

Moon Area High School

Program of Studies
2024-2025



MOON AREA HIGH SCHOOL
8353 University Boulevard
Moon Township, PA 15108
412-264-9440

HIGH SCHOOL ADMINISTRATION

Mr. Ryan Matsook,	Principal
Ms. Nicole Hegerich,	Assistant Principal
Mr. Matthew Tumulty,	Assistant Principal

COUNSELING DEPARTMENT

Ms. Deanne Hinerman	Ext 2010
Mrs. Emily Smith	Ext 2011
Mrs. Patricia Johnson	Ext 2012
Ms. Julie Sitko, College and Career Counselor	Ext 2038

ADMINISTRATION

Mr. Barry Balaski, Superintendent	Dr. Jason D'Alesio, Assistant Superintendent
Ms. Jessica Drylie, Director of Fiscal & School Services	Dr. Ashley Beeson, Director of Pupil Services
Dr. Lauren Morgan, Director of K-12 Curriculum and Instruction	Mr. David Gallup, Asst. Director K-12 Curriculum & Instruction/School Safety and Security Coordinator
Dr. Kim Prevost, Director of Data and Analysis	Mr. Alan Alcalde, Athletic Director
Mr. John Daniels, Director of Facilities	Ms. Christie Leininger, Director of Food Services
Mr. Casey Kaiser, Director of Technology	Ms. Kellie Crago, HR, Benefits & Payroll Supervisor
Dr. Marissa Deleel, School Psychologist	Demi Skeriotis, School Psychologist

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Table of Contents

TABLE OF CONTENTS.....	3
Our Mission	12
Vision	12
Philosophy and Beliefs	12
Belief Statements	12
Course Selection Requirements	13
Requirements for Grade Advancement	13
Honor Roll	13
Graduation Requirements	14
Criteria for Determining Graduation Ceremony Speakers	15
Miscellaneous Information	15
NCAA Eligibility - Student Athletes	16
College Testing Terms	17
PSAT AND THE NATIONAL MERIT SCHOLARSHIP QUALIFYING TEST (NMSQT)	18
ASVAB	18
COURSE OFFERINGS AND SELECTION	19
ART DEPARTMENT	19
Art 1	19
Art 2	19
Art 3	19
Art 4	19
Advanced Placement Art History	19
Art Therapy	19
Creative Art	19
Photography 1	20
Photography 2	20

Hands-On Art	20
Functional Ceramic Art	20
Digital Imaging 1.....	20
Digital Imaging 2.....	20
Digital Imaging 3.....	20
BUSINESS AND MARKETING DEPARTMENT.....	21
Accounting 1	21
College in High School, Financial Accounting	21
Intro to Business & Marketing Essentials.....	21
Personal Finance	21
Entrepreneurship	21
Sports and Entertainment Management	22
International Business.....	22
COMPUTER SCIENCE DEPARTMENT	23
Visual Basic Programming 1.....	23
Visual Basic Programming 2.....	23
Java Programming 1	23
Java Programming 2	23
Cybersecurity Honors	23
AP Computer Science Principles	24
CHS Information Technology 1*	24
CHS Information Technology 2*	24
CHS Microsoft Office Applications *	24
Web Page Design*	24
ENGLISH LANGUAGE ART DEPARTMENT.....	25
English 9	25
English 9 – Pre AP	25

English 10 25

English 10 – Pre AP 25

English 11 25

English 11 College Prep..... 26

English 11 Advanced Placement Language & Composition 26

English 12 26

English 12 Advanced Placement Literature & Composition 26

Writing Beyond the Classroom 27

Contemporary Fiction and Literacy Theory..... 27

Poetry 27

Survey of British Literature..... 27

Survey of World Literature 27

Film as Literature..... 27

Theatre and Dramatic Arts 27

Contemporary Nonfiction..... 28

Creative Nonfiction Writing Workshop..... 28

ENGLISH LANGUAGE ARTS ELECTIVES..... 28

Communications and Public Speaking 28

Theatre Arts 28

Multimedia Journalism 1 28

Print Journalism 2-3..... 29

Print Journalism 4..... 29

Photo Journalism 2 – 3 29

Photo Journalism 4..... 29

Contemporary Issues..... 29

FAMILY AND CONSUMER SCIENCE DEPARTMENT 30

Personal Nutrition and Wellness 30

Exploration of Cooking and Nutrition	30
Mastery of Cooking	30
The Art of Baking.....	30
Child Development 1	30
Advanced Child Development	31
Lifetime Readiness	31
MATHEMATICS DEPARTMENT.....	32
Algebra 1	32
Core Geometry	32
Geometry	32
Geometry Honors.....	32
Algebra 2	33
Algebra 2 – Honors	33
Algebra 2A.....	33
Algebra 2B.....	33
Trigonometry/Pre-Calculus	33
Trigonometry/Pre-Calculus Honors	33
Calculus	34
Advanced Placement Calculus AB.....	34
Advanced Placement Calculus BC.....	34
Advanced Placement/College in High School – Basic Statistics	34
Mathematics with Business Applications	34
Math Lab	34
MATH SEQUENCE CHART	35
MUSIC DEPARTMENT	36
Brass Class.....	36
Woodwind Class.....	36

Concert Band 36

Symphonic Band Honors 36

Percussion Ensemble 36

Percussion Ensemble – Honors 37

String Ensemble..... 37

Chamber String Ensemble – Honors 37

Music Technology..... 37

Comprehensive Musicianship 37

Concert Choir 37

Honors Choir 38

HEALTH AND PHYSICAL EDUCATION DEPARTMENT 39

Physical Education..... 39

Adaptive Physical Education..... 39

Health & Wellness 39

Health Education..... 39

Lifetime Fitness 39

Team Sports 40

Athletic Conditioning..... 40

Partners in Physical Education..... 40

Independent Physical Education..... 40

SCIENCE DEPARTMENT 41

Integrated Science..... 41

Biology – Applied 41

Biology 41

Biology - Honors 41

Human Anatomy and Physiology – Honors..... 41

Physical Science..... 42

Chemistry42

Chemistry – Honors42

Physics.....42

Advanced Placement Physics 1.....42

Earth and Space Science42

Advanced Placement Chemistry42

Advanced Placement Chemistry Lab.....43

College in High School Physics43

Advanced Placement Biology43

Advanced Placement Biology Lab.....43

Recommended Science Sequence44

SOCIAL STUDIES DEPARTMENT..... 45

U.S. History 1865 to 194545

U.S. History 1865 to 1945 – Honors45

Comparative World History.....45

Comparative World History – Honors45

Advanced Placement European History.....45

Contemporary Global History & Current Events45

Contemporary Global History & Current Events – Honors46

Advanced Placement U.S. History.....46

Civics and Economics.....46

Advanced Placement U.S. Government/Politics46

SOCIAL STUDIES ELECTIVES 47

Ethics.....47

Practical Justice47

Psychology47

Sociology47

SPECIAL EDUCATION DEPARTMENT 48

Algebra 1 48

Core Geometry 48

Consumer Math..... 48

Reading Strategies – Year 1 48

Reading Strategies – Year 2 48

Executive Functioning Skills/Study Skills 49

Reading Strategies – Year 3 49

Reading and Writing Strategies 49

ADDITIONAL SPECIAL EDUCATION COURSES..... 49

TECHNOLOGY EDUCATION DEPARTMENT 50

Integrated Technology 50

Invention Laboratory..... 50

Wood Fabrication 50

Metals Fabrication..... 50

Advanced Wood Fabrication 50

Computer Aided Drafting and Design (CADD)..... 50

Engineering Design ½ Honors 51

Architectural Drawing and Design 51

Television Studio and Media Production 1 51

Television Studio and Media Production 2/3..... 51

MAHS – TV 51

WORLD LANGUAGE DEPARTMENT 52

French 1 52

French 2 52

French 3 52

French 4 52

French 4 – Honors.....52

French 552

French 5 – Honors.....52

German 153

German 253

German 353

German 453

German 4 – Honors.....53

German 553

German 5 – Honors.....53

Spanish 154

Spanish 254

Spanish 354

Spanish 454

Spanish 4 – Honors54

Spanish 554

Spanish 5 – Honors54

PARKWAY WEST CAREER & TECHNOLOGY CENTER..... 55

PARKWAY WEST CAREER MAJORS 55

Auto Body Repair55

Automotive Technology55

Cyber Security & Network Technology55

Culinary Arts 155

Culinary Arts 255

Culinary Arts 355

Cosmetology 1.....56

Cosmetology 2.....56

Cosmetology 3.....56

Nail Technician License.....56

Cosmetology Teacher’s License56

Construction Technology Cluster56

Carpentry56

Electrical Systems Technology56

HVAC/R56

Welding Technology57

Health Occupations Technology57

Phlebotomy Technician Certification (CPT).....57

Pharmacy Technician Certification (CPhT)57

Graphic Arts & Production Technology.....57

Veterinary Technology57

Public Safety Technology58

Sports Medicine & Rehabilitation Therapy Technology (SMARTT).....58

Diesel Technology58

Power Motorsports Technology58

PARKWAY WEST ACADEMIC COURSE OFFERINGS 58

Principles of Technology.....58

Chemical Properties in Practice58

U.S. History 1.....59

World Cultures59

U.S. History 2.....59

Civics59

SUMMARY OF ADDITIONAL DUAL ENROLLMENT OPPORTUNITIES 59

Introduction

This Program of Studies is distributed to explain the curriculum and course options at Moon Area High School for the 2023- 2024 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 to request courses for the 2023-2024 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 request; however, some courses have limited availability. Schedules will be posted in the summer. Once scheduled, all schedule changes must follow “Procedures for Course Changes,” (Page 5).

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 based on 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 Mr. Barry Balaski, Title IX/Section 504 Coordinator at 8353 University Blvd, Moon Township, PA 15108. Phone: (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.)

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 - 3.84 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 3.85 grade point average or higher 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.

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 includes - 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 and
3. Meet Pennsylvania Graduation Requirements – Act 158 (See Below)

Pennsylvania Graduation Requirements -- Act 158

Act 158 of 2018 (Act 158), which was signed into law by Governor Tom Wolf on October 24, 2018, expands upon the options that students have for meeting Pennsylvania's graduation requirements. While Act 158 maintains that students will still be required to take the Keystone Exams for federal accountability purposes, students may not be required to achieve proficiency on the Keystone Exams to graduate, as long as they meet the requirements set forth by one of the following defined options.

These options, which are outlined below, apply to students who will graduate in 2023 and beyond:

Option 1: Keystone Proficiency Pathway

- Student must earn a proficient or advanced score on all three Keystone Exams: Algebra I, Literature and Biology.

Option 2: Keystone Composite Pathway

Student must earn meet ALL of the following:

- Composite score of 4452 on the Algebra I, Literature and Biology Keystone Exams.
- Earn a 'proficient' or 'advanced' score on at least one of the three exams.
 - May NOT earn a 'Below Basic' score on either of the other two exams.

Option 3: Alternate Assessment Pathway

Student must earn a passing grade in the course(s) associated with each Keystone Exam on which the student did not earn at a proficient or advanced score. These courses include Algebra I, 10th grade English Language Arts and Biology.

Student must also achieve one of the following:

- Attainment of an established score on an approved alternate assessment (SAT, PSAT, ACT, ASVAB):
 - SAT: 1010
 - PSAT: 970
 - ACT: 21
 - ASVAB: The minimum score required for admittance to the armed services branch during the year the student graduates
- Gold Level on the ACT WorkKeys Assessment.
- Attainment of at least a '3' score on an Advanced Placement Program exam in an academic content area associated with each Keystone Exam on which the student did not achieve a proficient or advanced score.
- Successful completion of a concurrent enrollment course (ex. college-in-high school course) in an academic content area associated with each Keystone Exam in which the student did not achieve at least a proficient score.
- Successful completion of a pre-apprenticeship program; or
- Acceptance in an accredited 4-year nonprofit institution of higher education and evidence of the ability to enroll in college-level coursework.

Option 4: Evidence Based Pathway

Student must earn a passing grade in the course(s) associated with each Keystone Exam that a proficient or advanced score was not earned. These courses include Algebra I, 10th grade English Language Arts, and biology. Students must also demonstrate three pieces of evidence consistent with the student's goals and career plans, including:

- One of the following:
 - Attainment of an established score on the ACT WorkKeys assessment (Silver Level), a SAT subject test (score of 630), an Advanced Placement Program Exam (score of 3).
 - Acceptance to an accredited nonprofit institution of higher education other than a 4-year institution and evidence of the ability to enroll in college-level coursework.
 - Attainment of an [industry-recognized credential](#); or
 - Successful completion of a concurrent enrollment or postsecondary course; and
- Two additional pieces of evidence, including one or more of the options listed above, or: satisfactory completion of a service-learning project; attainment of a score of proficient or advanced on a Keystone Exam; a letter guaranteeing full-time employment; a certificate of successful completion of an internship or cooperative education program; or satisfactory compliance with the NCAA's core courses for college-bound student athletes with a minimum grade point average (GPA) of 2.0.

Option 5: CTE Pathway

Students who are Career and Technical Education (CTE) Concentrators must earn a passing grade in the course(s) associated with each Keystone Exam on which a proficient or advanced score was not earned. These courses include Algebra I, 10th grade English Language Arts, and biology. Student must also attain an industry-based competency certification related to the CTE Concentrator's program of study or demonstration of a high likelihood of success on an approved industry-based competency assessment or readiness for continued meaningful engagement in the CTE Concentrator's program of study. For further explanation of the CTE Pathway, please see [PDE's Act 6 guidance](#).

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 based on 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 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.

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. 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:

<https://www.ncaa.org/sports/2015/2/11/student-athletes-future-educational-resources.aspx>.

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.

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
Film as Lit
Poetry
Pre-AP English 9
Pre-AP English 10
Survey of British Literature
Survey of World Literature
Theatre and the Dramatic Arts
Writing Beyond the Classroom

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
Integrated Science 1
Earth/Space Science
Honors Human Anatomy &
Physiology
Physical Science
Physics
CHS Physics
AP Physics 1

MATHEMATICS

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 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 throughout the year. Juniors and seniors are invited 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.

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 invited 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 some colleges and universities. There are two sections on the SAT: Evidenced-Based Reading, Writing and Math. The Reading and Math sections are scored 200-800, with a perfect score being 1600.

- 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 SAT Reasoning Test is typically given to high school juniors and seniors. It is offered throughout the calendar year. 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.

Many colleges are test optional (do not require ACT or SAT tests) for admission and scholarships. It is the student's responsibility to verify with each planned university application whether test scores are needed for admission.

ASVAB

The Armed Services Vocational Aptitude Battery (ASVAB) is a multiple-aptitude assessment that measures developed abilities and helps predict future academic and occupational success in the military. It is administered to annually to more than one million military applicants, high school, and post-secondary students. Learn more about the ASVAB at: <https://www.officialasvab.com/>. The ASVAB is offered once in the fall and once in the spring at Moon Area High School.

Course Offerings and Selection

Art Department

Art 1-2-3-4	AP Art History
Creative Art*	Art Therapy
Photography 1*	Functional Ceramic Art*
Photography 2*	Hands-On Art
Digital Imaging 1-2-3	*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, 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 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 3 and teacher recommendation

Advanced Placement Art History

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

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

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, optical art, tie-dye and more.

<u>Photography 1</u>	Course 3525
Gr. 9, 10, 11, 12	.5 Credit
This one-semester course will explore the visual arts through digital photography. Students will research the history of photography and understand such components as camera functions, composition, basic lighting principles, file formats and print display. Each student will develop a portfolio of prints which will be displayed. A digital camera is required for this course.	
<u>Photography 2</u>	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.	
<i>Prerequisite: 80% or higher in Photography I and teacher recommendation</i>	
<u>Hands-On Art</u>	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 mâché. This class is designed for all levels of learning.	
<u>Functional Ceramic Art</u>	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.	
<u>Digital Imaging 1</u>	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 graphic design, creating digitally produced images using the software programs Adobe Illustrator and Photoshop. Students taking the course will acquire the necessary skills to manipulate photographs, create original 2-D illustrations and apply design and layout principles.	
<u>Digital Imaging 2</u>	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.	
<i>Prerequisite: 80% or higher in Digital 1 and teacher recommendation</i>	
<u>Digital Imaging 3</u>	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.	

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*	<i>*Indicates a one-semester course</i>

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, 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 expertise.

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

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

Visual Basic Programming 1*	AP Computer Science Principles
Visual Basic Programming 2*	CHS Information Technology 1*
Java Programming 1*	CHS Information Technology 2*
Java Programming 2*	CHS Microsoft Office Applications*
Cybersecurity Honors	Webpage Design*

*Indicates a one-semester course

Visual Basic Programming 1

Gr. 9, 10, 11, 12

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.

Course 4035

.5 Credit

Visual Basic Programming 2

Gr. 9, 10, 11, 12

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

Course 4040

.5 Credit

Java Programming 1

Gr. 9, 10, 11, 12

This course is designed for the student who would like to continue his or her study of computer science by using the Java Programming Language. This programming language is widely used by colleges, industry and on the AP Computer Science Exam. Java is also the basis for Android application development. This course is recommended for prospective computer science, mathematical, physics and/or engineering students.

Prerequisite: 80% or higher in Linear Algebra 1

Course 4045

.5 Credit

Java Programming 2

Gr. 9, 10, 11, 12

The Java Programming 2 course extends the study of the Java programming language. This class will include small and large programming projects using Java and the Greenfoot IDE. These projects will include several Java based games that require students to use their creativity, problem solving, mathematics, reverse engineering, and logic skills.

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

Course 4050

.5 Credit

Cybersecurity Honors

Gr. 10, 11, 12

This year long course is designed for the student who would like to continue his or her study of computer science by focusing on Cybersecurity. This course will lay the foundation for understanding cyber law and policy, Linux, networking technology basics, risk assessment, cryptography, and a variety of cybersecurity tools – all the essential knowledge and skills needed to begin a future in the cybersecurity workforce. Not only does this cybersecurity course introduce the breadth of cybersecurity concepts and skills to students, but it also prepares them to verify their technical know-how through the CompTIA Security+ Certification Exam. This professional exam is optional and must be scheduled and paid for by the student.

Prerequisite: Students must have earned an 80% or higher in Java 1, Visual Basic 1, or AP Computer Science Principles.

Course 4052

1 Credit

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

CHS Information Technology 1*

Course 4055

Gr. 10, 11, 12

.5 Credit

This course provides the student with a view of hardware, operating systems, and applications as integrated systems. Fundamental concepts and constraints of computer architectures are presented. Specific examples of single-user and enterprise operating systems, e.g., Windows 10, Linux, and IBM mainframe z/OS, are used to illustrate the range of tasks that an operating system accomplishes. Programming languages, applications, application development, compilation and execution concepts are discussed. Distributive systems, storage area networks and cloud architectures are introduced.

***The opportunity to earn three college credits and one high school credit can potentially be awarded for successful completion.**

CHS Information Technology 2*

Course 4060

Gr. 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 expertise.

Prerequisite: Intro to Business & Marketing Essentials and teacher recommendation

CHS Microsoft Office Applications *

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.

*** Optional College Credit: 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.**

Students must earn a grade of 70% or higher to receive college credits

Web Page Design*

Course 4085

Gr. 9, 10, 11, 12

.5 Credit

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 Art Department

<u>Required Courses</u>	<u>Elective Courses</u>
English 9	Communications & Public Speaking*
English 9 – Pre AP	Theatre Arts*
English 10	Multimedia Journalism 1*
English 10 – Pre AP	Print Journalism 2-3*
English 11	Print Journalism 4*
English 11 - College Prep	Photojournalism 2-3*
English 11 – AP Language & Composition	Photojournalism 4*
English 12	Contemporary Issues*
English 12 – AP Literature & Composition	
	<i>*Indicates a one-semester course</i>

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 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 recommendation

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.

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, supported analysis and composition. Students will continue to develop their close reading and evidence analysis skills. They will engage in reading a variety of genres along with correlating literary techniques and theories to come 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 English 9, or 80% or higher in Pre-AP English 9 and teacher recommendation

Average hours of homework per week: 2-3.

English 11

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. Writing for the workplace, academic writing assignments, discussion and formal speaking assignments are required for this course.

Failure to complete junior Career Project will result in repeating your 11th grade English class.

English 11 College Prep

Course 1025

Gr. 11

1 Credit

This rigorous course is designed for students to prepare for college-bound juniors for college reading, writing and communication skills. 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. Writing assignments, discussion, project- based and critical and personal evaluations are an integral part of this course. This course will also include English based SAT preparation and implementation of the Junior Career Project.

Failure to complete junior Career Project will result in repeating your 11th grade English class.

English 11 Advanced Placement Language & Composition

Course 1032

Gr. 11

1 Credit

This introductory college-level composition course is designed to prepare 11th 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 11th 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

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, as well as critically analyze film and documentary texts. It will further reinforce written and verbal communications skills; students will examine career and educational opportunities available in life after high school.

Prerequisite: English 11 or teacher recommendation

English 12 Advanced Placement Literature & Composition

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. The focus of the course is on reading, analyzing, and writing about literature from various time periods. Students will read several novels, short fiction pieces, poetry, and dramas. Students engage in close reading and critical analysis of literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style and themes, as well as its use of figurative language, imagery and symbolism. Writing assignments include expository, analytical and argumentative essays that require students to analyze and interpret literary works. 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 & Literary Theory*	Contemporary Non-Fiction*
Poetry*	Contemporary Non-Fiction Workshop*
Survey of British Literature*	Writing Beyond the Classroom*
Survey of World Literature*	Film as Literature*
Theatre and Dramatic Arts*	<i>*Indicates a one-semester course</i>

Writing Beyond the Classroom

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, grammar, and essential presentation strategies.

Contemporary Fiction and Literacy Theory

Course 1040

Gr. 12

.5 Credit

Designed for the college-bound student, this course uses a literary analysis model approach to assist students with reading, analyzing, discussing, and writing about critically acclaimed works of fiction from the twentieth and twenty-first centuries. Students will explore various critical perspectives when reading and evaluating select works. Analytical writing and discussion skills are emphasized.

Poetry

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. 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

Course 1042

Gr. 12

.5 Credit

In this fascinating 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. Beginning their study with the popular epic Beowulf and Norse Mythology. Students will continue through to 21st century contemporary British literature (including drama, poetry and even comedic British writing), students will be well prepared for post-secondary education through the completion of reading, writing, research and speaking skills based on British literature.

Survey of World Literature

Course 1043

Gr. 12

.5 Credit

Designed for the college-bound student, this survey course covers classic and contemporary literature from around the globe to broaden perspective and provide a historical context behind chosen works. Selections include mythology, drama, poetry, short stories, a novella, essays, and speeches. Students will prepare for post-secondary education through the completion of reading, writing, speaking, listening and research skills based on literature selections. Classic and contemporary selections may be paired.

Film as Literature

Course 1044

Gr. 12

.5 Credit

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

Theatre and Dramatic Arts

Course 1045

Gr. 12

.5 Credit

Designed for the college-bound student, this course focuses on an analytical reading of several popular contemporary and famous historical plays and includes 1-2 field trips: one to the City Theater's Playwriting Competition and one to a theatre production, if available. Many various works 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. Students will be encouraged to try their hand at writing scenes and will be encouraged to submit a one-act play to the City Theatre’s playwriting competition.

Contemporary Nonfiction

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 commentary, psychological study, science-medical writing, a feature article, personal essay and memoir. 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 writing skills are emphasized.

Creative Nonfiction Writing Workshop

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, memoir, travel writing, meditative essays, cultural criticism) and 2) that which seeks to document the experience of others (nature writing, historical narratives, podcasts, profiles). Coursework will include a mixture of reading discussions, drafting workshops, critical analysis of other’s writing, 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.

English Language Arts Electives

Communications & Public Speaking	Print Journalism 4*
Theatre Arts	Photojournalism 2-3*
Multimedia Journalism 1*	Photojournalism 4*
Print Journalism 2-3*	Contemporary Issues
<i>*Indicates a one-semester course</i>	

Communications and Public Speaking

Course 1050

Gr. 9, 10, 11, 12

.5 Credit

This is a one-semester elective course designed to help students who desire to improve their communication skills including listening, speaking and body language. Students will analyze their audience prior to speaking on many different topics including toasts, eulogies, speeches of introduction, Pecha Kucha talks, poetry readings and persuasive speeches. Students will also engage in lively, prepared debates and work with the television studio as talent utilizing the teleprompter. This is a fun-filled, hands-on class with a safe and happy atmosphere.

Theatre Arts

Course 1036

Gr. 9, 10, 11, 12

1 Credit

The Theatre Arts course is designed to enhance students’ understanding of the theatre by surveying all phases of theatre. This year long course is a combination of theory and workshop for any student who is interested in exploring the complexities of theatre. Course activities include examination of terminology, history, dramatic works, stage combat, set design, costumes, directing, acting, role playing and contemporary theatre. Students will become skilled at employing acting techniques, proper body control, vocalization methods and character development. Additionally, an emphasis on technical theatre will be infused through lighting, set construction, sound design, make-up and costumes. No prerequisite is needed to enroll in year one.

Multimedia Journalism 1

Course 1055

Gr. 9, 10, 11, 12

1 Credit

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, law and ethics and properties of layout and design. This course is recommended for students who are interested in a career in journalism, broadcasting, or communications. It is also a prerequisite for students to be on the newspaper or yearbook staff. Students should have a sincere interest in writing and a willingness to work cooperatively with others.

Print Journalism 2-3

Course 1060

Gr. 10, 11, 12

1 Credit

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, MoonBeams. Students will become broadly engaged in all aspects of scholastic newspaper production.

Prerequisite: Multimedia Journalism 1 or teacher recommendation

Print Journalism 4

Course 1060

Gr. 12

1 Credit

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, or teacher recommendation

Photo Journalism 2 – 3

Course 1070

Gr. 10, 11, 12

1 Credit

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 to cover school events. The course will expand and sharpen students' knowledge, skills, and aptitudes for producing a high school yearbook.

Prerequisite: Multimedia Journalism 1, or Photography 1, or teacher recommendation

Photo Journalism 4

Course 1070

Gr. 12

1 Credit

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 2-3 or teacher recommendation

Contemporary Issues

Course 1080

Gr. 10, 11, 12

.5 Credit

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 and Wellness	Child Development
Exploration of Cooking & Nutrition*	Advanced Child Development
Mastery of Cooking*	Lifetime Readiness
The Art of Baking*	
*Indicates a one-semester course	

Personal Nutrition and Wellness

Course 4535

Gr. 9, 10, 11, 12

.5 Credit

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 and modify recipes to create a happier, healthier lifestyle. Topics will include nutrients, eating disorders, weight control, grains, fruits, vegetables, etiquette, meal planning, 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

Gr. 9, 10, 11, 12

.5 Credit

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, protein foods, dairy, eggs, sandwiches, salads, knife skills, event planning and budgeting breakfast foods. 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 4540

Gr. 9, 10, 11, 12

.5 Credit

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

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

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

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

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

Algebra 1

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: Teacher Recommendation

Course 2005

1 Credit

Core Geometry

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: 60% or higher in Algebra 1 and a teacher recommendation

Course 2010

1 Credit

Geometry

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, points of concurrency, 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:

1. **70% or higher in 8th grade Algebra 1, a 'Proficient' on the Algebra One Keystone and a teacher recommendation;**
or
2. **70% or higher in 9th grade Algebra 1 and a teacher recommendation**

Course 2015

1 Credit

Geometry Honors

Gr. 9, 10, 11

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, points of concurrency, 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 a teacher recommendation

Average hours of homework per week: 5

Course 2020

1 Credit

Algebra 2

Course 2025

Gr. 9, 10, 11, 12

1 Credit

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 a teacher recommendation

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

Algebra 2 – Honors

Course 2030

Gr. 9, 10, 11, 12

1 Credit

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

Gr. 11, 12

1 Credit

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 most of 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: 60% or higher in Core Geometry and teacher recommendation

Algebra 2B

Course 2040

Gr. 12

1 Credit

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 most 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 most 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

Course 2050

Gr. 10, 11, 12

1 Credit

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

Course 2055

Gr. 10, 11, 12

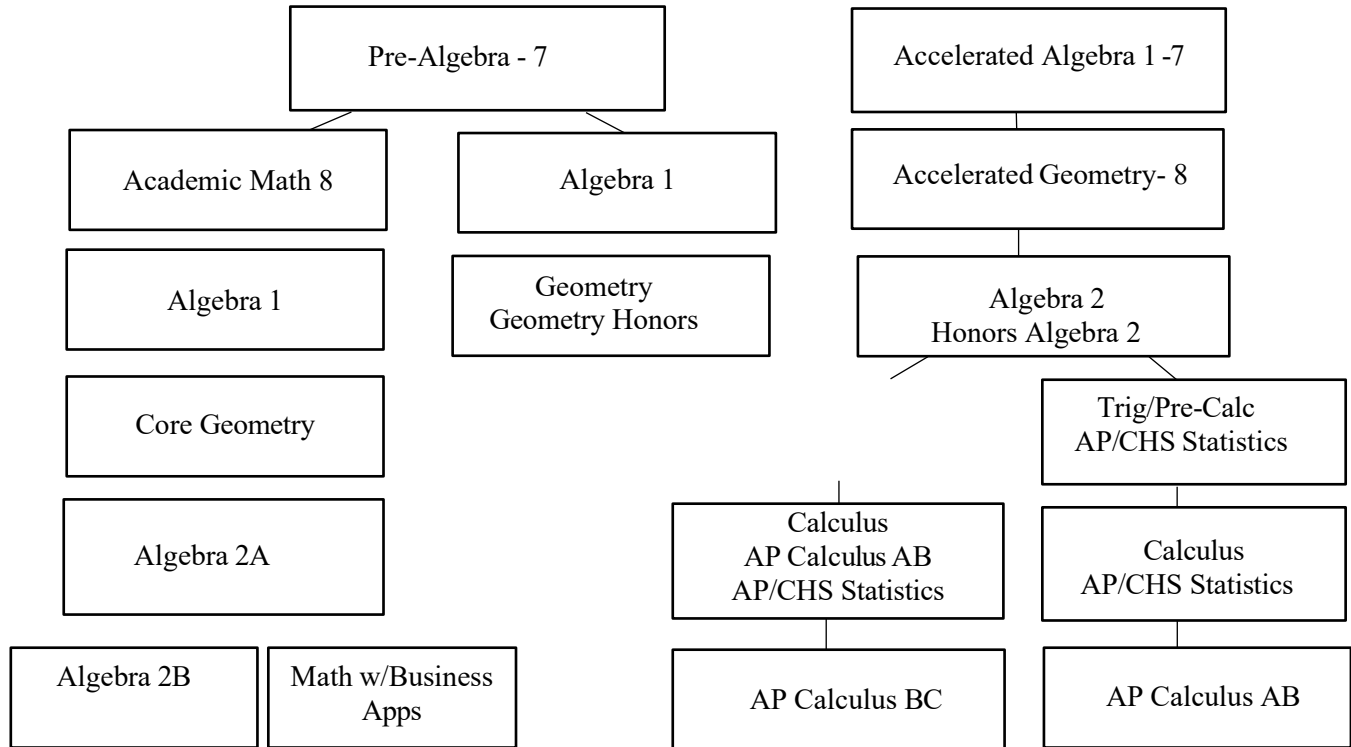
1 Credit

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 - 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

<u>Calculus</u>	Course 2060
Gr. 11, 12	1 Credit
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	
<u>Advanced Placement Calculus AB</u>	Course 2065
Gr. 11, 12	1 Credit
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	
<u>Advanced Placement Calculus BC</u>	Course 2070
Gr. 11, 12	1 Credit
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. Teachers 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	
<u>Advanced Placement/College in High School – Basic Statistics</u>	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	
*University of Pittsburgh's Course 2080 is offered and provides 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	
<u>Mathematics with Business Applications</u>	Course 2085
Gr. 11, 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	
<u>Math Lab</u>	Course 2090
Gr. 9, 10, 11, 12	.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 Class	Chamber String Ensemble - Honors
Woodwind Class	Music Technology*
Concert Band	Comprehensive Musicianship
Symphonic Band Honors	
Percussion Ensemble	Concert Choir
Percussion Ensemble - Honors	Honors Choir
String Ensemble	<i>*Indicates a one-semester course</i>

Brass Class

Course 3560

Gr. 9, 10, 11, 12

1 Credit

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

Gr. 9, 10, 11, 12

.5 Credit

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

Concert Band

Course 3565

Gr. 9, 10, 11, 12

1 Credit

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.

Symphonic Band Honors

Course 3570

Gr. 9, 10, 11, 12

1 Credit

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

Percussion Ensemble

Course 3575

Gr. 9, 10, 11, 12

1 Credit

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

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 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

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

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

Music Technology

Course 3582

Gr. 9, 10, 11, 12

.5 Credit

This hands on, one semester course introduces the theory and fundamentals of using software and hardware for producing and creating music. Topics to be included are multi-track recording, microphones, MIDI, music notation software, digital music editing, and digital audio workstations. Students in MAHS grades 9-12 are eligible to enroll in this class, regardless of musical experience.

Comprehensive Musicianship

Course 3583

Gr. 10, 11, 12

1 Credit

applies to theory/compositional elements studies. Students will also study digital sampling and live multitrack 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.

PREREQUISITE: Students must meet one of the following criteria to be eligible for this course: enrolled in a MAHS performing music ensemble; successful completion of MAHS Music Technology course; pass the non-performance entrance examination in the spring

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 daily 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	Team Sports 11-12*
Adaptive Physical Education* 9-10-11-12	Athletic Conditioning 11-12*
Health & Wellness 9*	Partners in Physical Education 11-12*
Health Education 10*	Independent Physical Education 11-12*
Lifetime Fitness 11-12*	
<i>*Indicates a one-semester course</i>	

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

Physical Education

.5 Credit

Gr. 9

Course 0500

Gr. 10

Course 0505

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.

Required P. E. Attire & Equipment: Grades 9 and 10

Red, white, black, or grey athletic shorts, t-shirt and/or sweats, athletic shoes, swimsuit, towel, and lock for gym locker

Adaptive Physical Education

Gr. 9 Course 0530

Gr. 11 Course 0540

Gr. 10 Course 0535

Gr. 12 Course 0545

Health & Wellness

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

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

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, weightlifting, 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

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, angle ball, water games, and cardio games.

Athletic Conditioning

.5 Credit

Gr. 11, 12 – Fall

Course 0517

Gr. 11, 12 – Spring

Course 0518

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

.5 Credit

Gr. 11, 12 – Fall

Course 0534

Gr. 11, 12 – Spring

Course 0535

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, aquatics, and Bocce. The goal of the course is to facilitate an appreciation for lifelong fitness and wellness through positive peer relationships. Partners in Physical Education also supports the development of leadership skills and empowers all students to foster an inclusive class and school- wide environment. Additionally, peer students will be responsible for leading warmups and sport skill stations as well as designing and instructing an engaging, differentiated lesson plan.

Prerequisite: Application Process and 2 Teacher Recommendations

Special Consideration: May be given to members of Unified Sports Bocce Team Partners & Members of Forever Friends Club

Independent Physical Education

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. The principal may consider other unusual circumstances.
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

Integrated Science	Physics
Biology - Applied	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

Integrated Science

Course 2506

Gr. 9

1 Credit

This comprehensive lab-based course is designed to expose 9th grade students to the difference science classes offered at the high school. Students will spend time learning about the process of science and how scientist use various tools and equipment to successfully carry out studies. Students will also be introduced to the basic building blocks of Chemistry, the intricacies of the Earth and Solar System, and the fundamentals of our biological world. Students will be expected to analyze, interpret, and make predictions based on given data. Scientific calculators will be used in this course.

Prerequisite: Recommendation from 8th grade science teacher

Biology – Applied

Course 2510

Gr. 10, 11, 12

1 Credit

This is a year-long, full-credit course that continues the study of applied science introduced in Integrated Science 1. This course emphasizes life science and provides hands-on experience e which demonstrates the practical use of biology in our society. Students are required to take the Keystone Exam upon completion of this course.

Prerequisite: Successful completion of Integrated Science and teacher recommendation

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 Integrated Science 9

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

Course 2530

Gr. 11, 12

1 Credit

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

Course 2535

Gr. 10, 11, 12

1 Credit

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 and biology class; recommendation from current science teacher and math teacher is required*

Chemistry – Honors

Course 2540

Gr. 10, 11, 12

1 Credit

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

Course 2545

Gr. 10, 11, 12

1 Credit

This will be lab-based college-prep course exploring principles of mechanics, waves and electricity. It will be based on the integration of physics principles with algebra, trigonometry, and chemistry concepts.

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

Advanced Placement Physics 1

Course 2550

Gr. 10, 11, 12

1 Credit

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

Course 2555

Gr. 11, 12

1 Credit

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

Course 2560

Gr. 11, 12

1 Credit

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

Gr. 11, 12

.5 Credit

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

College in High School Physics

Course 2565

Gr. 11, 12

.5 Credit

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; minimum Calculus concurrently

Average hours of homework per week: 2

Advanced Placement Biology

Course 2570

Gr. 11, 12

1 Credit

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

Gr. 11, 12

.5 Credit

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 Human Anatomy & Physiology AP Chemistry AP Biology	AP Chemistry AP Biology CHS Physics Human Anatomy & Physiology Earth/Space Science
<u>Integrated Science 1</u>	<u>Biology</u> <u>Honors Biology</u>	<u>Chemistry</u>	<i>Electives</i>
		<u>Honors Chemistry</u>	Physics
		<u>Physical Science</u>	AP Physics 1 AP Chemistry AP
<u>Integrated Science 1</u>	<u>Applied Biology</u> <u>Biology</u>	<i>Electives</i>	Biology
		Human Anatomy & Physiology Earth/Space Science	Human Anatomy & Physiology Earth/Space Science
<u>Integrated Science 1</u>	<u>Applied Biology</u> <u>Biology</u>	<u>Physical Science</u>	<i>Electives</i>
		<u>Chemistry</u>	Earth/Space Science Chemistry Physics
<p>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.</p> <p>All science course selections must have the approval of the student's current science teacher. Please Note: These are recommended, not required, sequences.</p>			

Social Studies Department

Required Courses		Elective Courses
Gr. 9	U.S. History 1865 to 1945	Ethics * (Gr. 11-12) Practical Justice * (Gr 11-12) Psychology * (Gr 11-12) Sociology * (Gr 11-12) *Indicates a one-semester course
Gr. 9	U.S. History 1865 to 1945 Honors	
Gr. 10	Comparative World History	
Gr. 10	Comparative World History - Honors	
Gr. 10	AP European World History	
Gr. 11	Contemporary Global History & Current Events	
Gr. 11	Contemporary Global History & Current Events-Honors	
Gr. 11	AP U.S. History	
Gr. 12	Civics and Economics	
Gr. 12	AP Government & U.S. Government/Politics	

U.S. History 1865 to 1945

Course 1500

Gr. 9

1 Credit

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

Gr. 9

1 Credit

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

Gr. 10

1 Credit

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

Gr. 10

1 Credit

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

Course 1535

Gr. 10

1 Credit

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

Course 1525

Gr. 11

1 Credit

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

Course 1530

Gr. 11

1 Credit

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

Course 1520

Gr. 11

1 Credit

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

Course 1540

Gr. 12

1 Credit

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

Advanced Placement U.S. Government/Politics

Course 1545

Gr. 12

1 Credit

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* – 11,12	Psychology* – 11, 12
Practical Justice* – 11, 12	Sociology* - 11, 12
*Indicates a one-semester course	

Ethics

Course 1550

Gr. 11, 12

.5 Credit

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

Gr. 11, 12

.5 Credit

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

Gr. 11, 12

.5 Credit

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 an in-depth research project on a psychological issue of their choice.

Sociology

Course 1565

Gr. 11, 12

.5 Credit

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	Reading Strategies – Year 1
Core Geometry	Reading Strategies – Year 2
Consumer Math	Executive Functioning Skills/Study Skills
	Reading Strategies – Year 3
	Reading & Writing Strategies

Algebra 1

Course 6205

Gr. 9, 10

1 Credit

This year long course focuses on linear and quadratic relationships. During the linear portion of the course, students will study linear expressions, equations and inequalities. Students will also solve systems of linear equations, represent linear equations and inequalities, and graph linear functions. During the quadratics portion of the course, students will study quadratic and exponential expressions, equations and relationships. The course is intended for students in the Learning Support Math Program. Students are required to take the Keystone Exam upon completion of this course.

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

Prerequisite: teacher recommendation

Core Geometry

Course 6210

Gr. 10, 11

1 Credit

This course focuses on the key topics that provide a strong foundation in the essentials of geometry. Core geometry is intended for students in the Learning Support Math Program, Grades 10 or 11 who have completed Algebra One.

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 1 and Consumer Math 2. Any student in 10th, 11th or 12th grade learning support math may take this course for one or two years.

Reading Strategies – Year 1

Course 6405

Gr. 9, 10, 11, 12

1 Credit

This class will provide students with intensive instruction to develop fundamental reading skills. Instructional goals include growth and development of decoding, accuracy and automaticity for word recognition, spelling, and proofreading proficiency.

Development of reading skills will focus on vocabulary and passage comprehension. Reading comprehension instruction focuses heavily on prosody, intonation, and retell/comprehension review after reading a passage. Extensive opportunities for applying reading strategies for before, during and after reading will be provided. Students are encouraged to continue through the entire 3-year program. The course is intended for students in the Learning Support Program.

Upon successful completion of Reading Strategies – Year 1, students will be recommended for Reading Strategies – Year 2, which is then followed by Reading Strategies – Year 3.

Prerequisite: teacher recommendation

Reading Strategies – Year 2

Course 6406

Gr. 10, 11, 12

1 Credit

This class follows successful completion of Reading Strategies – Year 1 and will continue providing students with intensive instruction to develop fundamental reading skills. Instructional goals include the goals include the continued growth and development of decoding, accuracy and automaticity for word recognition, spelling and proofreading proficiency. Development of reading skills will continue to focus on vocabulary and passage comprehension. Reading comprehension instruction focuses heavily on prosody, intonation, and retell/comprehension review after reading a passage. Extensive opportunities for applying reading strategies for before, during and after reading will be provided. Students are encouraged to continue through the entire 3-year program. The course is intended for students in the Learning Support Program.

Upon successful completion of Reading Strategies – Year 2, students will be recommended for Reading Strategies – Year 3

Prerequisite: Reading Strategies – Year 1 Successful Completion; teacher recommendation

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.

Reading Strategies – Year 3

Course 6408

Gr. 10, 11, 12

1 Credit

This class follows successful completion of Reading Strategies – Year 2 and will continue providing students with intensive instruction to develop fundamental reading skills. Instructional goals include the continued growth and development of decoding, accuracy and automaticity for word recognition, spelling and proofreading proficiency. Development of reading skills will continue to focus on vocabulary and passage comprehension. Reading comprehension instruction focuses heavily on prosody, intonation and retell/comprehension review after reading a passage. Extensive opportunities for applying reading strategies for before, during and after reading will be provided. The course is intended for students in the Learning Support Program

Prerequisite: Reading Strategies – Year 2; teacher recommendation

Reading and Writing Strategies

Course 6411

Gr. 9, 10, 11, 12

1 Credit

This class will provide students the opportunity to improve fundamental reading and writing skills through intensive instruction. Extensive opportunities for applying reading strategies for before, during and after reading will be provided. Instructional goals include strengthening word recognition, comprehension, and proofreading skills. Specific lessons provide opportunities for students to work on their instructional and independent levels to improve fluency and retell, accurately identify, and utilize context clues and write cohesive, focused paragraphs. This course is intended for students in the Learning Support Program.

Prerequisite: teacher recommendation

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 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

Art Therapy – Course 3517

Partners in PE – Course 0530

Lifetime Readiness – Course 4560

Concert Choir – Course 3589, Section 3A

Vocational Education – Course 6320

Technology Education Department

Integrated Technology*	Computer Aided Drafting & Design
Invention Laboratory*	Engineering Design 1/2 Honors
Wood Fabrication	Architectural Drawing & Design
Metals Fabrication	Television Studio & Media Production 1
Advanced Wood Fabrication	Television Studio & Media Production 2/3
	MAHS TV*

*Indicates a one-semester course

Integrated Technology

Gr. 9, 10, 11, 12

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.

Course 4500

.5 Credit

Invention Laboratory

Gr. 11, 12

Students will work in a group alongside professional engineers to collaborate and assist them with current design problems within their company. Students will develop solutions to the real-world problems proposed by local businesses and organizations that require a wide range of skills and creative thinking. This course will require students to participate in problem-based and project-based learning activities, inquiry learning tasks, and use the technology to present design solutions at the cooperating business

Course 4502

.5 Credit

Prerequisite: Honors Engineering Design 1

Wood Fabrication

Gr. 9, 10, 11, 12

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.

Course 4505

1 Credit

Metals Fabrication

Gr. 9, 10, 11, 12

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.

Course 4510

1 Credit

Advanced Wood Fabrication

Gr. 10, 11, 12

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.

Course 4515

1 Credit

Prerequisite: Manufacturing

Computer Aided Drafting and Design (CADD)

Gr. 9, 10, 11, 12

This class follows successful completion of Reading Strategies – Year 1 and will continue providing students with intensive 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.

Course 4520

1 Credit

Engineering Design ½ Honors

Gr. 10, 11, 12

Limit 2 years

Honors Engineering Design is a course that develops application, creativity, and problem-solving skills with emphasis on 3D modeling with Inventor software. This course emphasizes following the design process to develop unique solutions to problems such as designing a stadium, hydraulic arm, airboats, and boomerangs. A year-long portfolio will be created throughout the year.

Engineering Design 1 Co-requisite: Algebra 2

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

Course 4525

1 Credit

Architectural Drawing and Design

Gr. 10, 11, 12

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.

Course 4530

1 Credit

Television Studio and Media Production 1

Gr. 9, 10, 11, 12

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.

Course 4531

1 Credit

Television Studio and Media Production 2/3

Gr. 10, 11, 12

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.

Course 4532

1 Credit

Prerequisite: Television Studio and Media Production 1

MAHS – TV

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.

Course 4533

.5 Credit

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

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

Course 3000

1 Credit

French 2

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

Course 3005

1 Credit

French 3

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

Course 3010

1 Credit

French 4

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

Course 3015

1 Credit

French 4 – Honors

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

Course 3020

1 Credit

French 5

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

Course 3025

1 Credit

French 5 – Honors

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.

Course 3030

1 Credit

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

Average hours of homework per week: 4-6

German 1

Course 3035

Gr. 9, 10, 11, 12

1 Credit

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

Course 3040

Gr. 9, 10, 11, 12

1 Credit

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 using games, hands-on activities, and multimedia resources.

Prerequisite: 70% or higher in German 1

German 3

Course 3045

Gr. 9, 10, 11, 12

1 Credit

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

Course 3050

Gr. 9, 10, 11, 12

1 Credit

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

Course 3055

Gr. 9, 10, 11, 12

1 Credit

This course is designed for students who demonstrate outstanding ability in grammar, writing, reading, and speaking skills. 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

Course 3060

Gr. 9, 10, 11, 12

1 Credit

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

Course 3065

Gr. 9, 10, 11, 12

1 Credit

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

<u>Spanish 1</u>	Course 3070
Gr. 9, 10, 11, 12	1 Credit
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	
<u>Spanish 2</u>	Course 3075
Gr. 9, 10, 11, 12	1 Credit
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	
<u>Spanish 3</u>	Course 3080
Gr. 9, 10, 11, 12	1 Credit
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, multimedia and speaking activities are used to develop communication skills.	
Prerequisite: 70% or higher in Spanish 2	
<u>Spanish 4</u>	Course 3085
Gr. 9, 10, 11, 12	1 Credit
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	
<u>Spanish 4 – Honors</u>	Course 3090
Gr. 9, 10, 11, 12	1 Credit
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	
<u>Spanish 5</u>	Course 3095
Gr. 9, 10, 11, 12	1 Credit
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	
<u>Spanish 5 – Honors</u>	Course 3100
Gr. 9, 10, 11, 12	1 Credit
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

** 9th Grade Students: MUST submit their PWW application via the PWW portal by March 1. No exceptions. Students with any attendance or discipline issues will be subject to administrative review and application may be denied.

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 to enroll and remain in a Parkway program.

Auto Body Repair

Course 5030

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

3 Credits

Automotive Technology is certified by the National Automotive Technology Education Foundation (NATEF) and affiliated with all 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

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

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.

Cosmetology 1

Course 5040

Cosmetology 2

PM Course 5045 / AM Course 5046

Cosmetology 3

Course 5050

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:

Nail Technician License

Course 5051

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.

Cosmetology Teacher's License

Course 5052

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.

Construction Technology Cluster

Course 5000

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.

Carpentry

Course 5003

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.**

Electrical Systems Technology

Course

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

Course 5006

3 Credits

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

Course 5075

3 Credits

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

Course 5060

3 Credits

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)

Course 5064

3 Credits

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)

Course 5062

3 Credits

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

Course 5023

3 Credits

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 Certiport.

Veterinary Technology

Course 5077

3 Credits

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

Course 5070

3 Credits

The Public Safety Technology program focuses on careers relating to emergency medical services, firefighting, law enforcement, and emergency management services. 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)

Course 5080

3 Credits

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

Course 5073

3 Credits

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.

Power Motorsports Technology

Course 5033

3 Credits

Power Motorsports Technology teaches students to diagnose, maintain and repair utility vehicles, all-terrain vehicles, including side-by-sides, motorcycles, watercrafts as well as outdoor power machines, including lawn and garden equipment. Students will learn the principles of engine operation, understand basic electricity, service and maintain fuel and carburetor systems, transmissions, and powertrain systems used on several types of recreational and lawn & garden equipment. Students may have the opportunity to earn the following certifications: PA Emissions Certification; S/P2, OSHA 10.

Parkway West Academic Course Offerings

Principles of Technology

Course 5115

1 Credits

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

Course 5117

1 Credits

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

Course 5120

1 Credits

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

Course 5125

1 Credits

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

Course 5130

1 Credits

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

Course 5130

1 Credits

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 – Visit <https://www.ccbc.edu/high-school-academies> for more information

Begin an exciting college education during 11th or 12th 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.

Aviation Academy	For students interested in a career as a professional pilot, air traffic control or aerospace management
Health Academy	For students interested in health careers such as nursing, physical therapist, respiratory therapist, nurse practitioner, physician assistant
STEM Academy	For students who are interested in careers in Math, Science and Technology related fields.
Criminal Justice Academy	For students interested in a career in law enforcement
Mascaro Construction Academy	For students interested in learning technical skills that can then be applied to the planning, design, and construction of a project, from beginning to end.
Education Academy	For students interested in a career in education.

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. 11th and 12th 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>	<i>4.0</i>					
<i>Social Studies (4 years)</i>	<i>4.0</i>					
<i>Mathematics (3 years)</i>	<i>3.0</i>					
<i>Science (3 years)</i>	<i>3.0</i>					
<i>Physical Education</i>	<i>2.0</i>					
<i>Health 10</i>	<i>.05</i>					
<i>Elective Arts & Humanities</i>	<i>2.0</i>					
<i>Additional Electives</i>	<i>5.5</i>					
<i>Totals</i>	<i>24.0</i>					