout/design, and fabrication, as well as how to prepare materials lists for cost estimates. Students have the opportunity to earn several **American Welding Society (AWS)** certifications.

## **Health Occupations Technology**

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**Course 5060**

**3 Credits**

**Gr. 9, 10, 11, 12**

Students in this program have the opportunity to participate in a wide range of real-world clinical and job shadowing experiences at many different local healthcare providers such as hospitals and other medically related facilities. Clinical experiences may include: childcare, long-term care, emergency nursing, recovery room nursing, radiology, medical records, operating room observation, pharmacy, physical/occupational therapy, and/or lab technician work. Students will have the opportunity to earn and complete the American Heart Association "**CPR for Health Care Providers**" certification and the following certifications in relation to the Health Care industry: **Pennsylvania State Nurse Aid Registry (CNA)**: for first and second-year students, instruction begins with anatomy, physiology, and medical terminology, and special attention is given to medical office examinations, treatment, and patient care; **Personal Care Home Direct Care Staff**: for first and second-year students, this component offers a competency test from the PA Department of Public Welfare and it prepares students to work in a personal care home as a direct care giver.

## **Phlebotomy Technician Certification (CPT)**

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**Course 5064**

**3 Credits**

**Gr. 12**

This is a one-semester certification course directed toward 12th grade students. Module and lab work include: anatomy and physiology, infection control, safety and compliance, patient preparation, collection techniques, and processing of collected samples. Students must demonstrate a minimum of 30 successful venipunctures and 10 successful capillary punctures.

## **Pharmacy Technician Certification (CPHT)**

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**Course 5062**

**3 Credits**

**Gr. 12**

After successful completion of this one-year, 12th grade course, students will assist a pharmacist in a variety of tasks. Module and lab work include: controlled substances, laws and regulations, drug classification, frequently prescribed medications, prescription information, preparing/dispensing prescriptions, calculations, sterile products, unit dose, and repackaging.

## **Graphic Arts & Production Technology**

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**Course 5023**

**3 Credits**

**Gr. 9, 10, 11, 12**

The Digital Multimedia Technology program provides instruction in basic graphic design using computers and design software such as Adobe Illustrator, Acrobat, Photoshop, InDesign, and Dreamweaver. Students learn entry-level skills for desktop publishing, web design, digital photography, and graphic animation utilizing Flash. Several software applications are used to design, edit, and publish documents, images, and multimedia presentations in print and electronic form. From designing a poster to developing a website, students will have the opportunity to apply their creativity to projects that resemble those within industry. Students can earn the **Adobe Certified Associate in Visual Communication** and the **Adobe Certified Associate in Web Communication** via Certipoint.

## **Veterinary Technology**

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**Course 5077**

**3 Credits**

**Gr. 9, 10, 11, 12**

Students will learn to keep medical records, schedule, offer client education, practice laboratory procedures, assist with nursing duties, prepare for surgeries, and assist during a routine exam. Students will also gain a solid educational base on which to build a post-secondary degree. This program may lead to additional career pathways such as Animal Trainer,



Animal Breeder, Non-Farm Animal Caretaker, Laboratory Animal Caretaker, Groomer, Animal Control Worker, Veterinary Technician, Veterinary Technologist, and Veterinarian. Upon accreditation, students may earn the following certifications: **Purina Certified Weight Coach; Pharmacy Technician; and Veterinary Assistant.**

### **Public Safety Technology**

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**Course 5070**

**3 Credits**

**Gr. 9, 10, 11, 12**

The Public Safety Technology program focuses on careers relating to emergency medical services, firefighting, law enforcement, and emergency management services. In order to successfully complete the program, students must meet minimum proficiency levels in all public safety areas. Instruction is provided in disaster situations/management, hazardous materials handling, pre-hospital medical care, map reading, firefighting, the judicial system, and emergency dispatching. Students have the opportunity to earn the following certifications: Emergency Medical Technician-Basic (EMT-B), Basic Vehicle Rescue (BVR), Emergency Vehicle Operators Course (EVOC), Hazardous Materials Recognition and Identification (Haz-Mat R&I), and multiple Federal Emergency Management Agency certifications.

### **Sports Medicine & Rehabilitation Therapy Technology (SMARTT)**

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**Course 5080**

**3 Credits**

**Gr. 9, 10, 11, 12**

The Sports Medicine and Rehabilitation Therapy Technology (SMARTT) Program prepares students to work in the field of physical therapy, occupational therapy and sports medicine. Students will develop skills in prevention, diagnosis, differential diagnosis, assessment, prognosis and the rehabilitation of injuries and other health conditions. Students will learn the principles of developing a plan of care including: evaluation, interventions (exercise, manual therapy, modalities and neuro re-education), assessment, goal setting and discharge. Students will also learn how to develop a proper diet for healthy individuals and tailor it for special populations through a comprehensive understanding of nutrition. Upon successful completion, students should be able to assist in the development and implementation of a plan of care for healthy and special populations. Careers available directly out of the program could include: Personal Trainer, Coach, and Physical Therapy Aid. This program also provides a solid educational base on which to build a post-secondary degree or advanced certification. Careers available with additional post-secondary schooling include: Personal Trainer, Athletic Trainer, Physical Therapist, Physical Therapist Assistant, Occupational Therapist, Certified Occupational Therapist Assistant, Strength and Conditioning Coach, Medical and Exercise Physiology Researcher, Sports Psychologist, Dietitian and Exercise Physiologist.

### **Diesel Technology**

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**5073 Course**

**3 Credits**

**Gr. 9, 10, 11, 12**

Diesel Technology is part of every aspect of today's transportation, construction, and manufacturing industries. In Diesel Technology, students will learn about the operation, maintenance, and overhaul of diesel-powered equipment. Diesel engines are found in military vehicles, trucks, trains, buses, construction and agricultural equipment. As the diesel equipment industry expands, the demand for mechanics and technicians to repair and maintain diesel equipment will continue to grow.

## **Parkway West Academic Course Offerings**

### **Principles of Technology**

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**Course 5115**

**1 Credit**

**Gr. 10, 11, 12**

Students will learn applied physics. Topics will include force, momentum, thermodynamics, states of matter, electricity and magnetism. The math skills needed to be successful in this course are included in this curriculum. Students attending Parkway will take this course to satisfy 1 of 3 science credits required for graduation.

### **Chemical Properties in Practice**

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**Course 5117**

**1 Credit**

**Gr. 10, 11, 12**

This course focuses on chemistry and its applications to today's issues. Students will first become acquainted with the basic principles of chemistry including matter and its states, the atomic theory and thermodynamic theory, reactions and solutions, and equilibrium. They will gain an understanding of the relationship between these content and nuclear and organic issues facing today's technology. Finally, they will use this knowledge to explore many of the ways chemistry is used to balance the needs and wants of humanity with the stresses placed on the physical environment with an eye toward the application of green technology and providing the energy needed for a population becoming more technological each

day. The major focus is placed on: content, analysis, interpretation and problem solving of today's issues. Students attending Parkway may take this course to satisfy 1 of 3 science credits required for graduation.

### **U.S. History 1**

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**Course 5120**

**Gr. 9, 10, 11, 12**

**1 Credit**

Students will learn the history of the United States from Pre-Colonial American to 1865. Students will gain insight into the nation's past and examine the links between past and present events. The major focus is placed on content, chronology, analysis, and interpretation.

### **World Cultures**

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**Course 5125**

**Gr. 10, 11, 12**

**1 Credit**

Students will learn about diverse cultures existing around the world. Through study of pertinent issues to the world's major regions, students will recognize and evaluate the relationships between people, places, regions, and environments. Students will further explore how physical environments affect human events and build a global perspective that allows them to understand the connections between global and national issues. The major focus is placed on content, chronology, analysis and interpretation.

### **U.S. History 2**

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**Course 5130**

**Gr. 10, 11, 12**

**1 Credit**

Students will learn the history of the United States from 1865 to present. Students will gain insight into the nation's past and examine the links between past and present events. The major focus is placed on content, chronology, analysis and interpretation.

Academic courses note: Many other academic course offerings will be available through e-CADEMY, an online collaborative. These courses will be scheduled through the Parkway West Counselors on an individual basis.

### **Civics**

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**Course 5135**

**Gr. 12**

**1 Credit**

Students will learn about diverse cultures existing around the world. Through study of pertinent issues to the world's major regions, students will recognize and evaluate the relationships between people, places, regions, and environments. Students will further explore how physical environments affect human events and build a global perspective that allows them to understand the connections between global and national issues. The major focus is placed on content, chronology, analysis and interpretation.

# **Summary of Additional Dual Enrollment Opportunities**

*MAHS requires students considering any Dual Enrollment Program to have earned and maintain at least a minimum 2.5 GPA (some specific programs have higher GPA requirements) and have good attendance and behavior records.*

## **CCBC Academies**

Begin an exciting college education during 11<sup>th</sup> or 12<sup>th</sup> grade while completing high school. Students attend MAHS in the morning and travel to CCBC in the afternoon where they directly prepare for their career and earn college credits at a special Dual Enrollment rate.

**Stem Academy-** Choose between Engineering or Process Technology

**Health Academy** (2.75 GPA requirement) – Prepare for any of the many health care careers.

**Aviation Academy-** Prepare for a career as a Professional Pilot, Air Traffic Controller, or Unmanned Aerial Vehicles Specialist.

**Criminal Justice-** Complete coursework and continue your studies towards an associate degree in Criminal Justice, Police Academy, or Cyber Security.

*Each Academy has its own specific admissions criteria. Please see the Counseling Office for further information on programs or how to enroll.*

## **Traditional Dual Enrollment**

MASD has Dual Enrollment agreements with CCAC, RMU and PSU-Beaver. 11<sup>th</sup> and 12<sup>th</sup> grade students who meet all of the criteria are permitted to enroll in specific coursework, as High School Students, through these colleges at a discounted Dual Enrollment rate. Courses can be taken after school. Eleventh graders are permitted to leave after period 6A and take up to 1 course per semester. Twelfth graders are permitted to leave after period 5A and take up to 2 courses per semester.

## Course and Credit Planning Guide

*The Course and Credit Planning Guide should be used by a student to adequately plan their four years at Moon Area High School. Total credits for each course are noted with course descriptions in the Program of Studies.*

		<i>Grade</i>				
	<i>Minimum Required Credits</i>	<i>9</i>	<i>10</i>	<i>11</i>	<i>12</i>	<i>Totals</i>
<i>English (4 years)</i>	4.0					
<i>Social Studies (4 years)</i>	4.0					
<i>Mathematics (3 years)</i>	3.0					
<i>Science (3 years)</i>	3.0					
<i>Physical Education</i>	2.0					
<i>Health 10</i>	.05					
<i>Elective Arts &amp; Humanities</i>	2.0					
<i>Additional Electives</i>	5.5					
<i>Totals</i>	24.0					