Curriculum Guide

Muhlenberg School District

Muhlenberg High School
Reading, PA

2023-2024

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It is the policy of the Muhlenberg School District not to discriminate on the basis of disability, race, color, gender, or national origin in its education programs, activities, or employment policies as required by Title IX of the Civil Rights Act of 1964, Title IX of the 1972 Education Amendments, or Section 504 of the Rehabilitation Act of 1973. Inquiries regarding compliance should be directed to the Office of the Assistant Superintendent, 801 Bellevue Avenue, Reading, PA 19605, telephone 610- 921-8000, or to the Director of the Office for Civil Rights, Department of Education, Washington, DC.

Purpose of This Manual

PURPOSE OF THIS MANUAL

This guide to the educational programs available at Muhlenberg High School shows that approximately two-thirds of the courses selected each year are required, while the other third of the courses are elective. The elective courses should reflect a student's academic abilities, achievements, interests, and educational or career goals. The faculty and Counseling Department will assist students in making course selections. Careful consideration by students and their parents, together with this assistance from the faculty and Counseling Department, should result in a program that satisfies the student's needs.

PLANNING A PROGRAM

The students, parents, teachers, and counselors should all be involved in the planning of a sound educational program. This program, as it unfolds and develops from year to year, should result in an enjoyable, successful, and profitable high school career. The students' ability to continue their education or their readiness for employment will determine how successful this program has been. In planning this program students should:

1. Establish personal goals.
2. Evaluate personal interests, aptitudes, and needs.
3. Learn career entrance requirements as soon as possible. If post-secondary education is required, find out about the entrance requirements as soon as possible.
4. If college is anticipated, visit as many colleges as possible during the 11th & 12th grades.
5. Consult with parents, teachers, and counselors in order to benefit from their experience and the information they can make available.
6. Be prepared to modify the program as their interests change.
7. Make sure all graduation requirements are met.

The student will receive a completed schedule at the end of the school year. If there are concerns with this schedule, an appointment should be made with the high school counselor. After this time, making schedule changes will be very difficult and only the following reasons will be considered valid for such changes:

1. The course is beyond the academic ability of the student.
2. A major career change makes other courses more important in the student's schedule.

PATHWAYS TO SUCCESS

Muhlenberg School District

K-4
Career Awareness

5-8
Career Exploration

PATHWAY CHOICE
Arts & Communications
Business, Finance & Information Technology
Engineering & Industrial Technology
Human Services
Science & Health

Muhlenberg High School
9-12
Follow Pathway for Course Selection

SUCCESSFUL CAREER AND LIFELONG LEARNING

PATHWAYS TO SUCCESS

Connecting Career, Curriculum, and Character Education

WHAT ARE CAREER PATHWAYS?

Each pathway is a broad group of careers that share similar characteristics and whose employment requirements call for many common interests, strengths, and competencies. A chosen Pathway focuses a student's courses toward preparing them for a specific goal area.

WHY SHOULD I CHOOSE A CAREER PATHWAY?

- To help focus on a career area that matches interests in high school
- To help set goals and discover classes necessary to achieve those goals
- To create career awareness and encourage planning for post-secondary education and opportunities
- To provide knowledge that relates your high school education to the world after graduation

HOW DO I CHOOSE A CAREER PATHWAY?

- You will research various career fields in 9th grade
- Your counselors, parents, and teachers can assist you with this choice

WILL THERE BE A MY CHANGE IN MY MAJOR ACADEMIC STUDIES?

- No, you will still take all required core courses at the AP, honors, or college prep levels
- You will still follow the graduation requirements listed

THE 5 PATHWAY OPTIONS

Arts & Communication (AC)- Designed to cultivate students' awareness, interpretation, application, and production of visual, verbal, and written work.

- Performing Arts
- Visual Arts
- Publishing Arts

Business, Finance & Information Technology (BFI)- Designed to prepare students for careers in the world of business, finance, and information technology.

- Marketing, Sales, and Service
- Finance
- Information Technology
- Business Management

Engineering & Industrial Technology (EI)- Designed to cultivate students' interests, awareness, and application to areas related to technologies necessary to design, develop, install, or maintain physical systems.

- Engineering and Engineering Technology
- Construction and Architecture
- Manufacturing
- Transportation, Distribution, and Logistics

Human Services (HS)- Designed to cultivate students' interests, skills, and experience for employment in careers related to human and family needs.

- Counseling and Personal Care
- Education
- Law, Public Safety and Government
- Hospitality and Tourism

Sciences & Health (SH)- Designed to cultivate students' interests in the life, physical and behavioral sciences. In addition, the planning, managing and providing of therapeutic services, diagnostic services, health information and biochemistry research development.

- Health Science
- Agriculture, Food, and Natural Resources
- Science, Technology and Math

Graduation Requirements

A. For a student to be eligible for graduation, the student shall:

1. Demonstrate mastery of academic standards as defined by Chapter 4, “Curriculum” from the State Board of Education Regulations, PA School Code.
2. Complete a minimum number of credits as defined below.
3. Complete all other requirements developed in conjunction with PA Dept. of Education regulations or as approved by the Muhlenberg School District and presented in district publications.

The process for fulfilling the above requirements is as follows:

a) Academic Standards - Students must successfully master the content embedded in the high school planned courses, which are developed in accordance with the Pennsylvania academic standards approved by the Pennsylvania State Board of Education. Course descriptions are obtainable from the Educational Planning Guide which is revised on a yearly basis and available in the high school Counseling Office or on the school district website. Complete copies of the curriculum for each course are available in the main office at the high school.

b) MSD Course/Credit Requirements - Students shall accumulate a minimum of 24.00

Class of 2024

Full-Time Muhlenberg Students	***Credits***	***Career & Technology Students***	***Credits***
English	4.00	English	4.00
Social Studies*	4.00	Social Studies*	4.00
Mathematics	4.00	Mathematics	4.00
Science	4.00	Science	3.00
Arts/Humanities	2.00	Arts/Humanities	1.00
Driver Education	0.25	Driver Education	0.25
Family & Consumer Science	0.25	Family & Consumer Science	0.25
Career Explorations	0.25	Career Explorations	0.25
Wellness Education**	2.25	Wellness Education**	2.25
Electives	3.00	Electives	5.00

*Students shall complete at least one credit of Economics/Government as part of the Social Studies curriculum.
**Students must successfully complete a Wellness Education or Strength and Conditioning course each year.

Class of 2025 and Beyond

Full-Time Muhlenberg Students	***Credits***	***Career & Technology Students***	***Credits***
English	4.00	English	4.00
Social Studies*	4.00	Social Studies*	4.00
Mathematics***	3.00	Mathematics***	3.00
Science***	3.00	Science***	3.00
Arts/Humanities	2.00	Arts/Humanities	1.00
Driver Education	0.25	Driver Education	0.25
Family & Consumer Science	0.25	Family & Consumer Science	0.25
Financial Literacy	0.5	Financial Literacy	0.5
Wellness Education**	2.25	Wellness Education**	2.25
Electives	5.00	Electives	6.00

*Students shall complete at least one credit of Economics/Government as part of the Social Studies curriculum.
**Students must successfully complete a Physical Education/Wellness Education or Strength and Conditioning course each year.
***It is highly recommended that students take both a Math and Science credit **all four years**.

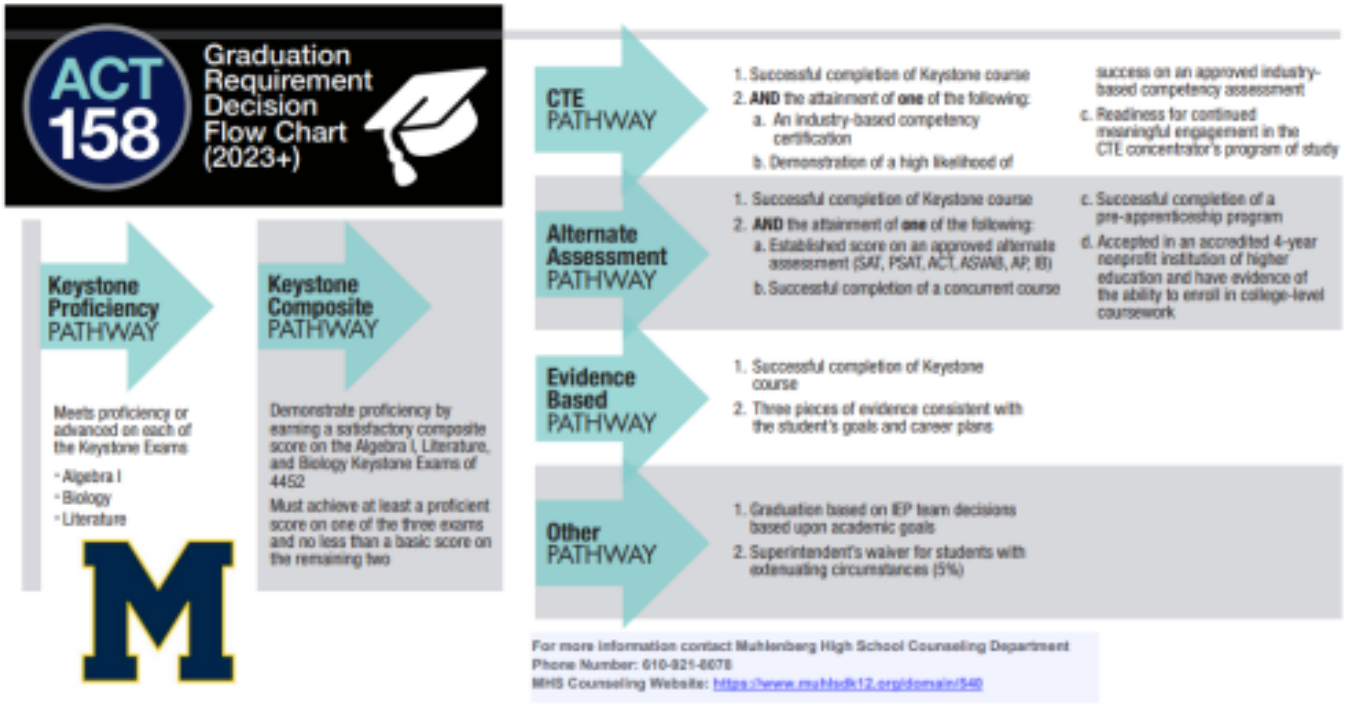
Note: Children with disabilities who satisfactorily complete a special education program developed by an Individualized Education Plan team under the Individuals with Disabilities Education Act and

in conjunction with graduation requirements stipulated in Chapter 4 shall earn and be issued a regular high school diploma. This section also applies if the special education program of a child with an Individualized Education Plan related to disability does not otherwise meet all requirements of Chapter 4 but the child completes goals for graduation requirements established by the IEP team.

In addition to the above course requirements, students are also required to complete the following to be eligible for graduation:

c) Act 158 Graduation Pathways

1. All students must meet the above local credit requirements.
2. Students must score proficient or advanced on all three Keystone Exams – Algebra I, Biology, and Literature.
3. Students can continue to take any Keystone Exam as many times as needed after participating in assigned remediation. The highest score on each module is banked and the sum of the two best scores (regardless of when the test was taken) is used to determine proficiency. If proficiency is not met, there are alternative pathways students can meet PA graduation requirements.
4. The Pennsylvania Department of Education (PDE) created graduation requirements which will help guarantee that a high school diploma reflects the skills and knowledge graduating students need to be successful in college and the workplace in an increasingly complex and challenging economy. These requirements are designed to help all students demonstrate proficiency in state academic standards. Through the Standards Aligned System (SAS) website, PDE provides downloadable resources, general information, and frequently asked questions regarding graduation requirements. Below is a document released by the PDE explaining the graduation pathways.
5. Please note that Administration and Counselors will be responsible for documenting graduation pathways for all students. Please contact your student's alpha counselor with any specific questions. However, tracking of these requirements is handled within the Counseling Office.



B. Standards Assurance

The Assistant Superintendent/ Designee will ensure that the curriculum of Muhlenberg High School meets the requirements of Chapter 4.

Electives

ARTS/HUMANITIES ELECTIVES

Foundations of Art
Advanced Drawing & Painting
Advanced Crafts
AP Studio Art
Contemporary 2-D Design
Exploring Sculpture: 3-D Design
Multicultural Arts
Creative Living
Working with Young Children
Multicultural Foods
Family Foods
Cook Once, Eat Twice
Fashion

TV & Video Production
Computer Aided Drafting
Architectural Drawing & Design
Engineering Design
Construction Technology I
Digital Media Technology
Material & Processes I
Material & Processes II
Major Music I
Major Music II
Major Music III
Voice Class
Steel Drums I
Music Appreciation

Spanish I
Spanish II
Spanish III
Spanish IV
AP Spanish
German I
German II
German III
German IV
Latin 1
Latin II
Latin III
Latin IV

OTHER ELECTIVES

Advanced Accounting
Basic Accounting
Business Management and Entrepreneurship
Sports & Entertainment Mktg
AFJROTC
Science Research

AP Computer Science Principles
AP Computer Science A
Mobile App Development & Programming

Computer Game Design & Programming
Advanced Topics in Computer Science

Practical Law
This Generation
General Psychology

AP European History
Intro to Sociology
AP Psychology
AP World History

The general elective requirement may be fulfilled by completing any of the elective courses in the English, Mathematics, Science, Social Studies, AFJROTC, and Business curricula. This requirement may also be fulfilled by completing additional courses from the list above.

RANKING

Students in grades 9 through 12 will be ranked at the end of the academic year by using final grades. Ranking will be based on all subjects carried, with the exception of chorus/band and any Pass/Fail courses. The students with the highest grade point averages based upon final grades only will be ranked first, etc.

Procedure for selecting commencement speakers: After the third quarter of the senior year, the rank of the top 10 students will be figured by using final grades from grades 9, 10, and 11, and the average of the first three quarters of grade 12. The students will be ranked by order of highest grade point average to the lowest. The honor graduates (commencement speakers) will be the highest ranking seniors at the end of the third quarter senior year.

Advanced Placement

ADVANCED PLACEMENT COURSES

Students who wish to elect an advanced placement course must meet the following criteria before the course is scheduled:

1. The student must have an overall GPA of 3.0 for the year prior to enrolling in the course and at least a 90% average in the major subject area for the previous year for which the student is enrolling. Teacher recommendation may also be used to determine eligibility for AP classes in lieu of the required 90% average and/or 3.0 GPA. Final determination of eligibility will rest with the high school principal. It is strongly recommended that the student has previously taken Honors-level courses in the subject area of the AP course in which he/she is enrolling.
2. Prior to the close of school in the current year, the student must make an appointment with the teacher responsible for the course to determine possible summer reading or project requirements.
3. All students enrolled in the AP courses are encouraged to take the AP exam at the student's expense.
4. The AP courses will be weighted only if the student takes the midterm exam and either the AP exam or the final exam for that AP course.
5. The Keystone exam incentive does not apply to any student enrolled in an AP class.
6. Any AP class with an enrollment of nine or less students may be canceled.

In order to receive college credit for an AP course, students must take the AP exam associated with each course. A score of 3 or better--on a scale of 1 to 5--is usually required to receive college credit. Beginning in the 2019-20 school year, students will be required to register and pay for AP exams by October. Any student that adds or cancels an AP exam after the October deadline will incur a $42 fee. These changes have been set forth by the College Board to all schools participating in the AP program.

Dual Enrollment

Muhlenberg High School and Reading Area Community College have established a Dual Enrollment Agreement. Students enrolled in a Muhlenberg High School course, which is approved as a dual enrollment course may choose to participate, at the student's expense, in RACC's Dual Enrollment Program. All dual enrollment courses are offered during the school day at MHS. By choosing to participate in the program, tuition is paid directly to RACC, and in turn college credits are earned, while the student is currently still in high school. Below is a list of the courses that have been approved for the dual enrollment program, along with RACC's course equivalencies. Enrollment is voluntary and takes place in September at the student's expense.

Muhlenberg Core Courses for 2023-2024:

MUHLENBERG HS COURSE NAME	**RACC COURSE SECTION**	**COLLEGE CREDITS**	**RACC COURSE NAME**
Business Management and Entrepreneurship	BUS 100-1503	3	Introduction to Business
AP Chemistry	CHE 150-1508 CHE 155-3508	4 4	Chemistry I Chemistry II
Honors Chemistry	CHE 120	4	Principles of Chemistry
AP Language	COM-121-1517	3	English Composition 1
AP Literature	ENG-125-1505	3	Introduction to Literature
AP Environment	ENV 130-1504	3	The Environment
AP US History (9th)	HIS 110-1509 HIS 115-3509	3 3	US History I: Foundations of American Society US History II: The Emergence of Modern America
AP European History	HIS 120-1503 HIS 125-3505	3 3	Western Civilization I: Foundations of European Society Western Civilization II: Europe and the World
Advanced Algebra 2	MAT 150 -1501	3	Foundations of Math
Pre-calculus Honors	MAT 180-1509	3	Precalculus
AP Statistics	MAT 210-1506	3	Statistics
Honors Calculus	MAT 220-1516	4	Calculus I
AP Calculus AB	MAT 220-1510	4	Calculus I
AP Calculus BC	MAT 221-3508	4	Calculus II
AP Physics I	PHY 240-1507	4	Physics I
AP Physics II	PHY 245-1503	4	Physics II
AP Government	POS 130-1506	3	American Government
Spanish III	SPA 101-1505	3	Spanish I
Spanish IV	SPA 102-3505	3	Spanish II

THIS COURSE LIST IS SUBJECT TO CHANGE

Meeting Course Requirements

Students may schedule no fewer than six major subjects (a major subject is any course that meets every day of the cycle; two one-semester courses that meet each day are the equivalent of one major subject). Students are encouraged to take a seventh full-time subject. Students may not drop or add courses during the school year except by permission of the principal. In granting such permission, recommendations of teachers, reasons for such a change, test scores, past records, and personal and/or career goals are considered in rendering a judgment. Students who receive permission to drop courses may do so with the following notations placed on their permanent record:

Full Year Courses

1. If dropped before the start of the second marking period, no notation of having entered the course will be placed on the permanent record.
2. If dropped after the end of the first marking period, the notation WP for "withdrew passing" or WF for "withdrew failing" will be placed on the permanent record.

Semester Courses

1. If dropped before the twenty-third day of the course, no notation of having entered the course will be placed on the permanent record.
2. If dropped after the twenty-third day of the course, the notation WP for "withdrew passing" or WF for "withdrew failing" will be placed on the permanent record.

SUMMER SCHOOL/CREDIT RECOVERY

Students may repeat failed courses at a recognized summer school/credit recovery program with approval of the high school principal. Students can enroll in a maximum of two summer school/credit recovery courses. *Students must enroll in Muhlenberg's Summer School/Credit Recovery Program if the course they failed is offered here. Courses repeated in summer school/credit recovery will be recorded as the grade earned and credit for the course will be given. Summer school/credit recovery courses taken at Muhlenberg High School will be included in a student's grade point average (GPA) once those courses have been passed.*

Students should understand that permission to enroll in summer school/credit recovery courses may not be granted if circumstances indicate that minimum or no effort was exhibited by the student in the failed course during the school year.

Occasionally, a student may be given permission by the principal to enroll in two English, Social Studies, Math, or Science courses during a school year in order to make up a required subject. This permission is granted primarily for senior students only and doubling up on courses should not be expected.

COURSE AVAILABILITY

The courses described in this guide are offered if sufficient enrollment numbers are reached. Courses may be canceled if minimum enrollments are not met. When the number of students requesting a course exceeds the number of openings, preference will be given to seniors, first; juniors second; etc. If courses are dropped from the master schedule or eliminated due to conflicts, the student will be notified and given the opportunity to make other selections.

SPECIAL NOTE: Some courses may be offered in a variety of patterns (i.e.: a ½ credit course may be offered for six days per cycle during one semester or for three days per cycle for the entire school year). The decision on how to offer each course will be based on the pattern that will allow the most students to schedule a particular course.

Computing Your GPA

Numerical Range	Letter Equivalent	Quality Points
97-100	A+	4.00
93-96	A	4.00
90-92	A-	3.75
87-89	B+	3.50
83-86	B	3.00
80-82	B-	2.75
77-79	C+	2.50
73-76	C	2.00
70-72	C-	1.75
67-69	D+	1.50
63-66	D	1.00
0-62	F	0.00

COURSE	GRADE	QUALITY POINTS	X	CREDIT	=	TOTAL CREDIT
			X		=	
			X		=	
			X		=	
			X		=	
			X		=	
			X		=	
			X		=	
				TOTAL A		TOTAL B

Write the titles of all your courses in the first column. In the "grade" column, write the grade you received for the course. The "quality point" column is for the weight of the grade you received; the quality point(s) for a course can be obtained from the chart above. In the "credit" column, write the amount of credit you will receive when you complete the course. Multiply the "quality points" column by the "credit" column and record your answer in the "total credit" column. Total the "credit" column (A) and the "total credit" column (B). Divide total B by total A. The resulting number is your GPA. Chorus & Band will not be calculated in the GPA.

****The final course/final year GPA is weighted for students who have earned passing grades in Honors and/or Advanced Placement (AP) courses. To calculate a weighted GPA:**

1. Calculate the final year GPA as described above (using final course grades).
2. To the GPA obtained in step one:
   - ✳ Add .1 for each 1 credit AP course that the student takes the midterm exam and either the AP exam or the final exam for that AP course.
   - ✳ Add .1 for each 1.33 credit AP course that the student takes the midterm exam and either the AP exam or the final exam for that AP course.
   - ✳ Add .035 for each 1 credit Honors course.
   - ✳ Add .04095 for each 1.17 credit Honors course.
3. The resulting number is the student's weighted GPA.

Testing Programs

Keystone Exams Grade: 8, 9,10,11

The Keystone Exams are end-of-course assessments designed to assess proficiency in the subject areas of Algebra I, Literature, and Biology. The Keystone Exams are one component of Pennsylvania's new system of high school graduation requirements. Keystone Exams will help school districts guide students toward meeting state standards.

ACT- American College Test Grade: 11 and 12

Description: The ACT is a college admission test consisting of four parts: English, Math, Reading, and Science Reasoning. Completion with satisfactory scores is optional for college entry. Many health majors are encouraged to take this test. Fee and registration information and practice booklets may be obtained via ACT's website. Fee waivers are available for students who qualify for free/reduced lunch. Students are encouraged to register online at www.act.org.

AP Exam- Advanced Placement Exam Grade: 9, 10, 11, 12

Description: The AP exam is the culmination of the Advanced Placement course. This exam is taken at the end of the course. It is given during the school day during the first two weeks of May, as designated by the CollegeBoard. Satisfactory scores on this exam can earn a student college credit when they enroll in college. Fee waivers are available to help reduce the cost of the test for those students who qualify for free/reduced lunch.

ASVAB Grade:10, 11, 12

Description: The Armed Service Vocational Aptitude Battery is offered to any student in grades 10-12. This test consists of eight short individual tests and measures verbal skills, math skills, and science and technology skills. The test is given one time per year at the high school during the day.

PSAT/NMSQT Grade 10 and 11

Description: The Preliminary Scholastic Aptitude Test is a practice SAT test and is open to all college-bound students in grades 10-11. It is administered only once per year in October at the high school during the school day. Not only does it serve as a practice test, but scores earned in the junior year determine eligibility for consideration in the National Merit Scholarship Program. There is a nominal fee for this exam. Fee and registration information may be obtained through the Counseling Office. Fee waivers are available for 11th grade students who qualify for free/reduced lunch.

SAT- Scholastic Aptitude Test Grade 11 and 12

Description: The SAT is a college admission test made up of three sections: Critical Reading, Math, and Writing. Completion with satisfactory scores is required for college entry. Juniors are encouraged to take the test at least once the spring of their junior year. Fee and registration information and practice materials may be obtained via the CollegeBoard website. Fee waivers are available for students who qualify for free/reduced lunch. Students register online at www.collegeboard.com.

RMCTC

RMCTC recognizes that regular attendance and punctuality are vital to achievement. The educational program provided by RMCTC is predicated upon the presence of the student and requires continuity of instruction and classroom participation. Attendance is required for students enrolled in programs at RMCTC during the days and hours that the center is in session as governed by the state law.

1. Absences will be considered unlawful until the school receives a written excuse signed by a parent/guardian for the absence. RMCTC and the home school require separate written notes for each absence. **Therefore, a student needs two excuse notes when absent; one for RMCTC and one for the home school.**

2. Written excuses MUST be submitted within three (3) school days to be considered valid. If an acceptable written excuse is not submitted within three (3) days, the absence becomes "unlawful". 3. Absences of three (3) or more consecutive days will require a physician's excuse. 4. After ten (10) cumulative absences, whether unlawful, unexcused or excused solely by a parental note, an **excuse from a physician is required**. If a physician's note is not received, the day(s) will be considered unlawful or unexcused.

XIV. RMCTC GRADE REPORTING

Purpose: The intent of this grading procedure is to provide a student grade that accurately reflects student achievement. Progress is measured in the areas of work ethic, knowledge, and the practical skills aligned to the program area learning guides. Student performance for learning guide activities and assignments are reflected in the knowledge grade. Students will be evaluated according to established program standards on an individual basis. The grading software automatically calculates student grades using the following formula:

Work Ethic 40%
Knowledge 60%

Interpreting a Grade:

Work Ethic Grade (40%): Each school day, every student receives a Work Ethic or daily grade. Criteria that comprise these grades are safety, student behavior, preparation/participation, productivity or time on task, professional appearance, and extra effort. The Work Ethic grade range is based on a 0 to 10 model that students may earn each day depending on how many criteria they satisfactorily meet.

Knowledge Grade (60%): Throughout the marking period, a student's cognitive knowledge about various career-specific topics will be evaluated and recorded by the instructor. Examples of knowledge activities include: lab/shop assignments, homework, quizzes, tests, and research activities. The Knowledge grade range is based on actual points earned divided by the total accumulative points.

Skill (Learning Guide): Learning guides are aligned to lab assignments or shop projects where a student will physically perform a task. At the beginning of each quarter the student and teacher will discuss student expectations and the required tasks that must be completed by the end of the marking period. This allows a student to work productively with the expectation to make constant progress during the marking period. All assignments, activities and rubrics associated with learning guides are documented in the "knowledge" grading component. It is important to note that poor productivity will have a negative impact on a student's grade.

NOTE: For the purpose of students earning a job title associated with their program area, teachers track students' skill/task work. Teachers identify specific criteria to evaluate each task performed, ranging from a 0 to 5 (not completed to mastery). Students must earn a 4 or 5 in order to credit the task towards earning the specific job title. Students have the opportunity to revisit a task multiple times until successfully receiving credit. The job titles a student earns will be listed on the student's RMCTC certificate that is awarded at Senior Recognition Night.

The Final Grade is based on the average of the student's four (4) numerical marking period grades. The individual teacher must evaluate each student's achievement in terms of the expected goals for his/her program area.

Failure to complete assignments, frequent lateness or absences, and demonstrated indifference to school are major contributors to student failure.

The following divisions are given as a guide to recording and interpreting the grading system. It remains for each teacher to objectively and fairly rate each student, not based upon personality, but performance.

Note: Muhlenberg students at RMCTC will follow the Muhlenberg grading system for BOTH the CTC program and their Social Studies grade.

Incomplete Grades: Incomplete grades must be updated no later than ten (10) days from the close of the marking period. As soon as the work is completed and the grade is available, it must be reported to the appropriate person.

Failures: Students who receive a failing final grade in a program area are permitted to repeat that program, but are urged not to do so. If this situation presents itself, students and parents are advised to consider an alternative program which is probably more suited to the student's true interests and aptitudes.

Attendance and its Impact upon Grades: The importance of regular school attendance and its positive impact upon a student's performance grade cannot be overstated. If a student is absent, he or she does not have the opportunity to keep pace with their classmates and must work independently to acquire the information missed during any absence. Regardless of how well a student performs when he/she is present, habitual absenteeism has a negative impact on student learning.

Make up Work for Absences: Students have the opportunity to make-up school work due to an illness/being absent from school provided their absence is excused. Students must submit make-up work within the following timelines:

1. One (1) to three (3) days excused absences – five (5) school days to complete assigned work.
2. Four (4) or more days excused absence – ten (10) school days to complete assigned work.

Report Cards (see Progress Reports): Students will receive a report card from the sending school district which will reflect the student's grade from his/her Career & Technology class. In addition, grades are available on the parent portal.

Student Recognition Night: Reading Muhlenberg Career & Technology Center hosts an annual Student Recognition Night which honors our senior students. During this event, senior students in attendance are recognized and may also receive awards that they have earned relevant to their accomplishments while attending RMCTC.

XV. READING-MUHLENBERG CAREER & TECHNOLOGY PROGRAMS: www.RMCTC.org

RMCTC offers 30 high school programs for students in 10th, 11th and 12th grades. At RMCTC, occupational, professional, and academic skills are integrated throughout each program. Courses are designed to provide students with the skills and confidence they need to create and maintain an atmosphere which contributes to their entire process of learning and succeeding. Students are encouraged to take advantage of what RMCTC has to offer and enjoy the challenges that will make learning rewarding. Attending RMCTC will provide students the opportunity to earn college credit based upon completed coursework, achieve recognized certifications, gain marketable skills, and leave high school prepared to enter college or the workforce.

Students are encouraged to research their career plans by reading related information and reviewing and discussing their plans with counselors and parents. Students may complete an application on our website at www.RMCTC.org. Prospective students must complete the application process to be considered for admission.

SOAR College Credit:

SOAR (Students Occupationally and Academically Ready) programs prepare today's students for high priority occupations which include career categories that are in high demand by employers, have higher skill needs, and are most likely to provide family sustaining wages. Programs of Study are statewide curriculum approved by the Pennsylvania Department of Education that allow students in high school career and technical programs to seamlessly continue their education in a related Program of Study on the college level. Upon successful completion of the high school program, students may be awarded college credits for their work completed at RMCTC.

ADCA/ADCP/ADCP12 ADVERTISING DESIGN/COMMERCIAL ART **2-3 Credits**

Students in the Advertising and Design/Commercial Art program work to improve their drawing and painting skills in a variety of media by designing eye-popping graphics for print and the web. Students use digital cameras to create stunning pictures and videos, and learn how to use programs like Adobe Photoshop and After Effects to edit like the pros. Students also prepare a professional print and digital portfolio of their work for entrance into college or the workforce.

ABRA/ABRP/ABRP12 AUTO BODY REPAIR **2-3 Credits**

Auto Body Repair students will learn all phases of repair and refinishing work necessary to restore a damaged automobile. Major and minor collision repair skills include auto body tools, removing and replacing body parts, frame and body straightening, welding, body work preparation, spray painting, air brushing, and estimating repair costs.

ATTA/ATTP/ATTP12 AUTOMOTIVE TECHNOLOGY **2-3 Credits**

The Automotive Technology program is a nationally recognized and award winning three-year program that teaches students entry level skills in automotive services that are based on NATEF National Standards. The program includes work safety, hand tools, suspension and steering, brakes, engines, engine performance, electrical systems, and air conditioning. Students have access to the latest computerized equipment for automotive diagnosis and repairs.

BAKA/BAKP/BAKP12 BAKING & PASTRY ARTS **2-3 Credits**

In the Baking & Pastry Arts program, students work hands-on, using state-of-the-art kitchen tools and equipment found in large and small industrial kitchens and bakeries. They plan and prepare a variety of desserts and pastries in both small and large batches that can be served in a variety of establishments, from casual to fine dining settings. Students earn industry-recognized certifications and develop employability skills including resume preparation, interview techniques, and inter personal skills that prepare students for competitive employment opportunities locally and abroad within the growing and diverse baking and hospitality industry. Students also acquire practical knowledge and skills necessary for entry-level employment, along with preparation for academic success at the post-secondary level in either a community college, technical school, or a four-year college or university.

BRKA/BRKP/BRKP12 BRICKLAYING **2-3 Credits**

The Bricklaying program teaches students bricklaying, block laying, concrete work, tile work, plastering, stone work and laboring. Students gain hands-on experience through the use of lab projects and live work for the school and local community.

BPMA/BPMP/BPMP12 BUILDING & PROPERTY MAINTENANCE **2-3 Credits**

This instructional program teaches students the skills necessary for employment in a variety of occupations including masonry, construction laborer or apprentice, carpentry, plumbing, and electrical. Emphasis is placed on the use and care of hand and power equipment related to all phases of the care and maintenance of buildings and grounds.

BTDA/BTDP/BTDP12 BUILDING TRADES **2-3 Credits**

The Building Trades program is a partner to Building & Property Maintenance. Building Trades introduces students to occupations in the masonry, construction, carpentry, plumbing, and electrical fields. Safety training and work readiness are emphasized in this program. This program is designed to support students with Individualized Educational Programs (IEPs). Students must be referred to Building Trades.

CARA/CARP/CARP12 CARPENTRY **2-3 Credits**

The Carpentry program prepares students to apply technical knowledge and skills in all aspects of residential construction. Students will receive hands-on experience using hand and power tools, reading blueprints, framing and roofing, engaging in interior and exterior finishing work, and more.

CDTA/CDTP/DCTP12 COMPUTERIZED DRAFTING TECHNOLOGY **2-3 Credits**

In the Computerized Drafting Technology program, students prepare for a professional career as a certified drafter in the architectural or mechanical design fields. They model and create objects with a 3D printer, design a future home, and utilize the latest software in the drafting and entertainment industries on powerful, high speed computers with dual monitors.

COSA/COSP/COSP12 COSMETOLOGY **2-3 Credits**

The Cosmetology program teaches the art of hair, nail, and skin care. Students learn anatomy and physiology, facial treatments, manicuring, and the coloring, cutting and styling of hair. Students can be eligible to take the Cosmetology State Board Licensure Examination upon completion of the 1250 hours of instruction needed. Students gain experience through the services they provide to clients in our onsite clinic.

CULA/CULP/CULP12 CULINARY ARTS **2-3 Credits**

The Culinary Arts program instructs students in kitchen safety, food preparation and food service. Students spend their days working in the actual production setting of a restaurant and cafeteria. They prepare and serve the food and beverages at in-school functions such as breakfasts and luncheons, provide the refreshments needed for meetings, and cater special events such as school banquets. Special emphasis is given to the development of both a strong work ethic and teamwork skills.

IFDA/IFDP/IFDP12 INSTITUTIONAL FOODS **2-3 Credits**

The Institutional Foods program is a partner to Culinary Arts. Institutional Foods introduces students to kitchen safety, food preparation, and food service. Safety training and work readiness are emphasized in this program through live work. This program is designed to support students with Individualized Educational Programs (IEPs). Students must be referred to Institutional Foods.

DTTA/DTTP/DTTP12 DIESEL TRUCK TECHNOLOGY **2-3 Credits**

In the Diesel Truck Technology program, students receive training in order to obtain their PA State Inspection certifications in auto/light truck, heavy truck/trailer, and emissions. They develop the skills necessary to perform on- and off-vehicle repairs needed in the diesel repair industry that will lead to a future in the diesel powered industry, whether it is medium or heavy duty trucks, tractor, or construction equipment. Students utilize computers in the shop to diagnose problems on vehicles and learn how to repair them.

ECEA/ECEP/ECEP12 EARLY CHILDHOOD EDUCATION **2-3 Credits**

The Early Childhood Education program prepares students for careers in the early child care field and Early Childhood Education college programs. Students receive hands-on training in health, safety, child development, learning environments, guidance, classroom and behavior management, lesson planning, and assessment. Our onsite day care lab provides students with practical experience with older toddlers and preschoolers.

This program provides participation in RMCTC's Teacher Academy in which students are eligible to earn up to 24 credits while in high school.

ELTA/ELTP/ELTP12 ELECTRICAL TECHNOLOGY **2-3 Credits**

The Electrical Technology program instructs students in basic electrical theory, circuits, wiring, maintenance and installation of motors, blueprint reading, and telecommunications cabling technology. National, state, and local electrical codes, tools and equipment as they pertain to the electrical trade are studied and used.

EATA/EATP/EATP12 ENGINEERING & AUTOMATION TECHNOLOGY 2-3 Credits

Students in the Engineering & Automation Technology program develop the knowledge of diverse engineering systems, including electrical, mechanical, hydraulic, pneumatic, and PLC controls. Students also test equipment, practice soldering techniques, design and troubleshoot mechanical and electrical systems, motor controls, and PLC technology. They effectively apply problem-solving and leadership skills in a field that offers a multi-disciplinary approach to product and manufacturing system design. In this program, students enroll in a challenging and rewarding program leading to "high priority" jobs right here in Berks County or continue on to a post-secondary college of their choice.

This program provides participation in RMCTC's Technical Academy in which students are eligible to earn up to 29 credits while in high school.

HDOA/HDOP/HDOP12 HEALTH – DENTAL OCCUPATIONS 2-3 Credits

In the Dental Occupations program, students prepare for a professional career as a dental assistant or for further education as an expanded- function dental assistant, dental hygienist, dental lab technician, or dentist. Students experience the satisfaction of providing high quality patient care in a team-oriented, modern dental office environment. They perform a wide variety of dental office duties with other dental professionals that include taking x-rays, mixing materials, passing instruments, sterilization, and receptionist duties. Students work alongside other dental professionals to ensure patients receive the highest quality dental care.

HMPA/HMPP/HMPP12 HEALTH – MEDICAL PROFESSIONS 2-3 Credits

In the Medical Professions program, students engage in off-site medical career explorations at local health facilities by exploring specific professional programs such as occupational therapy, physical therapy, respiratory therapy, massage therapy, and alternative therapies. Students will also investigate surgical and pharmacological procedures.

HNCA/HNCP/HNCP12 HEALTH – NURSING CAREERS 2-3 Credits

Students in the Nursing Careers program perform a wide variety of nursing skills that include making a hospital bed, transferring a patient from the bed to a wheelchair, taking vital signs and basic patient care practices. Students will explore the topics of medical terminology (350 words completed at the end of the year), anatomy and physiology (discussion of eleven body systems), communication skills, and work ethics skills.

HSMA/HSMP/HSMP12 HEALTH – SPORTS MEDICINE & REHABILITATION 2-3 Credits

The Sports Medicine & Rehabilitation program prepares students for further education and a professional career in the sports medicine and rehabilitation fields, such as athletic training, physical therapy, occupational therapy, sports medicine, and other related fields. Students design safe and effective exercise prescriptions, individual exercise programs, and fitness testing while learning to perform a wide variety of healthcare skills to aid in the successful treatment of patients.

HRTA/HRTP/HRTP12 HORTICULTURE 2-3 Credits

Students in the Horticulture program discover the rewards of growing a variety of plants to feed their family and beautify our surroundings. Students create unique floral designs for all occasions, explore the many aspects of the landscape industry, including the operation of various types of equipment, the development of water features, and the principles of landscape design. They learn how to become an innovative greenhouse grower specializing in production horticulture, aquaculture, and other sustainable environmental practices.

ITAA/ITAP/ITAP12 INFORMATION TECHNOLOGY APPLICATIONS 2-3 Credits

Students in the Information Technology Applications program explore the computer inside and out with hands-on learning, become familiar with home networks, the internet, and social networks, and design, modify, and maintain professional documents. Students build business related databases used in every business and prepare financial statements using accounting principles and software. They will creatively code and design interactive computer programs and explore the creative processes needed to be in a supervisory position and lead others.

This program provides participation in RMCTC's Technical Academy in which students are eligible to earn up to 24 credits while in high school.

ITWA/ITWP/ITWP12 INFORMATION TECHNOLOGY WEB DESIGN **2-3 Credits**

Students in the Information Technology Web Design program explore and prepare for different areas of web design, including graphics, design, coding, and formatting for search engine optimization. Students develop different types of web designs based on the needs of the client (business, e-commerce, informational, etc). They learn additional computer skills like taking apart a computer and figuring out how the components work. Students develop the programming skills that lead to mobile phone apps, web-enabled JavaScript games, and other computer programs.

This program provides participation in RMCTC's Technical Academy in which students are eligible to earn up to 24 credits while in high school.

MMEA/MMEP/MMEP12 MOTORCYCLE/MARINE/SM ENGINE TECH **2-3 Credits**

Students in the Motorcycle, Marine, and Small Engine Technology program acquire the skills necessary to work on today's sophisticated vehicles, perform factory maintenance, and repair factory machinery. Students develop and apply the skills needed to perform repairs on equipment from lawn care machines to small diesel engines. They also receive training in order to obtain their PA State Inspection certifications.

PIDA/PIDP/PIDP12 PAINTING & DECORATING **2-3 Credits**

Students in the Painting and Decorating program will learn to design creative living and work spaces that fit the needs of clients. They will analyze and perform various painting techniques including faux finishing, refurbish broken and outdated furniture using innovative materials and techniques, and develop the necessary skills to create and deliver innovative spaces using the principles of design.

PLHA/PLHP/PLHP12 PLUMBING & HEATING **2-3 Credits**

Students in the Plumbing and Heating program will learn to design and build residential and industrial plumbing systems by installing kitchen and bathroom fixtures using state of the art hand tools, power tools, and equipment. They will repair and replace older plumbing fixtures and faucets with modern tools and equipment used by master plumbers. Students will also obtain OSHA 10-Hour Safety Certification required by most plumbing contractors.

PMTA/PMTP/PMTP12 PRECISION MACHINING TECHNOLOGY **2-3 Credits**

Students in the 3D Manufacturing Technology program learn the highly precise processes for cutting and shaping metals and other materials through the use of lathes, milling machines, precision grinders, and saws. These skills are supported by blueprint reading, mathematics, and the use of precision measuring instruments. Students gain valuable experience in our state-of-the-art automated manufacturing lab and computer programming (CNC) technology to design and manufacture precision machined components.

PMPA/PMPP/PMPP12 PRINT MEDIA PRODUCTION **2-3 Credits**

Students in the Printing and Graphic Communications program will create and produce eye-catching signs, banners, and other marketing materials using the newest equipment that the industry has to offer. Students will also use the latest technology to create printed materials for local business and industry members by using Adobe Illustrator, Photoshop, InDesign, and a digital camera. These experiences will prepare students for employment in the fast-growing field of digital output.

PSSA/PSSP/PSSP12 PUBLIC SAFETY AND SECURITY **2-3 Credits**

The Public Safety and Security Program is a comprehensive public safety course that is designed to assist students in pursuing a career in Law Enforcement, Emergency Medical Technician, or Firefighting. Law enforcement instruction includes the PA Crimes Code and Vehicle Code Books, arrest procedures and processing, use of force, crime scene investigations, and an introduction to corrections. The Emergency Medical Technician portion includes patient care and transportation of the sick and injured. Students also learn the foundations of firefighting which includes instruction in personal protective equipment, tools and hose lines, and firefighting equipment such as ladders and ropes, along with basic rescue techniques.

SCMA/SCMP/SCMP12 SEWING/CLOTHING MANUFACTURING **2-3 Credits**

Students in the Sewing and Clothing Manufacturing program will explore the world of fashion, sewing, and textiles. They will create personal garments choosing from a wide variety of fabrics, patterns, and trims. They will gain experience in the apparel industry using a wide variety of industrial equipment. Students will utilize this course for entry into the apparel industry directly from high school or as a stepping stone into college.

WMFA/WMFP/WMFP12 WELDING/METAL FABRICATION **2-3 Credits**

Students in the Welding and Metal Fabrication program will work in an occupation that is currently one of the most desired and highest paying trades both locally and nationally. Students will acquire expertise in areas of stick, tig, mig, and oxyacetylene welding and cutting. They will effectively apply problem-solving and leadership skills in a field that offers a multi-disciplinary approach to welding and manufacturing while learning proper safety procedures in a complex and challenging trade.

****THE TECHNICAL ACADEMY IS AN HONORS TRACK OF THE PROGRAM. ELIGIBLE STUDENTS MAY TAKE RACC DUAL ENROLLMENT COURSES THAT MAY LEAD TO AN ASSOCIATE DEGREE WHILE ENROLLED IN THE RMCTC PROGRAM. FOR MORE INFO PLEASE VISIT: WWW.RMCTC.ORG**

CAREER & TECHNOLOGY SOCIAL STUDIES COURSES

Course #	Name
CTC203	Gov't/Citizenship - College
CTC205	Gov't/Citizenship - Honors
CTC211	World St - College
CTC213	World St - Honors

XVI. ARTICULATION AGREEMENTS

ARTICULATION AGREEMENTS & DUAL ENROLLMENT

Students who demonstrate high levels of learning and mastery of skills at RMCTC often decide to pursue further education at a college, university, or technical school. Graduates may get a head start on post secondary education by taking advantage of articulation and dual enrollment agreements. Articulation and dual enrollment agreements are cooperative arrangements between secondary schools, such as RMCTC, and post-secondary schools that issue college credits to students who are interested in continuing their education. Benefits of articulation agreements may include automatic or priority admission, advanced placement, and/or college credit for mastery of material learned in high school. RMCTC has established articulation agreements with a number of post-secondary schools.

WORK BASED LEARNING / INDUSTRY CERTIFICATIONS

Students at RMCTC are eligible to participate in job shadowing, internships, and Work Based Learning (WBL) opportunities with local business and industry partners while still attending high school. Such experiences will enhance learning while building a resume to increase employment potential. They will be beneficial to any post-secondary school application.

Through the earning of industry certifications, RMCTC students are able to gain college credit and/or advanced placement at some post-secondary schools. Also, these certifications are recognized by industry and are often portable from state to state. Industry certifications are invaluable to the student when entering the job market and can provide an advantage to obtaining employment.

Special Education

500 BASIC ENGLISH **Grades 10-12** **1 Credit**

This course is designed to parallel the general education English class by addressing the same Standards and essential questions. Students will write for a variety of authentic purposes and audiences in the three modes of writing: narrative, persuasive, and informative. Students will gain exposure to a variety of literary genres and their respective characteristics. Students will receive individualized instruction based on their specific writing needs.

530 BASIC MATH **Grades 10-12** **1 Credit**

This class introduces and teaches effective mathematics strategies through direct instruction to improve computing and problem solving. The program is taught at a variety of levels based on individual student need. The course also works to improve student performance in establishing relationships between concepts and their applications.

551 ADVOCACY II **Grades 10-12** **1 Credit**

This course is for students to work toward individualized goals with modifications and accommodations. It provides focused instruction in the areas of self-awareness and self-management. Emphasis is on individual student needs. Topics include anger management, accepting responsibility, and social interactions. Other topics include conflict resolution, recognizing character strengths, and refuting labels and stereotypes. Curriculum is a two-year program. Prerequisite(s): Advocacy I.

526 TRANSITION II **Grade 10** **1/2 Credit**

The 10th grade transition class is designed to place a more detailed emphasis on job exploration, skill assessment, and post-secondary education options. Students will further assess their abilities and interests and learn how to begin identifying appropriate and related post-secondary outcomes based on their self assessments. Increased participation and understanding of self-advocacy in the IEP meeting will also be explored and role-played. Students will also learn about the agencies and services available to students with disabilities.

548 READING **Grades 10-12** **1/2 Credit**
549 READING **Grades 10-12** **1 Credit**

This course is offered for those students who demonstrate a need for improvement in basic reading skills. It will focus on the use of reading strategies to increase proficiency in decoding, fluency, and vocabulary and text comprehension. This course is taught at a variety of levels based on individual student needs.

English as a Second Language Education- ESL

592 ESL – ELA CREDIT BEGINNER **Grades 10-12** **2 Credits**
This course provides new Second Language students with the basic English vocabulary and skills needed for speaking, understanding, reading, and writing in school and outside of school. An important goal of this course is oral communication in English. Students are also given an introduction to American culture and customs. Included in this course are the 21st Century Literacy Skills: Informational, Media, Visual, and Cultural. The focus of the English skills is to prepare students to flourish in today's society and in the future. Regular support is provided to ensure student success in content classes. *(Placement is determined by an English Language Proficiency test and additional academic criteria.)*

593 ESL – ELA CREDIT **Grades 10-12** **1 Credit**
In this course students will continue to build their skills in English through vocabulary development, reading, and writing activities. Students will read a variety of texts including fiction, nonfiction, biographies, and poetry. There is a continued focus on writing strategies and the expansion of oral communication skills. Included in this course are the 21st Century Literacy Skills: Informational, Media, Visual, and Cultural. The goal is the application of English skills is to prepare students to flourish in today's society and in the future. Regular support is provided to ensure student success in content classes. (*Placement is determined by an English Language Proficiency test and additional academic criteria.)*

594 ESL **Grades 10-12** **1/2 Credit**
The focus of this course is on student competency in both the academic and practical areas of English. Expanded vocabulary development along with the application of reading and writing strategies are emphasized. The English language activities included in this course build critical thinking skills, communication skills, and comprehension skills. Included in this course are the 21st Century Literacy Skills: Informational, Media, Visual, and Cultural. Proficiency in English is the objective so that students can flourish in today's society and in the future. Support is provided on an as-needed basis to ensure student success in content classes. *(Placement is determined by an English Language Proficiency test and additional academic criteria.)*

College Preparatory

The college preparatory track is designed for those students planning to pursue a two-year trade school or a four-year college program upon graduation from high school. All college preparatory students, planning to pursue a four-year college program upon graduation, are encouraged to schedule the following courses in order to prepare for the rigors of college academics:

- 4 years of English - college prep or honors
- 4 years of Social Studies - college prep or honors
- 4 years of Mathematics - college prep or honors
- 4 years of Science - lab courses

It is suggested that college preparatory students choose electives in subject areas related to their chosen career pathway.

Research indicates that students selecting a challenging high school program score higher on the SAT/ACT tests, find college acceptance easier, and are more successful in academic studies.

Course Offerings

Course #	Name	Grade	Per Cycle	Credit	Prerequisite(s)
Air Force Junior ROTC Program (AFJROTC): Pathway ALL					
394	AFJROTC	10-11	6	1	
395	AFJROTC/Senior Hon	12	6	1	Successful completion of one year of AFJROTC
Art: Pathway AC					
366	Foundations of Art	10-12	6	1	
369	Advanced Drawing & Painting	11-12	6	1	Foundations of Art or permission from the instructor
370	Advanced Crafts	11-12	6	1	Foundations of Art or permission from the instructor
371	AP Studio Art	12	6	1	Advanced Drawing & Painting, Advanced Crafts or permission from the instructor See pg. 10- AP Criteria
376	Multicultural Arts	10-12	6	1	
378	Contemporary 2-D Design	10-12	6	1	
379	Exploring Sculpture: 3D Design	10-12	6	1	
Business: Pathway BFI					
240	Business Management and Entrepreneurship	10-12	6	1	
243	Basic Accounting	10-12	6	1	
244	Advanced Accounting	10-12	6	1	Basic Accounting
247	Sports & Entertainment Mktg	10-12	6	1	
248	Financial Literacy	11	3	1/2	(required 11th grade course)
Computer Science: Pathways BFI & EI					
254	AP Computer Science Principles	10-12	6	1	
256	AP Computer Science A	10-12	6	1	
258	Computer Game Design & Programming	10-12	6	1	
261	Advanced Topics in Computer Science	11-12	6	1	Completion of another CS course or permission from instructor
268	Mobile App Development & Programming	10-12	6	1	

English: Pathway All					
012	English 10 Honors**	10	6	1	
013	English 10 College**	10	6	1	
022	English 11 Honors**	11	6	1	Students must have achieved high scores (at least 90% and nothing less than an 80% in their grade 10 English course) and must be recommended by their teachers in order to be scheduled into English 11 Honors.
023	English 11 College**	11	6	1	
029	AP Language & Comp	11	6	1	See pg. 10 - AP Criteria
030	AP English Lit & Comp**	11	6	1	See pg. 10- AP Criteria
031	English 12 Honors**	12	6	1	
033	English 12 College**	12	6	1	
Family Consumer Science: Pathways AC & HS					
302	Family Foods	10-12	6	1	
302	Multicultural Foods	10-12	6	1	
307	Creative Living	10-12	6	1	
318	Cook Once, Eat Twice	10-12	6	1	
313	Fashion	10-12	6	1	
315	Family & Consumer Science	10	3/sem	1/4	(required 10th grade course)
319	Working with Young Children	10-12	6	1	
Internship: Pathway All					
275	Internship	12	6	1	
Mathematics: Pathway All					
112	Algebra 2/Geometry College**	9-10	6	1	Algebra 1
122	Advanced Algebra 2**	11-12	6	1	
132	College Algebra/Trigonometry**	10-12	6	1	
114	Precalculus Honors**	10-12	6	1	Algebra 2/Geometry Honors
115	Precalculus College**	10-12	6	1	Algebra 2/Geometry College or Algebra 2/Trigonometry
117	AP Calculus AB**	11-12	6	1	See pg. 10 - AP Criteria
118	Calculus Honors**	11-12	6	1	Precalculus College or Precalculus Honors (80% or better)

138	Math Concepts for the Real World**	12	6	1	Algebra 2/Geometry or College Algebra/Trigonometry
125	AP Statistics	11-12	6	1	See pg. 10 - AP Criteria
127	AP Calculus BC	12	6	1	AP Calculus AB; see pg. 10 - AP Criteria
135	Probability & Statistics**: Statistics Through Application	12	6	1	
136	Probability & Statistics**: Statistical Reasoning in Sports	12	6	1	
137	AP Pre-Calculus	10-12	6	1	See pg. 10 - AP Criteria
Music: Pathway AC					
348	Music Appreciation	10-12	6	1	
351	Major Music I	10-12	6	1	The ability to read music; music teacher recommendation
352	Major Music II	11-12	6	1	Major Music (70% or better in each of the four disciplines); music teacher recommendation
353	Major Music III	12	6	1	Major Music II (80% or better); music teacher recommendation
357	Blue Band	10-12	2	1/3	Performance ability on a band instrument
358	Jazz Band	10-12	1	1/6	Member of Blue Band & Audition
359	Concert Choir	10-12	3	1/2	Simple pitch range check for voice part assignment
364	Voice Class	10-12	6	1	
Wellness Education/Driver Education: Pathway HS					
417	Wellness- Intro to Strength & Conditioning	10-12	3	1/2	
418	Wellness- Female Strength & Conditioning	10-12	3	1/2	
419	Wellness- Athlete Strength & Conditioning	10-12	3	1/2	
420	Wellness- Block Strength & Conditioning	10-12	12	2	Permission from instructor
421	Wellness- Yoga/Dance/Pilates	10-12	3	1/2	

422	Wellness- Fitness	10-12	3	1/2	
423	Wellness- Team Sports	10-12	3	1/2	
424	Wellness- CPR/First Aid	10-12	3/sem	1/4	
425	Wellness- Learn to Swim	10-12	3/sem	1/4	2nd semester only
450	Driver Education	10	3/sem	1/4	Required 10th grade course
Science: Pathway SH					
151	Biology College	11	6	1	
154	AP Biology**	11-12	8	1.33	See pg. 10 - AP Criteria, and pass Keystone Biology Exam
158	AP Chemistry**	11-12	8	1.33	See pg. 10 - AP Criteria
160	Chemistry Honors**	10	7	1	Algebra 1 & Algebra 2 (can be concurrent). Students must have passed the Algebra & Biology Keystone Exam.
161	Chemistry College**	10-12	7	1	Algebra 1
167	AP Environmental Science**	11-12	8	1	Students should have completed 1 year of a physical science, 1 year of a life science and scored proficient on the Algebra & Biology Keystone Exam. Teacher recommendation required.
168	Environmental Science College**	11-12	6	1	
170	General Physical Science	10-12	6	1	
171	Physics College	11-12	6	1	General Physical Science or Chemistry
176	AP Physics 1**	11-12	8	1.33	See pg. 10 - AP Criteria (Prerequisite Trig, Precalculus, or concurrent)
177	AP Physics 2**	12	8	1.33	See pg. 10 - AP Criteria (Prerequisite AP Physics 1)
175	Human Anatomy & Phys**	11-12	7	1	Biology College & Chemistry College (80% or better) or approval by instructor
179	Astronomy & Meteorology**	11-12	6	1	
182	Science Research	11-12	6	1	Permission from instructor
183	AP Physics C: Mechanics	11-12	8	1.33	See pg. 10- AP Criteria (Prerequisite Calculus or concurrent)
184	AP Physics C: Electricity and Magnetism	11-12	8	1.33	See pg. 10- AP Criteria (Prerequisite Calculus or concurrent)
Social Studies: Pathway HS					
060	American Cultures II Hon**	10	6	1	

061	American Cultures II Coll**	10	6	1	
070	World Cultures Hon**	10-11	6	1	
071	World Cultures Coll**	10-11	6	1	See pg. 10 - AP Criteria
080	AP US Gov't & Politics**	12	6	1	
081	Gov't/Economics Honors**	12	6	1	
082	Gov't/Economics College**	12	6	1	
086	AP European History**	10-12	6	1	See pg. 10 - AP Criteria
088	AP World History	10-12	6	1	See pg. 10 - AP Criteria
089	AP Psychology**	10-12	6	1	See pg. 10 - AP Criteria
090	General Psychology	10-12	6	1	
092	Practical Law	10-12	6	1/2	
093	This Generation	10-12	6	1/2	
095	Introduction to Sociology	10-12	6	1	
Special Education*					
500	Basic English*	10-12	6	1	ALL
502	English 10*	10	6	1	ALL
503	English 11*	11	6	1	ALL
504	English 12*	12	6	1	ALL
530	Basic Math*	10-12	6	1	ALL
527	Consumer Math*	11-12	6	1	ALL
534	Algebra 2/Geometry*	11-12	6	1	ALL
539	Math for the Workplace*	11-12	6	1	ALL
548	Reading*	10-12	3	1/2	AC
549	Reading*	10-12	6	1	AC
551	Advocacy II*	10-12	6	1	HS
526	Transition II*	10	3	1/2	HS
**Students will be provided with a curriculum that parallels the curriculum in regular education classes. Each course addresses the students' individual goals and is taught with modifications that address instructional pace, format, and presentation techniques.*					
Technology Education: Pathway EIT					
331	Computer Aided Drafting	10-12	6	1	
332	Architectural Drawing & Design	10-12	6	1	

333	Engineering Design	10-12	6	1	
334	Construction Technology I	11-12	6	1	
341	Digital Media Technology	10-12	6	1	
345	Material & Processes I	10-12	6	1	
346	Material & Processes II	11-12	6	1	Material & Processes I (70% or better)
400	TV & Video Production	11-12	6	1	
Work Experience: Pathway All					
603	Work Experience	12	6	None	
World Languages: Pathway AC					
211	German I**	10-12	6	1	
212	German II**	10-12	6	1	German I (70% or better)
213	German III**	11-12	6	1	German II (70% or better)
213	German IV**	12	6	1	German III (70% or better)
222	Latin I**	10-12	6	1	
223	Latin II**	10-12	6	1	Latin I
224	Latin III**	10-12	6	1	Latin II (70% or better)
225	Latin IV**	11-12	6	1	Latin III (70% or better)
232	Spanish I**	10-12	6	1	
233	Spanish II**	10-12	6	1	Spanish I (70% or better)
234	Spanish III**	10-12	6	1	Spanish II (70% or better)
235	Spanish IV**	11-12	6	1	Spanish III (70% or better)
236	AP Spanish**	12	6	1	Spanish III (90% or better, Spanish IV 90% or better along with teacher recommendation) See pg. 10 - AP Criteria

****NCAA approved core course**

Course #		Name	Grade	Per Cycle	Credits	Pathway
Senior AM/PM	Non-Senior AM/PM	**Career & Technology**				
ADCP12	ADCA/ADCP	Ad Design/Commercial Art	10-12	12-15	2-3 cr	AC
ABRP12	ABRA/ABRP	Auto Body Repair	10-12	12-15	2-3 cr	EI
ATTP12	ATTA/ATTP	Automotive Tech	10-12	12-15	2-3 cr	EI
BAKP12	BAKA/BAKP	Baking/Pastry Arts	10-12	12-15	2-3 cr	SH
BRKP12	BRKA/BRKP	Bricklaying	10-12	12-15	2-3 cr	EI
BPMP12	BPMA/BPMP	Building & Property Maint	10-12	12-15	2-3 cr	EI
CARA12	CARA/CARP	Carpentry	10-12	12-15	2-3 cr	EI
CDTP12	CDTA/CDTP	Computerized Draft Tech	10-12	12-15	2-3 cr	EI
COSP12	COSA/COSP	Cosmetology	10-12	12-15	2-3 cr	HS
CULP12	CULA/CULP	Culinary Arts	10-12	12-15	2-3 cr	SH
DTTP12	DTTA/DTTP	Diesel Truck Technology	10-12	12-15	2-3 cr	EI
ECEP12	ECEA/ECEP	Early Childhood Education	10-12	12-15	2-3 cr	HS
ELTP12	ELTA/ELTP	Electrical Technology	10-12	12-15	2-3 cr	EI
EATP12	EATA/EATP	Engineering/Automation Tech	10-12	12-15	2-3 cr	EI
HDOP12	HDOA/HDOP	Health- Dental Occupations	10-12	12-15	2-3 cr	SH
HMPP12	HMPA/HMPP	Health- Medical Professions	10-12	12-15	2-3 cr	SH
HNCP12	HNCA/HNCP	Health- Nursing Careers	10-12	12-15	2-3 cr	SH
HSMP12	HSMA/SHMP	Health- Sports Med & Rehab	10-12	12-15	2-3 cr	SH
HRTP12	HRTA/HRTP	Horticulture	10-12	12-15	2-3 cr	HS
ITAP12	ITAA/ITAP	Information Technology Appl	10-12	12-15	2-3 cr	BFI
ITWP12	ITWA/ITWP	Information Technology Web	10-12	12-15	2-3 cr	BFI
MMEP12	MMEA/MMEP	Motor/Marine/Small Eng	10-12	12-15	2-3 cr	EI
PIDP12	PIDA/PIDP	Painting & Decorating	10-12	12-15	2-3 cr	AC
PLHP12	PLHA/PLHP	Plumbing & Heating	10-12	12-15	2-3 cr	EI
PMTP12	PMTA/PMTP	Precision Machining Technology	10-12	12-15	2-3 cr	EI

PMPP12	PMPA/PMPT	Print Media Production	10-12	12-15	2-3 cr	AC
PSSP12	PSSA/PSSP	Public Safety & Security	10-12	12-15	2-3 cr	HS
SCMP12	SCMA/SCMP	Sewing/Clothing Manuf	10-12	12-15	2-3 cr	EI
WMFP12	WMFA/WMFP	Welding/Metal Fabrication	10-12	12-15	2-3 cr	EI
CTC203		Gov't/Citizenship- College	11	6	1 cr	HS
CTC205		Gov't/Citizenship- Honors	11	6	1 cr	HS
CTC211		World St- College	10	6	1 cr	HS
CTC213		World St- Honors	10	6	1 cr	HS

Course Descriptions

AIR FORCE JUNIOR ROTC PROGRAM (AFJROTC)

The Air Force Reserve Officer Training Corps (AFJROTC) is a program designed to develop citizens of character dedicated to serving their nation and community. Each AFJROTC class consists of three components—aerospace science, leadership education, and a wellness program. Citizenship and character education, the heart of the curriculum program, is primarily embedded in the leadership education series of courses, while a sense of service and education in science and technology related aerospace science is primarily found in the aerospace science series of courses. To reinforce what is taught in the classroom, students participate in many outside activities such as field trips to military bases, aerospace facilities and industries, museums, and other areas related to aerospace education. Students are also offered the opportunity to participate in co-curricular activities to include drill and ceremonies, summer leadership school, and honorary academic groups. Community service projects are a major part of the AFJROTC experience and help to instill a sense of civic pride and citizenship. Students are required to meet Air Force dress and appearance standards and wear the Air Force uniform once a week as well as participate in the wellness portion of the curriculum. Course offerings include Aerospace 100 "A Journey into Aviation History", Aerospace 200 "The Science of Flight", Aerospace 220 "Cultural Studies", Aerospace 300 "Exploring Space", and Aerospace 400 "Management of the Cadet Corps." Courses will be taught on a rotating basis and no cadet will repeat a course. **There is no military obligation for students enrolled in AFJROTC**

394 AFJROTC **Grades 9-11** **1 Credit**

Courses will be taught on a rotating basis and no cadet will repeat a course.

395 AFJROTC/SENIOR (HONORS WEIGHTED COURSE) Grade 12 **1 Credit**

This is a continuation of the 394 AFJROTC course. *Prerequisite: Successful completion of one year of AFJROTC.*

ART

The art curriculum offers a variety of activities through its various courses. Course work is designed to meet the individual interests, talents and abilities of students. Whether the student is a craftsman, fine artist, or a person who simply enjoys art, there is a program of study to meet his/her interest. Students are encouraged to develop according to their talents and abilities but all students taking art courses will find their creative problem solving skills challenged and their sense of personal identity encouraged.

COURSE RECOMMENDATIONS

Students planning a career in art should consider taking one of the Art Major sequences (Craft or Drawing & Painting) or a combination of the two. Both the Drawing & Painting Major and the Craft Major sequences are designed for students deeply interested in art and who are considering one of the many careers available in the visual arts. Students in the Major course sequences are expected to maintain an art journal/sketchbook and participate in an end of year exit exhibition. Students who enjoy art, but are not planning an art-related career, should consider taking the Art Elective courses. Students can expect sketchbook homework and written assignments in addition to project creations for all elective courses and participation in the annual art exhibit is required.

366 FOUNDATIONS OF ART **Grades 10-12** **1 Credit**

Do you like art? To paint and draw? To play with clay, fibers, and metal, building three-dimensional structures? Then THIS is your class! We will focus on the developing artist's use of the Principles of Design through the exploration of artists past and present. This content will be the basis for exploring a wide variety of media, building skills in drawing, painting, color theory and computer technologies in addition to working with clay, plaster, wood, metal, paper and fibers. Students will be able to better understand how to work both two dimensionally and three dimensionally, with a half-year focus on each. Students will be expected to maintain an art journal/sketchbook; written assignments and reflections upon works created will be used to reinforce concepts addressed in class. All students enrolled are required to participate in the annual art exhibit.

369 ADVANCED DRAWING & PAINTING **Grades 11-12** **1 Credit**

The focus of this course is geared towards the development of a quality studio portfolio suitable for college admission. However, the hobbyist wanting to advance their drawing and painting skills will enjoy this course as well. Students will be thoroughly examining the art forms of the still life, portrait/figure, landscape and graphic arts while using a wide variety of art media and techniques and an advanced use of the elements and principles of design. Each category will also be examined historically from the Romantic period to the Contemporary art of today. Personal art journal work and written assignments can be expected. Participation in the annual art exhibit is required. *Prerequisites: Foundations of Art or permission from the Instructor.*

370 ADVANCED CRAFTS **Grades 10-12** **1 Credit**

Advanced Crafts is intended for the development of a quality portfolio that will demonstrate mastery of a wide variety of three-dimensional media. Students will look to the work of artists from the Romantic to the present day for inspiration, with a particular focus on contemporary crafts. Students will be expected to maintain an art journal/sketchbook; written assignments and reflections upon works created will be used to reinforce concepts addressed in class. All students enrolled are required to participate in the annual art exhibit. *Prerequisite(s): Foundations of Art or permission from the Instructor.*

371 AP STUDIO ART **Grade 12** **1 Credit**

The focus of this course is the completion of the studio portfolio with the advanced art student developing a personal concentration, or theme, which will result in the production of individual works of art. The work from all previous art classes, in addition to this group of concentration pieces, will become the student's AP Studio Portfolio exam. Outside assignments, written work, and participation in the annual art exhibit are required. **Students may choose to take the AP exam at the student's expense.** *Prerequisite(s): Advanced Drawing & Painting or Advanced Crafts or permission from the Instructor. See page 10 for AP criteria.*

376 MULTICULTURAL ARTS **Grades 10-12** **1 Credit**

This year-long course will examine the idea of "culture". We will examine the traditions and values of different cultures and how the artwork from those cultures reflects those ideas. This will lead to comparisons to our own culture, and projects will be a blend of global ideas and a student's own personal culture. A variety of media will be used, and both 2-D and 3-D art work will be created.

378 CONTEMPORARY 2-D DESIGN **Grades 10-12** **1 Credit**

Printmaking, collage, paint, paper crafts and more are featured in this course that will focus on two dimensional design compositions with modern influences! The course will have a focus on contemporary artists and their modern studio processes. The elements of art will be explored as students learn to draw, paint, and create strong compositions using a wide variety of media. This course is open to any student with an interest in the visual arts.

379 EXPLORING SCULPTURE: 3-D DESIGN **Grades 10-12** **1 Credit**

Students will focus upon creating three-dimensional works to better understand the possibilities and limitations of the media of clay, plaster, wood, and metals as well as paper and fibers. Students can expect to improve problem solving skills, and learn more about both the elements and the principles of art as we create a variety of sculptural works. All students enrolled are required to participate in the annual art exhibit.

BUSINESS

The business education program offers many valuable opportunities for the non-business major. For those who plan to major in some field of business in college, a rudimentary background in Accounting and Data Processing would be a valuable asset. For all students, regardless of their career intentions, there are a number of courses, which would prove valuable.

240 BUSINESS MANAGEMENT AND ENTREPRENEURSHIP Grades 10-12 1 Credit
Business Management is a seminar course for the academic student planning a career in business, as well as for students planning to enter the business world after high school or continue on in a business/technical school. This multifaceted course covers various topics; some tailored to individual interests of students. It includes entrepreneurial techniques, oral and written communication, job search and application techniques, and various business management skills. Field experiences and outside speakers are an integral part of the curriculum as well as the use of student projects to simulate the business world.

243 BASIC ACCOUNTING Grades 10-12 1 Credit
Basic Accounting is an introduction to the accounting cycle as it pertains to a single proprietorship and partnership for both service and merchandising business. Clerical and analytical skills are developed for recording entries in various journals, keeping ledgers, payroll, preparing worksheets and various financial reports.

244 ADVANCED ACCOUNTING Grades 10-12 1 Credit
This is a one-year course that further develops skills from Basic Accounting. It teaches students how to keep the records of a partnership and corporation. Topics include departmental accounting, payroll, accounting control systems, updating accounts by adjustment, corporate accounting (stocks, bonds, and dividends) and cost accounting. Advanced computerized accounting is an integral part of this course. *Prerequisite(s): Basic Accounting.*

247 SPORTS & ENTERTAINMENT MARKETING Grades 10-12 1 Credit
The field of sports and entertainment marketing is rapidly growing. This course is designed to apply business and marketing principles to the area of sports, sporting events, and sports products. This will be done by presenting real world business and marketing strategies used in this industry, examining the legal and ethical issues that commonly occur, and how exploring the use of technology has effectively been applied in the sports business/marketing arena.

248 FINANCIAL LITERACY Grade 11 1/2 Credit
Financial planning and self-management skills for the future will be the focus of the course, ending with a financial plan based on a desired career and salary. This project based course will provide hands-on experience for a financial future. Areas of study will include planning for educational expenses, personal and household budgeting, taxes, banking, investing, insurance, loans, understanding debt, credit procedures, and long-range financial planning. *Required for 11th grade students.*

COMPUTER SCIENCE

254 AP COMPUTER SCIENCE PRINCIPLES Grade 10-12 1 Credit
AP Computer Science Principles offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. AP Computer Science Principles also gives students the opportunity to use current technologies to create computational artifacts for both self expression and problem solving. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science. *See page 10 for AP criteria.*

256 AP COMPUTER SCIENCE A **Grade 11-12** **1 Credit**

AP Computer Science A is equivalent to a first-semester, college-level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object oriented and imperative problem solving and design using Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems. *See page 10 for AP criteria.*

258 COMPUTER GAME DESIGN & PROGRAMMING **Grades 10-12** **1 Credit**

Computer Game Design & Programming is for anyone who loves gaming and wants to design and build original games from scratch. Students learn how to use popular game-development software to create engaging, interactive games in a variety of styles. This class introduces students to object-oriented game scripting language. Students learn to build a sophisticated computer gaming program, as well as learn about event driven programming, data driven programming and elementary graphics concepts.

261 ADVANCED TOPICS IN COMPUTER SCIENCE **Grades 11-12** **1 Credit**

Exploring new realms of technology is the goal of this course. While working in teams, students will learn about leading edge concepts such as augmented and virtual reality, cybersecurity, artificial intelligence, machine learning, data analysis & simulation development, embedded systems, GUI and NUI-based programming and robotics. Ideal for students pursuing Computer Science and engineering degrees and careers, completion of this course adds greater breadth to their deep knowledge of Computer Science topics.*Prerequisite: Successful completion of another CS course or permission from instructor.*

268 MOBILE APP DEVELOPMENT & PROGRAMMING **Grades 10-12** **1 Credit**

Mobile App Development & Programming provides students with no programming background with an introduction to mobile application development. Students will use a visual, drag and drop tool to build applications for Android and will be introduced to fundamental programming concepts and skills in the process. The intention of the course is to enable you to design, implement, test, and debug simple mobile applications for the Android operating system.

DRIVER EDUCATION

450 DRIVER EDUCATION **Grade 10** **1/4 Credit**

This required course emphasizes helping young people save lives. Much material in this course is selected because of its relation to the life or death aspect of driving. Behind-the-wheel instruction is given to those students who desire to take advantage of it. Students who will be 16 years old prior to the end of the first semester of 10th grade should schedule the fall semester course. For the behind-the-wheel phase, students must be 16 years of age and possess a valid learner's permit or driver's license. Students may arrange for behind-the-wheel training with the instructor. This behind-the-wheel training is scheduled during the student's study halls.

ENGLISH

The overall goal of our English Department is to promote literacy—specifically the ability to read, write, and think critically. We encourage students to think beyond the obvious and to equip them with the language arts skills necessary to meet the expectations of college professors and employers; this includes the fostering of such technological literacy as information retrieval, research, and communication. Students will also craft their expository and persuasive writing abilities while utilizing the Modern Language Association (MLA) format. While we maintain the intrinsic value of literature through a variety of genres and encourage students to become lifelong readers and writers, we also encourage them to read across the boundaries of time, place, and culture, and to recognize the historical and cultural contexts in which literature is created.

012 ENGLISH 10 HONORS **Grade 10** **1 Credit**
013 ENGLISH 10 COLLEGE **Grade 10** **1 Credit**

Students will read, interpret, analyze, and apply knowledge of the structures, themes, and elements of American fiction and nonfiction. They will develop an understanding of the importance of various periods of literature that characterize and reflect the American experience. Additionally, the course will continue to build upon the conventions and skills of vocabulary, reading, writing, speech, grammar, and research to further prepare our students as Twenty-first century learners. Students will be expected to successfully complete research-based assignments and projects including literary analyses and a formal research paper in MLA format. Students who successfully complete the English 10 Honors course will be offered the option for English 11 Honors in their junior year. Honors Note: A summer reading list and/or assignments will be required as preparation for this course Honors Prerequisite(s): Students must have achieved high scores (at least 2 90% and nothing less than an 80% in their grade 9 English course) and must be recommended by their teachers in order to be scheduled into English 10 Honors.

022 ENGLISH 11 HONORS **Grade 11** **1 Credit**
023 ENGLISH 11 COLLEGE **Grade 11** **1 Credit**

World Literature investigates the question of what makes us human. The course focuses on how literature reveals to readers that even the most different of cultures have things in common. Because individual viewpoints shape human understanding and action, students question the truth behind perception and examine the role it plays in either reinforcing or undermining the truth. Students will also explore fiction and non fiction text from cultures and time periods across the globe. Additionally, the students in this course will continue to build upon the conventions and skills of vocabulary, reading, writing, speech, grammar, and research. ***Note:*** *A summer reading list and/or assignments will be required as preparation for the Honors course; therefore, each student who enrolls in this course must complete the Summer Assignments Policy, get it signed, and turn it in to their respective teacher along with his/her course selection sheet. Honors Prerequisite(s): Students must have achieved high scores (at least 2 90% and nothing less than an 80% in their grade 10 English course) and must be recommended by their teachers in order to be scheduled into English 11 Honors.*

029 AP LANGUAGE & COMPOSITION **Grade 11** **1 Credit**

This college-level English course uses a mix of fiction and non-fiction texts to prepare students for success on the AP Language & Composition test. That said, students who opt out of the test will find that the course's emphasis on composition, argumentation, rhetoric, bias assessment, and critical analysis will prepare them not only for 12th grade AP Literature but college-level writing and thinking in general. Texts are primarily short, as are the written assignments. Class discussion is an essential component of the course. Students may choose to take the AP exam at the student's expense. ***Note:*** *A summer reading list and/or assignments will be required as preparation for this course See page 10 for AP criteria.*

030 AP ENGLISH LIT & COMPOSITION **Grade 12** **1 Credit**

This specialized English course is targeted for the senior honors student planning to take the Advanced Placement test in Literature and Composition. It demands a strong, confident command of standard written English and proficiency with expository writing. The student will be required to read, analyze, explicate, and respond to many pieces from the various literary genres. Students may choose to take the AP exam at the student's expense. ***Note:*** *A summer reading list and/or assignments will be required as preparation for this course. See page 10 for AP criteria.*

031 ENGLISH 12 HONORS **Grade 12** **1 Credit**
033 ENGLISH 12 COLLEGE **Grade 12** **1 Credit**

Surveying modern and classic literature, students will develop higher-order thinking skills through application and analysis as they encounter a variety of literary genres and themes. Mastery of written and oral communication skills are practiced while also preparing for life after high school. Additionally, the students in this course will continue to build upon the conventions and skills of vocabulary, reading, writing, speech, grammar, and MLA formatted research. ***Note:*** *A summer reading list and/or assignments will be required as preparation for the honors version of this course. All students enrolling in the honors course should be recommended by their grade 11 English teachers. Students must have achieved high scores (at least 2 90% and nothing less than an 80% in their grade 11 English course) and must be recommended by their teachers in order to be scheduled into English 12 Honors.*

FAMILY AND CONSUMER SCIENCES

The curriculum of the Family and Consumer Sciences Department, designed to help students meet the challenges of life, includes the study of food, nutrition, interior design, housing, sewing, consumerism, child development, parenting, and independent living. Consumerism, foods, and sewing lab work provide the students with the tools necessary to develop skills for daily living. Nutrition, fitness, and personal development contribute to positive self-concepts as students explore individual priorities and goals; learn more about themselves, others, and their environment; and recognize the importance of their role within the family unit. Communication, problem solving, and decision-making are integral components within the curriculum, since these life management skills are essential to self-actualization, regardless of life or career directions.

302 FAMILY FOODS **Grades 10-12** **1 Credit**
The aim of this course is to provide the students with a basic knowledge of food and the many facets of consumerism. Principles of food preparation are thoroughly covered as they relate to the amount of time and skill needed to prepare meals. Opportunity is provided for students to exercise self-reliance in food purchasing, food preparation, and serving of the meal. *Note: A nominal fee may be charged for supplies used on projects in the class.*

303 MULTICULTURAL FOODS **Grades 11-12** **1 Credit**
This course acquaints the student with international and regional foods in order to develop an appreciation of mealtime customs and home life of other nations and cultural groups. Emphasis is placed on providing the student with an opportunity to experiment, create, and analyze new food flavors, combinations, and methods of food preparation of selected cuisines. *Note: A nominal fee may be charged for supplies used on projects in the class.*

307 CREATIVE LIVING **Grades 10-12** **1 Credit**
This course allows students to express themselves through interior design and baking. Students will learn the basics of interior design while developing their eye for design. They will also learn various baking skills including preparation of various types of breads, cakes, cookies, and pies. Students are responsible for some project materials. *Note: A nominal fee may be charged for supplies used on projects in the class*.

313 FASHION **Grades 10-12** **1 Credit**
This course will explore the different facets of fashion from its history, to why we wear what we do, to styles, designers, and the industry. It will look at the elements of design as they relate to fashion and the role of color in fashion. Fibers and fabrics along with clothing care will also be explored. Consumerism as it relates to clothing purchases will be covered. Students will explore careers in the fashion industry. The students will review basic sewing information before beginning construction of a garment. **Students are responsible for purchasing supplies used to make their sewing projects.**

315 FAMILY & CONSUMER SCIENCE **Grade 10** **1/4 Credit**
Family & Consumer Science is a required fast-paced, comprehensive course designed to acquaint students with a common sense approach to skills and modern challenges in wellness, nutrition and foods, human development, family and child development, interpersonal relationships, housing and living environments, as well as financial and consumer resource management. Future Career and Community Leaders of America (FCCLA) activities are part of this course. These skills will assist students in managing, with good judgment and creativity, the many challenges across the life span that are related to the family unit in a global society.

318 COOK ONCE, EAT TWICE **Grades 11-12** **1 Credit**
This course focuses on kitchen economics. Food can be even more delicious the second time around. “Cook Once, Eat Twice” is a timesaving, economical approach to “no waste” home cooking that includes make-ahead strategies yielding at least two meals from one preparation. Students will explore substitutions and strategies for preparing a meal with staple foods, commonly found in all kitchens. *Topics to be covered are: soups, stews, sauces, stir-fries, casseroles, salads & dressing, sandwiches and pizza.*

319 WORKING WITH YOUNG CHILDREN **Grades: 10-12** **1 Credit**

This course offers students the opportunity to explore the facts, issues, and development involved in being a parent, child care provider, or early childhood and elementary educator. The student will gain a better understanding of children as individuals and their behavior as it relates to their environment and heredity. Topics will include adult responsibilities in development, attitudes towards children, nutritional needs, caring for a newborn, the developmental stages of children birth through middle childhood, and learning experiences using music, art, literature, etc.. Students will observe and analyze adult/child interactions through direct instruction, observation, and hands-on experiences. This course will provide one on one experience working with children of multiple ages.

INDEPENDENT STUDY

Students may participate in an independent study program to explore, in-depth, any subject area of interest by working one-on-one with a teacher familiar with the subject. Areas are chosen by the student after discussions with a school counselor and the teacher in charge. All independent study programs are for seniors only who want to explore an area not covered in the regular curriculum. Credits earned by an independent study must be credits beyond those required for graduation; and they may not substitute any course required for graduation. These credits are in addition to the normal course load for a student.

Students in an independent study program must be capable of completing the project with a minimum of teacher supervision and in addition to their regular schedule of classes. Application forms for this program are available in the Counseling office. Programs must be approved by the principal in the spring prior to the Independent Study taking place.

INTERNSHIP

275 INTERNSHIP **Grade 12** **1 Credit**

The purpose of the Internship Program is to prepare our students for the world of work and to have them examine their career interests and opportunities for continuing education. Students will participate in a workplace experience, in regularly scheduled meetings with the supervising teacher, and in semester presentations. Internships may be paid or unpaid. Internships can be tailored to the unique needs and interests of the learner. A learning agreement outlines the expectations of all parties: the student, parent, supervising teacher, employer, and school. It is the students' responsibility to identify a location for their internship opportunity as well as secure transportation to and from the internship site. The program is open to senior students.

MATHEMATICS

The Mathematics Department has designed its courses to meet the needs of our students according to their individual preferences. In the academic area, we feel our graduates are prepared to pursue mathematics or any mathematics-related area beyond high school. In the trades and/or consumer area, our courses give our students a firm background to handle the mathematics of the high-tech workforce and everyday living.

112 ALGEBRA 2 GEOMETRY COLLEGE **Grades 9-12** **1 Credit**

The principles of this course design—problem-based lessons, collaborative student work, and spiraled practice— are based on the methodological research for teaching mathematics that leads to conceptual understanding. Through this course students will gain mastery in working with and evaluating mathematical expressions, equations, and graphs. Students will also become adept at making and testing conjectures about geometric relationships and using theorems and properties to justify their reasoning. Topics include: real numbers, equations, functions, linear equations and inequalities, solving systems of linear equations and inequalities, polynomials and factoring, quadratic equations, and rational expressions, congruent and similar polygons, and probability and statistics. Additionally, students will be encouraged to develop positive behaviors in the area of classroom preparation and task completion.

114 PRECALCULUS HONORS **Grades 10-12** **1 Credit**

115 PRECALCULUS COLLEGE **Grades 10-12** **1 Credit**

This course gives students an understanding of the trigonometric functions, as well as polynomial, rational, exponential, logarithmic functions, and functions involving radicals and offers a foundation for theory of calculus to prepare students for college level study. Students in 115 Precalculus Honors may choose to apply for Dual Enrollment at their own expense. *Prerequisite(s): Algebra 2/Geometry College/Honors.*

117 AP CALCULUS AB **Grade 11-12** **1 Credit**

This one-year course follows a rigorous schedule that prepares students for taking the AP Calculus AB exam. AP Calculus AB introduces the Theory of Limits and the differentiation and integration processes and their applications. Calculus is taught through a graphical, analytical, and a numerical approach. Students may choose to take the AP exam or apply for Dual-Enrollment at the student‘s expense. If a student chooses to take the AP exam they will be exempt from taking a course final. If a student dual enrolls with RACC, they are required by RACC’s guidelines to take a final to determine their overall course grade**. If a student does not take the AP exam or is not dual-enrolled they will receive the same credit weight for the course as Calculus Honors.** *Prerequisite(s): See pages 10 and 11 for AP and Dual Enrollment criteria.* Note: Summer assignments may be required as preparation for this course.

118 CALCULUS HONORS **Grade 11-12** **1 Credit**

This one-year course introduces the Theory of Limits and the differentiation and integration processes and their applications. The course includes a review of analytic geometry but is not taught as an Advanced Placement course. Calculus is taught through a graphical, analytical, and a numerical approach. Students may choose to apply for Dual-Enrollment at their own expense. *Prerequisite(s): Students must earn an 80% or better in Precalculus Honors or Precalculus College.*

138 MATH CONCEPTS FOR THE REAL WORLD **Grade 12** **1 Credit**

This course is designed to solidify a student’s understanding of mathematics that are frequently used in the real world both as a consumer and in the workplace. Included in the curriculum are units on Measurement, consumer applications of Percentages (including discounts, markups, and taxes), Personal Finance, Representing and Interpreting Data and Statistics, applications of Geometry, and an introduction to Right Triangle Trigonometry.

122 ADVANCED ALGEBRA 2 **Grades 11-12** **1 Credit**

This course features coherent, connected units that advance student understanding and skills in algebra and functions, geometry and trigonometry, statistics and probability, financial and discrete mathematics. The goal is to build on a theme of mathematics as sense-making. Through problem-based investigations featuring realistic contexts, students develop a rich and connected understanding of important mathematics that makes sense to them. Students may choose to apply for Dual Enrollment at their own expense.

125 AP STATISTICS **Grades 11-12** **1 Credit**

This course is structured around the AP Statistics curriculum. Students taking this course may be able to receive college credits if they earn a 3 or better on the AP exam at the end of the year. The students will gain an understanding of how to use statistical methods to interpret real-life data. The students will use graphing calculators as well as computer software. The main topics of the course include organizing data, probability, designing samples and experiments, hypothesis testing, and analyzing data. **Students may choose to take the AP exam or apply for Dual-Enrollment at the student‘s expense.** Prerequisite(s): *See pages 10 and 11 for AP and Dual Enrollment criteria*. Note: Summer assignments may be required as preparation for this course.

127 AP CALCULUS BC **Grade 12** **1 Credit**

This course will continue from where AP Calculus 1(AB) left off and prepares the student for taking the AP Calculus BC exam. After a brief review period, students will begin working on the following 3 units, which complete the AP Calculus BC curriculum: Techniques of Integration (topics not covered in AP Calc. 1), Parametric Equations and Polar Curves, and Sequences and Series. Once students complete the AP Calculus BC curriculum we will move into material typically covered in a College level Calculus 3 course. Students may choose to take the AP exam or apply for Dual-Enrollment at the student's expense. If a student chooses to take the AP exam they will be exempt from taking a course final. If a student dual enrolls with RACC, they are required by RACC's guidelines to take a final exam to determine their overall course grade. **If a student does not take the AP exam or is not dual enrolled, they will receive the same credit weight as an Honors course.** Prerequisite(s): See pages 10 and 11 for AP and Dual Enrollment criteria. Note Summer assignments may be required as preparation for this course.

132 COLLEGE ALGEBRA/TRIGONOMETRY **Grade 10-12** **1 Credit**

This course is designed to solidify a student's understanding of the algebra concepts most important in a College Algebra classroom. The course is composed of three components: College Algebra concepts (solving equations, systems of equations, functions, graphs of functions, polynomials and factoring, and quadratic equations), SAT Math eligible content, and Trigonometry. The foundations from this course will allow a student to explore higher mathematics in their junior and senior year.

STUDENTS SIGNING UP FOR PROBABILITY & STATISTICS MUST CHOOSE ONE OF THE TWO OPTIONS.

135 PROBABILITY & STATISTICS: STATISTICS THROUGH APPLICATION **Grade 12** **1 Credit**

This course is designed to focus on statistical ideas and reasoning, and their relevance to such fields as medicine, education, environmental science, business, psychology, sports, politics, and entertainment. Students will formulate questions that can be addressed with data, and collect, organize, and display relevant data to answer them, select appropriate statistical methods to analyze data, develop and evaluate inferences and predictions based on data, and understand and apply basic concepts of probability through the use of real world examples. Activities give students opportunities to investigate, discuss, and make use of statistical ideas and methods. *Prerequisite(s): Algebra 2/Geometry or College Algebra/Trigonometry*

136 PROBABILITY & STATISTICS: STATISTICAL REASONING IN SPORTS **Grade 12** **1 Credit**

The purpose of Statistical Reasoning in Sports is to teach students the principles of statistical reasoning in an accessible and enjoyable way that helps prepare them for life in the 21st century. In a data-saturated world, citizens must be able to ask thoughtful questions, properly analyze data, and, most importantly, use critical thinking skills to draw appropriate conclusions and recognize inappropriate conclusions made by others. The aim is to introduce the principles of statistical reasoning using a non-standard and student-friendly approach that emphasizes the entire statistical process, all in a motivating sports context. *Prerequisite(s): Algebra 2/Geometry or College Algebra/Trigonometry*

137 AP PRECALCULUS **Grades 10-12** **1 Credit**

This one year course is designed to prepare students who will take the AP exam in a faster paced deeper level of knowledge of the precalculus curriculum. This course will foster the development of deep conceptual understanding of functions, hone in on the symbolic manipulation skills needed for future mathematics courses that involve solving equations and manipulating expressions, and lastly apply mathematical tools in real world modeling situations to prepare for college level calculus. *See page 10 for AP criteria.*

MUSIC

The Music Department offers a program of studies for the student who plans to enter a music or music-related field as well as the student who wants to gain an understanding of the fine art of music. The department also provides the opportunity for each student to attain instrumental and vocal performing competence through a variety of performing organizations.

348 MUSIC APPRECIATION **Grades 10-12** **1 Credit**

This course provides an approach to perceptive listening of music and an introduction to musical elements, forms, and stylistic periods. The lives, individual styles, and representative works of many music artists (composers & performers) are examined in detail. This class will work from the present scene in music and go backwards in music history, with an emphasis on American music.

351 MAJOR MUSIC I **Grades 10-12** **1 Credit**

This is a major course, which encompasses three disciplines of music: 1) music theory (harmony & analysis), 2) sight singing, and 3) dictation (interval recognition and hearing & writing melodies). This course is designed for students deeply interested in music, students who are planning a career in a music-related field, or students interested in the field of elementary education. *Prerequisites: The ability to read music; music teacher recommendation.*

352 MAJOR MUSIC II **Grades 11-12** **1 Credit**

This is a continuation of the Major Music I class. *Prerequisite: Major Music I (70% or better in each of the three disciplines); music teacher recommendation.*

353 MAJOR MUSIC III **Grades 12** **1 Credit**

This is a continuation of studies from Major Music II. Topics include sight singing (including dominant seventh intervals), ear training (harmonic dictation), theory (four part writing & orchestration), and history (Romantic & Impressionist eras*). Prerequisite(s): 80%or better in Major Music II or teacher recommendation.*

357 BLUE BAND **Grades 10-12** **1/3 Credit**

This is a non-select band which rehearses twice a cycle during school hours. The band prepares and performs a variety of marching and concert band music and provides music at football games, parades and various concert events. Students are required to attend a 1 week band camp (first full week in August) and Wednesday evening rehearsals during the football season. Five sectionals or a playing exam are required from students quarterly. Students are also required to purchase appropriate concert and performance attire as needed. All students will play a short audition yearly for chair placement. Please contact the band director for additional information. *Prerequisite(s): Performance ability on a band instrument.*

358 JAZZ BAND **Grades 10-12** **1/6 Credit**

These are select jazz ensembles that rehearse both on and off school time. The groups play a wide variety of jazz styles and concentrate on developing improvisational skills. Both bands perform at concerts, jazz festivals, and other community functions throughout the spring of the year. Students are required to purchase appropriate attire for performances. *Prerequisite(s): Membership in "Blue Band"; audition.*

359 CONCERT CHOIR **Grades 10-12** **1/2 Credit**

This is a non-select chorus which rehearses three times a cycle during school hours and requires one sectional rehearsal during four separate cycles as well as some evening rehearsal time. This chorus prepares and performs a variety of four to eight part music with emphasis on intermediate and advanced music reading and vocal production. Concert Choir performs three to five times per year and participates in Music Department trips that are planned every three years. *Prerequisite: no audition, but all members will perform a simple pitch range check for voice part assignment.*

364 VOICE CLASS **Grades 10-12** **1 Credit**

This class is aimed at students who want to learn the proper techniques for solo vocal singing. This is ideal for students who have not yet taken private voice lessons. Students will be required to perform in at least two recitals, which will be after school hours.

386 STEEL DRUMS I **Grades 10-12** **1 Credit**

Steel Drums I is a performance based course that will teach students to play and perform on the steel drums, develop initial music reading skills and learn the background and development of the steel drum culture. The goal of this course is to expose students to this multicultural art and prepare students for a public performance.

SCIENCE

The science program is designed to provide each student with the opportunity to take the fundamental courses in life, physical and earth and space science areas of science. In addition, the science program provides electives in science for those students who are interested in a scientific career. The science program is focused on discovery as a means of learning. Students enrolling in AP lab sciences often need to miss one day per cycle of an elective course in order for that lab science to be scheduled. Students are responsible for work that is missed in such situations.

151 BIOLOGY COLLEGE **Grade 11** **1 Credit Life Science**

This course will prepare students to take the Keystone Biology at the end of the course. This course will include the following topics: Biochemistry, Cell Biology, Cellular Transport, Cellular division, energy processes, reproduction, genetics, and ecology. This course is for students who have not taken the Keystone Biology

154 AP BIOLOGY **Grades 11-12** **1.33 Credit Life Science**

The AP Biology course is designed to be the equivalent of a two-semester college introductory course usually taken by biology majors during their first year. The content is organized around four Big Ideas; Evolution, Biochemistry, Genetics, and Organismal Biology. It incorporates seven science practices meant to develop advanced inquiry and reasoning skills such as, designing a plan for collecting data, analyzing data, applying mathematical routines, and connecting concepts in and across domains.

Students can anticipate 5-8 hours of homework a week. The course is designed to foster laboratory skills, critical thinking skills, and study skills to help the college bound student. Students may choose to take the AP exam at the student's expense. *Prerequisites: Proficient or Advanced on the Biology Keystone. 80% or better in Chemistry. Students will be required to complete assignments the summer before they take this course. See page 10 for AP criteria.*

158 AP CHEMISTRY Grades 11-12 1.33 Credit Physical Science
Many colleges and universities grant admission with advanced standing in chemistry to students who have passed the Advanced Placement Chemistry test. In addition to covering topics in inorganic chemistry that were not covered in the basic chemistry course, this course prepares students for the Advanced Placement Chemistry Test. Students who are enrolled in AP Chemistry will meet for eight periods in a six day cycle. ***Students may choose to take the AP exam at the student's expense.*** *Prerequisite(s): Chemistry College/Honors and Algebra 2 College. Students may be required to complete "review" assignments the summer before they take this course. See page 10 for AP criteria.*

160 CHEMISTRY HONORS Grades 10-12 1.17 Credits Physical Science
Honors Chemistry is a rigorous, fast-paced course that is recommended for students who intend to pursue post-secondary education immediately after high school. Units of study include describing matter, atomic theory, nomenclature, reactions, stoichiometry, gasses, thermochemistry, and kinetics. Honors Chemistry examines each chemistry topic more thoroughly than in Chemistry College. Due to this course's heavy mathematical component, students should be successful in algebra and mathematical problem solving. Honors Chemistry prepares students to take AP Chemistry and/or other AP sciences if they so desire. This course is a dual enrollment course. *Prerequisite(s): Algebra 1 & Algebra 2 (can be concurrent).*

161 CHEMISTRY COLLEGE Grades 10-12 1.00 Credits Physical Science
Chemistry is the first lab-based course available to students and is essential for students who intend to pursue post-secondary education immediately after high school. This course examines matter and energy at the microscopic level. Units of study include describing matter, atomic theory, nomenclature, reactions, stoichiometry, and gasses. *Students will have a foundation in these topics in order to prepare them to take chemistry in college Prerequisite(s): Algebra I*

167 AP ENVIRONMENTAL SCIENCE Grade 11-12 1 Credit Life Science
*A*P Environmental Science will allow students to engage with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the risks associated with these problems, and examine alternative solutions for resolving or even preventing them. Environmental Science covers a variety of topics including geology, psychology, chemistry and biology, and ecology. ***Students may choose to take the AP exam at the student's expense.*** *Prerequisites: Students should have completed 1 year of physical science, 1 year of a life science and scored proficient on the Biology and Algebra Keystone exam. Teacher recommendation required. Students may be required to complete "review" assignments the summer before they take this course. See page 10 for AP criteria.*

168 ENVIRONMENTAL SCIENCE COLLEGE Grades 11-12 1 Credit Life Science
Recommended for college bound students with an interest in the environment and problems that face it. Course content includes an in depth look at topics such as ecosystems, global problems, pollution, human population, and current environmental topics and legislation. Other general areas of study include but are not limited to alternative energy sources and possible solutions to environmental problems. This course also includes project-oriented studies. *Prerequisite(s): Biology and General Physical Science or Chemistry.*

170 GENERAL PHYSICAL SCIENCE Grades 10-12 1 Credit Physical Science
The emphasis of this course is on the introductory concepts and applications of Chemistry and Physics. The course includes units such as Properties of Matter, Density, Force, Motion, Energy and Work, Machines, Elements and Atoms, Compounds and Mixtures, Chemical Formulas, Chemical Reactions and Metals. Students who have passed chemistry or physics may not schedule this course. *Prerequisite(s): Algebra 1 is recommended, but not required. (Can be concurrent)*

171 PHYSICS COLLEGE Grades 11-12 1 Credits Physical Science
The Physics College course deals in the topics of classical mechanics & electricity and magnetism. The

course places an emphasis on students understanding the conceptual aspects of physics, and ability to solve real world physics problems. Throughout the course, students will gain an understanding of physics through a variety of lab experiments, in-class demonstrations and simulations. The Physics College course is designed for students bound for college or Technical School who are looking for an in depth study of physics, but are not quite ready for the rigors of an AP Physics Course. *Prerequisite(s): Algebra 2/Geometry or a B or higher in Advanced Algebra 1/Geometry & General Physical Science or Chemistry College.*

176 AP PHYSICS 1 Grades 11-12 1.33 Credits Physical Science
AP Physics 1: The AP Physics 1 course is designed to be the equivalent of a semester college introductory course usually taken by any science major. The course is algebra-based and will require a calculator. This course meets 8 periods in a six day cycle. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; and mechanical waves and sound. It will also introduce electric circuits. ***Students may choose to take the AP exam at the student's expense.*** *Prerequisite(s): Trig, Precalculus, or concurrent. Students may be required to complete "review" assignments the summer before they take this course. See page 10 for AP criteria.*

177 AP PHYSICS 2 Grade 12 1.33 Credits Physical Science
AP Physics 2: The AP Physics 2 course is designed to be the equivalent of a semester college introductory course usually taken by any science major. The course is algebra-based and requires a calculator. This course meets eight periods in a six day cycle. The course covers fluid mechanics; thermodynamics; electricity and magnetism; optics; and atomic and nuclear physics. ***Students may choose to take the AP exam at the student's expense.*** *Prerequisite(s): Either AP Physics 1 or Physics. Students may be required to complete "review" assignments the summer before they take this course. See page 10 for AP criteria.*

175 HUMAN ANATOMY & PHYSIOLOGY Grades 11-12 1 Credit Life Science
This course is designed for students who wish to pursue a profession in the medical field, and is taught at a level students would experience in the post-secondary medical setting. This class includes the subject areas of biology, mathematics, physics, and health sciences. This course explores components of physiology, anatomy, and kinesiology - areas that comprise the human body as a whole. Students will explore the gross and surface anatomy of nearly all of the human body systems and determine how those structures carry out specific functions. ***Note:*** *Field trips are an important aspect of this course and may involve a nominal cost.* ***Prerequisites:*** *Students must have scored proficient on the Biology Keystone Exam. In addition, students must have completed at least 1 year of life science (AP Biology, AP Environmental Science, Biology College, or Advanced Biology) and at least 1 year of a Chemistry course with a year-end minimum of 80% in both subject areas.*

179 ASTRONOMY & METEOROLOGY Grades 11-12 1 Credit Earth & Space Science
This course is a general overview of the understanding of the universe, earth, and earth's weather. The course has been designed so that the instruction will appeal to students of all ability levels within the sciences. The study includes: constellation and bright star identification; motions of celestial objects – including the earth and moon, and comparison of solar system components. Additionally, students will study the earth's crust, rocks, minerals, fossils, weathering and erosion, topographic maps, and Plate Tectonics. Students will also study the earth's weather, the atmosphere, air masses, global wind systems, precipitation, storms, and forecasting. This course is available to 11th and 12th grade students only.

182 SCIENCE RESEARCH Grades 11-12 1.17 Credit Science Elective
This junior or senior elective science course is designed to teach students about how to conduct scientific research. Throughout the course, students will conduct a research experiment and share their findings, outside of the classroom. Students will be given the opportunity to present their research in multiple venues. The basis for this course is the scientific method, and students will learn extensively about each part and how it applies to their research. Students will also learn 21st century skills like communication, creativity, and collaboration throughout the process. Students' topics can range from life science to physical science to math/computers and social sciences; just to name a few. This elective course is designed for students who want to explore a science topic in depth.*Must have permission from the instructor to enroll in this course.*

183 AP PHYSICS C: MECHANICS Grades 11-12 1.33 Credit Physical Science

AP Physics C Mechanics is a calculus-based physics course that prepares students to major in the physical sciences or engineering fields. This course explores topics such as kinematics, forces, energy, works and momentum through calculus. This will also include laboratory experimentation to solidify the major concepts. ***Students may choose to take the AP exam at the student's expense.*** *Prerequisite(s): Calculus, or should be taken concurrently. Students may be required to complete "review" assignments the summer before they take this course. See page 10 for AP criteria.*

184 AP PHYSICS C: ELECTRICITY AND MAGNETISM Grades 11-12 1.33 Credit Physical Science
AP Physics C Electricity and Magnetism is a calculus-based physics course that prepares students to major in the physical sciences or engineering fields. This course explores topics such as electrostatics, capacitors, circuits and electromagnetism through calculus. This will also include laboratory experimentation to solidify the major concepts.***S tudents may choose to take the AP exam at the student's expense.*** *Prerequisite(s): Calculus, or should be taken concurrently. Students may be required to complete "review" assignments the summer before they take this course. See page 10 for AP criteria.*

SOCIAL STUDIES

A day doesn't pass in our lives when we are not involved with some aspect of social studies. Our use of money; our relations with family, friends, and associates; and our rules and regulations all borrow from the broad field known as social studies. By understanding the total system in which we live, the societies in which others live, and the history of man, which brought all of us to this point in time, we should be better able to live more effectively in our society. All students must have: US History, World Cultures/World History and Econ/Gov.

060 AMERICAN CULTURES II HONORS Grade 10 1 Credit
061 AMERICAN CULTURES II COLLEGE Grade 10 1 Credit
The American Cultures course is a continuation of the American Cultures I program. It begins with industrialization in the late nineteenth century and moves to the present. Emphasis will be placed on America's role in world events and on the cultural developments in the United States. Some topics include: Urbanization, and Industrialization, the Gilded Age, Imperialism, Progressivism, World War I, the Roaring Twenties, the Depression, World War II, the Cold War including the Korean Conflict and the Vietnam War, the Civil Rights Movement, and contemporary issues that impact the United States today. Using a cultural approach, students will learn to deal with American problems as they affect our daily lives.
Note: *Prerequisite(s): Students must have achieved high scores (at least 2 90% and nothing less than an 80% in their grade 9 Social Studies course) and must be recommended by their teachers in order to be scheduled into American Cultures II Honors.*

070 WORLD CULTURES HONORS Grade 11 1 Credit
071 WORLD CULTURES COLLEGE Grade 11 1 Credit
Using geography, history, political science, economics, anthropology, sociology, art, music, and literature, the student will gain an understanding, appreciation, and respect for different cultures around the world and how they interact with one other. The various cultures of Asia, Africa, the Middle East and Europe will be explored from a primarily non-Western standpoint. An emphasis will be placed on contemporary issues facing these regions and their impact across the world today. ***Note:*** *Prerequisite(s): Students must have achieved high scores (at least 2 90% and nothing less than an 80% in their grade 10 Social Studies course) and must be recommended by their teachers in order to be scheduled into World Cultures 11 Honors.*

080 AP US GOVERNMENT & POLITICS Grade 12 1 Credit
This specialized one-year course is designed to prepare those students taking the AP exam in United States Government and Politics at the student's expense. Students can anticipate a college level course, with particular emphasis on independent learning. Participants will develop a critical and analytical approach to the study of political science. This is an intense course of study that integrates frequent supplemental reading assignments into curriculum that has been devised by the College Board. *Please note that AP Government students will also receive instruction in Economics.* ***Students may choose to take the AP exam at the student's expense.*** *Prerequisite(s): See page 10 for AP criteria.*

081 GOV'T & ECONOMICS HONORS **Grade 12** **1 Credit**
082 GOV'T & ECONOMICS COLLEGE **Grade 12** **1 Credit**

The ultimate goal of the Economics and Political Science courses is to give students the tools they need to become active, informed, involved, and responsible citizens. Both of these courses integrate the use of technology into the course of study. Using resources from the Internet, CD-ROM programs, computer programs, and simulations, students will participate in active learning strategies, which stress a student centered model of learning. The curriculum in each course will emphasize practical applications of both economic and political information. Each course will stress the roles and responsibilities of citizens. Current issues in each discipline will be examined from many views, and students will be encouraged to propose workable solutions. Responsibilities which accompany freedoms will be examined in each course. Personal economics will include units on money, banking, saving, investing, and credit. In the higher-level course, various economic systems will be examined. *Government & Economics is a required course; electives cannot be substituted.*

086 AP EUROPEAN HISTORY **Grades 10-12** **1 Credit**

This is an accelerated and enriched history course with a great emphasis placed on the use of original source materials as the basis of studying a historical period. Through research and study projects, the student will analyze and evaluate critical events of European History. The effect of these events on our world today will be carefully examined. This course will focus on the important events and relationships from 1450 (the high Renaissance) to present. Key areas covered will include the founding and development of Italy and Germany, the progress of Western European Democracies, the race for colonization, and thus the rise and effects of Industrialism. This course will require an in-depth research project and paper on a particular event or events of the periods. Advanced reading and writing will be required of students in this course. Summer reading and writing assignments will be required of students enrolling in this course. Selection of students is based upon teacher recommendations, past performance, and student interest. This course will be offered every other year to interested 11th and 12th grade students. *Students may choose to take the AP exam at the student's expense. Prerequisite(s): See page 10 for AP criteria.*

088 AP WORLD HISTORY **Grades 10-12** **1 Credit**

AP World History is designed to be the equivalent of a two semester introductory college or university world history course. In AP World History students investigate significant events, individuals, developments, and processes in six historical periods from approximately 8000 B.C.E. to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical comparisons; and utilizing reasoning about contextualization, causation, and continuity and change over time. The course provides five themes that students explore throughout the course in order to make connections among historical developments in different times and places: interaction between humans and the environment; development and interaction of cultures; state building, expansion, and conflict; creation, expansion, and interaction of economic systems; and development and transformation of social structures. This class may qualify as a core course or as an elective. *Students may choose to take the AP exam at the student's expense. Prerequisite(s): See page 10 for AP criteria*

089 AP PSYCHOLOGY **Grades 10-12** **1 Credit**

The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice. This is an intensive course of study that integrates frequent supplemental reading assignments into curriculum that has been devised by the College Board. Summer reading and writing assignments will be required of students enrolling in this course. This class may qualify as a core course or as an elective. *Prerequisite(s): Students must have a recommendation from a current social studies teacher. Students may choose to take the AP exam at the student's expense. See page 10 for AP criteria.*

SOCIAL STUDIES ELECTIVES

090 GENERAL PSYCHOLOGY **Grades 10-12** **1 Credit**

The General Psychology elective is a full year elective designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Among all sciences, psychology is unique in the degree to which it speaks to daily living and applies to everyday problems and concerns. Topics of study include: history of psychology; research methods; neuroscience; states of consciousness; developmental psychology; personality theory; psychological disorders and treatments; and social psychology. This course is an academic approach to the study of psychology and is a study-centered course that requires a higher level of reading comprehension. The course will best serve students who are pursuing careers requiring post-secondary education. Requirements for this course include keeping a personal journal/lab notebook, participation in experiments, individual and group projects, writing assignments and unit exams.

092 PRACTICAL LAW **Grades 10-12** **1/2 Credit**

This course will present concepts related to man and his role in our society, based on law. Prepared in a manner *which is useful to the layman, the course will deal with those areas of law which affect our daily lives. Topics* covered will include juvenile justice and criminal, civil, and family law. Resource persons will communicate law-related career opportunities.

093 THIS GENERATION **Grades 10-12** **1/2 Credit**

Many events have happened in our society since the 1970's. Changes in entertainment, the family, the world of work, international relations, education, our system of values, and how we see the world around us have had a tremendous impact on our country as a whole. Students will examine those events and discuss what effect they might have on our future.

095 INTRODUCTION TO SOCIOLOGY **Grades 10-12** **1 Credit**

The Introduction to Sociology course is designed to introduce students to the sociological study of society. Sociology focuses on the systematic understanding of social interaction, social organization, social intuitions, and social change. Major themes in sociological thinking include the interplay between the individual and society, how society is both stable and changing, the causes and consequences of social inequality, and the social construction of human life. Understanding sociology helps discover and explain social patterns and see how such patterns change over time and in different settings. By making vivid the social basis of everyday life, sociology also develops critical thinking by revealing the social structures and processes that shape diverse forms of human life. This course is academically structured to mirror a college course. Students are expected to complete independent work, collaborate in the classroom and investigate research topics related to sociology. It is suitable for students who may wish to pursue a career in criminal justice, social work, psychology or any other social service.

TECHNOLOGY EDUCATION

The Technology Education program is an integral part of general education, providing all students with the opportunity to combine tool and material manipulation, critical thinking, and problem solving. The program is designed to provide a broad content base and extended opportunity for experiences with tools and materials. The concept of "learning by doing" is utilized whenever possible. Note: Students who register for a materials course after the beginning of the school year must have teacher approval.

331 COMPUTER AIDED DRAFTING **Grades 10-12** **1 Credit**

This course has been developed to enhance student skills learned in scaling, proportion, technical lettering, multi-view drawings, dimensioning, and auxiliary views in relation to mechanical drawing. AutoCAD software will be utilized to transfer pencil and paper drawings to the computer. Students will explore areas that include software commands, two and three dimensional geometry, and plotting. This course is highly recommended for college prep students considering a field in architecture/engineering.

332 ARCHITECTURAL DRAWING & DESIGN **Grades 10-12** **1 Credit**

This course is designed to provide students with the opportunity to explore the many components in the field of architecture and design. AutoCAD software and the addition of a 3D modeling machine will take the students' drawing experience to the next level.

333 ENGINEERING DESIGN **Grades 10-12** **1 Credit**
This course has been developed to enhance the student's skills in designing, prototyping, and testing. Emphasis will be placed on the research and development of superstructures that shape our world. A problem solving unit will conclude the engineering experience.

334 CONSTRUCTION TECHNOLOGY I **Grades 11-12** **1 Credit**
This course is designed to provide basic instruction for the student interested in construction trades and will enable do-it-yourself persons to handle many construction jobs that they would otherwise be reluctant to undertake. This course provides the math, problem solving and hands-on skills necessary in all aspects of light frame construction; including site layout, foundations, framing, sheathing, roofing, windows, doors and exterior finish. Technological change and developments in the construction industry have modified the tools, machines and materials being used, therefore careful attention will be given to new developments in the building industry as well. Class activities will include: working in the classroom and on a construction site, employing learned skills to construct a structure.

341 DIGITAL MEDIA TECHNOLOGY **Grades 10-12** **1 Credit**
This course provides students with the opportunity to achieve technical and conceptual exposure in photography, print media, audio, and video. Computer applications in those areas are emphasized. This class will cover all basic concepts and technical skills for using cameras, computers, lighting, and audio-visual equipment. Throughout the year, students will be required to support and promote school related activities such as sporting events, social gatherings within the school district, and community related events through the application of techniques learned in class. This will be the basis of most class projects.

345 MATERIAL & PROCESSES I **Grades 10-12** **1 Credit**
This course covers information on tools, machines, materials, and procedures through lecture, demonstration, and a heavy influence on application. The primary focus of this course will be to expose students to the processing of mixed media (wood, metal, polymers, and ceramics) with exposure to the materials used in current manufacturing trends. Areas covered will include but are not limited to: layout and design; individual projects; mass production, and finishing techniques.

346 MATERIAL & PROCESSES II **Grades 11-12** **1 Credit**
This course is a continuation of Material & Processes I with a focus on advanced techniques. The student's creativity will be challenged as they develop and create individualized projects based on topics and techniques covered in class. *Prerequisite(s): Must score a 70% or better in Material & Processes I*.

400 TV & VIDEO PRODUCTION **Grades 11-12** **1 Credit**
This course will introduce students to the basic concepts of storyboard creation, script writing, filming, editing, computer graphic generation, and producing short-subject videos. Students will explore the fundamentals of video equipment operation and video editing through use of editing software applications. A major component of this course will be in live broadcasting the daily announcements with the following production roles emphasized: director, news anchor, lighting engineer, sound engineer, switching board and teleprompter operators. Throughout the year, students will be required to produce videos that highlight school related activities such as sporting events, social gatherings within the school district, and community related events. When possible, students will participate in video production competitions.

WELLNESS EDUCATION

417 WELLNESS- INTRO TO STRENGTH & CONDITIONING **Grades 10-12** **1/2 Credit**
This class is for anyone who has never really lifted before and would like to learn weight room etiquette, proper spotting, use of machines, and proper technique. Students will also use the Plt4m app to log in workouts.

418 WELLNESS- FEMALE STRENGTH & CONDITIONING **Grades 10-12** **1/2 Credit**
This class is similar to the Intro to S & C, but will be geared towards working with females only with an emphasis on overall body composition (fitness type) workouts. This class will also utilize the plt4m app.

419 WELLNESS- ATHLETE STRENGTH & CONDITIONING **Grades 10-12** **1/2 Credit**
This class will be for any athlete who wants to use different workouts based on their seasons (in-season, off-season, maintenance phase, etc.) Workouts will be available on Plt4m for this class.

420 WELLNESS- BLOCK STRENGTH & CONDITIONING Grades 10-12 2 Credits
This class is for athletes who want to have class every day for 2 periods. This class will be at the start of the day. Athletes will be utilizing different workout plans based on time of year for their sports. This class will also include mobility work, visualization/relaxation techniques, plyometric work, and much more. *Students who sign up for this class will need to get permission from a Wellness teacher.*

421 WELLNESS- YOGA/DANCE/PILATES Grades 10-12 1/2 Credit
This class will consist of more relaxation strategies and overall general fitness. This class will rotate between different types of Yoga, Dance, Pilates, etc.

422 WELLNESS- FITNESS Grades 10-12 1/2 Credit
This class will utilize the fitness room upstairs in our newly renovated weight/fitness room. This class consists of having to meet certain goals in a period based on time and/or distance. Equipment includes a rower, ellipticals, stationary bikes, treadmills, punching bag, and functional training station.

423 WELLNESS- TEAM SPORTS Grades 10-12 1/2 Credit
This class consists of different sports for each quarter. Sports may include, but are not limited to: Soccer, Football, Speedball, Handball, Lacrosse, Pickleball, Volleyball, Hockey, Badminton, and Basketball.

424 WELLNESS- CPR/FIRST AID TRAINING Grades 10-12 1/4 Credit
Students will follow the Red Cross CPR Training and will have the option to purchase a certificate if you pass the test.

425 WELLNESS- LEARN TO SWIM/POOL GAMES Grades 10-12 1/4 Credit
This class is for anyone who is not comfortable in the water and wants to learn how to swim. Only prerequisite is that you must wear an appropriate suit. T-Shirts will also be allowed to wear over top a suit should you choose to. *This class will only be offered in the 2nd semester.*

WORK EXPERIENCE

603 WORK EXPERIENCE Grade 12 1 Credit
The Work Experience Program is designed to provide students with the opportunity to investigate and explore career interests, while gaining employment experience. Therefore, program participation must be approved by the principal and/or his/her designee.

Students will be notified of program participation after the scheduling process has concluded. Therefore, interested students must ensure they are completing their course requests for at least 6.50 credits for their senior year. Once approved for the Work Experience Program, the student's school counselor will notify the student and adjust their schedule accordingly. Program eligibility and continuation is based on the student providing and maintaining evidence of the approved work experience.

Program participants will not be awarded credit or grades for Work Experience Program participation nor will participation count for the purpose of determining class rank.

***You need to have a job for this option and fill out an application. No credit will be given.**

WORLD LANGUAGES

Dramatic growth in international commerce and travel has increased the need for Americans to communicate with other nations. Government, business, and industry all need people with world language skills. The study of another country and its language broadens cultural insights. Students gain a better perspective of our language and heritage. The World Language Department offers four-year sequences in German and Spanish, and a four-year sequence in Latin. Students may elect one or more languages. *Based on grades in the first level course, students may require permission from the instructor to take subsequent courses.*

211 GERMAN I **Grades 10-12** **1 Credit**

Students acquire basic skills in understanding and speaking German through dialogs, phrases, and conversational practice. Reading and writing skills are begun through the study of sentence structure, paragraphs, and reading selections. Life in the German speaking countries is discussed via current events and text references, as well as modern videos.

212 GERMAN II **Grades 10-12** **1 Credit**

Building upon the basics of German I, students become more aware and capable of using the grammatical structures of the German language. Spoken German is emphasized with the situations becoming increasingly more appropriate to real life. Written and reading exercises gradually increase in both length and cultural awareness. Videos create an awareness of all aspects of German culture. *Prerequisite(s): German I (70% or better).*

213 GERMAN III **Grades 11-12** **1 Credit**

Students review and expand upon all the German language skills begun in German I and II, e.g. speaking, reading, writing, and knowledge of grammar. Increasingly difficult selections are read for understanding in German with less emphasis on translation. Oral expression in German is encouraged and used daily. Cultural appreciation is continued and may include a field trip. *Prerequisite(s): German II (70% or better).*

214 GERMAN IV **Grade 12** **1 Credit**

During the first semester students will complete the formal study of German grammar and vocabulary. The second semester will consist of advanced readings and oral presentations. Intensive use of spoken German is practiced. Individual seminar projects provide for a culminating experience. A field trip may be included. *Prerequisite(s): German III (70% or better).*

222 LATIN I **Grades 10-12** **1 Credit**

This course is offered to any high school student who has not completed it at the middle school. Emphasis is placed on learning basic Latin syntax and vocabulary development. Roman cultural topics such as the baths, government, the education system, gladiatorial shows, the forum, slavery and the eruption of Mt. Vesuvius are explored. Students are also exposed to Roman mythology.

223 LATIN II **Grades 10-12** **1 Credit**

The stories in this course take place outside of Rome. Emphasis is placed on vocabulary development and writing skills. The study of more detailed syntax continues as students learn all case uses and verb tenses. Cultural topics include life in Roman Britain and Alexandria, Egypt. Religion, astrology, science and medicine are also explored. The study of Roman culture again includes mythology. *Prerequisite(s): Latin I (70% or better)*

224 LATIN III **Grades 10-12** **1 Credit**

This course continues to explore Roman Britain. Vocabulary development is strongly emphasized and the study of Latin syntax includes the subjunctive mood, participles, gerundives, purpose and result clauses. The focus of the culture includes travel and communication in the Roman world, engineering, philosophy and entertainment. *Prerequisite(s): Latin II (70% or better)*

225 LATIN IV **Grades 11-12** **1 Credit**

The stories in this course are set back in Rome. Vocabulary development is still an emphasis and new grammatical concepts include the passive voice, gerunds and fearing clauses. The course also examines the writings of such noted Roman writers as Catullus, Horace, Ovid and Vergil in selected passages. Cultural topics to be studied include marriage, the senate and the court system. *Prerequisite(s): Latin III (70% or better)*

232 SPANISH I **Grades 10-12** **1 Credit**

In this first-year course, students are exposed to the Spanish language and the culture of those who speak it. Listening and speaking skills necessary for conversation are developed. Grammar is introduced and students begin to read and write in the target language. Basic vocabulary is learned to enable students to communicate with Spanish speakers.

233 SPANISH II **Grades 10-12** **1 Credit**

Students continue to build upon skills attained in Spanish I. More complicated grammar structures, including the past tenses, are presented. Students are expected to produce more of the target language with a higher degree of accuracy. Their study of the culture of Spanish-speaking countries is also furthered. *Prerequisite(s): Spanish I (70% or better).*

234 SPANISH III **Grades 10-12** **1 Credit**

The third-year course uses and further refines language skills learned previously. Included are short stories and other literary excerpts, as well as items of cultural interest, oral projects, written essays, and vocabulary units. Advanced grammar is studied. *Prerequisite(s): Spanish II (70% or better).*

235 SPANISH IV **Grades 11-12** **1 Credit**

The main objective in this language course is to develop students' communication skills in Spanish by using the target language at all times and in different situations. This course will continue to develop their knowledge of Spanish in all four skills; listening, reading, writing, and speaking along with an appreciation for the culture, art, history, and literature of the Spanish speaking world. *Prerequisite(s): Spanish III (70% or better).*

236 AP SPANISH **Grade 12** **1 Credit**

AP Spanish Language and Culture Course is an intensive course in advanced Spanish. This course will be conducted in Spanish. Students that are enrolled in this course practice perfecting their Spanish listening, speaking, reading and writing skills. They study vocabulary, grammar, and cultural aspects of the language and then apply what they have learned in extensive written and spoken exercises. By the end of the course, students will have an expansive vocabulary, and a solid working knowledge of all verb forms and tenses. The equivalent of a college level language course, AP Spanish prepares students for the AP Exam and for further study of Spanish language, culture, or literature*. Prerequisite(s): Spanish III - 90%, Spanish IV 90%, along with teacher recommendation. Students will be required to complete assignments the summer before they take this course*. ***Students may choose to take the AP exam at the student's expense.*** *See page 10 for AP criteria.*

Sample Schedule

After selecting your courses for next year, use this worksheet to plan your time. This schedule chart is helpful when determining the number of study halls you will have and to check if all courses you select will fit into your schedule. Don't worry about what periods your classes will be, but rather how many periods per cycle each course uses in your schedule.

	Home-room	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7	Period 8	Period 9	Period 10
Day 1										
Day 2										
Day 3										
Day 4										
Day 5										
Day 6										

Your Four Year Plan

Use this worksheet to plan your program for grades nine through twelve. In the space provided, list the courses, levels, and credits for the courses you have completed, are taking this year, and plan to take in the future. As you plan your program, be sure to consider your future career and educational goals as well as the graduation requirements.

Year	Grade 9	Credit	Grade 10	Credit	Grade 11	Credit	Grade 12	Credit
English								
Social Studies								
Mathematics								
Science								
Arts & Humanities								
Wellness Education								
Driver Ed/FCS/Financial Literacy								
Elective								
Elective								
Elective								
Elective								
Elective								
Total Credits/Year								