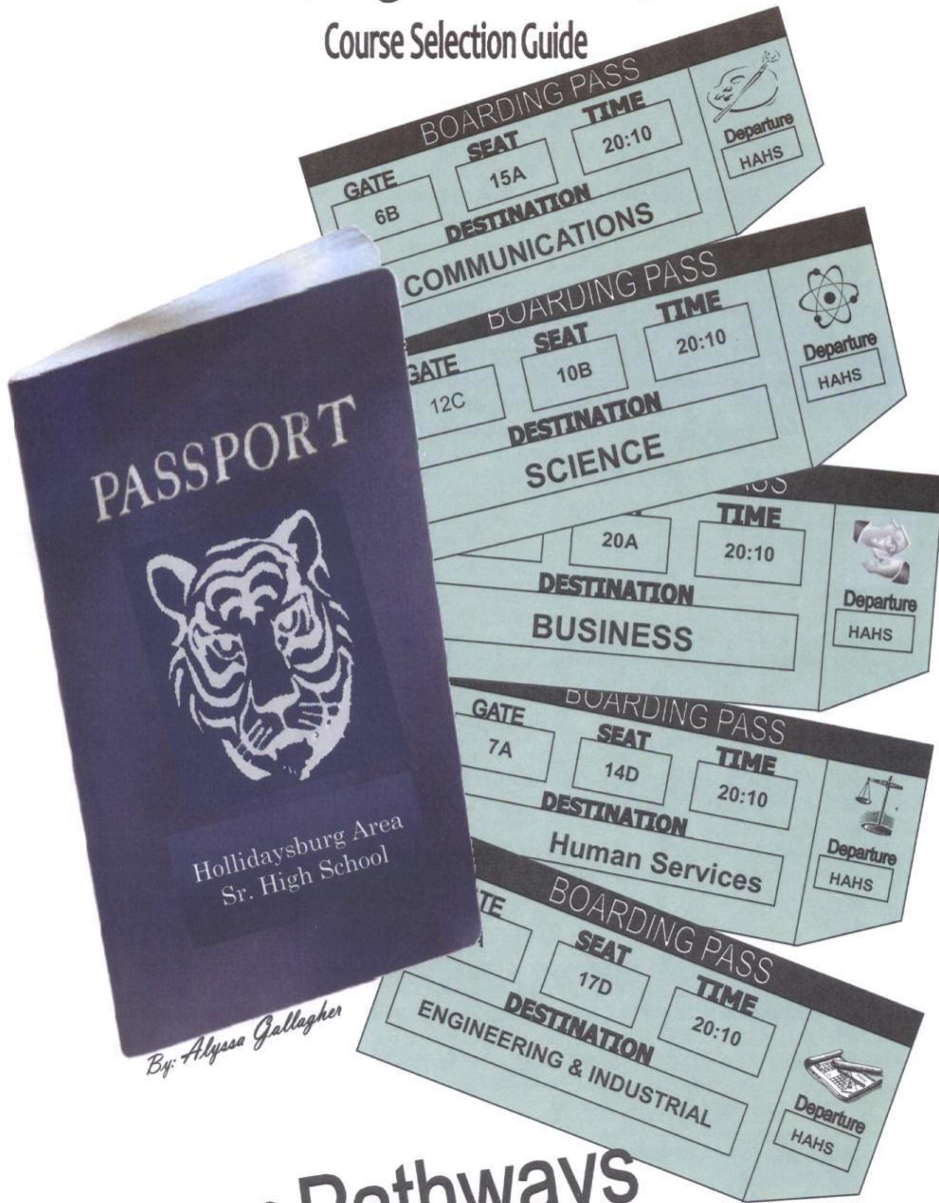


Hollidaysburg Area High School

Course Selection Guide



Career Pathways

HOLLIDAYSBURG AREA SENIOR HIGH SCHOOL

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PROGRAM OF STUDIES

Revised January 2015

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Junior High Principal	Ms. Lydia Dobrowolsky
Assistant Junior High Principal	Mr. Dale McCall
Junior High Dean of Students	Mrs. Kristin Wilson

Parents are urged to study the contents of this **PROGRAM OF STUDIES** in order to assist their children in making appropriate choices for career plans. The administration, guidance counselors, and teachers will be glad to assist students and parents who are in doubt about selections. Courses are scheduled each year based on student's request and teacher availability.

The Hollidaysburg Area School District is an Equal Opportunity Education institution and will not discriminate in employment or the provision of programs and services to students based on race, color, gender, religion, age, national origin, or handicap as required by Title VI, IX, and Section 504. For more information regarding civil rights, grievance procedures, and Title VI and Title IX contact Benjamin Caldwell, Title IX Coordinator and Director of Human Resources at 814-695-5585. For issues pertaining to handicapped provisions and facilities that are accessible, contact Phil Smith, Coordinator for Section 504 and Director of Physical Plant at 814-696-9185. These offices are located in the Administration Building, 403 Clark Street, Hollidaysburg, PA 16648.

Table of Contents

GENERAL INFORMATION	
Summary of Graduation Requirements.....	7
Class Rank Information.....	8
Grade Requirements.....	9
Homework Requirements.....	9
Keystone Exam Requirements.....	9
Special Programs.....	10,11
Career Pathways.....	12-43
Course Sequence.....	44-45
Supportive Programs and Services.....	46
<u>COURSE OFFERINGS</u>	
COMMUNICATIONS COURSES.....47	
Advanced Placement English (Language and Composition).....	47
Advanced Placement English (Literature and Composition).....	47
College Bound English 9.....	48
College Bound English 10.....	48
College Bound English 11.....	48,49
College Bound English 12.....	49
English 9.....	49
English 10.....	50
English 11.....	50
English 12.....	50
Honors English 9.....	51
Honors English 10.....	51
Honors English 11.....	51,52
Honors English 12.....	52
MATHEMATICS COURSES.....53	
Advanced Placement Calculus (AB).....	53
Advanced Placement Calculus (BC).....	53
Advanced Placement Statistics.....	54
Algebra 1.....	54
College Bound/Honors Calculus.....	54
College Bound Algebra 1.....	55
College Bound Algebra 2.....	55
College Bound Geometry.....	55
College Bound Probability & Statistics.....	56
College Bound Trigonometry/Pre-Calculus.....	56
Honors Algebra 2.....	56,57
Honors Geometry.....	57
Honors Trigonometry/Pre-Calculus.....	57
Integrated Math 1.....	57
Integrated Math 2.....	58
Mathematics with Financial Applications.....	58
NATURAL SCIENCE COURSES..... 59	
Advanced Placement Biology.....	59
Advanced Placement Chemistry.....	60
Advanced Placement Environmental Science.....	60
Advanced Placement Physics 1 & 2.....	60,61
Advanced Placement Physics C.....	61
Astronomy.....	61
Biology 1A.....	61
Biology 1B.....	62
Biology 2.....	62
Botany.....	62
Chemistry.....	63
College Bound Anatomy & Physiology.....	63
College Bound Biology 1.....	63, 64
College Bound Chemistry 1.....	64
College Bound Physics.....	64
College Bound Science 9.....	64
College Bound/Honors Astronomy.....	65
College Bound/Honors Enviro & Ecology.....	65
College Board/Honors Forensic Science.....	65
College Bound/Honors Microbiology.....	66
Earth Science.....	66
Environment and Ecology.....	66
Environmental Science.....	66,67
Greenhouse.....	67
Honors Anatomy/Physiology.....	67
Honors Biology 1.....	67,68
Honors Chemistry 1.....	68
Honors Chemistry 2.....	68
Marine Biology.....	68,69
Meteorology.....	69
Oceanography.....	69
Science 9.....	69
SOCIAL SCIENCE COURSES.....70	
20th Century US History: Reconstruction to Present.....	70
Advanced Placement European History.....	70
Advanced Placement US Govt. & Politics.....	71
Advanced Placement United States History.....	71
Civics and Government.....	72
College Bound 20 th Century US History:Reconstruction to Present.....	72
College Bound Civics and Government.....	72
College Bound Intro to Civics 9.....	73
College Bound World History.....	73
Honors 20 th Century US History:Reconstruction to Present.....	73
Honors Government and Civics.....	74
Honors Intro to Civics 9.....	74
Honors World History.....	74,75
Intro to Civics 9.....	75
World History.....	75
COMPUTER SCIENCE COURSES.....76	
Advanced Digital Photography.....	76
Advanced Placement Computer Science Princ.....	76
App Development.....	76
Desktop Publishing.....	77
Digital Photography.....	77
Digital Video.....	77
InDesign.....	78
Introduction to Computering for the Humanities.....	78
Introduction to Programming – J.....	78
Introduction to Programming – .P.....	79
Introduction to Web Design.....	79
Java.....	79
Multimedia.....	80
Spreadsheet.....	80
Video Game Design.....	80
Web Design.....	80
HUMANITIES COURSES..... 81	
Advanced Child Development.....	81
Advanced Contemporary Living Skills.....	81
Advanced Foods and Nutrition.....	81

Advanced Music.....	82
Advanced Placement Music Theory.....	82
Advanced Placement Latin.....	82
Advanced Placement Psychology.....	83
Advanced Placement Studio Art	83
Applied Latin.....	83
Applied Theatre.....	84
Art 1.....	84
Art 2.....	84,85
Art 3.....	85
Art 4.....	85,86
Art Assistants.....	86
Band 9.....	86
Basic Foods.....	87
Chamber Strings.....	87
Child Development.....	87
Chorus.....	87,88
Community Service.....	88
Concert Band.....	88
Concert Choir.....	88, 89
Crafts.....	89
Creative Writing 1.....	89
Creative Writing 2.....	89, 90
Culinary Arts Specialty.....	90
Exploratory Art.....	90
Food Preparation.....	90
French 1.....	91
French 2.....	91
French 3.....	91, 92
French 4.....	92
French 5.....	92
Germany: An Experiential Perspective....	92, 93
German 1.....	93
German 2.....	93
German 3.....	93, 94
German 4.....	94
German 5.....	94
Instrumental Lessons.....	94, 95
Intermediate Guitar.....	95
Introduction to Drama/Writer’s Workshop. . .	95
Introduction to Guitar.....	95
Introduction to Theatre.....	96
Jazz Band.....	96
Latin 1.....	96, 97
Latin 2, 3, 4.....	97
Law.....	98
Music Theory.....	98
Myths and Legends.....	98
Orchestra (Grade 9).....	99
Orchestra (Grades 10,11,12).....	99
Psychology 1.....	99
Psychology 2.....	100
Rock, Rap, and Revolution.....	100
Russian 1.....	100
Russian 2.....	100, 101
Russian 3.....	101
Sculpture.....	101

Sociology.....	101, 102
Spanish 1, 2.....	102
Spanish 4, 5.....	103
Speech Communic/Intro to Journalism.....	104
Symphonic Wind Ensemble.....	104
Technical Theatre.....	104
TV Production.....	105
Vocal Ensemble Fantazia.....	105
HEALTH & PHYSICAL EDUCATION	
COURSES.....	106
Health (Grade 9).....	106
Health (Grades 10).....	106
Lifeguarding.....	106,107
Physical Education (Grade 9).....	107
Physical Education (Grades 10,11,12).....	107
ELECTIVE COURSES.....	108
Accounting 1,2,3.....	108
Advanced Placement Micro Economics.....	109
Cardiovascular Lab.....	109
Chimrock.....	109
Civil War: Issues & Consequ.....	110
Computer-Aided Engineering (CAE) 1.....	110
Computer-Aided Engineering (CAE) 2.....	110
Construction Technology.....	111
Cooperative Education Work Experience.....	111
Cooperative Work Experience Assistant.....	111
Discovering Photography.....	111
Drama Assistant.....	112
Engineer by Design.....	112
Engineering by Design.....	112
Engineering/Manufacturing Studies.....	113
Entrepreneurism.....	113
Honors Engineering Physics.....	113
Honors Engineering and Robotics.....	114
Honors European Literature.....	114
Human Anatomy and Physiology.....	114
Introduction to 3D Printing.....	115
Introduction to Business.....	115
Marketing 1.....	115,116
Marketing 2, 3.....	116
Personal Finance.....	116
Production Technology.....	117
Research & Development in Engineering.....	117
Robotic Technology.....	117
Sea, Air, and Land Engineering Applic.....	118
Senior High Tiger TV.....	118
Sports and Entertainment Marketing.....	119
Sports and Entertainment Management.....	119
STEM Robotics.....	119
STEM Robotics II.....	119
STEM Robotics III.....	120
Student Library Assistant.....	120
Wood Craft.....	120
Wood Technology 1.....	121
Wood Technology 2.....	121
Work Experience.....	121, 122
World War II.....	122

SUMMARY OF GRADUATION REQUIREMENTS

Graduation Requirements

In order to receive a diploma from the Hollidaysburg Area School District, a student will be expected to complete the following:

- a. Complete required course work or its equivalency in the following designated areas for the number of credits indicated:

Communications	4 credits
Social Science	4 credits
Natural Science	4 credits
Mathematics	4 credits
Computer Science	1 credit
Physical Education	2 credits
Health	1 credit
Humanities	1 credit
Electives	<u>6 credits</u>
Total	27 Credits

Students who attend the Greater Altoona Career and Technology Center (GACTC) will be required to complete the same graduation requirements with the exception of 3 Social Studies Credits and 3 Science Credits, ½ of a Computer Credit, ½ of a Humanity Credit, and 5 electives. The GACTC students will be required to complete a total of 27 credits. Since technical/vocational training is dependent upon the use of applied concepts, students will be awarded credits toward graduation in any of the designated areas based on the content of the curriculum for the shop in which they are training. The credits awarded will be determined by the Graduation Review Board.

Students must have their swimming component of their PE course done by the end of their 11th grade year.

All courses will be assigned a number of credits or fractions thereof. This will be determined by the frequency with which the course meets and/or the level of demonstrations that are required.

- b. Complete a graduation project.

If you were not here for the graduation project your junior year, you must have it completed by the end of the first marking period.

- c. Demonstrate proficiency on the State Standards.

Demonstrating proficiency on the Standards can be achieved by one of the following:

- 1) Scores at the Advanced Level or Proficient Level on the required Keystone tests.
- 2) Score at the Proficient Level on the Locally Designed Assessment for the class of 2017.
- 3) Score at the Proficient Level on a retake of the Locally Designed Assessment for the class of 2017.

Remediation will be provided to all students not scoring at the Proficient Level or Advanced Level.

Students with IEP's:

Students identified as having special needs qualifying for an Individual Educational Program (IEP) will graduate by meeting the requirements of the IEP.

Grade Level Promotion:

In order to be promoted to the next grade level you must have earned the following numbers of credits in each grade:

- 9th – 6 credits
- 10th – 7 credits
- 11th – 7 credits
- 12th – 7 credits

Exceptions to this requirement may be made by the building administration upon their individual review.

Credit by Exemption:

- Testing out of class is being offered to gifted students as long as the course they are testing out of does not trigger the keystones: Algebra 1, Algebra 1B, English, Honors Biology, Biology, Biology 1B.
- To test out of a foreign language the student must complete assessments and score a 90% or higher.

CLASS RANK

The Class Rank System is used to establish relative standing within a class. It is an equitable system based on Grade Point Average (GPA) and takes into account the number of credits each student attempts and the level of classes scheduled.

Explanation as follows: The Hollidaysburg Area School District will calculate GPA via the use of a bonus system. The bonus system denotes the rigor of the honors and AP classes yet at the same time gives values to all. This bonus system recognizes the increased levels of expectations for each of the courses offered.

- Course work taken outside the district will only be included on the transcript under the following conditions.
 - must be approved
 - must count as a required credit toward a grade
 - will only be assessed as pass/fail
 - will not be included in class rank calculations
- Any credits awarded through exemption will not factor into the Class Rank System.
- An independent student course that is held during a normal classroom setting under direct supervision of a certified teacher and that follows the same curricular and assessment requirements of the course will be issued a percentage grade and will count toward class rank.
- An independent study course, in which the student does not spend regular scheduled class time in the teacher's room, will receive a pass/fail grade and the grade will not be included in the class rank calculation.
- Any Pass/Fail grades do not count in the calculation for Class Rank.

1. Class Rank System

	Credit	Bonus Points
Advanced Placement Classes (Biology, Chemistry, Physics)	2	7.00
Advance Placement Classes (all others)	1	7.00
Honors and 4 th year and above Foreign Languages	1	3.50

- Any grade below an 84% does not receive a bonus point.
- Any student refusing to take the Advanced Placement Exam will not receive bonus points.

2. Class Rank Credit

- 16 AP Credit limit to be counted toward class rank
- AP and Honors students need an 84% or higher to earn the bonus points.
- Seniors may request class rank after August 1st thru Parchment. Underclassmen may request class rank after 1st marking period thru Parchment.

3. Class Rank Formula

- Beginning in ninth grade, rank will be calculated each year using the following formula.

$$\text{CUMULATIVE GPA With Bonus Points} = \left(\frac{\text{SUM(GPA Value x GPA weight)}}{\text{SUM (GPA weight)}} \right) + \left(\text{SUM(Bonus Points x GPA Weight)} \right)$$

GRADE REQUIREMENTS

The following grade percentages will be used when determining the course levels on a student's schedule:

- In order to advance a level, students must have a final grade of 84% in that discipline. Course sequencing will be followed.
- In order to maintain current level, a 77% or higher must be earned.
- In order to advance more than one level, students must have a final grade of 84% and an AP Potential score of 40% or above in that discipline. Keystone scores and teacher recommendation will also be considered. Course sequencing will be followed.

HOMEWORK REQUIREMENTS

The amount of time each student spends on homework will be affected by natural ability and level of courses he/she is taking. When selecting courses, each student should consider the time he/she is capable of spending on homework assignments. High level and advanced courses require much outside reading and preparation. Parents and students should consult the course selection booklet or course syllabus for the type of homework that can be expected in each course.

KEYSTONE EXAM REQUIREMENTS

All students must be proficient on the Keystone Exams in the areas of: Algebra, Biology, and Literature.

- If a student is not proficient on one or more of the Keystone Exams, he/she will be offered remediation.
- Starting with the Class of 2022, if a student is not proficient on one or more of the Keystone Exams, he/she will be required to meet established PDE alternative pathways for high school graduation

SPECIAL PROGRAMS

ADVANCED PLACEMENT COURSES The Advanced Placement (AP) courses provide qualified, interested students the opportunity to complete college-level studies. Some students receive advanced placement and/or credit for the course when they enter college if they perform well on the AP exam at the end of the year. The AP courses are college-level. They require extensive, intensive preparation by the student. Because of the increased workload, an accelerator of .1 will be used to calculate class rank. Hollidaysburg Area Senior High offers AP courses in English, math, social studies, science, music, computer science, Latin and psychology. Any student taking an Advanced Placement class must take the standardized AP test to receive the AP class rank accelerator and the transcript AP name.

NATIONAL MATH AND SCIENCE INITIATIVE The National Math and Science Initiative: The National Math and Science Initiative (NMSI) is a national nonprofit organization that supports districts in developing college readiness through improving teacher effectiveness and student performance in critical subjects of science, technology, engineering and math. As part of a partnership with NMSI through the 2020-2022 School Year, students enrolled in math, science, technology, and English AP courses will receive additional support with extra tutoring sessions, administration/scoring of mock AP Exams and supplemental Saturday Study Sessions. For more information about the NMSI organization, you can visit their website: <http://www.nms.org/>.

Three focused Saturday study sessions are offered for each AP subject in the content areas of English, math, and science. Each session is run by state and national AP experts. Students that attend all Saturday study sessions will earn a personal day in late May 2019 (up to 1 personal day per content area, science, math, or English) and 50 added points. The schedule for the Saturday study sessions will be provided.

COLLEGE IN HIGH SCHOOL The College in High School program provides an opportunity for a smooth and successful transition to college by offering the students in some classes the opportunity to be exposed to college work while still in high school. After successfully completing the course work and exams prepared in cooperation with the university, the student will receive college credits and a grade recorded on a regular college transcript. Costs incurred are the responsibility of the student. We currently have cooperative programs with the *Juniata College*; AP Music Theory, AP Studio Art, Chamber Strings, Show Choir, and Wind Ensemble. *Mount Aloysius College*; AP Biology, AP English Lang & Comp, AP English Lit & Comp, CB/H Microbiology, H Anatomy/Physiology, H Civic/Govt, and H English 1, CB/Honors Environment & Ecology. *St. Francis University*; H. Chemistry 2, French 4 and 5, German 4 and 5, Latin 4, and Spanish 4 and 5. *University of Pittsburgh*; AP Physics C, AP Statistics, CB/H Calculus, JAVA, Introduction to Computing for Humanities, and Web Design.

COOPERATIVE EDUCATION WORK EXPERIENCE This program is to provide on-the-job training in cooperation with local business and industry. Students selected for the Cooperative Educational Program must receive teacher recommendations and have an interest and a willingness to work in a vocational area of choice. Students enrolled will attend their high school part of the day for academic studies and then report to their specialized vocational training station. Students interested in this program are scheduled on an individual basis with the consent of the Co-op Coordinator and counselor.

EARLY TO COLLEGE PROGRAM During the senior year, college bound students may take college credit courses while completing their senior year in high school. Students may take these courses at any accredited college, university or community college. Two variations of this program are available: 1) full-time attendance at a college, university or community college, or 2) part-time attendance at a near-by college accompanied by part-time attendance at Hollidaysburg Area Senior High School. To participate in this program the student must obtain approval from the administration and gain admission at the institution of higher education selected for attendance. In addition, the student must complete all requirements for graduation from the Hollidaysburg Area School District. Grades earned in college courses will not be counted toward a student's class rank and high school GPA.

INDEPENDENT STUDY Independent Study is offered so that a student who is not able to schedule a course at the regularly scheduled time during the eight period day, may still complete the course by adhering to the following steps: 1) obtain consent from the subject area teacher; 2) request counselor/administrator approval; 3) be willing to meet with the teacher on a regular basis to obtain course materials and schedule exams; 4) Be responsible for completing all course requirements. Courses taken through independent study will result in a pass/fail grade, unless the student attends a class period daily with the subject area teacher. All students will earn the course assigned unit value. Independent study courses are not included in class rank.

COMMUNITY SERVICE The Community Service Program is designed to make students more aware of community needs. Students work directly with community agencies or within the school district to address these needs. Participation in Community Service will assist students in the development of their decision-making abilities, communication skills, and self-esteem. A student also has the

opportunity to perform service for academic credit. Academic credit is awarded based on the number of hours a student volunteers throughout the school year. Community Service does not meet as a formal class. Most students perform their service during after-school hours or on weekends; however, there are some opportunities to volunteer during the school day.

NINTH GRADE CAREER & TECHNOLOGY EDUCATION The Ninth Grade Program at the Career and Technology Center offers selected ninth grade students the opportunity to receive an early start in career training. Students who are selected or who apply for the program and are accepted may enter the CTC setting a year earlier than most students. The program was established to serve students who could be enthused about an alternative form of education. The students are selected and referred to the program by guidance counselors and principals. After being selected for the program, each student participates in an orientation to the building and program; takes a picture-interest inventory; is skill-tested in the Singer Evaluation Center; visits trade areas of his/her choice; and chooses a trade area best suited for him/her. If the student, counselors, and instructor all agree, the student is placed in that particular shop. The student is accepted into a competency-based curriculum and encouraged to work through the program at his or her own rate of speed. The teacher keeps in mind the goal of motivating the student to stay enrolled in vocational education and to prepare for a career after graduation.

WORK EXPERIENCE PROGRAM This special program refers to a combination of one-half day on-the-job work experience in the community under the supervision of a cooperating employer and one-half school day in functional academic instruction designed to equip and prepare the student to take his place in the community as a worker, citizen and homemaker.

CAREER PATHWAYS

Lifelong learning is the mission of the Hollidaysburg Area School District. The basic framework of career pathways allows this goal to be incorporated as the students are guided in their academic and career planning. The basic framework of career pathways focuses on selected areas which meet the needs of students based on their interests, talents, skills and avocations. With this framework, meaning and purpose is given to classroom work as it relates to each student's career interests.

Within each pathway, a series of classes is offered to provide the students with content and performance assessments that will best prepare the students for their post-high school future. A student's career pathway choice should be based on his/her future plans and goals. A description of each pathway and the recommended entry requirements is provided.

Students entering the tenth grade must select one of the following career pathways:

- ◆ **Business**
- ◆ **Communications**
- ◆ **Engineering and Industrial**
- ◆ **Human Services**
- ◆ **Science**

The Career Pathways program is a flexible, guided means for students to gain career awareness, career exploration and career development through a sequential series of common career experiences/activities at each grade level. There is a focused awareness of how courses are related to career interests, ability/aptitude and personal goals through the connection of classroom experiences and career exploration. Every student is encouraged each year to choose a minimum of one elective within the chosen pathway. Students also have an opportunity to choose elective courses outside their pathway area. Finally, opportunities are available for all students to explore careers through job fairs, shadowing experiences, career speakers, interview experiences, and personal assessments.

Students select core foundation courses that challenge their academic abilities. Each pathway program offers courses at all levels through and including Advanced Placement. These foundation courses will be augmented with school-based and work-based activities designed so that each student will be able to communicate effectively, compute accurately, think and reason skillfully, and learn to work cooperatively.

HOLLIDAYSBURG AREA SCHOOL DISTRICT

CAREER PATHWAY OPTIONS

Business

- Business Administration, Marketing, Mathematics, Sales
- Computer Information Systems

Communications

- Journalism, Language Arts, Media, Public Relations
- The Arts – Music, Theater, Visual

Engineering and Industrial

- Architecture, Construction, Manufacturing
- Material Sciences and Nanofabrication

Human Services

- Consumer Services and Human Development
- Education, Government, Law

Science

- Biomedical, Physical, Earth Science
- Environmental Science

Business Pathway

Business Administration, Marketing, Mathematics, Sales



These occupations are related to the business environment. These may include entrepreneurship, sales, marketing, finance, accounting, personnel, economics, and management.

Are you interested in . . .

- Accounting/recordkeeping
- Advertising
- Buying and merchandising
- Computers and technology
- Hospitality and tourism
- Insurance/banking/finance
- Marketing research
- Mathematics
- Office management
- Sales
- Technical advances

Can you. . . .

- Analyze data
- Attend to details
- Design and give presentations
- Organize your time effectively
- Persuade others
- Relate to people
- Show initiative
- Use technology
- Work easily with others
- Work with numbers
- Work with the public

Do you enjoy . . .

- Assisting people with services
- Being your own boss
- Doing market research
- Drawing theoretical conclusions
- Forecasting market demands
- Keeping financial records
- Learning concrete facts
- Learning new software programs
- Making conclusions from a database
- Meeting with groups
- Organizing a project
- Planning an event
- Selling a variety of products/services
- Using numbers to develop proposals



Business Pathway

Business Administration,

***Marketing,
Levels of Career Competence***

Mathematics, Sales

Entry

Accounting assistant
Adjustment clerk
Auto sales
Bank clerk/teller
Bill Collector
Cashier
Insurance clerk
Payroll clerk
Receptionist
Restaurant manager trainee
Retail sales
Shipping/receiving
Wholesale sales

Professional

Accountant
Actuary
Advertising manager
Auditor
Client Services Director
Economist
Financier
Hotel manager
Human resources administrator
Insurance broker
Manufacturer's representative
Marketing manager
Production Manager/Supervisor
Research mathematician
Sales Manager
Statistician
Stockbroker
Store manager

Technical/Skilled
Accounting clerk
Administrative assistant
Buyer
Credit manager
Fashion merchandiser
Graphic designer
Media buyer
Merchandising manager
Office manager
Public relations
Purchasing manager
Real estate agent
Restaurant management
Scheduler
Secretary
Telecommunications technician
Travel agent



Recommended Electives

Business Pathway

Business Administration, Marketing, Mathematics, Sales

Business

Accounting 1, 2, 3
Entrepreneurship
Marketing 1, 2, 3
Personal Finance
Sports and Entertainment Management
Sports and Entertainment Marketing

Career Experiences

Cooperative Education
Community Service
Work Experience

Fine Arts

Art 1, 2, 3, 4
Crafts
Exploratory Art/Sculpture
Intro to Art
Studio Art

GACTC

Administrative Office Specialist
Logistics
Retail Marketing

Humanities

Creative Writing 1 & 2
Law

Math

AP Statistics
CB/Honors Calculus
CB Probability and Statistics
CB Trigonometry/Pre-Calculus
Math with Financial Applications

Social Science

AP Government
AP Micro Economics

Technology

AP Computer Science Principles
App Development
Chimrock
Digital Photography
Digital Video
InDesign
Intro to Programming – J
Intro to Programming--P
Intro to Web Design
Multimedia
Programming the Web
Spreadsheet
Video Game Design
Web Design

Electives

AP Psychology
Intro to 3D Printing
Psychology 1
Psychology 2
Sociology
Writer's Workshop



Business Pathway

Computer Information Systems

These occupations are related to the business environment. These may include computer information systems, programming, database operations and telecommunications.

Are you interested in . . .

- A business environment
- Computers and technology
- Different work sites
- Office management
- Presentations to groups
- Telecommunications

Can you . . .

- Attend to detail
- Design and give presentations
- Organize your time effectively
- Persuade others
- Relate to people
- Show initiative
- Work easily with others or independently
- Work with the public
- Operate a computer with ease

Do you enjoy . . .

- Assisting people with products/services
- Communicating in a variety of ways
- Following directions
- Learning new software programs
- Meeting with groups
- Organizing a project
- Using numbers to develop proposals
- Working in varying locations
- Working with technology

Business Pathway

Levels of Career Competence Computer Information Systems



Entry

Computer operator
Data entry clerk
Product demonstrator
Website designer

Professional

Computer design/manufacturing
Computer engineer
Computer programmer
Computer systems analyst
Database administrator
Electronics engineer
Manufacturer's representative
Network administrator
Software developer
Systems engineer

Technical/Skilled

CAD/CAM technician
Computer maintenance/service technician
Electronic sales technician
Entrepreneur
Graphic designer
IT technician
Robotics technician
Secretary
Software technician
Sound recording technician
Telecommunications technician

Recommended Electives

Business Pathway

Computer Information Systems



Career Experiences

Cooperative Education
Community Service
Work Experience

GACTC

Computer Technology/Cisco
Computer Programming/Oracle
Digital Printing Technologies
Multimedia and Web Design

Math

AP Statistics
CB/Honors Calculus
CB Probability and Statistics
CB Trigonometry/Pre-Calculus
H Probability and Statistics
Math with Financial Applications

Technology

AP Computer Science Principles
App Development
Digital Photography
Digital Video
InDesign
Intro to Computering for Humanities
Intro to Desktop/Multi Pub
Intro to JAVA
Intro to Web Design
Java
Logo 1
Programming Basic 1
Programming in Basic/Projects
Programming the Web
Multimedia
Spreadsheet
Video Game Design
Web Design

Electives

Intro to 3D Printing

Communications Pathway

Journalism, Language Arts, Media, Public Relations

These occupations are related to the literary and media arts. These may include writing, graphic design and production, journalism, radio, advertising and public relations.



creative

Are you interested in . . .

- Advertising and print/broadcast media
- Computers
- Editing
- Editorial cartooning
- Electronic communications
- Graphic Arts
- Interviewing and reviewing
- Investigative reporting/writing
- Journalism
- Libraries and data collection
- News reporting and writing
- Newspaper and magazine technology
- Photography
- Writing

Can you. . . .

- Conduct an interview
- Design presentations and layouts
- Develop an advertising campaign
- Interview
- Meet deadlines
- Persuade others
- Proofread copy
- Research topics/events
- Search the internet
- Work on a team

Do you enjoy . . .

- Designing ads and commercials
- Following sports, entertainment, news
- Interviewing a variety of people
- Searching for information
- Speaking before a group
- Working with computers and graphics
- Writing advertising and sales copy



Communications Pathway

Journalism, Language Arts, Media, Public Relations

Levels of Career Competence

Entry

Broadcast intern
Circulation aid
Copy person
Cub reporter
Newspaper intern
Newsroom worker
Public opinion researcher
Public relations intern

Professional

Advertiser
Art critic/writer
Columnist
Editor
Feature writer
Interpreter/translator
Journalist
Librarian
National park historian
News reporter
Novelist
Playwright
Public relations
Publisher
Sports manager
Writer

Technical/Skilled

Broadcast advertising journeyman
Circulation manager
Layout designer
Newspaper advertising journeyman
Photo journalist
Public relations office journeyman
Technical writer
Typesetter

Recommended Electives

Communications Pathway

Journalism, Language Arts, Media, Public Relations



Business

Entrepreneurship
Marketing 1, 2, 3
Personal Finance
Sports Entertainment Management
Sports Entertainment Marketing

Career Experiences

Cooperative Education
Community Service
Work Experience

Fine Arts

Applied Theater
Art 1, 2, 3, 4
Exploratory Art/Sculpture
Intro to Art
Intro to Drama/Writer's Workshop
Studio Art
Technical Theatre

GACTC

Digital Printing
Visual Arts
Interior Decorating and Finishing

Humanities

Creative Writing 1 & 2

Math

CB Probability and Statistics
CB Algebra 2
CB Geometry

Technology

AP Computer Science Principles
App Development
Chimrock
Digital Photography
Digital Video
Graphic Design for the Web
InDesign
Intro to Computering for Humanities
Intro to Desktop Pub/Multi
Intro to Programming-J
Intro to Programming-P
Intro Web Design
Java
Multimedia
Video Game Design
Web Design

World Languages

AP Latin
French 1, 2, 3, 4
German 1, 2, 3, 4
Latin 1, 2, 3, 4
Russian 1 & 2
Spanish 1, 2, 3, 4

Elective

Intro to 3D Printing
Intro to Drama/Writer's Workshop
Speech Communications/Intro to Journalism
Student Library Assistant

Communications Pathway

The Arts – Music, Theater, Visual



These occupations are related to the humanities and the performing, visual, and media arts. These may include architecture, creative writing, film, music, drama, art, graphic design and production.

Are you interested in . . .

- Art, design, or fashion
- Composing and/or creating
- Dance classes, stage productions, sports
- Drawing and improving art skills
- Parades, half-time performances, and/or concerts
- Performing in a band, chorus, and/or orchestra
- Radio, television, film, video
- Technical lighting, sound, state support
- Using a camera

Can you. . . .

- Articulate clearly and boldly
- Compose, arrange, or perform music
- Create an artistic project
- Dance and express yourself
- Design or help construct sets
- Draw, paint, or sculpt
- Entertain and communicate with others
- Play an instrument
- Sing, dance, act, or recite
- Use a camera
- Visualize designs

Do you enjoy . . .

- Being part of a production team
- Designing clothes, buildings, interiors, window displays, or bulletin boards
- Designing/making costumes, sets and/or hairstyles and makeup
- Entertaining others in a staged setting
- Expressing yourself through music
- Expressing yourself through art
- Expressing yourself through theater
- Making videos
- Performing in front of a live audience
- Teaching, acting, choreographing, or dancing
- Using your imagination
- Working on creative projects

Communications Pathway

Levels of Career Competence The Arts – Music, Theater,



Visual

Entry

Actor/extra
Choreography for dance recitals
Community theater – dance/production crew
Conductor of church or community ensemble
Dance or fitness class instructor
Dancer in a performing group
Desktop publisher
Disc jockey
Photographer
Pianist/organist
Private music instructor
Public speaker

Professional

Broadway stage/music performer
Cartoonist
Choreographer
Composer/arranger
Conductor
Dance studio teacher/owner
Fine arts teacher
Interior designer
Music video recording artist
Producer
Professional actor
Professional musician
Public/private school teacher
Radio/TV announcer
Recording artist
Set designer
Sound recording engineer
TV/stage/movie director

Technical/Skilled

Community musician
Community theater dancer, actor, director
Composer or arranger
Design lighting technician
Director of studio or television group
Graphic artist
Landscape artist
Media specialist
Newscaster
Newspaper/corporate photographer
Recording/sound technician
Screenwriter
Studio musician
Stunt performer
Symphony orchestra manager

Recommended Electives

Communications Pathway

The Arts – Music, Theatre, Visual



Career Experiences

Cooperative Education
Community Service
Work Experience

Fine Arts

AP Music Theory
Applied Theatre
Art 1, 2, 3 4
Chamber Strings
Chorus
Concert Band
Concert Choir

Creative Writing 1 & 2
Exploratory Art/Sculpture
Fundamentals of Guitar
Intro to Art
Intro to Theater
Jazz Band
Show Choir (Fantazia)
Music of Our Lives
Music Theory
Orchestra
Rock, Rap, and Revolution
Studio Art
Symphonic Wind Ensemble
Technical Drama

GACTC

Digital Printing Technology
Interior Decorating and Finishing
Multimedia and Web Design
Visual Arts Technology

Math

CB Probability and Statistics

Technology

AP Computer Science Principles
App Development
Digital Photography
Digital Video
Graphic Design for the Web
InDesign
Intro to Computering for Humanities
Intro to Programming-J
Intro to Programming-P
Intro to Web Design
Java
Multimedia
Video Game Design
Web Design

World Languages

AP Latin
French 1, 2, 3, 4
German 1, 2, 3, 4
Latin 1, 2, 3, 4
Russian 1 & 2
Spanish 1, 2, 3, 4

Elective

Intro to 3D Printing
Intro to Drama/Writer's Workshop

Engineering and Industrial Pathway

Architecture, Construction, Manufacturing



install or

These occupations are related to the technologies necessary to design, develop, maintain physical systems. These may include engineering, architecture, manufacturing, construction, and related technologies.

Are you interested in . . .

- Building and construction
- Computer technology
- Electrical systems
- Engineering design and architecture
- Heating and air conditioning
- Masonry, brick laying
- Math and measurement
- Woodworking

Can you. . . .

- Apply math and science concepts
- Create and interpret schematics
- Design buildings
- Design electrical systems
- Design HVAC systems
- Follow verbal and written directions
- Use computers and technology
- Use problem solving skills
- Work from illustrations

Do you enjoy . . .

- Applying math and science concepts
- Applying science concepts to prototypes
- Building with your hands
- Operating tools and equipment
- Solving problems
- Using high technology equipment
- Using high technology principles
- Working on teams

Engineering and Industrial Pathway

Architecture, Construction,

Manufacturing



Levels of Career Competence

Entry

Apprentice – body repair, construction
Apprentice – electrician, plumber, welder,
Apprentice - carpenter, HVAC, brick masonry
Assembly line laborer
Automotive mechanic assistant
Drywall installer
Fitter
Fork lift operator
Laborer
Machine operator
Painter
Rail worker
Roofer
Welder fitter

Technical/Skilled

Aircraft mechanic
Building Maintenance
Cabinetmaker
Carpenter
Cost estimator
Drafting Operator/CAD
Job foreman
Journeyman plumber
Licensed electrician
Machinist
Plasterer
Power plant operator
Sheet metal worker
Technician – engineering, auto
Technician – welding, HVAC, robotics

Recommended Electives

Engineering and Industrial Pathway

Architecture, Construction, Manufacturing



Technology

Advanced Engineering Design
Advanced Robotics
AP Computer Science Principles
App Development
Computer-Aided Engineering 1
Computer-Aided Engineering 2
Construction Technology
Engineering/Manufacturing Studies
Honors Engineering Physics
Honors Engineering Robotics
Intro to 3D Printing
Intro to Computering for Humanities
Java
Production Technology
Programming in BASIC 1
Programming in BASIC Projects
STEM Robotics
Wood Craft
Wood Tech I
Wood Tech II

Engineering and Industrial Pathway

Engineering, Material Sciences, and Nanofabrication



These occupations are related to the technologies necessary to design, develop, install or maintain physical systems. These may include material sciences, nanofabrication and related technologies.

Are you interested in . . .

- Alternative energy sources
- Engineering
- Machine equipment
- Math and science
- Problem solving
- Production management
- State of the art technology

Can you. . . .

- Apply math concepts
- Apply problem solving
- Apply science concepts
- Be precise and detailed oriented
- Create and design products
- Use computers and technology
- Visualize a product

Do you enjoy . . .

- Applying technology to production
- Being a problem solver
- Creating products using your hands
- Operating machinery/tools
- Solving problems using math
- Solving problems using mechanical skills
- Solving problems using science
- Solving problems using technology
- Working on a team
- Working with your hands

Engineering and Industrial Pathway

Engineering, Material Sciences, and Levels of Career Competence Nanofabrication



Entry

Assembler
Computer operator
Machine operator
Packer
Research assistant

Technical/Skilled

Associate engineer
Computer technician
Designer
Diagnostician
Drafting technician
Electronic technician
Job foreman
Machinist
Mechanical technician
Photolithography technician
Repair technician
Robotics technician
Specialized technician
Surface chemistry engineer
Tool and die maker
X-ray lithography technician

Professional

Chemist
Manufacturer's representative
Physicist
Production coordinator

Recommended Electives

Engineering and Industrial Pathway

Engineering, Material Sciences, and Nanofabrication



Career Experiences

Cooperative Education
Community Service
Work Experience

Math

AP Calculus AB
AP Calculus BC
AP Statistics
CB Algebra 2
CB Geometry
CH Probability and Statistics
CB Trigonometry/Pre-Calculus

Science

AP Chemistry
AP Physics 1 & 2
AP Physics C
Chemistry
CB Chemistry
CB Physics
CB/H Astronomy
CB/H Environmental Science
H Chemistry 1 & 2
H Physics
Honors Engineering Physics

CTC

Drafting and Design Technology
Masonry
Precision Machining
Welding Technology

Technology

Advanced Engineering by Design
Advanced Robotics
AP Computer Science Principles
App Development
Computer-Aided Engineering 1
Computer-Aided Engineering 2
Construction Technology
Engineering/Manufacturing Studies
Honors Engineering
Honors Engineering Physics
Honors Engineering Robotics
Intro to Computing for Humanities
Intro to Programming-J
Intro to Programming-P
Java
Production Technology
Programming in BASIC 1
Programming BASIC Projects
STEM Robotics
Video Game Design
Wood Tech I
Wood Tech II

Elective

Intro to 3D Printing

Human Services Pathway

Consumer Services and Human Development



These occupations are related to the promotion of health and the treatment of disease, nutrition, hospitality and overall social well-being. These may include research, prevention and treatment of specific individuals or groups.

Are you interested in . . .

- Dentistry
- Family and social services
- Fashion design and merchandising
- Hair design/nail design
- Hospitality industry
- Interior design
- Nutrition, fitness or body building
- Personal appearance and health care
- Personal care
- Social work/counseling

Can you. . .

- Apply theory to real world situations
- Assume leadership roles
- Attention to detail
- Communicate with others
- Cut and style hair
- Manage finances
- Organize travel plans
- Relate to diverse populations easily
- Use interpersonal skills
- Work in an organization

Do you enjoy . . .

- Being creative
- Caring for others
- Designing and sewing fashion
- Helping others to reach their potential
- Maintaining physical fitness
- Planning vacations
- Preparing and serving food
- Working in a shop or service industry
- Working with a variety of people
- Working with hair, nails, makeup



Human Services Pathway

Consumer Services and Levels of Career Competence Human Development

Entry

Chauffer
Childcare worker
Claims taker
Coach
Cook
Food service worker
General maintenance worker
Laundry/dry cleaner
Senior center worker
Taxi driver
Upholsterer
Waiter/waitress

Professional

Athletic trainer
Clergyman
Counselor/social worker
Economist
Funeral director
Public Health Director
Safety inspector
Security Systems Engineer

Technical/Skilled

Barber
Chef
Childcare director
Cosmetologist
Fashion artist/management
Firefighter
General maintenance worker
Hotel/motel manager
Police Officer
Security Systems Technician
Travel agent



Recommended Electives

Human Services Pathway

Consumer Service and Human Development

Career Experiences

Cooperative Education
Community Service
Work Experience

Family/Consumer Sciences

Adv Child Development
Adv Contemporary Living Skills
Adv Foods/Nutrition
Basic Foods
Child Development
Culinary Arts Specialty
Food Preparation

GACTC

Administrative Office Specialist
Cosmetology
Culinary Arts
Dental Assistant
Emergency Services
Food Production
Health Occupations

Humanities

AP Psychology
Psychology 1 & 2
Sociology

Math

AP Statistics
CB Probability and Statistics

Science

AP Biology
AP Chemistry
AP Physics 1 & 2
AP Physics C
Biology 1 & 2
CB Anatomy & Physiology
CB Chemistry
CB Environment and Ecology
CB/H Environment and Ecology
Chemistry
H Anatomy & Physiology
H Chemistry 1 & 2
H Microbiology

Technology

AP Computer Science Principles
App Development
Digital Photography
Multimedia
Spreadsheet
Web Design
Intro to Web Design

World Languages

AP Latin
French 1, 2, 3, 4
German 1, 2, 3, 4
Latin 1, 2, 3, 4
Russian 1 & 2
Spanish 1, 2, 3, 4

Human Services Pathway

Education, Government, Law



These occupations are related to economic, political and social systems. These may include education, government, law and law enforcement, leisure and recreation, military, religion and social services.

Are you interested in . . .

- Aging adults
- Children
- Firefighting
- Government work
- Judicial systems
- Law and Law Enforcement
- Safety of others
- Security systems
- Social work
- Teaching and education

Can you. . . .

- Approach problems logically
- Demonstrate leadership ability
- Relate to people
- Remain fair in a variety of situations
- Think calmly in emergency situations
- Think logically and solve problems
- Use computers and technology
- Use good interpersonal skills
- Work on a team
- Work within an organization

Do you enjoy . . .

- Analyzing human behavior
- Helping and protecting others
- Helping others grow and develop
- Helping people solve problems
- Knowing the legal system
- Meeting physical challenges
- Observing your surroundings
- Teaching and preparing lessons
- Working on a team
- Working with details
- Working with people of different ages

Human Services Pathway

Levels of Career Competence

Education, Government, Law



Entry

Bodyguard
Camp counselor
Court clerk
Court reporter
Detention officer
Health, security and safety personnel
Library aide
Local government clerk
Public radio dispatcher
Security guard
State department worker

Professional

Administrator
Attorney
CIA/FBI
City/county manager
Demographer
Diplomat
Foreign service
Judge

Technical/Skilled

Corrections officer
Dept. of Trans. – roads, electrical grounds crew
Detective
Firefighter
Law clerk
Library aide
Paralegal
Peace corps worker
Police officer
Postmaster
Teacher Aide

Librarian
Politician
Security systems engineer
State dept. supervisor/manager
Teacher
Translator/linguist
Urban planner

Recommended Electives Human Services Pathway Education, Government, Law



Career Experiences

Cooperative Education
Community Service
Work Experience

Family/Consumer Sciences

Adv Child Development
Adv Contemporary Living Skills
Adv Foods and Nutrition
Child Development
Culinary Arts Specialty
Foods and Nutrition

Humanities

AP Psychology
Civil War: Issues & Consequences
Creative Writing I
Creative Writing II
Law
Psychology 1 & 2
Sociology
World War II

Math

AP Statistics
H/CB Algebra 2
CB Probability and Statistics

Social Science

AP Government
AP Micro Economics

Technology

Advanced Digital Photography
AP Computer Science Principles
APP Development
InDesign
Intro to Web Design
Multimedia
Spreadsheet
Video Game Design
Web Design

World Languages

AP Latin
French 1, 2, 3, 4
German 1, 2, 3, 4
Latin 1, 2, 3, 4
Russian 1 & 2
Spanish 1, 2, 3, 4

Science Pathway

Biomedical, Physical, Earth Science, Healthcare



These occupations are related to science based careers. These may include biological, physical and earth sciences in addition to medical fields.

Are you interested in . . .

- Animal Care
- Dentistry
- Food production
- Healthcare
- Medical research
- Medicine
- Pharmacy
- Physical therapy
- Radiology
- Science and Medicine
- Wildlife, animals, parks, and forestry

Can you. . .

- Follow instructions precisely
- Pay attention to details
- Use a calculator and computers
- Use laboratory equipment
- Use technology
- Work outdoors
- Work with others
- Work with scientific theories
- Work in a labor medical facility

Do you enjoy . . .

- Conducting experiments
- Developing research techniques
- Caring for sick animals and plants
- Making a contribution to society
- Solving problems
- Working on a team
- Working on medical research
- Working outdoors

Science Pathway

Biomedical, Physical, Levels of Career Competence Earth Science, Healthcare



<i>Entry</i>	
Agricultural worker	
Animal caretaker	<i>Professional</i>
Breeder	Biologist
Farm manager	Botanist
Hospital worker	Chemist
Patient care technician	Cytologist
Phlebotomist	Dental medical illustrator
Ranch and farm worker	Dietician/Nutritionist
Stable attendant	Forensic artist
	Medical researcher
	Nurse
	Occupational Therapist
<i>Technical/Skilled</i>	Optometrist
Animal trainer	Pathologist
Breeder	Pharmacist
Dental assistant	Physical therapist
Dental hygienist	Physician
Fish and game warden	Prosthesis designer
Health inspector	Psychiatrist
Histo technician	Psychologist
Medical lab technician	Speech therapist
Physical Therapy assistant	Veterinarian
Research technician	
Veterinarian assistant	
X-ray technician	



Recommended Electives

Science Pathway

Biomedical, Physical, Earth Science, Healthcare

Career Experiences

Cooperative Education
Community Service
Work Experience

Family/Consumer Sciences

Adv Child Development
Adv Contemporary Living Skills
Adv Foods and Nutrition
Child Development
Culinary Arts Specialty
Foods and Nutrition

Humanities

AP Psychology
Psychology 1 & 2
Sociology

Math

AP Calculus AB
AP Calculus BC
AP Statistics
CB Probability and Statistics
H/CB Algebra 2
H/CB Geometry
Trigonometry/Pre-Calculus

Science

Anatomy and Physiology
AP Biology
AP Chemistry
AP Physics 1 & 2
AP Physics C
Astronomy
Biology 2
CB Biology
CB Anatomy & Physiology
CB Chemistry
CB Environment and Ecology
CB/H Astronomy & Physiology
CB/H Environment and Ecology
CB/H Environmental Science
CB/H Microbiology
Chemistry

H Anatomy & Physiology
H Chemistry 1 & 2
Marine Biology
Physics
H Scientific Research

Technology

AP Computer Science Principles
APP Development
Honors Engineering Physics
Honors Engineering Robotics
InDesign
Intro to Computering for Humanities
Intro to Programming-J
Intro to Programming-P
Java
Logo 1
Programming in Basic/Projects
STEM Robotics

World Languages

AP Latin
French 1, 2, 3, 4
German 1, 2, 3, 4
Latin 1, 2, 3, 4
Russian 1 & 2
Spanish 1, 2, 3, 4

Elective

Intro to 3D Printing

Science Pathway

Environmental Science



These occupations are related to environment and the technologies necessary to design, develop, install, or maintain agricultural, environmental and natural resources.

Are you interested in . . .

- A global perspective
- Building materials and equipment
- Conservation
- Environment
- Floral design
- Food production
- Government regulations
- Landscape horticulture
- Plant nursery operation
- Plant production
- Protecting the environment
- Science
- Studying patterns in nature
- Wildlife, animals, parks, and forestry

Can you. . . .

- Collect data from experiments
- Create floral and landscape designs
- Draw conclusions from data
- Follow instructions precisely
- Manage a business
- Perform physical labor
- Tolerate varying weather conditions
- Use a calculator and computer
- Work in a variety of scientific fields
- Work outdoors
- Work with others

Do you enjoy . . .

- Applying government regulations
- Arranging plants and floral displays
- Conducting experiments
- Creating beauty through nature
- Designing and constructing gardens
- Designing projects for construction
- Doing field research
- Learning about the land and forest
- Serving clients
- Trouble shooting problems
- Working outdoors
- Working with plants

Science Pathway

Levels of Career Competence Environmental Science



Entry

Agricultural worker
Extension service worker
Flower arranger
Forest conservation worker
Gardener, groundskeeper
Greenhouse worker
Hazardous waste technician
Irrigation systems installer
Plant production worker
Ranch and farm worker
Wildlife preserve worker

Professional

Agricultural scientist
Agri-science engineer
Agronomist
Biological sales representative
Biological/chemical researcher
Botanist
Chemical sales representative
Chemist

Technical/Skilled

Agricultural technician
Conservation technician
Environmental inspector
Equipment operator
Field service representative
Fish and game warden
Florist
Forest conservation technician
Forester
Garden center manager
Greenhouse manager
Health inspector
Irrigation systems designer
Lab technician
Landscape designer
Park ranger
Plant grower/retailer
Surveyor
Water plant operator

Conservationist
Earth scientist
Environmental engineer
Environmentalist
EPA employee
Geographer
Geologist
Geophysicist
Horticulturist
Landscape architect
Marine biologist
Soil conservationist
Turf manager
Urban/city planner
Wildlife conservationist

Recommended Electives

Science Pathway

Environmental Science



Career Experiences

Cooperative Education
Community Service
Work Experience

Humanities

Sociology

Science

AP Biology
AP Chemistry
Biology 2
Botany
Environment and Ecology
CB Biology
CB Anatomy & Physiology
CB Chemistry
CB Environment and Ecology
CB/H Microbiology
Chemistry 1
Earth and Space Science
H Chemistry 1 & 2
Marine Biology

Technology

AP Computer Science Principles
APP Development
Honors Engineering Physics
Honors Engineering Robotics
InDesign
Intro to Computering for Humanities
Intro to Programming-J
Intro to Programming-P
Java
Logo 1

COURSE SEQUENCE – To maintain CB or higher level, a student must have a minimum of 77%. To move to a higher level a student must have an average of 84%.

COMMUNICATIONS COURSE SEQUENCE

English 9 English 10 English 11 English 12	CB English 9 CB English 10 CB English 11 CB English 12	H English 9 H English 10 H English 11 H English 12	AP English Lit AP English Lang and Comp
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MATHEMATICS COURSE SEQUENCE

Algebra 1 Algebra 1B Integrated Math 1 Integrated Math 2 Mathematics with Financial Applications	CB Geometry CB Algebra 1 CB Algebra 2 CB Trig/Pre-Calculus CB Probability & Stats	H Geometry H Algebra 2 H Trig/Pre-Calculus CB/H Calculus	AP Calc AB AP Calc BC AP Statistics
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NATURAL SCIENCE COURSE SEQUENCE

Science 9 Biology 1A Biology 1B Chemistry Biology 2 Botany Greenhouse	CB Science 9 CB Biology 1 CB Chemistry 1 CB Physics CB Astronomy CB Environment & Ecology CB Marine Biology CB Anatomy & Physiology CB/H Environmental Science	H Biology 1 H Chemistry 1 H Anatomy/Physiology H Chemistry 2 CB/H Microbiology	AP Biology AP Chemistry AP Physics
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SOCIAL SCIENCE COURSE SEQUENCE

Intro to Civics 9 World History 20 th Cent. US Hist: Reconstr Civics/Government	CB Intro to Civics 9 CB World History CB 20 th Cent. US Hist: Reconstr CB Civics/Government	H Intro to Civics 9 H World History H 20 th Cent. US Hist: Reconstr H Civics/Government	AP Euro Hist AP US Hist AP US Gov
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COMPUTER SCIENCE COURSES

Advanced Digital Photography AP Computer Science Principles APP Development Desktop Publishing Digital Photography Digital Video InDesign Introduction to Computing for the Humanities Introduction to Programming-J	Introduction To Programming-P Introduction to Web Design JAVA Multimedia Spreadsheet Video Game Design Web Design
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HUMANITIES COURSES

Advanced Child Development Advanced Contemporary Living Skills Advanced Foods and Nutrition Advanced Music Advanced Placement Music Theory Advanced Placement Latin Advanced Placement Psychology Applied Latin Applied Theatre Art 1, 2, 3, 4 Art Assistant Band 9 Basic Foods Chamber Strings Child Development Chorus Community Service Concert Band Concert Choir Crafts Creative Writing 1, 2 Culinary Arts Specialty Exploratory Art Food Preparation French 1, 2, 3, 4, 5	Intermediate Guitar Germany: An Experiential Perspective German 1, 2, 3, 4, 5 Instrumental Lessons Introduction To Drama/Writer's Workshop Introduction To Guitar Introduction to Theatre Jazz Band Latin 1, 2, 3, 4 Law Music Theory Myths & Legends Orchestra 9, 10, 11, 12 Psychology 1, 2 Rock, Rap, and Revolution Russian 1, 2, 3 Sculpture Sociology Spanish 1, 2, 3, 4, 5 Studio Art Speech Communication/Introduction to Journalism Symphonic Wind Ensemble Technical Theatre TV Production Vocal Ensemble Fantazia
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HEALTH & PHYSICAL EDUCATION COURSES

Health 9, 10, 11, 12	Physical Education 9, 10, 11, 12
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ELECTIVE COURSES

Accounting 1, 2, 3 Advanced Placement Environmental Science Advanced Placement Micro Economics Advanced Placement Studio Art Astronomy Cardiovascular Lab Chimrock Civil War: Causes & Consequences College Bound/Honors Forensic Science Computer-Aided Engineering (CAE) 1, 2 Construction Technology Cooperative Education Work Experience Cooperative Work Experience Assistant Discovering Photography Drama Assistant Earth Science Engineer by Design Engineering by Design Engineering/Manufacturing Studies Entrepreneurism Environmental Science Honors Engineering Physics Honors Engineering and Robotics Honor European Literature	Human Anatomy and Physiology Introduction to 3D Printing Introduction to Business Marketing 1, 2, 3 Meteorology Oceanography Personal Finance Production Technology Research & Development in Engineering Robotic Technology Sea, Air, and Land Engineering Applications Senior High Tiger TV Sports and Entertainment Marketing Sports and Entertainment Management STEM Robotics STEM Robotics II, III Student Library Assistant Wood Crafts Wood Technology 1, 2 Work Experience World War II
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SUPPORTIVE PROGRAMS AND SERVICES

1. District Pupil Personnel Services

Guidance Services
Health Services
School Psychologist
Speech and Language Support
Emotional Support

2. District Programs

Gifted
Reading Support
Learning Support
Alternative Education Program

3. Intermediate Unit 08 Service

Social Worker

4. Intermediate Unit 08 Programs

Life Skills Support
Hearing Impaired Support
Visually Impaired Support
Multi Handicap Support

COMMUNICATIONS

(All students must take **four** credits)

ADVANCED PLACEMENT ENGLISH LANGUAGE AND COMPOSITION

Grade 11

Full Year

1 Credit

Purpose: “AP English Language and Composition is an introductory college-level composition course for college-bound students who are highly motivated academically. Students cultivate their understanding of writing and rhetorical arguments through reading, analyzing, and writing texts as they explore topics like rhetorical situation, claims and evidence, reasoning and organization, and style” – The College Board. Through this course, students can possibly obtain up to one year of college-level credit and/or advanced placement in college composition. Students will also complete a portion of the Graduation Project.

Course Description: “AP English Language and Composition course focuses on the development and revision of evidence-based analytic and argumentative writing, the rhetorical analysis of nonfiction texts, and the decisions writers make as they compose and revise. Students evaluate, synthesize, and cite research to support their arguments. Additionally, they read and analyze rhetorical elements and their effects in nonfiction texts-including images as forms of text-from a range of disciplines and historical periods” – The College Board.

Students will also work through formal MLA research procedures, which are eligible content for the AP exam in the spring. Finally, to fulfill the junior year requirement for the Graduation Project, students will complete a detailed resume.

Requirements: The requirements include daily/weekly critical reads, structured responses to practice prompts, vocabulary study, and a portion of the Graduation Project. There is also a possibility of a summer assignment at the discretion of the teacher. Students are expected to take the standardized Advanced Placement exam at the end of the school year at the current cost.

Prerequisites: CB English 10, Honors English 10 (Refer to page 9 for specific grading and percentage guidelines).

ADVANCED PLACEMENT ENGLISH LITERATURE AND COMPOSITION

Grade 12

Full Year

1 Credit

Purpose: Advanced Placement English Literature is designed for the academically motivated senior who plans to pursue a college career. Upon the completion of Advanced Placement English Literature, students should possess a high degree of proficiency in analyzing and interpreting literature of all genres and time periods and in effectively analyzing about those texts they have read. The mock interview portion of the graduation project will be completed during the course of the year.

Course Description: “AP English Literature and Composition is an introductory college-level literary analysis course. Students cultivate their understanding of literature through reading and analyzing texts as they explore concepts like character, setting, structure, perspective, figurative language, and literary analysis in the context of literary works.” – The College Board

Requirements: Each student will be expected to complete a summer assignment, which consists of two texts and writing activities. This assignment is due before August. During the year they will read novels, plays, and poetry. The requirements include literary analysis essays on poetry, prose and novels, longer structured compositions, and the mock interview portion of the graduation project. There is also a possibility of a summer assignment at the discretion of the teacher. Students are expected to take the standardized Advanced Placement test at the end of the school year at the current cost.

Prerequisites: CB English 11, AP English Language and Composition, (Refer to page 9 for specific grading and percentage guidelines).

☐ **COLLEGE BOUND ENGLISH 9** Grade 9 Full Year 1 Credit

Purpose: The College Bound English 9 course exists for the student who plans to continue his/her education after high school graduation. At the completion of this course, students should possess a high degree of proficiency in reading, writing, speaking, and thinking skills along with a strong emphasis in vocabulary development.

Course Description: College Bound English 9 focuses on writing, grammatical structures, vocabulary development, an understanding of literary genres, independent reading through the Accelerated Reader program, and development of speaking skills. Students are expected to develop a high degree of mastery of these language/communication skills.

Requirements: Every student will analyze a number of books, in writing or orally, in addition to reading assigned stories, poems, plays essays, and biographies. The Accelerated Reader Program, an independent reading program, is a requirement. Compositions and sentence-combing exercises are completed throughout the year, and students will revise grammar/usage in written work. Several forms of public speaking will be required. Students will be given tests and quizzes in grammar/usage, literature and vocabulary.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

☐ **COLLEGE BOUND ENGLISH 10** Grade 10 Full Year 1 Credit

Purpose: The College Bound English 10 course exists for the student who plans to continue his/her education after high school graduation. At the completion of this course, the student should possess a high degree of proficiency in literary reading, writing, speaking and thinking skills besides a strong emphasis in vocabulary development.

Course Description: The College Bound English 10 course provides the student with in-depth studies in all aspects of the language, including, writing, vocabulary, and literature/non-fictional reads. Since good writing must be clear, students work to master writing techniques in order to produce coherent and well-structured pieces of formal writing. Thinking skills such as inference making, deductive reasoning and brainstorming serve as tools for honing reading comprehension and language studies. Students learn to locate and decode figurative language, symbols and themes. Speaking and listening skills become part of the daily vocabulary and analysis activities. Students will prepare for Keystone Testing (given at the end of the year) through an emphasis on interpretative reading and intensive, structured writing.

Requirements: Students will read selected stories, poems, plays, novels, articles, essays, etc.; and complete various activities on all, including essays. Pupils will memorize, define, spell, pronounce vocabulary words, and write sentences to practice grammar/usage skills. Homework is an integral part of the studies. The student will also practice MLA research techniques in addition to taking various quizzes, unit tests, etc. The sophomore portion of the Graduation Project will also be completed.

Prerequisites: College Bound English 9 (Refer to page 9 for specific grading and percentage guidelines).

☐ **COLLEGE BOUND ENGLISH 11** Grade 11 Full Year 1 Credit

Purpose: The College Bound English 11 course exists for the student who plans to continue his/her education after high school graduation. At the completion of this course, the student should have increased his reading, writing, and critical thinking skills and also should have gained a knowledge of American literature and writers.

Course Description: College Bound English 11 focuses on the study of American literature, writing, and research. The course features the development of critical thinking skills through literary analysis of the short story, poetry, drama, and the novel. Emphasis is placed upon the formulation of thesis and its development with specific, supporting details. The composition assignments usually correlate with the literature under study. Grammar and usage skills are addressed through the domains of writing in a practical setting and in response to literature. Oral speaking skills are also stressed. Also integrated into the course is vocabulary development through the study of word elements and words related in meaning.

Requirements: Each student will complete the reading of several novels and various related stories, poems, plays, and essays. They will also take both objective and essay literature tests. Students will complete frequent expository writing assignments along with writing a documented research paper. They will also write informative, narrative and persuasive essays. They will take frequent

vocabulary tests, which require them to memorize, spell, define, and write context sentences. They will also be tested and evaluated in their compositions and speech for proper grammar/usage. In addition to tests, they will take frequent quizzes and do homework on a regular basis. Students are expected to take an active part in class discussions and to complete all assignments. All students will participate in group and individual oral reports. Students will also complete the 11th grad component of the graduation project, which consists of a cover letter, resume, and job application.

Prerequisites: College Bound English 10 (Refer to page 9 for specific grading and percentage guidelines).

☐ **COLLEGE BOUND ENGLISH 12** Grade 12 Full Year 1 Credit

Purpose: The College Bound English 12 course exists for the student who plans to continue his/her education past high school graduation. The student who successfully completes this course should be competent in composition format, including grammar/usage skills, literary analysis, research techniques, and vocabulary identification and usage. The final area of study is the successful preparation for the completion of the Graduation Project 12th grade component, which consists of a mock interview.

Course Description: College Bound English 12 concentrates on the analysis of representative pieces of British, American, and World literature, the review of grammar and usage skills, vocabulary development, and the research and writing processes. Analysis of literature from early periods through contemporary genres will be conducted through class discussion, written tests and essays, and formal essay questions on tests. Students review formal research procedures. Narrative writing skills will also be developed. Oral speaking skills are also developed. Vocabulary building continues with a focus on word definitions and their use in the context of writing.

Requirements: Students will develop a formal essay, using various specified modes of development: comparison/contrast, cause/effect, and rhetoric. They read novels, short stories, poetry, essays, and plays, primarily from British, American, and World literature, and analyze each piece orally and/or in written form. Students participate in both individual and group oral report activities. Grammar/usage skills will be evaluated through review exercises and the students' compositions. Vocabulary building exercises and tests are also included in studies. A final requirement is the successful completion of the Graduation Project 12th grade component, including the interview, cover letter, and resume.

Prerequisites: College Bound English 11 (Refer to page 9 for specific grading and percentage guidelines).

☐ **ENGLISH 9** Grade 9 Full Year 1 Credit

Purpose: The English 9 course provides a language study for students planning a career after high school graduation. When this course is completed, the students should have a balanced background for the senior high English 10 experience.

Course Description: English 9 encompasses the areas of grammar and usage, literature, composition, vocabulary and public speaking. Grammar concepts include verbal phrases, sentence structure, and types of clauses. Other areas of weakness, discovered in written work, are covered as needed. The basic elements of plot, characterization, theme, conflict, and setting are incorporated in the literary analysis of contemporary and classical works. Students will write responses to prompts that evolve from the literature study. Vocabulary lessons will stress meaning and the use of the words found in content.

Requirements: Every student will analyze a number of books, in writing or orally, in addition to reading assigned stories, poems, plays, essays, and biographies. The Accelerated Reader Program, an independent reading program, is a requirement. Compositions and sentence combing exercises are completed throughout the year, and students will revise grammar/usual in written work. Several forms of public speaking will be required. Students will be given tests and quizzes in grammar/usage, literature and vocabulary.

Prerequisites: Successful completion of 8th grade English (Refer to page 9 for specific grading and percentage guidelines).

□ **ENGLISH 10**

Grade 10

Full Year

1 Credit

Purpose: The purpose of English 10 is to introduce students to the types of skills and knowledge needed to succeed in the world of work.

Course Description: English 10 is a course designed to strengthen and advance the communication skills of those students who will seek employment after high school graduation. The fundamentals of effective speaking and writing will be stressed along with the basics of grammar and usage. Reading comprehension will be emphasized through a wide variety of novels and short stories. Students will prepare for Keystone testing at the end of the sophomore year through an emphasis upon interpretative reading and intensive writing. Students are encouraged to be independent and active learners, to take responsibility for their work, and to participate and contribute to the positive learning environment of the classroom. Individualized and differentiated instruction is provided to help all students succeed. The sophomore portion of the Graduation Project will also be completed in this course.

Requirements: Students will be expected to take an active role in daily classroom activities and to complete all assignments.

Prerequisites: 9th grade English (Refer to page 9 for specific grading and percentage guidelines).

□ **ENGLISH 11**

Grade 11

Full Year

1 Credit

Purpose: The purpose of English 11 is to continue to develop skills for reading and analysis of fiction and nonfiction, and effective writing, ranging from pre-written to revision.

Course Description: English 11 is designed to strengthen skills in reading and writing for students who will enter the work force after graduation. The fundamentals of reading skills will be a major focus of the course. Use of textbook and selected novels help to develop students' reading comprehension skills. In addition, much course work will focus on informational and persuasive writing skills, from brainstorming and pre-writing through revision and grammar. Students will build responsibility with increased independence. With a focus on active learning, participation is a necessary component for success in the course. Individualized and differentiated instruction and assessment are used to promote success for all students. Students will also complete the junior year requirement of the Graduation Project, which includes a diagnostic career survey, a cover letter, and a resume. The Graduation Project will be a significant portion of the marking period grade.

Requirements: Students will be expected to take an active role in daily classroom activities and to complete all assignments.

Prerequisites: English 10 (Refer to page 9 for specific grading and percentage guidelines).

□ **ENGLISH 12**

Grade 12

Full Year

1 Credit

Purpose: The purpose of English 12 is to provide the necessary tools for job acquisition and to polish those skills introduced in English 11. The development of the oral Graduation Project presentation is an area of study.

Course Description: English 12 is a course designed to strengthen and advance the communication skills of those students who will seek employment after high school graduation. There will be a major emphasis upon reading for comprehension, analysis, interpretation, and on making connections; and on writing in response to literature. Students will identify specific literary devices in various genres: short stories, satire, novels, drama, and essays. Students will respond to common interview questions and complete an oral mock interview as the final component of the Graduation Project. Students are encouraged to be independent and active learners, to take responsibility for their work, and to participate and contribute to the positive learning environment of the classroom. Individualized and differentiated instruction is provided to help all students succeed.

Requirements: Students will be expected to take an active role in daily classroom activities and to complete all assignments.

Prerequisites: English 11 (Refer to page 9 for specific grading and percentage guidelines).

□ HONORS ENGLISH 9

Grade 9

Full Year

1 Credit

Purpose: The Honors English 9 course exists for the student who plans to continue his/her education after high school graduation. At the completion of this course, students should possess a high degree of mastery in language and communication skills as well as the ability to conduct in-depth analysis of literary selections and novels.

Course Description: Honors English 9 focuses on composition and analysis of various forms of literature. The reading and discussion of novels, short stories, plays, poems, and essays will introduce literary terms and generate writing activities.

Requirements: Students will prepare written and/or oral reports on at least four novels and will read selected short stories, plays, poems, and essays. In addition to writing about literature, students will prepare expository, descriptive, and persuasive essays. Students will identify grammatical constructions (specifically, independent and dependent clauses and verbal phrases) and use them to improve punctuation and sentence variety in compositions. Students will memorize definitions of new vocabulary words and write original sentences to practice usage and to reinforce grammatical concepts.

Prerequisites: At least an 84% in Pre-Honors English 8, or an average of 95% College Bound English 8, Writing and Usage Screeners, and a teacher recommendation (Refer to page 9 for specific grading and percentage guidelines).

□ HONORS ENGLISH 10

Grade 10

Full Year

1 Credit

Purpose: The Honors English 10 course exists for the student who plans to continue his/her education after high school graduation. Honors English requires in-depth reading and writing, as well as more comprehensive analysis of literary selections and research assignments.

Course Description: Emphasis is placed on composition skills, vocabulary development, literary analysis of the short story, the drama, and the novel, and oral presentation skills. Since good writing must be clear, students work to master major aspects of grammar. Thinking skills such as inference making, deductive reasoning, and brainstorming serve as tools to hone reading comprehension skills and for language studies in semantics and literary analysis. Students learn to locate and decode figurative language, symbols, and themes in period and contemporary literature. Speaking and listening skills are part of the literature activities, as well as **productive, meaningful and consistent** participation in class discussions. Students will also study elements of research and complete preparatory assignments/activities for the Keystone Literature Exam.

Requirements: Students will complete written and oral reports; will read selected stories, poems, plays, novels, and essays; and will write about many of these readings. Pupils will memorize, define, spell, pronounce vocabulary words, and write context sentences to practice grammar/usage skills. Homework is an integral part of the studies as well as a variety of other assignments. The student will also construct a research paper in addition to taking various quizzes, unit tests, semester and final examinations in composition and literature/grammar. Honors English 10 requires more in-depth reading and writing and more required analysis of literature and research assignments.

Prerequisites: Honors English 9 and successful completion of all parts of the summer assignment. (Refer to page 9 for specific grading and percentage guidelines).

□ HONORS ENGLISH 11

Grade 11

Full Year

1 Credit

Purpose: The Honors English 11 course exists for the accelerated student who plans to continue his/her education after high school graduation. At the completion of this course, the student should have increased his reading, writing, and critical thinking skills and also should have gained a knowledge of American literature and writers.

Course Description: Honors English 11 features the development of critical thinking skills through the literary analysis of the short story, poetry, drama, thematic nonfiction, and the novel. Expository writing is integrated into the course. Emphasis is placed upon the formulation of a thesis and its development with specific, supporting details. Another major focus of study is the review of research skills and the writing of argumentative research paper. Also, integrated in the course is vocabulary development through the study of word elements and word related meanings. Discrimination in the fine shades of meaning and the context analysis of sentences are stressed. Another area of study included in the course is the review of grammar/usage elements. Emphasis is placed upon those areas as they are reflected in student writing and speaking. A final area of study is the graduation project 11th grade component, which includes a resume, cover letter, and job application.

Requirements: Each student will read several novels and read various related stories, poems, plays news articles and nonfiction essays. Students will take both objective and essay literature tests. Students will complete frequent expository writing assignments, including informative, narrative, and persuasive styles, in addition to writing a documented research paper. Vocabulary assessments require use selected terms in context. They will also be tested and evaluated in their compositions for proper grammar/usage. In addition to tests, they will take frequent quizzes and complete homework on a regular basis. Students are expected to take an active part in class discussions to complete all assignments. All students will also participate in group and individual oral reports. In contrast to College Bound English 11, Honors English 11 requires more in-depth reading and writing, more required reading and interpretation of literary themes, and a more extensive research paper.

Prerequisites: Honors English 10 and successful completion of all parts of the summer assignment. (Refer to page 9 for specific grading and percentage guidelines).

HONORS ENGLISH 12

Grade 12

Full Year

1 Credit

Purpose: The Honors English 12 course is designed to enhance the composition skills, literary analysis ability, research techniques, and speaking activities of the academically talented student who plans to continue his/her education past high school graduation. The Graduation Project oral component is the final area of study.

Course Description: Honors English 12 is a course designed to enhance the composition skills, literary analysis abilities, research techniques, and speaking abilities of the academically talented student who plans to continue his/her education after high school. Honors English 12 concentrates on organizational techniques which promote clear, well-proven essays, compositions, and research papers. The student will concentrate on world literature, study implications of that literature and analyze literary techniques and themes, and model his/her writing on exceptional examples of literature throughout history. Novels, short stories, poetry, essays, and plays will be analyzed in oral and/or written form. Students will prepare for and participate in a formal mock job interview with members of the local business community as the final component of the Graduation Project. Class participation is also an expected component. Students may participate in the Mount Aloysius College's College in High School Program in conjunction with this course. Mount Aloysius College charges a fee (approximately 165.00) for registration and credits.

Requirements: Students will develop formal essays, each with specified audiences and purposes. They read novels, short stories, poetry, essays, and plays, and analyze each piece in oral and/or written form. Grammar/usage skills will be evaluated through the students' compositions. In contrast to College Bound English 12, Honors English 12 requires more in-depth reading and writing, and more required reading and interpretation of literary themes. All requirements and expectations as dictated by the CHS (College in High School) program and The Mount Aloysius College will be fulfilled.

Prerequisites: Honors English 11 or AP English Language and Composition. (Refer to page 9 for specific grading and percentage guidelines).

MATHEMATICS

(All students must take **four** credits.)

□ **ADVANCED PLACEMENT CALCULUS (AB Level)**

Grades 10, 11, 12

Full Year

1 Credit

Purpose: Advanced Placement Calculus (AB Level) is intended for students who have a thorough knowledge of college preparatory mathematics and who enjoy being challenged mathematically. It will prepare the student for advanced mathematical analysis and the Advanced Placement Calculus (AB Level) examination.

Course Description: The course follows the outline of topics required by the Educational Testing Service on the AP test. The course is concerned primarily with elementary functions, differential calculus, and integral calculus. Topics studied include: algebraic, trigonometric, exponential, and logarithmic functions; limits; derivatives; applications of derivatives; integration techniques; definite integrals; and applications of definite integrals. Application of knowledge learned to theoretical, as well as practical situations, is included.

Requirements: Students are expected to complete daily homework assignments, maintain a neat and thorough portfolio/notebook, participate in cooperative class activities, and take tests and quizzes as required by the instructor. Extensive practice exercises in preparation for the Advanced Placement Test are required. Students are expected to take the Advanced Placement Calculus (AB Level) test at the end of the school year at the current cost. Based on the performance on the exam, most colleges will exempt the student from taking an entrance level mathematics course. Students will have a summer assignment. Failure to complete the summer assignment by the deadline will result in score of zero.

Prerequisites: CB Trigonometry/Pre-Calculus. (Refer to page 9 for specific grading and percentage guidelines).

□ **ADVANCED PLACEMENT CALCULUS (BC Level)**

Grades 10, 11, 12

Full Year

1 Credit

Purpose: Advanced Placement Calculus (BC Level) is intended for students who have a thorough knowledge of college preparatory mathematics and who enjoy being challenged mathematically. It will prepare the student for advanced mathematical analysis and the Advanced Placement Calculus (BC Level) examination.

Course Description: The course follows the outline of topics required by the Educational Testing Service on the AP test. In addition to reviewing and studying, in more depth, all topics studied in Advanced Placement Calculus AB Level, BC Level Calculus students explore numerous more advanced topics and techniques in mathematics. Some of these topics include: integration by parts; integration using partial fractions; improper integrals; polar, parametric and vector expressions; arc length; work problems; and an extensive unit on series.

Requirements: Students are expected to participate in cooperative class activities, complete required homework assignments, and take tests and quizzes. Extensive practice exercises in preparation for the Advanced Placement Test are strongly suggested. Students are expected to take the standardized Advanced Placement Calculus (BC Level) test at the end of the school year at the current cost. Based on the performance on the exam, most colleges will exempt the student from taking an entrance level mathematics course and at least one calculus course. Students will have a summer assignment. Failure to complete the summer assignment by the deadline will result in a score of zero.

Prerequisites: Advanced Placement Calculus (AB Level). (Refer to page 9 for specific grading and percentage guidelines).

□ **ADVANCED PLACEMENT STATISTICS**

Grades 10, 11, 12

Full Year

1 Credit

Purpose: The purpose of this course is to provide an additional mathematics course for the mathematically talented student. The AP Statistics course addresses the needs of two different student populations. This course, which may be taken concurrently with another math class, provides another exploration into the world of mathematics for those students interested in a future career in a math/science field. For those students interested in a non-math/science field, this course is a likely alternative to H/CB Calculus, AP Calculus AB Level, or AP Calculus BC Level. This course prepares the student for more advanced statistics courses as well as the Advanced Placement Statistics examination.

Course Description: The course follows the outline of topics required by the Educational Testing Service on the AP statistics test. The topics discussed in AP Statistics are divided into four major themes: exploratory analysis, planning a study, probability, and statistical inference. Students may participate in the University of Pittsburgh's CHS (College in High School) Program in conjunction with this course. The University of Pittsburgh charges a fee for registration and credits.

Requirements: Students will be required to read the textbook and complete all assignments. Data gathering activities will be incorporated into this course as well as projects and experiments. As true with other AP courses, AP Statistics will require dedicated students to complete extensive required work, both in and out of the classroom, as well as a summer assignment. Students are expected to take the Advanced Placement Statistics test at the end of the school year at the current cost. Based on the performance on the exam, most colleges will exempt the student from taking an entrance level statistics course. All requirements and expectations as dictated by the CHS (College in High School) Program and the University of Pittsburgh will be fulfilled.

Prerequisites: CB Algebra 2. (Refer to page 9 for specific grading and percentage guidelines).

□ **ALGEBRA 1**

Grades 10

Full Year

1 Credit

Purpose: Algebra 1 is a full year Algebra 1 course. This course builds on the mastery from the previous course sequence including Math 8 and Math 9.

Course Description: The course includes the following topics: Review of expressions, equations, and functions, solving linear equations and inequalities, graphing relations and functions, analyzing linear equations, solving systems of linear equations and inequalities, exploring polynomials, factoring polynomials, explore quadratics, simplifying radical expressions, rational expressions, equations, and data and analysis.

Requirements: Tests and/or quizzes will be given and practice will be assigned daily. Students will be expected to take an active role in daily classroom activities and to complete all assignments. Students are required to take the Algebra1 Keystone Exam at the conclusion of the course.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

□ **COLLEGE BOUND/HONORS CALCULUS**

Grades 11,12

Full Year

1 Credit

Purpose: Calculus will further develop the concepts learned in previous mathematics courses and will lay the foundation for the student's study of challenging mathematical analysis. This course provides a link between past studies in algebra, geometry, and pre-calculus and more advanced study in mathematical analysis.

Course Description: The course practices and reviews concepts such as the analysis of functions, algebraic procedures and business applications. In addition two major classes of problems are explored – finding the rate at which a quantity is changing and finding a function when its rate of change is known. Students may participate in the University of Pittsburgh's CHS (College in High School) Program in conjunction with this course if a passing score is earned on the entrance exam. The University of Pittsburgh charges a fee for registration, the entrance exam, and credits in *MATH 0120 Business Calculus*.

Requirements: Students are expected to complete daily homework assignments, maintain a neat and thorough portfolio/notebook, participate in cooperative class activities, and take tests and quizzes as required by the instructor. All requirements and expectations as dictated by the CHS (College in High School) program and the University of Pittsburgh will be fulfilled.

Prerequisites: Trigonometry/Pre-Calculus or Honors Trigonometry/Pre-Calculus (Refer to page 9 for specific grading and percentage guidelines).

☐ **COLLEGE BOUND ALGEBRA 1** Grades 9 Full Year 1 Credit

Purpose: College Bound Algebra 1 is a rigorous academic Algebra 1 course. This course builds on the mastery from the previous course College Bound Pre-Algebra.

Course Description: The course includes the following topics: Review of expressions, equations, and functions, solving linear equations and inequalities, graphing relations and functions, analyzing linear equations, solving systems of linear equations and inequalities, exploring polynomials, factoring polynomials, explore quadratics, simplifying radical expressions, rational expressions and equations.

Requirements: Tests and/or quizzes will be given and homework will be assigned regularly. Students will be expected to take an active role in daily classroom activities and to complete all assignments. Students are required to take the Algebra 1 Keystone Exam at the conclusion of the course

Prerequisites: Students must have earned at least a 77% average in CB Pre-Algebra in grade 8. (Refer to page 9 for specific grading and percentage guidelines).

☐ **COLLEGE BOUND ALGEBRA 2** Grades 10, 11,12 Full Year 1 Credit

Purpose: The Algebra 2 course is designed for the college bound student to learn the rules, concepts, and reasoning that prepare one for involved problem solving. At the completion of the course, students should be prepared to use fundamental algebra needed in trigonometry, calculus, or any higher mathematics.

Course Description: The course, Algebra 2, includes the following topics: real numbers; first degree equations; inequalities; relations, functions and graphs; systems of equations; polynomials and polynomial equations; rational expressions and equations; powers, roots, and complex numbers; quadratic equations; quadratic functions; polynomial, exponential, and logarithmic functions.

Requirements: Tests or quizzes will be given, and homework will be assigned regularly. Students are expected to take an active role in daily class activities and to complete all assignments.

Prerequisites: Geometry or Honors Geometry and Algebra 1 (Refer to page 9 for specific grading and percentage guidelines).

☐ **COLLEGE BOUND GEOMETRY** Grades 9,10,11 Full Year 1 Credit

Purpose: Geometry is a college bound math course taken after Algebra 1, but before Algebra 2. The student learns to discover relationships among geometric shapes and to state and apply them accurately and concisely. The student learns to reason logically in a step-by-step approach in order to solve geometric proofs. Logical reasoning is also applied in finding length of segments, degrees of angles, area, perimeters, circumference, and volumes. Solving geometric problems of a practical nature is emphasized throughout the course.

Course Description: Students will spend a major part of class time learning the following major topics: relationships between point, line and plane; angle relationships and types of angles; parallel lines; polygons; conditionals and logic; congruent triangles; triangle inequalities; similar polygons; right triangle properties; introductory trigonometry; perimeter, area and properties of quadrilaterals and triangles; circle properties; and the volume and surface areas of cylinders, rectangular solids and spheres.

Requirements: Students are expected to complete nightly assignments, to take periodic tests and/or quizzes, to complete projects as assigned, and to take a positive, active part in daily class work.

Prerequisites: Students enrolled in College Bound Algebra 1 and College Bound Geometry, who have not demonstrated proficiency on the Algebra 1 Keystone Exam prior to Ninth Grade, will be required to take a remediation course and then retest during the winter administration of the Keystone. (Refer to page 9 for specific grading and percentage guidelines).

□ COLLEGE BOUND PROBABILITY AND STATISTICS

Grades 11, 12

Full Year

1 Credit

Purpose: Probability and Statistics is a full year elective course. The course is directed primarily at all college preparatory students who have completed Algebra 2.

Course Description: The course has three main objectives. The first objective is to provide each student with background material necessary to be successful in a college introductory statistics course. Concentrating on descriptive statistics, the student is taught how to summarize data using frequency tables, represent data graphically, and interpret data with percentiles and standard scores. The measures of central tendency, dispersion, and position are calculated both by hand and with calculators. The second objective is to expose students to various probability concepts and experiences. This course also covers concepts and ideas encountered in inferential statistics such as probability distributions (normal and binomial), sampling, hypothesis testing, and confidence levels. Numerous quantitative literacy activities and hands-on statistical experiences are included in the course.

Requirements: Computer applications and calculator exercises will be incorporated in the course in order to accelerate calculations leading to the solution of problems. A minimum of eight tests and/or projects and a final evaluation will be given. Students will be expected to take an active part in daily class work and to complete all assignments, projects and experiments.

Prerequisites: Algebra 2 (Refer to page 9 for specific grading and percentage guidelines).

□ COLLEGE BOUND TRIGONOMETRY/PRE-CALCULUS

Grades 10, 11, 12

Full Year

1 Credit

Purpose: Trigonometry/Pre-Calculus will provide a solid preparation for the student who intends to continue his study of mathematics and develop his problem-solving skills. It will also be helpful to the student who, although not wishing to continue formal mathematical education, wants to have an acquaintance with some important topics of mathematics that may be encountered in later studies and everyday life.

Course Description: The course will emphasize functions and their graphs. Definitions and examples will serve as useful models, which will aid in the student's clarity of mathematical thought. Verbal problems will illustrate applications of the principles of mathematical theory and organize the student's work sequentially. Calculators will be used to facilitate the rigorous and cumbersome calculations of various problems. The course is designed to give the student an understanding of the following mathematical concepts: trig functions, graphs of trig functions, circular functions, applications using right triangles, trig equations, algebraic functions, logarithmic functions, exponential functions, analytical geometry, and applications.

Requirements: Students will be expected to complete regularly assigned homework assignments, participate in class discussions and in cooperative class activities, maintain a note-taking system, complete all classroom assignments, and take tests and quizzes as required by the instructor.

Prerequisites: Algebra 2 and or Geometry or Honors Geometry. (Refer to page 9 for specific grading and percentage guidelines).

□ HONORS ALGEBRA 2

Grades 10, 11

Full Year

1 Credit

Purpose: The Honors Algebra 2 course is designed for the mathematically talented college bound student to learn the rules, concepts, and reasoning needed for involved problem solving. At the completion of the course, students will be well prepared to use algebraic skills required in trigonometry, calculus, or any higher mathematics courses.

Course Description: The course, Honors Algebra 2, includes the following topics: real numbers; first degree equations; inequalities; relations, functions and graphs; systems of equations; polynomials and polynomial equations; rational expressions and equations; powers, roots, and complex numbers; quadratic equations; quadratic functions; polynomial, exponential, and logarithmic functions.

Requirements: Tests or quizzes will be given, and homework will be assigned regularly. Students are expected to take an active role in daily class activities and to complete all assignments.

Prerequisites: Honors Geometry or Geometry and Algebra 1. (Refer to page 9 for specific grading and percentage guidelines).

□ HONORS GEOMETRY

Grade 9

Full Year

1 Credit

Purpose: At the completion of Honors Geometry the students should possess a knowledge of geometric relationships that exist in our environment. The student will develop the ability to reason scientifically and build relationships between concepts that follow in a logical and meaningful sequence.

Course Description: The course includes the following topics: Relationships between points, lines, and planes; angle relationships and types; parallel lines; polygons; conditionals and logic; triangle relationships; similarity; perimeter, area, surface area, and volume; right triangle properties; circles; and introductory trigonometry. Direct and indirect proofs are done in a manner which follows accepted mathematical procedures.

Requirements: Tests and/or quizzes will be given and homework will be assigned regularly. Outside projects are required. Students will be expected to take an active role in daily classroom activities and to complete all assignments.

Prerequisites: Students must have earned at least an average of 84% in Algebra 2 or completion of CB Algebra 1 with at least an average of 84% (Refer to page 9 for specific grading and percentage guidelines).

□ HONORS TRIGONOMETRY/PRE-CALCULUS

Grades 10, 11, 12

Full Year

1 Credit

Purpose: The Honors Trigonometry/Pre-Calculus course is designed for the mathematically talented college bound student in order to provide a solid preparation for continued study of mathematics and development of advanced problem-solving skills. At the completion of the course, students should be extensively prepared to use fundamental algebra, geometry, and trigonometry needed in the study of calculus or any higher-level mathematics course.

Course Description: The course, Honors Trigonometry/Pre-Calculus, includes similar topics as in Trigonometry/Pre-Calculus, but studies the topics in more depth and at a quicker pace. More challenging and extensive assignments will be given than those in Trigonometry/Pre-Calculus. The course will emphasize functions and their graphs. Definitions, theorems, and examples will serve as useful models, which will aid in the student's clarity of mathematical thought. Verbal problems will illustrate applications of the principles of mathematical theory. Calculators will be used to facilitate the rigorous and cumbersome calculations of various problems. The course is designed to give the student an understanding of the following mathematical topics: trigonometric functions and their graphs, circular functions, algebraic functions, logarithmic functions, exponential functions, analytic geometry, conic sections and applications. Only students who wish to be challenged mathematically should enroll in this honors course. .

Requirements: Students will be required to complete all homework assignments, exercises, experiments, projects, quizzes, and tests as assigned.

Prerequisites: Honors Algebra 2 or Algebra 2, and CB Geometry or Honors Geometry. (Refer to page 9 for specific grading and percentage guidelines).

□ INTEGRATED MATH 1

Grades: 10 and 11

Full Year

1 Credit

Purpose: To concentrate in an exploration of such mathematical topics as algebra, geometry and numbers and operations and a review of others in order to prepare students for their future educational pursuits.

Course Description: Integrated Math 1 further develops the student's knowledge of basic algebraic concepts and principles encountered in previous mathematics courses.

Requirements: Students are expected to take an active part in daily class work, projects, and homework. A good performance on quizzes and tests is also expected.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

□ **INTEGRATED MATH 2**

Grades: 11 and 12

Full Year

1 Credit

Purpose: To concentrate in an exploration of such mathematical topics as algebra, geometry and numbers and operations and a review of others in order to prepare students for their future educational pursuits.

Course Description: This course will present the basic disciplines of mathematics in an integrated fashion. Concepts of algebra, measurement, and numbers and operations are emphasized however data analysis, probability, and geometry are interwoven throughout the year.

Requirements: Students are expected to take an active part in daily class work, projects, and homework. A good performance on quizzes and tests is also expected.

Prerequisite: (Refer to page 9 for specific grading and percentage guidelines).

□ **MATHEMATICS WITH FINANCIAL APPLICATIONS**

Grade 12

Full Year

1 Credit

Purpose: To concentrate in an exploration of such mathematical topics as they apply in today's world of employment.

Description: Mathematics with Financial Applications is a course which emphasizes application of mathematics in the world of employment. Realistic practical problems requiring the use of arithmetic, algebraic, geometric, and statistical concepts and principles will be discussed.

Course Requirements: Students are expected to take an active part in daily class work, projects, and homework. A good performance on quizzes and tests is also expected.

Prerequisite: (Refer to page 9 for specific grading and percentage guidelines).

NATURAL SCIENCE

(Each student must take **four** credits)

□ **ADVANCED PLACEMENT BIOLOGY** Grades 10, 11,12 Full Year 2 Credits

Purpose: Advanced Placement Biology is designed for the academically motivated student who plans to pursue a college career and wishes to take a college level introduction to biology. The student may earn college credits by taking the Advanced Placement Biology Exam in May. Upon completion of Advanced Placement Biology, the student should possess the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology and will have an appreciation for the nature of science. Laboratory work is an extremely important part of AP Biology. Laboratory investigations are student-directed and inquiry based. Inquiry-based instruction requires students to make connections between concepts and the Big Ideas of biology and allows scaffolding of both concepts and science practices to increase students' knowledge and skills thus promoting deeper learning.

Course Description: Advanced Placement Biology will include those topics regularly covered in a two semester college biology sequence for majors. Advanced Placement Biology is designed around four big ideas:

Big Idea #1: The process of evolution drives the diversity and unity of life

Big Idea #2: Biological systems utilize energy and molecular building blocks to grow, to reproduce, and to maintain homeostasis.

Big Idea #3: Living systems store, retrieve, transmit, and respond to information essential to life processes.

Big Idea #4: Biological systems interact, and these interactions possess complex properties.

The course will meet ten periods per week.

Students have the option of taking AP Biology as a dual enrollment course. After successfully completing the course work and exams prepared in cooperation with the college, the student will receive college credits and a grade recorded on a regular college transcript. The Dual Enrollment Program for AP Biology is in cooperation with Mount Aloysius College. Details will be provided.

AP Biology is a National Math and Science Initiative (NMSI) course. As part of a partnership with NMSI students will receive additional support with extra tutoring sessions, administrative/scoring of mock AP Exams and supplemental Saturday Study Sessions. In addition, NMSI will subsidize the fee of the AP Exam and provide a monetary incentives for qualifying AP exam scores. Details will be provided.

Requirements: Each student will be required to complete extensive reading assignments from the textbook and from research materials. In addition students will be required to write frequently and extensively. College level laboratory work is a major component of Advanced Placement Biology and preparation of laboratory reports is required. Announced and unannounced evaluations are given on a regular basis. Projects of the teacher's choice and projects of student design will be required. Students are expected to take the standardized Advanced Placement test at the end of the school year at the current cost. Based on performance on the exam, many colleges and universities will exempt the student from taking an entrance level course(s) during the first year of enrollment. Students will have a summer assignment due before August.

Fees: Students will pay for equipment breakage and/or lost supplies.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

Grading: Grades will be on a total point basis. Types of assignments to be evaluated will include: tests, quizzes, essays, homework, classwork, reviews of reading assignments, projects, and lab work. Test questions require students to apply knowledge in novel ways. The tests do not evaluate rote memorization skills.

□ **ADVANCED PLACEMENT CHEMISTRY** Grades 11,12 Full Year 2 Credits

Purpose: Advanced Placement Chemistry is designed for the academically motivated student who wishes to take college level introductory chemistry while in high school. Students are expected to take the Advanced Placement Chemistry exam. Upon completion of the course, the student should possess the concepts, knowledge, skills and experience to deal successfully with college level science courses.

Course Description: Advanced Placement Chemistry will include those topics normally covered in a first year college chemistry course for science majors. Major areas include atomic structure, physical chemistry, chemical reactions, chemical mathematics, acid-base theory, solution chemistry, chemical bonding, equilibrium, kinetics, periodicity and thermodynamics.

Requirements: Each student will be required to complete reading assignments, homework assignments, laboratory assignments, laboratory reports, and participate in class activities. Reading notes, homework assignments, laboratory work, laboratory reports, tests, and quizzes may be included in student evaluations. One or more projects may be required. A willingness to work is necessary for success. Students are expected to take the standardized Advanced Placement test at the end of the school year at the current cost. Based on the performance in the exam, many colleges will exempt the student from taking the entrance level chemistry course. Students will have a summer assignment due before August.

Fees: Students will pay for equipment breakage, lost and/or damaged supplies, and for any special materials needed for a project.

Prerequisites: Chemistry 1 and AP Chemistry Screener (Refer to page 9 for specific grading and percentage guidelines).

□ **ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE**
Grade 10, 11, 12 Full Year 1.5 Credits

Purpose: To provide students a yearlong laboratory based environmental science course. The course will expose the student to the changing local and global environment. The student's interaction with the present environment will be explored, as well as his/her role in its conservation. At the completion of this college preparatory course, the student will have obtained extensive background knowledge in environment and ecology and will have developed laboratory skills necessary for success in studying environmental issues.

Course Description: Advanced Placement Environmental Science is a laboratory based course in which students will investigate the principles of environmental science. The course will focus on an introduction to environmental science focusing on the fundamental principles of ecological diversity, elemental cycling, methods of production, reduction and abatement of pollution and the role human society has in shaping the environment. Standard environmental sampling, data collection methods and techniques, as well as analysis are emphasized in laboratories.

AP Environmental Science is a National Math and Science Initiative (NMSI) course. As part of a partnership with NMSI students will receive additional support with extra tutoring sessions, administrative/scoring of mock AP Exams and supplemental Saturday Study Sessions. In addition, NMSI will subsidize the fee of the AP Exam and provide a monetary incentives for qualifying AP exam scores. Details will be provided.

Requirements: Successful participation in all classroom activities (laboratories, written assignments, exams, projects, etc).

Prerequisites: Students must have passed CB Biology and/or CB Chemistry with a 92% or higher; or have passed AP Biology with and 84% or higher. (Refer to page 9 for specific grading and percentage guidelines).

□ **ADVANCED PLACEMENT PHYSICS 1 & 2** Grades 11, 12 Full Year 2 Credits

Purpose: AP Physics provides students with instruction aligned with the AP Physics 1 and AP Physics 2 exams offered by the College Board. Students completing the course will take both exams and have the opportunity to receive credit for college coursework (please note that credit-awarding policies vary by university).

Course Description: The AP Physics course includes each of the topics contained in the AP Physics 1 and AP Physics 2 course description as published by the College Board. These topics include motion in one and two dimensions, momentum, energy, rotational motion, thermodynamics, fluids, waves, optics, electricity, and electromagnetism. Instruction will involve daily problem-solving as well as an emphasis on hands-on experiments. A strong mathematical background is encouraged.

Requirements: Students planning to take AP Physics will be required to complete a summer assignment prior to beginning the course. Students will be required to complete regular homework assignments involving problem-solving and calculations. Students are expected to take the College Board's Advanced Placement Physics 1 and AP Physics 2 exam at the end of the school year at the fee amount set by the College Board.

Prerequisites: Calculus or may be taking Calculus concurrently (Refer to page 9 for specific grading and percentage guidelines).

ADVANCED PLACEMENT PHYSICS C Grades 11,12 Full Year 1 Credit

Purpose: AP Physics C is designed for the academically motivated student who wishes to earn four college credits in physics through the University of Pittsburgh's *College in High School* program. The curriculum is based on the University's course syllabus for Physics 0174: Basic Physics for Science and Engineering I.

Course Description: AP Physics C will include those topics that are usually covered in a first-semester college physics course. The areas of emphasis will include vectors, motion in one, two, and three dimensions, Newton's laws of motion, work and energy, collisions, rotational motion, gravitation, and wave motion. Students may participate in the University of Pittsburgh's College in High School Program in conjunction with this course. The University of Pittsburgh charges a fee (approximately 200.00) for registration and credits.

Requirements: Each student will be required to complete reading, homework, and laboratory assignments along with additional preparation outside of class needed to prepare for exams. All requirements and expectations as dictated by the CHS (College in High School) program and the University of Pittsburgh will be fulfilled. This program will allow the student to use their scores on four exams given during the school year to receive credit for the freshman physics course at the University.

Fees: Students will pay for damage to lab equipment that result from negligent or abusive behavior.

Prerequisites: Calculus or may be taking Calculus concurrently (Refer to page 9 for specific grading and percentage guidelines).

ASTRONOMY Grade 10, 11, 12 Semester .5 Credit

Purpose: To expose students to open ended scientific problem solving and the nature of science. This course is designed to provide a non-technical overview of basic astronomy topics. The emphasis is on exploration and creativity. The course includes use of the high school digital planetarium and various computer simulations.

Course Description: The following topics are covered:

The Nature of Science & History of Astronomy; Motions in the Night Sky
The Solar System; Stars and Galaxies; Cosmology; and Space Flight

Requirements: Students will identify a determined list of constellations, asterisms, and stars/objects that are visible in the night sky throughout the year. In addition they will describe the movements in the night sky and explain their causes. Students will describe the Earth's place in the solar system, galaxy, and the universe. Students will be required to complete class and homework assignments, laboratory exercises, reading and writing assignments, and a semester project.

Prerequisite: Biology 1, Algebra 1, This course is not open to students who have had or are currently taking College Board Astronomy (Refer to page 9 for specific grading and percentage guidelines).

BIOLOGY 1A Grade 9 Full Year 1 Credit

Purpose: To provide students a full year in-depth ecology based course for 10th grade students.

Course Description: Introduction to Ecology is a laboratory based course in which students will investigate the principles of ecology.

Requirements: Successful participation in all classroom activities and assignments.

Prerequisites: Successful completion of Science 8 (Refer to page 9 for specific grading and percentage guidelines).

□ **BIOLOGY 1B**

Grade 10, 11

Full Year

1 Credit

Purpose: To provide biology year long course for students who need a full credit in science.

Course Description: Biology 1B is a laboratory based course in which students will investigate the principles of biology.

Requirements: Successful participation in all classroom activities and assignments. Students will complete the Keystone Exam at the end of the course.

Prerequisites: Biology 1A (Refer to page 9 for specific grading and percentage guidelines).

□ **BIOLOGY 2**

Grades 11, 12

Full Year

1 Credit

Purpose: Biology 2 is designed to provide non-college bound students with an additional elective in the Life Sciences. Students will be given many opportunities to increase their knowledge of plants and animals.

Course Description: Biology 2 is a laboratory-centered course divided into two major topics: animals and plants. The Animal Unit will cover the seven major classes of vertebrates. This unit will emphasize dissection with a major dissection being done on a representative organism from each vertebrate class. Identification and data base construction for comparison of organisms within these seven classes will also be done. The plant unit will emphasize plant identification, plant anatomy and physiology, distribution and classification, and the values of plants to man and society. Laboratory investigations will also be done during the course of this unit.

Requirements: Extensive readings, study sheets, exams, quizzes and laboratory work will evaluate the student's progress throughout the year. In addition, students will be required to complete several outside projects during the course of the year. Active participation in class activities is essential.

Note: It is strongly recommended that any student who is opposed to or uncomfortable with dissection should not enroll in this course, as dissection is a major component of this course.

Fee: Students are required to pay for any materials lost or damaged.

Prerequisites: Biology 1A and Biology 1B and Environment and Ecology, or concurrently taking Environment and Ecology (Refer to page 9 for specific grading and percentage guidelines).

□ **BOTANY**

Grades 12

Full Year

1 Credit

Purpose: Botany is an elective course designed to give students an appreciation of the principles of plant science and practical experience in the use of plants.

Course Description: Botany is centered on lab work (classroom, greenhouse, and outdoor laboratory experiences). Information will be presented to the student through demonstrations, class discussion, lecture, reading material, individual study guides, AV, and the computer lab. The emphasis will be on applying this information in the laboratory setting. The course includes the following content: plant anatomy, physiology, growth, development, reproduction, and horticulture. The business management and applied aspects of all units will be included.

Requirements: Students will be required to complete study guides, readings, homework, garden designs, greenhouse and outdoor projects, and other assignments on each unit covered. All units will be followed by a major test. Laboratory work, write-ups, and quizzes will also be evaluated. A major project will be completed as a course requirement.

Prerequisite: Biology 1A and Biology 1B (Refer to page 9 for specific grading and percentage guidelines).

☐ **CHEMISTRY**

Grades 10,11,12

Full Year

1 Credit

Purpose: Chemistry 1 is designed to give students a broad, subject matter background in the field of chemistry. At the completion of this course, the student should possess an understanding of chemistry and its importance in today's society.

Course Description: Chemistry is the study of structure and composition of materials and the changes that may occur in these materials. Chemistry uses a laboratory and problem solving approach in addition to a lecture approach to the understanding of the principles being taught. The course includes the following subject areas: matter, measurements, atomic structure, quantum numbers, electromagnetic spectrum, periodic relationships, bonding, formulas, equations, stoichiometry, gases, liquids, solids, solutions, and environmental chemistry.

Requirements: Each student will conduct laboratory work following safe practices as instructed and report his/her results. Tests and/or quizzes will be given at the completion of each chapter and other such times as appropriate. Students are expected to complete assigned homework. A project may be required. Students will be expected to take notes and participate in all class activities. A final exam are required by the district.

Fees: Students will pay for equipment breakage and/or damage, lost supplies, and special supplies for project work.

Prerequisites: Biology 1, Algebra 1, or Algebra 1B (may be taken with Chemistry 1) (Refer to page 9 for specific grading and percentage guidelines).

☐ **COLLEGE BOUND ANATOMY & PHYSIOLOGY** Grade 11, 12

Full Year

1 Credit

Purpose: To prepare students to be successful in a health care degree post high school. Students will gain valuable experience and knowledge of health care skills.

Course Description: This course is designed to provide students with the fundamental knowledge of the normal structure and function of the human body and the deviations from normal, as they apply to health relatable fields. Formal lectures dealing with systems of the body, in conjunction with the laboratory projects and clinical experiences, enable the student to correlate and integrate theory to the individual patients and case studies. This course covers the basics of anatomy, how the body is organized into regions, how the areas of the body are named and a general overview of all of the organ systems. Basic themes run throughout the course of this class. This course serves to introduce the students to the basic functions of living organisms, reviews the concept of homeostasis and introduces positive and negative feedback systems in response to homeostatic regulation. Aspects of chemistry, physics, pharmacology, root word origin, nutrition, sampling, and laboratory testing, along with microbiology (aseptic technique) are incorporated into the course.

Requirements: During any nine-week period, projects, formal evaluations, exams, labs, and term papers may be assigned. Each unit will have activities and quiz/exam. Laboratory skills and techniques may be tested for proficiency. First aid and CPR training may be offered at student expense and are highly recommended

Fee: Students are required to pay for materials lost or damaged. Students are required to pay for CPR and First Aid training when offered. Students pre-pay for field experiences are they arise.

Prerequisites: College Bound Biology 1, College Bound Chemistry 1 (Refer to page 9 for specific grading and percentage guidelines).

☐ **COLLEGE BOUND BIOLOGY 1**

Grade 10

Full Year

1 Credit

Purpose: College Bound Biology 1 is designed for students planning to attend college. It is a prerequisite laboratory course for all future college bound science courses. The student will gain valuable experience in completing labs.

Course Description: College Bound Biology 1 is divided into six major units. These units are Ecology, Biochemistry, Cytology, Genetics, and Microorganisms. Laboratory experiences will be provided for each unit. The Ecology unit will be split between the beginning of the year and the end. The beginning of the year will focus on ecosystems and the interactions occurring, while the end of the year will focus on global concerns and problems. The Biochemistry unit includes the theories of life's origins and the requirements for maintaining life. The Cytology unit studies the anatomy and function of the cell and continues on with processes required to sustain life. Using problems and models, the Genetics unit covers inheritance patterns and genetic disorders. The Microorganism unit discusses those organisms that make us sick and also those organisms in this group that are beneficial.

Requirements: During any nine-week period, a portion of the grade may consist of a collection, a project, or a term paper. There may be a research project to be completed by the third nine-week period. Each unit will have quizzes and/or a test. Many activities will

require a laboratory write-up for evaluation. Each unit requires students to define vocabulary terms and apply the concepts in pertinent questions. Homework will be assigned and graded. A graded notebook may be required in the course. All students must complete the Keystone Biology Exam at the end of the school year.

Fee: Students are required to pay for materials lost or damaged.

Prerequisites: College Bound Science 9 or Science 9 (Refer to page 9 for specific grading and percentage guidelines).

☐ **COLLEGE BOUND CHEMISTRY 1** Grades 10,11,12 Full Year 1 Credit

Purpose: College Bound Chemistry 1 is designed for the academic student to give him/her a broad, subject matter background in the field of chemistry. At the completion of this course, the student should possess an understanding of chemistry and its importance in today's society.

Course Description: Chemistry is the study of structure and composition of materials and the changes that may occur in these materials. Chemistry uses a laboratory and problem solving approach in addition to a lecture approach to the understanding of the principles being taught. The course includes the following subject areas: matter, measurements, atomic structure, quantum numbers, electromagnetic spectrum, periodic relationships, bonding, formulas, equations, stoichiometry, gases, liquids, solids, solutions, acids, bases, equilibrium, and environmental chemistry.

Requirements: Lab work, Lab Practical's, homework, classwork, tests, quizzes, written and oral projects.

Prerequisites: Geometry may take concurrently with College Bound Biology 1(Refer to page 9 for specific grading and percentage guidelines).

☐ **COLLEGE BOUND PHYSICS** Grades 11,12 Full Year 1 Credit

Purpose: To study the physical laws and gain an understanding of the principles of physics under which our world operates.

Course Description: This course is designed for college bound students who do not plan a career in science. The major emphasis is on the concepts of physics and the minor emphasis on computation.

Requirements: Participation in class activities including short labs, demonstrations, presentations, written homework, oral reports, projects, tests, quizzes, and portfolio construction.

Prerequisites: Geometry (Refer to page 9 for specific grading and percentage guidelines).

☐ **COLLEGE BOUND SCIENCE 9** Grade 9 Full Year 1 Credit

Purpose: College Bound Science 9 is for academic students who will be choosing courses of the college-bound level as part of their career path. The course presents both physical and biological concepts to the student who is considering college, but who will not necessarily be majoring in the sciences. It is designed to lay the groundwork for chemistry and physics classes in the Senior High School.

Course Description: College Bound Science 9 is designed to provide concepts and teach skills common to both the physical and biological sciences. The primary emphasis of the class is twofold. First, students will build upon the physical science concepts they learned in College Bound Science 8. Second, they will be introduced to biological topics such as biochemistry, the cell, genetics, and bioenergetics. This course offers the challenges of moving at a relatively fast pace along with the introduction to a number of biological topics in order to prepare students for a full year of biology in 10th grade.

Requirements: Students are expected to successfully complete homework, projects, and lab activities. Tests and quizzes will be given at the completion of each chapter.

Prerequisite: At least a 77% average in CB Science 8 or an average of 84% in Science 8 (Refer to page 9 for specific grading and percentage guidelines).

☐ **COLLEGE BOUND/HONORS ASTRONOMY** Grades 10,11,12 Full Year 1 Credit

Purpose: This course is designed to provide a basic introduction to the science of astronomy. Extensive use of the high school digital planetarium will be an integral part of the course

Course Description: This course focuses on the following content areas: The Nature of Science, The History of Astronomy, Telescopes, Spectroscopy, Stellar Evolution, Galaxies, and Cosmology, The Solar System, Space Exploration, and Exoplanets and Astrobiology. The High School Digital Planetarium and school telescopes will be incorporated into course instruction. Laboratory and project work is an integral and extremely important part of the course. Astronomy is an applied branch of Physics, which in turn is an applied branch of Mathematics. Therefore, math plays a vital role in many areas in astronomy. This will be apparent in many of the laboratory exercises done for this course. Certain labs and projects will require the student to complete outside observations and research and will require time outside the school day.

Requirements: Students will complete unit tests, quizzes, lab reports, classwork, essay assignments, reading assignments, projects, and other assignments. Unit tests in Astronomy consist of multiple choice, problem-solving, and free-response essay questions. Some test questions require students to apply knowledge in novel ways – the tests do not evaluate rote memorization skills.

Fees: Students will pay for equipment breakage and lost or damaged supplies.

Prerequisites: Geometry (may take concurrently) with Astronomy and high school level laboratory science (Refer to page 9 for specific grading and percentage guidelines).

☐ **COLLEGE BOUND/HONORS ENVIRONMENT AND ECOLOGY**
Grades 10,11,12 Full Year 1 Credit

Purpose: The course prepares students for advanced study in environment and ecology..

Course Description: An introduction to environment and ecology focusing on the practical applications of environmental research. The course will expose the student to the changing local and global environment. The student’s interaction with the present environment will be explored, as well as his/her role in its conservation. At the completion of this college preparatory course, the student will have obtained extensive background knowledge in environment and ecology and will have developed laboratory skills necessary for success in studying environmental issues.

Requirements: Successful participation in all classroom activities (laboratories, outdoor labs, written assignments, exams, projects, etc).

Prerequisites: Students must have passed CB Biology and CB Chemistry (Refer to page 9 for specific grading and percentage guidelines).

☐ **COLLEGE BOUND/HONORS FORENSIC SCIENCE**
Grades 11,12 Semester .5 Credit

Purpose: Expose students to open ended scientific problem solving and project based assessments. Students will also become familiar with the history of forensics science and its methodology of: Collecting & analyzing data, avoiding contamination, and preservation of the chain of custody. Presentation skills will also be a key component of the course as presentation of evidence in professional (courtroom) settings.

Course Description: This course is designed as a student centered cooperative learning environment, as well as individual projects, with inquiry labs and activities. The course content includes: career readiness skills, crime scene investigation, trace evidence, drugs & toxicology, soil & glass analysis, ballistics & tool marks, death investigations, fingerprints, crime-scene reconstruction, blood pattern analysis, and biological stain analysis. The course topics covered can fluctuate to a more focused portion of topics based on instructor availability, training, and advances in this rapidly changing field of study.

Requirements: Completion of various group and individual design projects.

Prerequisites: Successful completion of College Bound Biology I (Refer to page 9 for specific grading and percentage guidelines).

□ **COLLEGE BOUND/HONORS MICROBIOLOGY** Grades 12 Full Year 1 Credit

Purpose: Honors Microbiology is designed for the academically motivated student who plans to pursue a career in the health related science. At the completion of this college preparatory course, the student will have obtained extensive background knowledge in microbiology and will have developed laboratory skills necessary for success in pre-professional biology degree.

Course Description: Honors Microbiology is an intensive course of study providing the student with an enrichment opportunity in microbiology. This/lab lecture centered course enhances skills in scientific process, ethics, and therefore is based on health related sciences and medicine. Topics covered will include: the study of microorganisms, their metabolic processes, their relationship to disease and the positive role they play in everyday life. Students will also be introduced to epidemiology, virology and genetic engineering as it relates to microbes. Laboratory work includes: culturing, staining, studying and identifying microorganisms. Laboratory work is an integral part of the course. Coursework is intensive and rigorous; outside class time is required for success on exams, and in class. This course requires self-discipline and motivation. Students may participate in the Mount Aloysius College's College in High School Program in conjunction with this course. The Mount Aloysius College charges a fee (approximately 200.00) for registration and credits..

Requirements: Students are expected to participate in exams, labs, reports, activities, homework, projects, and individual research may be required. All requirements and expectations as dictated by the CHS (College in High School) program and the Mount Aloysius College will be fulfilled.

Prerequisites: College Bound Biology 2 or Honors Biology 2 (Refer to page 9 for specific grading and percentage guidelines).

□ **EARTH SCIENCE** Grade 10, 11, 12 Semester .5 Credit

Purpose: To provide students a semester laboratory based earth science course. The course will expose the student to Earth's history and the forces that change its surface.

Course Description: Earth Science is a laboratory based course in which students will investigate the principles of Earth Science.

Requirements: Successful participation in all classroom activities and assignments.

Prerequisites: Students who have taken Biology or are concurrently enrolled in Biology. (Refer to page 9 for specific grading and percentage guidelines).

□ **ENVIRONMENT AND ECOLOGY** Grades 11,12 Full Year 1 Credit

Purpose: Environment and Ecology is a course in which students learn about the environment, how it is changing, and what to do about it. It is designed for non-college bound students.

Course Description: The course will consist of six units: Ecology, Population, Resources, Energy, Pollution, and Habitat Management. The overall goal of the course is for students to develop individual convictions concerning the environment. Learning techniques will include laboratories, films, class discussions, projects, reading, writing, role-playing, and field work.

Requirements: There will be outdoor field work during the year. Students will be required to dress for the weather.

Prerequisites: Biology 1A and Biology 1B (Refer to page 9 for specific grading and percentage guidelines).

Fees: Students will pay for equipment breakage and/or lost and/or damaged supplies.

□ **ENVIRONMENTAL SCIENCE** Grade 10, 11, 12 Semester .5 Credit

Purpose: To provide students a semester laboratory based environmental science course. The course will expose the student to the changing local and global environment. The student's interaction with the present environment will be explored, as well as his/her role in its conservation and preservation.

Course Description: Environmental Science is a laboratory based course in which students will investigate the principles of Environmental Science.

Requirements: Successful participation in all classroom activities and assignments.

Prerequisites: Students who have taken Biology or are concurrently enrolled in Biology. (Refer to page 9 for specific grading and percentage guidelines).

□ **GREENHOUSE** Grades 10,11,12 Full Year .5 Credit

Purpose: Greenhouse is designed to provide the student with hands-on experience in greenhouse maintenance and plant production. The aim of Greenhouse is to introduce students to the skills needed to maintain a production greenhouse.

Course Description: Students will be responsible for routine maintenance and plant production in the high school greenhouse. This will include watering, seeding, re-potting, transplanting, fertilizing, and plant propagation. In addition, the students will assist the teacher with lab preparation for other courses and conduct tours of the greenhouse.

Requirements: Students will be required to demonstrate proper plant maintenance and production techniques and to keep a log of their activities.

Fees: Students will be required to pay for breakage and/or lost and/or damaged supplies.

Prerequisites or concurrent: Biology 1A and Biology 1B (Refer to page 9 for specific grading and percentage guidelines).

□ **HONORS ANATOMY/PHYSIOLOGY** Grades 11,12 Full Year 1 Credit

Purpose: Honors Anatomy/Physiology is designed for the academically motivated student who plans to pursue a career in the health related sciences. At the completion of this college preparatory course, the student will have obtained extensive background knowledge in biology and will have developed laboratory skills necessary for success in pre-medicine, pre-nursing or pre-veterinarian studies.

Course Description: Honors Anatomy/Physiology is an intensive course of study providing the student with an enrichment opportunity in Anatomy & Physiology. This lab/lecture centered course enhances skills in scientific process, ethics, and therefore is based on health related sciences and medicine. Topics covered include: biochemistry, histology, musculoskeletal, nervous, and endocrine systems as they relate to current scientific research and case histories. Laboratory work is an integral part of the course. Coursework is intensive and rigorous; outside class time is required to for success on exams and in class. This course requires self-discipline and motivation. Students may participate in the Mount Aloysius College's College in High School Program in conjunction with this course. The Mount Aloysius College charges a fee (approximately 220.00) for registration and credits.

Requirements: This course is designed to meet the dual enrollment requirements. As such exams, lab, reports, activities, homework, projects, and individual research may be required. All requirements and expectations as dictated by the CHS (College in High School) program and the Mount Aloysius College will be fulfilled.

Fees: Students are required to pay for materials lost or broken.

Prerequisites: Completion of CB Chemistry or concurrent with H Chemistry 1. (Refer to page 9 for specific grading and percentage guidelines).

□ **HONORS BIOLOGY 1** Grade 9 Full Year 1 Credit

Purpose: Honors Biology is part of the honors program of ninth grade geared to academically accelerated students who show an interest in the aptitude for the sciences. This challenging course is intended to meet the needs of highly motivated students who will take honors level and Advanced Placement science classes at the Senior High School.

Course Description: Honors Biology is designed to challenge the student to incorporate and apply the basic content of a number of biological topics (such as biochemistry, cell biology, genetics, microbiology, bioenergetics, ecology) and to foster skills of independent learning. The course emphasizes the scientific method, laboratory skill development, and empirical observation through a series of laboratory and classroom activities. The basic objectives of the course are designed to develop an interest in the biological sciences and to stimulate creative thought through the application of biological concepts and laboratory investigations.

Requirements: Students are expected to perform successfully on objective and essay tests and quizzes, written and reading homework, projects, and laboratory activities. Also, students will be required to take the Biology Keystone Exam as the final exam for the course.

Prerequisites: At least an 84% average in Pre-Honors Science 8 or an average of 84% in CB Science 8 (Refer to page 9 for specific grading and percentage guidelines).

□ **HONORS CHEMISTRY 1** Grades 10,11,12 Full Year 1 Credit

Purpose: Honors Chemistry 1 is designed for the highly motivated college bound student. This course prepares the student to take college level science courses. The goal of this course is to prepare students to succeed in higher level science courses.

Course Description: Honors Chemistry 1 is the study of structure and composition of materials and the changes that may occur in these materials. The course will require the student to solve problems using basic chemical concepts. Laboratory work will be an integral part of the course and the student will be expected to interpret laboratory data. The course includes the following subject areas: matter, measurements, atomic structure, periodic relationships, bonding, formulas, equations, stoichiometry, states of matter, solutions, acid-base chemistry, organic, nuclear, and environmental chemistry.

Requirements: Each student will be expected to participate in all class activities including lectures, discussion, lab, and problem solving. Students will be expected to read the textbook, review class notes, and practice problems nightly. Tests and/or quizzes will be given at the completion of each chapter and other such times as appropriate. Tests and quizzes will require students to not only recall, but synthesize and analyze information from class in new contexts. Lab work will be evaluated for technique, accuracy, interpretation and calculations. A project and other long-term assignments will be required. A final exam is required for this course.

Fees: Students will pay for equipment breakage and/or damage, lost supplies, and special supplies for project work.

Prerequisites: Geometry (may take concurrently), Honors Biology 1, (Refer to page 9 for specific grading and percentage guidelines). Students will be required to complete a screener to determine placement.

□ **HONORS CHEMISTRY 2** Grades 11, 12 Full Year 1 Credit

Purpose: The Honors Chemistry 2 course is a full year course. The course is directed toward the college preparatory student who has completed Honors Chemistry or Chemistry 1 and desires to further his/her knowledge of chemistry while obtaining college credit for a chemistry course while in high school.

Course Description: Honors Chemistry 2 is a second year chemistry course in which a student has an opportunity to earn college credits in chemistry through the University of Pittsburgh. Topics include: scientific method, atomic theory, structure of matter, states of matter, mole relations, chemical reactions, gases, kinetic theory, thermo chemistry, electronic structure, periodic table, acid base theory and chemical equilibria. A portion of the laboratory work is completed at the University of

Pittsburgh. Four major tests are prepared by the staff at the University of Pittsburgh and administered locally. Students may participate in the University of Pittsburgh's College in High School Program in conjunction with this course. The University of Pittsburgh charges a fee (approximately 325.00, scholarships are available on a need basis) for registration and credits. Students will travel to Pittsburgh for three school days to complete lab work and the final exam.

Requirements: Students are expected to participate in all class activities, complete laboratory work and associated reports, problem sets, and a project. This is a rigorous course and students should expect to work out of class every night. All requirements and expectations as dictated by the CHS (College in High School) program and the University of Pittsburgh will be fulfilled.

Prerequisites: Honors Chemistry 1 and Honors Chemistry 2 Screener (Refer to page 9 for specific grading and percentage guidelines).

□ **MARINE BIOLOGY** Grades 11,12 Semester 1 Credit

Purpose: Marine Biology is designed to provide the student with an opportunity to study various topics in marine biology, highlighting both aquatic plants and animals and how they relate to the marine environment. The aim of Marine Biology is to broaden one's knowledge and appreciation of the marine world.

SOCIAL SCIENCE

(All students must take **four** units)

□ 20TH CENTURY US HISTORY: RECONSTRUCTION TO PRESENT

Grade 11

Full Year

1 Credit

Purpose: The purpose of this course is to introduce the student to the major political, social, and economic changes in recent US history and introduce the concepts of consumer economics.

Course Description: This course will provide students with a survey of American History from reconstruction to the present. The course will investigate the following major historic eras: Reconstruction, Industrialization of American, Progressivism, the World Wars, the Roaring 20's and Depression, and the Cold War. Students will examine the social, political, and economic forces that shaped these eras and analyze how these eras impact modern America.

Requirements: The student will be an active participant in class activities. The student will be required to read, discuss, and write based on teacher assignments.

Prerequisites: 10th grade social studies class (Refer to page 9 for specific grading and percentage guidelines).

□ ADVANCED PLACEMENT EUROPEAN HISTORY

Grade 10

Full Year

1 Credit

Purpose: Advanced Placement European History is an intensive elective course designed to survey European History. Students should be college bound, capable of independent study, and have an interest in European history. The student may earn college credits by taking the Advanced Placement examination at the end of this course. At the conclusion of this course, students should be able to analyze and interpret the main themes in modern European history, prepare research projects independently, analyze historical evidence, and express historical understanding in writing.

Course Description: This course consists on twenty-one units surveying European cultural, intellectual, political, diplomatic, social and economic history from the Renaissance until the present. Specific topics include the late Middle Ages, Renaissance and Discovery, Reformation, religious wars, Absolutism, trade wars, Colonial rebellion, Trans-Atlantic economy, Enlightenment, French Revolution, Age of Napoleon, social unrest, Age of Nation States, World War I, Imperialism and alliances, World War II, Cold War, and the emergence of New Europe. For each unit, students will master text content independently at a self-paced rate and will develop skills in analyzing primary, secondary, and interpretive materials. Students will also practice research skills in oral and written projects throughout the course. The skills necessary to perform satisfactorily on the College Board AP exam, such as writing a document-based essay, will be taught, along with those necessary to do well on essay exams and oral presentations.

Requirements: Students must demonstrate successful performance on objective exams on the text content, written essay or analytical papers assigned at regular intervals, and class discussions. A concluding essay exam will follow each unit. Objective exams, written papers, class discussions, essay exams, and projects carry approximately equal weight. Performance on the College Board exam in May has no bearing on the course grade. Students are expected to take the Standardized Advanced Placement test at the end of the school year at the current cost. Based on the performance on the exam, some colleges will exempt the student from taking an entrance level course during the first year of enrollment.

Prerequisites: 9th grade social studies and English. Due to enrollment limitations, scores on a written readiness screener exam will be evaluated as a criteria for selection (Refer to page 9 for specific grading and percentage guidelines).

□ **ADVANCED PLACEMENT UNITED STATES GOVERNMENT AND POLITICS**

Grade 12

Full Year

1 Credit

Purpose: This course is an intensive elective course designed to survey the American governmental and political institutions. Students should be highly interested in the functioning of the United States governmental and political systems and/or desire to acquire college credit in high school. At the conclusion of the course, students should be able to analyze and evaluate complex concepts through the AP College Board Exam.

Course Description: This single period course will begin with an overview of Governmental systems and the development of the American republic. The course will be broken into 5 units: Constitutional Foundations; People and Politics, The Policymakers, Policies, and State and Local government. Students will investigate and evaluate primary source documents in order to link actions of the government to impact on the citizenry. Students will begin with an examination of founding documents and move into a contemporary study of the nature of the political and governing institutions and how these institutions shape public policy.

Requirements: Students must demonstrate successful performance on objective exams on text content, written essay or analytical papers, assigned at regular intervals, and class discussions. A concluding exam will follow each unit. Objective exams, written papers, class discussions, essay exams and projects carry approximately equal grading weight. Performance on the College Board exam in May has no bearing on the course grade. Students are expected to take Standardized Advanced Placement test at the end of the school year at the current cost. Based on the performance on the exam, some colleges will exempt the student from taking an entrance level course during the first year of enrollment. Students will also be required to complete a graded summer assignment designed to introduce them to the constitutional foundations of American government and politics. Failure to complete the summer assignment will necessitate a withdrawal from the course. Students will have a summer assignment due before August.

Prerequisites: Advanced Placement American History or 20th Century US History/Economics. Due to enrollment limitations, scores on a written readiness screener exam will be evaluated as a criteria for selection (Refer to page 9 for specific grading and percentage guidelines).

□ **ADVANCED PLACEMENT UNITED STATES HISTORY**

Grade 11

Full Year

1 Credit

Purpose: Advanced Placement United States History is an intensive elective course designed to survey American history. Students should be college-bound and capable of independent study and have an interest in American history and/or desire to acquire college credit in high school. At the conclusion of the course, students should be able to analyze and interpret the main currents of American history, prepare research projects independently, and possibly earn humanities credits towards college graduation through the AP College Board Exam.

Course Description: This course content consists of 12 units surveying American political, diplomatic, economic, social, and cultural history from the discovery of the New World until the present. Specific topics include the discovery, exploration, and colonization of the New World; the American Revolution; the Federalist, Jeffersonian, and Jacksonian periods; Manifest Destiny, sectionalism, Civil War and reunion; the West, industrialization, urbanization, and Gilded Age culture; immigration, Populism, imperialism and Progressivism; World War 1; the Roaring 20's; the Great Depression and the New Deal; World War 2 and the Cold War; and America since 1960. For each unit students will master text content independently at a self-paced rate and will develop skills in analyzing primary, secondary, and interpretive materials. Students will also practice research skills in oral and written projects due at mid-term and the end of the course. The skills necessary to perform satisfactorily on the College Board AP exam, such as writing a document based essay, will be taught along with those necessary to do well on essay exams and oral presentations.

Requirements: Students must demonstrate successful performance on objective exams on text content, written essay or analytical papers assigned at regular intervals, and class discussions. A concluding essay exam will follow each unit. Objective exams, written papers, class discussions, essay exams and projects carry approximately equal grading weight. Performance on the College Board exam in May has no bearing on the course grade. Students are expected to take Standardized Advanced Placement test at the end of the school year at the current cost. Based on the performance on the exam, some colleges will exempt the student from taking an entrance level course during the first year of enrollment. Students will have a summer assignment due before August.

Prerequisites: AP World History. Due to enrollment limitations, scores on a written readiness screener exam will be evaluated as a criteria for selection. Failure to complete the required summer assignment will result in removal from the course (Refer to page 9 for specific grading and percentage guidelines).

CIVICS AND GOVERNMENT

Grade 12

Full Year

1 Credit

Purpose: This course is designed to introduce the student to a survey of American government. Students will focus on the government at a national, state, and local level and will explore the role of the citizen in the public policy process.

Course Description: **Civics and Government** will focus on preparing students to accept an active role in their community, state and nation fulfilling their responsibilities and duties as citizens. The students will study the structure of our government. Students will evaluate and analyze their roles, rights and responsibilities as a citizen. The course will stress current affairs and how they affect us at the national, state and local levels. This will involve developing viewpoints through research, writing, oral presentations and debates. Issues will include how the government affects us and the challenges we face in our society today. Examples of this would include our constitutional rights, the economy, education, poverty, minorities and women, immigration, foreign affairs, crime in America and health care and medical advances.

Requirements: The class encourages student discussion and development of comparative skills. Students will be expected to complete extensive in-class writing assignments, oral presentations, and actively participate in in-class discussions.

Prerequisites: 11th grade social studies class (Refer to page 9 for specific grading and percentage guidelines).

COLLEGE BOUND 20TH CENTURY US HISTORY: RECONSTRUCTION TO PRESENT

Grade 11

Full Year

1 Credit

Purpose: The purpose of this course is to introduce the student to the major political, social, and economic changes in recent US history and introduce the concepts of economics.

Course Description: This course will provide students with an in-depth survey of American History from reconstruction to the present. The course will investigate the following major historic eras: Reconstruction, Industrialization of American, Progressivism, the World Wars, the Roaring 20's and Depression, and the Cold War. Students will examine the social, political, and economic forces that shaped these eras and evaluate how these eras impact modern America.

Requirements: The student will be an active participant in class activities. The student will be required to read, discuss, and write based on teacher assignments.

Prerequisites: College Bound 10th grade social studies class (Refer to page 9 for specific grading and percentage guidelines).

COLLEGE BOUND CIVICS AND GOVERNMENT

Grade 12

Full Year

1 Credit

Purpose: This course is designed to introduce the student to a survey of American government. Students will focus on the government at a national, state, and local level and will explore the role of the citizen in the public policy process.

Course Description: This two-semester course is designed for the college bound student to delve into the foundations and structure of the US Government and Civic Participation. One semester will be solely directed towards the foundations, structure and nature of government. During the other semester students will continue the study of America through Civic Participation. They will begin to prepare for their active role in their community, state and nation, fulfilling their duties and responsibilities as citizens. They will become aware of the effects of government and public agencies on their lives and practice citizenship skills to improve their lives. Students will also develop skills in research and information gathering, analysis and evaluation, critical thinking, opinion formation, problem solving and communication and writing skills. The course we will be using a variety of resources that will help bring about extensive participation from the student in the form of class discussions, papers, projects, etc.

Requirements: The class encourages student discussion and development of comparative skills. Students will be expected to complete extensive in-class writing assignments, oral presentations, and actively participate in in-class discussions.

Prerequisites: College Bound History 11 (Refer to page 9 for specific grading and percentage guidelines).

COLLEGE BOUND INTRODUCTION TO CIVICS 9

Grade 9

Full Year

1 Credit

Purpose: The course is an in-depth of government and citizenship in the United States. It is designed for students who have demonstrated above average work in the area of social studies.

Course Description: The course examines the foundations, structure, and function of the U.S. government on the local, state, and federal levels. In addition, it incorporates the importance of citizenship, with an emphasis on the rights, duties and responsibilities of U.S. citizens. Finally, it explores the role of the United States in world affairs.

Requirements: Students are required to complete regular reading and homework assignments, successfully pass object tests and quizzes, analyze content through essay writing, and extend their understanding through research projects and presentations.

Prerequisites: A minimum of 77% in College Bound U.S. History 8 or an average of 84% in U.S. History 8 (Refer to page 9 for specific grading and percentage guidelines).

COLLEGE BOUND WORLD HISTORY

Grade 10

Full Year

1 Credit

Purpose: College Bound World History examines world history from 1450 through the present. The course is an in-depth study designed for students who plan to further their education upon completion of high school. Students will develop an understanding of the events and figures that have shaped western civilization as well as analytical skills required for understanding the effects world events have on the current era.

Course Description: World History examines major historical eras including The European Renaissance, Exploration and Imperialism, The Muslim Empires, The Rise of Asia, World Wars I and II, The Cold War and challenges for the current era. The course is arranged chronologically. Organized around a reading and discussion format, the content explores the major ideas and personalities that have shaped western civilization. Students examine economic, political and social development throughout the major eras of world history.

Requirements: Students are required to successfully pass objective and essay tests and quizzes. Homework is given frequently and includes text reading as well as outside research and internet assignments. Students are expected to participate in class discussions and debates. Independent research projects, map interpretation, geographical influence, oral reports, group presentations, and written essay assignments are required.

Prerequisite: College Bound Intro to Civics 9 (Refer to page 9 for specific grading and percentage guidelines).

HONORS 20TH CENTURY US HISTORY: RECONSTRUCTION TO PRESENT

Grade 11

Full Year

1 Credit

Purpose: The purpose of this course is to introduce the student to the major political, social, and economic changes in recent US history and introduce the concepts of economics.

Course Description: This course will provide students with a deep understanding of the major political, social and economic forces that contributed to the development of America during the period of 1880 to the present. This course will highlight the following eras: Industrialization, Progressivism, World War I, the Roaring 20's the Great Depression, World War II and the Cold War. Students will critically evaluate the impact these historic eras have on modern America..

Requirements: The student will be an active participant in class activities. The student will be required to read, discuss, and write based on teacher assignments.

Prerequisites: Honors/AP 10th grade social studies class (Refer to page 9 for specific grading and percentage guidelines).

HONORS GOVERNMENT AND CIVICS

Grade 12

Full Year

1 Credit

Purpose: This course is designed to introduce the student to a survey of American government. Students will focus on the government at a national, state, and local level and will explore the role of the citizen in the public policy process. The student will be expected to work at a collegiate level for this dual enrollment course.

Course Description: This two-semester course is designed for the honors student to delve into the foundations and structure of the United States Government and Civic Participation. Students will explore the structure and nature of government and the interaction of major political and governing institutions. Students will continue the study of America and begin preparing for an active role in their community, state and nation, thus fulfilling their duties and responsibilities as citizens. They will be aware of the effects of government and public agencies on their lives and practice citizenship skills to improve their lives. Students will also develop skills in research and information gathering, analysis and evaluation, critical thinking, opinion formation, problem solving and communication skills. The course we will be using a variety of resources that will help bring about extensive participation from the student in the form of class discussions, papers, projects, etc. Students may participate in the Mount Aloysius College's CHS (College in High School) Program in conjunction with this course. The Mount Aloysius College charges a fee (approximately 165.00) for registration and credits.

Requirements: The class encourages student discussion and development of comparative skills. You are expected to participate in your class and your community. Students will be required to show performance on objective exams, complete extensive in-class writing assignments, oral presentations, and actively participate in in-class discussions. Presentations both for the class and Public Program are part of the expectations. All requirements and expectations as dictated by the CHS (College in High School) program and will be fulfilled.

Prerequisites: Honors 20th Century US History and Economics or AP American History, CB 20th Century US History and Economics with teacher recommendation (Refer to page 9 for specific grading and percentage guidelines).

HONORS INTRODUCTION TO CIVICS 9

Grade 9

Full Year

1 Credit

Purpose: The course is an intensive study of government and citizenship in the United States. It is designed to challenge students who have demonstrated superior academic skills, exemplary work ethic and special interest in the area of social studies. Students must be self-motivated, independent learners.

Course Description: The course examines the foundations, structure, and function of the U.S. government on the local, state, and federal levels. In addition, incorporates the importance of citizenship, with an emphasis on the rights, duties and responsibilities of U.S. citizens. Finally, it explores the role of the United States in world affairs.

Requirements: Students will be required to display superior reading, analytical, communication and study skills. They will be required to complete regular reading and homework assignments and successfully pass objective tests and quizzes. Essay writing, research projects and oral presentations will be a standard part of the class.

Prerequisites: At least an average of 84% in Pre-Honors U.S. History 8 or an average of 84% in CB US History 8 (Refer to page 9 for specific grading and percentage guidelines).

HONORS WORLD HISTORY

Grade 10

Full Year

1 Credit

Purpose: Honors World History is designed for the student who plans to attend college upon completion of high school. Completion of this in-depth study of western civilization will provide the student with an understanding and appreciation of the major political, intellectual, economic and social developments in Europe and the world.

Course Description: This course focuses on modern European history and emphasizes the major economic, social and political developments that have shaped the modern world. Units of study include The Renaissance, The Age of Exploration, The Democratic Revolution, Industrial Revolution, The World Wars, The Cold War, and Current World Events. The course covers major developments and leaders, political ideologies, and inter-cultural contact between Europe and the world. Map interpretation and geographical influences are examined. Historical events, data, literature, political and military leaders, and primary sources are interpreted in this course.

Requirements: The students are required to evaluate the significance of individuals and groups who made contributions to world history through research assignments, debates, text reading and interpretation, objective and essay tests and quizzes. Students will read and analyze literature and primary sources of the eras. Map interpretation and skills are developed through frequent assignments and testing. Extensive reading and essay assignments are given on a frequent basis. Students will present oral reports as well as group projects. Research assignments are given using the library and computer labs. Students are continually expected to evaluate the historical interpretation of events and their effect on current world affairs.

Prerequisite: Honors Intro to Civics 9 (Refer to page 9 for specific grading and percentage guidelines).

INTRODUCTION TO CIVICS 9 Grade 9 Full Year 1 Credit

Purpose: The course is a study of government and citizenship in the United States. It is designed for students who have demonstrated average work in the area of social studies.

Course Description: The course examines the foundations, structure, and function of the U.S. government on the local, state, and federal levels. In addition, it incorporates the importance of citizenship, with an emphasis on the rights, duties and responsibilities of U.S. citizens. Finally, it explores the role of the United States in world affairs.

Requirements: Students are required to perform satisfactorily on objective and/or essay tests and quizzes and complete homework assignments. Assignments will include text readings and reading assignments. Students are also required to participate in cooperative learning groups and hands-on activities.

Prerequisites: Successful completion of U.S. History 8 (Refer to page 9 for specific grading and percentage guidelines).

WORLD HISTORY Grade 10 Full Year 1 Credit

Purpose: World History is designed for the student who does not plan to attend college after graduation. The course is designed to give the student an understanding of world history from the Renaissance to the present as well as basic map skills. The course explores the major developments, ideas and personalities that have shaped Western civilization.

Course Goal: Upon completion of the course, the student will have developed an understanding of the major events and figures in world history and the effects these events and personalities had on the modern world. The student also will possess the ability to interpret maps and geographical conditions.

Course Description: World History focuses on the chronological study of the following eras: The Renaissance, The Ottoman Empire, The Rise of Asian Empires, The Age of Exploration, The Democratic Revolution, The Industrial Revolution and World Wars, The Cold War and Recent World Affairs. The course examines the interrelationships between events and the significance of leaders, government, social and political affairs. Social studies skills such as map reading, note taking, recognizing cause and effect, developing timelines and analyzing sources are incorporated into the class.

Requirements: Students will successfully pass objective tests and quizzes. Writing assignments and short essays are also required. Homework is assigned on a regular basis and students are expected to participate actively in class discussions. The course includes outside readings as well as some individual and group presentations.

Prerequisites: Intro to Civics 9 (Refer to page 9 for specific grading and percentage guidelines).

COMPUTER SCIENCE

(All students must take **one** credit.)

□ **ADVANCED DIGITAL PHOTOGRAPHY**

Grade 10, 11, 12

Semester

.5 Credit

Purpose: Designed to provide instruction using Adobe Photoshop. The instruction will incorporate the use of image editing and text editing features to create photo compositions.

Course Description: In this course you will learn to use your digital camera photos and other captured images and apply your work to a variety of applications. Software used will be Adobe Photoshop CS5.5, which is the standard of the photographic and publishing industry. Students will output the projects to a color laser printer (photo-quality). Photographic technique will be emphasized and critiqued. The use of special effects filters, B&W, duotone, and full color images will be studied.

Requirements: Students will be expected to learn the terminology and identify the screen elements of Adobe Photoshop. The students will be expected to complete instructional exercises and benchmark projects associated with each instructional exercise.

Prerequisites: Digital Photography (Refer to page 9 for specific grading and percentage guidelines).

□ **ADVANCED PLACEMENT COMPUTER SCIENCE PRINCIPLES**

Grade 11, 12

Full Year

1 Credit

Purpose: The AP Computer Science Principles course is designed to be equivalent to a first-semester introductory college computing course. It will prepare the student for the Advanced Placement (AP CS Principles) examination.

Course Description: Students will develop computational thinking skills vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course engages students in the creative aspects of the field by allowing them to develop computational artifacts based on their interests. Students will also develop effective communication and collaboration skills by working individually and collaboratively to solve problems, and will discuss and write about the impacts these solutions could have on their community, society, and the world.

Requirements: Creativity, abstraction, data and information, algorithms, programming, and Internet, and global impact are the major areas of study. The students will be required to learn about the foundational concepts of computer science, explore how computing and technology can impact the world. The AP Computer Science Principles course is designed with the goal of creating leaders in computer science fields and attracting and engaging those who are traditionally underrepresented with essential computing tools and multidisciplinary opportunities. The students will be required to learn about computer concepts and the digital information of computers and transfer to people and computational devices.

Prerequisites: Algebra 2 (Refer to page 9 for specific grading and percentage guidelines).

□ **APP DEVELOPMENT**

Grade 10, 11, 12

Semester

.5 Credit

Purpose: The APP Development class exists for the student who has aspirations of creating mobile applications. The student who successfully completes this course should be competent in platform-agnostic framework developed by successful tech companies such as Facebook. Students will design and build applications to run on their own smartphones and will use the latest tools and technologies available for mobile app development.

Course Description: Mobile applications are becoming increasingly important to our consumption of media, news, social interaction, and learning. In this course, students will learn how to create mobile apps using various program editors. Students will design and build application to run on their own smartphones and will use the latest tools and technologies available for mobile app development.

Requirements: Students will be able to modify text based programs in programming languages (JavaScript and XML) to create applications. Students will run their apps directly on their own mobile devices.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

DESKTOP PUBLISHING

Grade 9

Semester

.5 Credit

Purpose: This course is designed to provide instruction on desktop publishing software that will enable students to combine text and graphics electronically to produce professional looking documents.

Course Description: Students will use a desktop publishing software package to produce newsletters, fliers, bulletins, advertisements and other materials that would previously have had to be done by a typesetting and design service. The learning environment is self-paced with teacher assistance provided as necessary. Classroom lecture time is minimal.

Requirements: Students will be expected to learn the terminology and various functions associated with desktop publishing. Grades are determined from objective tests, application tests, and projects.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

DIGITAL PHOTOGRAPHY

Grade 10, 11, 12

Semester

.5 Credit

Purpose: Students will be introduced to the basics of good digital production from the point of capturing the picture, through simple image-editing, photo-retouching, and web graphics techniques and outputting the image for print and the Web. The software used is *Adobe Photoshop Elements*, which offers features designed specifically for amateur photographers, hobbyists, and business users who want to create professional quality images.

Course Description: This course provides instruction in: digital imaging; *Photoshop* elements; text tools; first steps in rotating, cropping, printing, saving, etc.; image adjustments and enhancements; transforming and retouching; painting and drawing; using layers; applying filters and effects; using type; and preparing images for the web.

Requirements: Students are expected to maintain a notebook containing class notes, lab assignments, quizzes and homework. Notebooks will be checked regularly. Periodic quizzes and regular unit exams will be given each nine weeks. These exams will be written as well as on the computer. Projects will be assigned throughout the semester with a comprehensive final project at the end of the semester.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

DIGITAL VIDEO

Grades 10, 11, 12

Semester

.5 Credit

Purpose: Provide students with the ability to create digital videos.

Course Description: Digital Video class will introduce students to the basics of good videography in a digital format. Topics covered will be production from the point of capturing the clip, transferring it to a computer, editing the clip to a desired composition, and rendering it to different formats including CD, DVD, email, and the web. Various software is used including Microsoft Movie Maker, Adobe Premiere Elements, Ulead Video Studio, and Serious Magic Visual Communicator, which all offer various features designed specifically for the amateur videographer, hobbyist, and business user who wants to create professional quality videos.

Requirements: Students must have the desire to learn about the tasks in the video production field. Students must be willing to do all phases of production including behind the camera, video editing, script writing, script editing, and being in front of the camera. Students must be willing to work as a team until production is completed. Students should have good writing, editing and proofreading skills. Topics covered will be: Care and use of video cameras, planning a video (Storyboarding), proper video filming techniques, Downloading and storage of digital video, simple editing of digital video, advanced editing of video, and presentation of various video editing software.

Pre-requisites: (Refer to page 9 for specific grading and percentage guidelines).

Purpose: This course is designed to provide instruction on desktop publishing projects using Adobe InDesign. The software will enable students to create professional publications combining text and graphics. In addition, the class will also help to design the Senior High School Newsletter throughout the semester.

Course Description: Students will receive an introduction to Adobe InDesign CS4 with this essential training that introduces students to the basics tools, skills, and techniques required to create professionally styled text, layouts, and graphics that deliver a powerful impact. Students will be guided through the techniques needed to work with text and graphics in their layouts. Students will learn how to apply artistic effects to text and placed artwork, without prior knowledge of other applications like Illustrator or Photoshop. Discover how InDesign CS4 provides a platform for communications beyond print. InDesign makes electronic documents as PDF as well as web documents as SWF including newsletters created for the Senior High School.

Requirements: Students will be required to learn the terminology and software screen elements associated with Adobe InDesign. The students will complete newsletters, fliers, brochures, advertisements, and other professional publications.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

□ **INTRODUCTION TO COMPUTERING FOR THE HUMANITIES**

Grades 11, 12

Full Year

1 Credit

Purpose: This course is designed for students who have already taken an Introductory Level programming class to further their knowledge in programming with the possibility of attaining college credit.

Course Description: The focus of this course is the development of skills required to use computers effectively for problem solving. Programming will be taught using the current College in High School (CHS), University of Pittsburgh - College in High School 0012, Introduction to Computering for Humanities language. Topics include interactive programming, decision and repetition structures, functions, files and exceptions, lists and tuples, dictionaries and sets, and object-oriented programming (oop). The approach for writing programs will be systematic and structured. Students will learn structured programming through the use of “top-down” problem solving, stepwise refinement and modular construction in the designing of programs. Problem solving analysis and the development of algorithms while using modern-high level programming language is primary focus of this class

Requirements: Students will work on projects in which they are expected to demonstrate their skill in implementing computer-based solutions to suitable problems. Projects will be assigned regularly. Quizzes and tests will be given throughout the 9-week periods. Notebooks will be checked periodically.

Prerequisites: Introduction to Programming J or P class (Refer to page 9 for specific grading and percentage guidelines).

□ **INTRODUCTION TO PROGRAMMING - J**

Grades 10, 11, 12

Full Year

.5 Credit

Purpose: Introduction to Programming is a one-semester course that provides the student with knowledge of the vocabulary and syntax. Students will learn the necessary system and commands for simple programming. Emphasis will be placed on developing good programming structure..

Course Description: This course will establish a knowledge base in the vocabulary, concepts and terms used in Java computer language. Introduction to Programming J will provide students the opportunities to learn and practice basic techniques and concepts in computer programming. Further exploration of Java language will include topics: syntax, errors, debugging, and control statements.

Requirements: The student will be expected to maintain a notebook containing in-class notes, lab assignments, and homework. Periodic quizzes and regular unit exams will be given each nine weeks. Programming projects will be assigned at appropriate intervals throughout the semester. Students will be required to complete all in and out of class assignments and participate in class activities.

Prerequisites: Algebra 1 (Refer to page 9 for specific grading and percentage guidelines).

□ INTRODUCTION TO PROGRAMMING - P

Grades 10,11, 12

Semester

.5 Credit

Purpose: Introduction to Programming P is a one-semester course that provides the student with knowledge of the vocabulary and syntax. Students will learn the necessary system and commands for simple programming. Emphasis will be placed on developing good programming structure.

Course Description: This course will establish a knowledge base in the vocabulary, concepts and terms used in Introduction to Computing for Humanities computer language. Introduction to Programming P will provide students the opportunities to learn and practice basic techniques and concepts in computer programming. Further exploration of Introduction to Computing for Humanities language will include topics: syntax, errors, debugging, and control statements.

Requirements: The student will be expected to maintain a notebook containing in-class notes, lab assignments, and homework. Periodic quizzes and regular unit exams will be given each nine weeks. Programming projects will be assigned at appropriate intervals throughout the semester.

Prerequisites: Algebra 1 (Refer to page 9 for specific grading and percentage guidelines).

□ INTRODUCTION TO WEB DESIGN

Grades 10, 11, 12

Semester

.5 Credit

Purpose: Web Page Design will provide students with the knowledge to create effective web pages and publish them to a server.

Course Description: This course will cover learning the basics of HTML, web page creation software such as *FrontPage* and beginning level *JavaScript*. Potential projects for the class could include personal web pages for the students as well as helping teachers to develop web pages for their classes, departments, clubs, etc.

Requirements: Students will be able to create a basic web page using HTML and a more advanced web page using *FrontPage* and such refining features as counters, looping, and branching with *JavaScript*.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

□ JAVA

Grades 11, 12

Full Year

1 Credit

Purpose: This course is designed for students who have already taken an Introductory Level programming class to further their knowledge in programming with the possibility of attaining college credit.

Course Description: The focus of this course is the development of skills required to use computers effectively for problem solving. Programming will be taught using the current College in High School (CHS), University of Pittsburgh - College in High School 0007, Java language. Topics include interactive programming, statements and control flow, methods: functional abstraction, arrays, objects: data abstraction, and reading and writing files. The approach for writing programs will be systematic and structured. Students will learn structured programming through the use of “top-down” problem solving, stepwise refinement and modular construction in the designing of programs. Problem solving analysis and the development of algorithms while using modern-high level programming language is primary focus of this class

Requirements: Students will work on projects in which they are expected to demonstrate their skill in implementing computer-based solutions to suitable problems. Projects will be assigned regularly. Quizzes and tests will be given throughout the 9-week periods. Notebooks will be checked periodically.

Prerequisites: Introduction to Programming J or P class (Refer to page 9 for specific grading and percentage guidelines).

□ MULTIMEDIA

Grade 9

Semester

.5 Credit

Purpose: This course is intended to provide students with knowledge to create effective presentations using Microsoft PowerPoint. The students will also practice presenting their presentations to one another to gain confidence and strategies for speaking in front of a small group.

Course Description: Students will create presentations using Microsoft PowerPoint. The presentations will include audio, video, music, pictures, animations, transitions and linking between the file and data in destination location. Hands-on activities will ensure student understanding.

Requirements: Various activities and projects will be assigned to evaluate the student's ability as well as application tests. Students will create presentations throughout the course. Several large presentations will be the culminating mission for this course.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

□ SPREADSHEET

Grades 10,11,12

Semester

.5 Credit

Purpose: This course is designed to introduce and instruct students in using spreadsheet applications as a tool for calculations, analysis, and reporting. Such spreadsheets are commonly used in accounting and management firms.

Course Description: Through the use of a spreadsheet software package, students will create, edit and save spreadsheets. Students will perform calculations, use formulas and functions to generate statistical data and, make projections, and organize information into an easy-to-read report. Some projects to be completed include grade reports, tables, budgets, sales reports, tables, stock portfolio analysis, balance sheets, and inventories.

Requirements: Students will be expected to learn the terminology and various features associated with spreadsheets. Grades are determined from objective tests, application tests and projects.

Prerequisites: Algebra 1 (Refer to page 9 for specific grading and percentage guidelines).

□ VIDEO GAME DESIGN

Grades 10, 11, 12

Semester

.5 Credit

Purpose: Video Game Design will provide students with instruction on computer aided game design.

Course Description: This course introduces students to fundamental principles of gam design and computer animation. The course explores methods of modeling, rendering, and animating objects for video games, computer simulations, and virtual worlds. Students use modeling software to create character animation and environments including rigging, key framing animation, lighting, camera angles, texture formation, and motion.

Requirements: Students will be expected to learn the terminology and various aspects of video game creation using the gaming software.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

□ WEB DESIGN

Grades 10, 11, 12

Semester

.5 Credit

Purpose: The purpose of this course is to expose the students to the skills of programming for the internet. The students will be taught how to make a webpage by writing code for a webpage instead of just using a prefabricated program with limitations.

Course Description: This course will allow the student to make side-by-side comparisons of source codes and the corresponding screen shots that help students visualize the code and what the code will display. It will also allow site building by using the step-by-step development of an actual website. Students may participate in the University of Pittsburgh's College in High School program in conjunction with this course. The University of Pittsburgh charges a fee (approximately 200.00) for registration and credits.

Requirements: Complete a simple web pages and complex websites using HTML code, maintain and update sites with adding images, and other graphics. All requirements and expectations as dictated by the CHS (College in High School) program and the University of Pittsburgh will be fulfilled.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

HUMANITIES

(All students must take **one** credit.)

☐ **ADVANCED CHILD DEVELOPMENT** Grades 11,12 Semester .5 Credit

Purpose: This is a semester course where students will take previous knowledge from Child Development and apply it understanding the growth of a child intellectually, physically, socially, and emotionally from ages one to five.

Course Description: Students will analyze the physical, social, emotional, and intellectual growth of children ages one to five. There will be special areas of study such as guiding behavior, handling accidents/injuries with children, teething, potty training, preparing healthy meals/nutrition of children, vaccinations, special needs children, developmentally appropriate practices, writing children's books and designing child care centers. Students will observe children in the child care setting through field trips to local child care centers.

Requirements: Each student is expected to keep a notebook of class notes and related materials, which is graded along with class work and quizzes/tests. There is occasional overnight homework and several projects throughout the semester.

Prerequisites: Child Development (Refer to page 9 for specific grading and percentage guidelines).

☐ **ADVANCED CONTEMPORARY LIVING SKILLS** Grade 9 Semester .5 Credit

Purpose: The Advanced Contemporary Living Skills class is designed for the student to gain an understanding of basic concepts in management, consumerism, foods and nutrition and housing.

Course Description: This course has been updated to include units in all areas of family and consumer sciences. In the nutrition and food preparation unit, students will plan, prepare and serve various foods. This course will also include units which explore contemporary issues in consumerism, resource management, career options, technology in the home, etc.

Requirements: Tests and quizzes will be given periodically; however, students are evaluated primarily on class participation and projects. Grades are given after each marking period.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

☐ **ADVANCED FOODS AND NUTRITION** Grades 10,11,12 Semester .5 Credit

Purpose: To provide the student with a more advanced approach to food preparation and nutrition application.

Course Description: Advanced Foods and Nutrition will take the student beyond the basics and into a more intense study of foods, their preparation, and the nutritional benefits of various types of food preparation techniques along with analyzing where our food comes from (farm to table), organic foods, GMOs, etc. Students will discuss ways to select, purchase and prepare foods to nourish our bodies. Students will study breakfast foods, soups, salad, sandwiches, food allergies/intolerances, super foods, Vegetarianism, baked goods, poultry, foreign foods and beverages.

Requirements: Completed class assignments, quizzes/tests, lab participation, folder work and small projects throughout the semester.

Prerequisites: Food Prep, (Refer to page 9 for specific grading and percentage guidelines).

□ **ADVANCED MUSIC**

Grade 9

Semester

.5 Credit

Purpose: Completion of this course should provide the student with an expanded knowledge of music that will enable him/her to listen to, discuss, analyze, create, and compose music in a knowledgeable manner.

Course Description: The Advanced Music course is designed to introduce and expand students' knowledge of music composition through an advanced study of organizational techniques in music such as; rhythm, pitch, harmony, form, etc. Student participants will have a hands-on experience with various rhythmic, melodic, harmonic, and expressionistic elements of music through classroom activities and the creation of original works of music.

Requirements: Students will be required to complete written and aural quizzes, unit tests, listening analysis, classroom seatwork, creative writing, and music compositions.

Prerequisites: Successful completion of Music 8 course and/or active participation in at least on school ensemble (band, chorus, or orchestra) and/or private music lessons (Refer to page 9 for specific grading and percentage guidelines).

□ **ADVANCED PLACEMENT MUSIC THEORY**

Grades 10, 11, 12

Full Year

1 Credit

Purpose: This course is designed for students who already possess an understanding of fundamental music theory concepts and wish to enhance their skills and knowledge at an advanced level. Students will develop the necessary skills to study music beyond high school by expanding their understanding of theoretical principals such as melody, harmony, rhythm, form, and tonality.

Course Description: This course offers students the opportunity to develop their skills and knowledge in the areas of music theory, aural skills, music history, and a variety of other topics such as conducting music technology, composing, etc. Emphasis is placed on developing skills necessary for students who are serious in the understanding of music theory and/or who wish to continue their music education at the college level.

Requirements: Completed notebook and journal, participation in class discussion, written and listening assessments, course projects. Students are expected to take the standardized Advanced Placement test at the end of the school year at the current cost. Students will have a summer assignment due before August.

Prerequisites: Due to enrollment limitations, scores on a written readiness screener exam will be evaluated as a criteria for selection (Refer to page 9 for specific grading and percentage guidelines).

□ **ADVANCED PLACEMENT LATIN**

Grade 12

Full Year

1 Credit

Purpose: Advanced Placement Latin is to prepare students to be able to successfully complete the AP Latin exam at the end of the school year with a score of at least 3, 4, or 5.

Course Description: The course will focus on particular lines of Books 1, 2, 4, and 6 of Vergil's *Aeneid* as well as line selections from Books 1, 4, 5, and 6 of Caesar's *De Bello Gallico*. Daily translation will be completed and discussed along with a breakdown of grammar and syntax. More specifically, the students will be able to: write a literal English translation of a Latin passage; explicate specific words or phrases in context; identify the context and significance of short excerpts from texts listed; identify and analyze characteristic features of the author's modes of expression, including use of imagery, figures of speech, metrical effects, and sound effects; discuss particular motifs or general themes not only suggested by passages, but also relevant to other passages/selections; analyze and discuss structure and demonstrate an awareness of the feature used in construction of a poem or an argument; and scan meter used by Vergil, dactylic hexameter.

Requirements: Students will be required to complete daily assignments throughout the school year. Students are expected to take the standardized Advanced Placement test at the end of the school year at the current cost. Students will have a summer assignment due before August.

Prerequisites: Latin 1, 2, 3 and successful performance on the screener (Refer to page 9 for specific grading and percentage guidelines).

□ ADVANCED PLACEMENT PSYCHOLOGY

Grades 10, 11, 12

Full Year

1 Credit

Purpose: This course is designed to prepare students to successfully complete the AP Exam at the end of the school year. The course will introduce students to the systematic and scientific study of behavior and mental processes of human beings and other animals. The objective of this course will be that each student take and pass the Advanced Placement Exam for Psychology and all aspects of the course will reflect this fact. AP Psychology will be taught at the college level and student study habits and participation should reflect this fact. The vocabulary, information and activities will be intended to prepare you for the AP exam. Students will be asked to complete many writing assignments and projects. Students should be prepared for work outside of class.

Course Description: This year long course is intended to introduce students to the systematic and scientific study of behavior and mental processes and students will increase their understanding of psychology, its methods, theory and research. AP Psychology is a survey course, so students will focus on bits of information from many different areas in Psychology. Primarily, the course will explore the psychological facts, principles, and phenomena associated with each of the major sub fields of psychology (consciousness, learning, personality, cognition, etc.)

Requirements: AP Psychology is open to students in 10th, 11th, or 12th grade. Students need to possess strong language and writing skills and have adequate technical skills and personal characteristics for success. Students are expected to take the standardized Advanced Placement test at the end of the school year at the current cost. A high school teacher recommendation will be required and successful performance on the screener. Failure to complete the summer assignment will necessitate a withdrawal from the course. Students will have a summer assignment due before August.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

□ ADVANCED PLACEMENT STUDIO ART

Grades 12

Full Year

1 Credit

Purpose: This course is intended to give students the opportunity to succeed at AP Studio Art and it be accredited toward their college goals and transcripts. They would be able to choose their concentration and focus on building their portfolio, not only for the AP exam, but for college admissions. The work that they have already been doing will be valued with the results of a score.

Course Description: Students will be required to submit 24 works of art. 5 will be shipped directly and the remaining will be reviewed through a digital portfolio.

Requirements: Students will choose a concentration and a theme and then work one on one with the teachers to set deadlines and critiquing times. Their portfolio will be built from work from previous years, summer assignments, and the class projects during the year.

Prerequisites: Art 1, Art 2, and Art 3. (Refer to page 9 for specific grading and percentage guidelines).

□ APPLIED LATIN

Grade 10, 11, 12

Full Year

1 Credit

Purpose: To acquire a working vocabulary of the fundamental Greek and Latin roots, prefixes, and suffixes that are key to understanding scientific terminology. Competency in using and understanding unfamiliar words to comprehend scientific data in context is a necessary skill.

Course Description: The natural sciences, and the life sciences in particular, employ an enormous vocabulary of technical terms, presenting a sizable challenge to the beginning student, the complexity of these terms is due to the fact that many were formed from Greek and Latin words in order to communicate in a multilingual scientific community during a time when Latin was required as a core part of education. This basic exposure to the Latin and Greek elements of scientific language can make it much easier to understand the meaning of technical terms and expand one's scientific vocabulary.

Requirements: Students should have an interest in the sciences and strong study skills.

Prerequisite: Students must have completed at least two years of a consecutive language.

□ **APPLIED THEATRE**

Grade 10, 11, 12

Full Year

1 Credit

Purpose: Applied Theatre is for the student who plans to major in the Dramatic Arts after his/her high school graduation. Upon the completion of this course, the student should possess advanced skills in the areas of acting, directing, and the production of plays and musicals.

Course Description: Applied Theatre advances the acting and directing experiences developed in previous drama courses to a production level. The course will expose the learner to advanced levels of acting and directing using a performance and production format.

Requirements: Each student will develop an acting portfolio of ten major scenes to be researched and performed in an acting workshop. Each student will be required to research and direct five scenes utilizing actors from the Introduction to Drama,

Technical Drama, and Elementary School Drama workshops. An outside drama project will be required that will involve participation in a high school, local community theatre, college theatre, or semi-professional theatre production. The project will be submitted for approval during the first marking period and must be completed by the end of the school year.

Prerequisites: Introduction to Drama and Technical Drama or previous stage experiences as determined by the instructor (Refer to page 9 for specific grading and percentage guidelines).

□ **ART 1**

Grades 9,10,11,12

Full Year

1 Credit

Purpose: Art 1 is intended to give the student a strong foundation in the practical use of the elements and principles of design in drawing, painting and fine craft as well as to introduce aspects of art history. After taking this course, the student will be able to build on specific learned artistic skills if they choose to take further art courses in high school or to use the tools learned to develop and execute unique ideas in any non-art course requiring creative thinking.

Course Description: Specific knowledge will be gained about wet and dry media such as pencil, pastels, markers, charcoal, colored pencil, paint, silkscreens, glass, sculpture materials, and batik. Students will complete multiple exercises and projects to learn art techniques. Artists and art styles throughout history will be studied as they relate to each medium. The student may find it necessary to put in additional time outside the classroom to complete the projects. The student will be responsible for storing and caring for his or her own artwork properly in the classroom on a daily basis and for maintaining classroom materials and supplies. You need to have a willingness to try any assignment and you put in your maximum effort with a good open-minded attitude throughout the processes of creation.

Requirements: Students should have an interest in art, a good attitude, and the ability to communicate positively when engaged in critiques. Students are expected to have a willingness to try any assignment and you put in your maximum effort with a good open-minded attitude throughout the processes of creation. No dues are required for this course, but any materials lost or damaged will result in a fine at the end of the school year. The student will be responsible for storing and caring for his or her own artwork properly in the classroom on a daily basis and for maintaining classroom materials and supplies.

Prerequisites: Student Portfolio. Students at the 9th grade level will submit a portfolio consisting of three original works of art created by the student. The submission deadline will be set by the guidance department based on the course scheduling timeline. Check with the guidance department for confirmation of the submission date and the details of a digital or hard copy portfolio submission. Portfolios must be submitted by the deadline in order to be eligible to take Art 1 at the Junior High. Any late submissions will not guarantee placement in Art 1. (If you submit a portfolio after the deadline, you will be notified if you are enrolled in the class no later than June 30th. Late submissions and considerations will not be accepted after June 30th.) All hard copies of artwork will be returned to the student in a timely manner. (Refer to page 9 for specific grading and percentage guidelines).

□ **ART 2**

Grades 10,11,12

Full Year

1 Credit

Purpose: This course is intended to reinforce skills and concepts acquired in Art 1. Through projects/challenges you should build on those art making skills and historical art and artist knowledge. Students will engage in a more in-depth study used in Art 1 and experiment with other materials and processes including presentation of work for exhibition. In addition, students will translate skills learned from two-dimensional challenges into three-dimensional works.

Course Description: This course concentrates on enhancing skills with dry and wet media used in Art 1, but also explores some of the more challenging art media. In addition, various painting techniques, printmaking and sculpture techniques which may include any or all of the following materials... india ink, tempera, acrylic paints, block printing, charcoal, earthenware clay, and mixed media will be explored. Projects will be based on examples of art throughout history as they relate to each medium we will use. Periodic viewing of films about art and artists will assist in learning about processes. Students will also be asked to use art vocabulary for class critique discussions of their own work. Images, books, and examples will reinforce the students' knowledge of each assignment/project. Quizzes related on techniques and vocabulary will be given after each unit of study.

Requirements: Successful completion, with a high level of skill and motivation, on all projects is a must to pass this class and move on to Art 3. The student may find it necessary to put in additional time outside the classroom to complete the projects. The student will be responsible for storing and caring for his or her own artwork properly in the classroom on a daily basis and for maintaining classroom materials and supplies.

Prerequisites: Art 1 is a pre-requisite course to take Art 2, and a genuine interest in art and improving on your skills as an artist is recommended. You need to have a willingness to try any assignment and you put in your maximum effort with a good open-minded attitude throughout the processes of creation. (Refer to page 9 for specific grading and percentage guidelines).

□ **ART 3** Grades 11,12 Full Year 1 Credit

Purpose: The course is intended to reinforce drawing and painting skills acquired in Art 2. Through projects/challenges you should build on those art making skills and historical art and artist knowledge. In addition, you will translate skills learned from two-dimensional challenges into three-dimensional works. Through learning the process of self and class critiques, you will improve as an artist and a viewer of art. Completed projects can possibly be used to include in a portfolio for students who plan to pursue the arts in college.

Course Description: Review and more in depth challenges of drawing using charcoal, pencil, colored pencil, chalk pastels, and/or pen and sculpture skills learned in Art 2 will be attempted. In addition, various painting techniques, printmaking and sculpture techniques which may include any or all of the following materials... watercolor, colored pencils, chalk pastels, acrylic paints, silkscreen, earthenware clay, sculpture, and mixed media will be explored. Projects will be based on examples of art throughout history as they relate to each medium we will use. Art 3 students should expect group projects and possible installations throughout the year. Periodic viewing of films about art and artists will assist in your learning about processes and give ideas projects. Students will receive handouts with information on the medium at hand, art historical references, vocabulary, materials needed, step-by-step procedures accompanied by teacher demonstrations, and grading criteria for each project.

Requirements: Successful completion, with a high level of skill and motivation, on all projects is a must to pass this class and move on to Art 3. It will be necessary to put additional time outside the classroom to complete the projects. The student will be responsible for storing and caring for his or her own artwork properly in the classroom on a daily basis for maintaining classroom materials and supplies.

Prerequisites: Art 2 is a prerequisite for this class. If you are here you have a genuine interest in art and improving on your skills as an artist. You have a willingness to try any assignment and you put in your maximum effort with a good open-minded attitude throughout the processes of creation. You will be expected to work independently with the **guidance** of the teacher. In Art 3 you will explore mediums to learn your strengths and weaknesses. Constructive criticism will be a large part of the process of learning – expect criticism and adapt it to your work to better yourself in this course (Refer to page 9 for specific grading and percentage guidelines).

□ **ART 4** Grade 12 Full Year 1 Credit

Purpose: This course is intended to reinforce drawing, painting and sculpting skills acquired in Art 3. Through projects/challenges you should build on those art making skills and historical art and artist knowledge. In addition, you will translate skills learned from two-dimensional challenges into three-dimensional works. Through learning the process of self and class critiques, you will improve as an artist and a viewer of art. Completed projects can possibly be used to include in a portfolio for students who plan to pursue the arts in college.

Course Description: Review and more in depth challenges of drawing using charcoal, pencil, chalk pastels, and/or pen and sculpture skills learned in Art 3 will be attempted. In addition, various painting techniques, printmaking and sculpture techniques which may include any or all of the following materials... watercolor, tempera, acrylic paints, silkscreen, Model Magic, Sculpey clay, metals, charcoal, earthenware clay, sculpture, and mixed media will be explored. Projects will be based on examples of art throughout history

as they relate to each medium we will use. Art 4 students should expect group projects and possible installations throughout the year. Art 4 students may have the opportunity to work on a senior project in the school and will have the chance to do community service within the arts at the end of the year. Periodic viewing of films about art and artists will assist in learning about processes. You will receive handouts with information on the medium at hand, art historical references, vocabulary, materials needed, step-by-step procedures accompanied by teacher demonstrations, and grading criteria for each project. You will also learn how to effectively participate in all class critiques. There may be an occasional quiz on vocabulary if I see the need to reinforce concepts that have not been shown in projects.

Requirements: Successful completion, with a high level of skill and motivation, on all projects is a must to pass this class. It will be necessary to put additional time outside the classroom to complete the projects. The student will be responsible for storing and caring for his or her own artwork properly in the classroom on a daily basis for maintaining classroom materials and supplies. .

Prerequisites: Art 3 is a prerequisite for this class. You need to have a willingness to try any assignment and you put in your maximum effort with a good open-minded attitude throughout the processes of creation. You will be expected to work independently with the **guidance** of the teacher. In Art 4 you will explore new and exciting mediums to learn your strengths and weaknesses. Constructive criticism will be a large part of the process of learning – expect criticism and adapt it to your work to better yourself in this course (Refer to page 9 for specific grading and percentage guidelines).

□ **ART ASSISTANTS** Grades 11,12 Full Year .5 Credit

Purpose: The art assistant program has a threefold purpose: to assist the art teacher in teaching duties, in-house art projects, and keeping the art rooms and supplies in order. The program will give the student valuable experience in carrying out an in-house assignment that would simulate an on-the-job-training later on in further studies in higher art education. The completion of this program would give the art student an insight into how a freelance artist works, the clients he or she must deal with, and the deadlines he/she must face.

Course Description: This program will be designed primarily by the work there is to be done in the art room as well as what in-house work is requested. Necessary things such as assisting the classroom teacher in materials setup, general cleanup and supply organization are ongoing throughout the year. The art assistant may be asked to assist in setting up showcases, bulletin boards, and art shows throughout the school year. If time allows, the student may use the facilities and materials of the art room to create artwork of his/her own throughout the year. This program is an excitingly different challenge to the student who has drive, interest, and honesty. This is a pass/fail grade.

Requirements: The art assistant must have completed Art2 or higher. He/she or she must be willing to work under some pressure of deadlines, and on occasion, work may have to be taken home to meet these deadlines.

Prerequisites: Art 2 and a genuine attitude toward doing artwork and helping the art teacher in everyday art room activities (Refer to page 9 for specific grading and percentage guidelines).

□ **BAND 9** Grades 9 Full Year 1 Credit

Purpose: This band is an intermediate band designed to give the student further experience in a large ensemble. At the completion of this course the student should possess the advanced fundamentals of band playing to be eligible for the high school band curriculum.

Course Description: Students in Band 9 are scheduled for three to five 42 minute periods of band rehearsals per week. In addition, each student receives one 42 minute lesson per week as part of a like-instrument group. Students are taught advanced techniques in order to play their instruments with good tone quality, good intonation, accurate rhythm, and adequate technique for their level of experience; they develop skills of independent playing, sensitivity to ensemble blend and balance, and respond accurately to conducting gestures.

Requirements: Each student through individual and ensemble playing will demonstrate knowledge of steady beat, rhythmic accuracy, tone production, phrasing, and musicianship by adapting their uses in the band literature. Students must be willing to participate in all phases of the band including participation in the Senior High School Marching Band, rehearsals, concerts, and a weekly rotating sectional lesson. The student’s academic achievement must be satisfactory to participate in the band program. Numerous instrumental concepts are introduced and reviewed using selected band literature and exercise in the rehearsal and lesson setting.

Prerequisites: Successful completion of Band 8, a full year of band lessons, and recommendation of junior high instrumental music teacher (Refer to page 9 for specific grading and percentage guidelines).

BASIC FOODS Grade 9 Semester .5 Credit

Purpose: The Basic Foods class for ninth grade is a course for any student who chooses to increase knowledge in foods and nutrition and to develop skills in food preparation. At the completion of this course, the student should be able to perform in an independent, organized manner when involved in food preparation.

Course Description: Basic Foods uses a two-fold-approach, the presentation of theory and the participation in foods laboratories. Content includes technological developments in our food supply, food safety, eating disorders, current nutrition trends and meal management principles. Focus is upon meal preparation. In foods labs, leadership and teamwork skills are emphasized. Holidays are also planned and celebrated by the preparation of traditional foods.

Requirements: Tests and quizzes will be given periodically; however, students are evaluated primarily on projects and class participation. Students will be expected to keep a well-organized, up-to-date binder, which will include all class papers. Students are encouraged to taste all foods that are prepared in class. Grades are given after each nine week period.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

CHAMBER STRINGS Grades 10,11,12 Full Year .5 Credit

Purpose: To provide select string students with an opportunity to perform in a chamber ensemble setting and engage string players with ample experience to challenge their musicality and technical performance skills.

Course Description: Students will enhance string performance skills through rehearsal and performance of advanced chamber ensemble music. Students will be able to perform works that would not be performed in the traditional orchestral setting. Students would also have increased performance opportunities with this select ensemble.

Requirements: Audition, home practice

Prerequisites: Students must play violin, viola, cello or bass and must audition (Refer to page 9 for specific grading and percentage guidelines).

CHILD DEVELOPMENT Grades 10,11,12 Full Year 1 Credit

Purpose: The Child Development course is for all students who have an interest in child care, careers related to children along with the development of a child from conception through the toddler years.

Course Description: Child Development deals with the various aspects of parenthood, with emphasis on conception, fetal development and prenatal care. The stages of physical, social, emotional, and intellectual development are explored from birth through young childhood. Childcare techniques and parental role changes during various levels of development are stressed. Other areas of concentration include birth defects, child abuse, childhood diseases, child safety, childhood nutrition, developmentally appropriate practices/child care settings, and March of Dimes.

Class activities include guest speakers, demonstrations, pregnancy belly simulator, Shaken Baby simulator and Baby Think It Over along with videos, classroom activities and projects.

Requirements: Each student is expected to keep a notebook of class notes and related materials, which is graded along with class work and tests throughout the marking period. There is occasional overnight homework and several small projects throughout the year with one large Baby Think It Over project.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

CHORUS Grade 9 2 periods weekly .5 Credit

Purpose: Chorus is offered to any student who has an interest in singing in a large group. The class provides students with the opportunity to develop skills necessary to become comprehensive musicians.

Course Description: Concert Choir is an opportunity for students to sing choral literature that covers a broad spectrum of sacred and secular music appropriate for a large ensemble. This course strengthens the vocal ability, music reading skills, and musicianship of the individual while creating an aesthetic experience for both performer and audience.

Requirements: Students must attend all rehearsals and performances.

Prerequisites: A desire to learn more about music and the human voice and to work cooperatively with others in creating an aesthetic experience for both performer and audience (Refer to page 9 for specific grading and percentage guidelines).

□ **CRAFTS** Grades 10,11,12 Semester .5 Credit

Purpose: The crafts course is offered for those students who would like to explore three-dimensional craft material for only one semester. A general exploratory approach will be used in the course of instruction. Completion of this course will provide the student with craft techniques and knowledge and hands-on experience throughout the unit.

Course Description: Students will be expected to complete several projects throughout the semester. Projects may vary according to supplies available and number of students in each section. Projects may include clay, glass, fibers, sewing, paint, woodworking, and sculpture. Students will review design, composition, perspective and ways of obtaining design ideas for projects while developing their projects.

Requirements: If a reasonable attempt is made and all assignments are completed, the student will pass the course. The student may find it necessary to put additional time outside the classroom to complete the projects. The student will be responsible for storing and caring for his or her own artwork properly in the classroom on a daily basis for maintaining classroom materials and supplies.

Prerequisites: There is no pre-requisite course to take Crafts, but a genuine interest in art and improving on your skills as an artist is recommended. You need to have a willingness to try any assignment and you put in your maximum effort with a good open-minded attitude throughout the processes of creation (Refer to page 9 for specific grading and percentage guidelines).

CREATIVE WRITING 1 Grades 10, 11, 12 Semester .5 Credit

Purpose: To encourage students to think and write creatively; to build student skills in various modes and purposes of writing, including character development, and audience awareness; to polish skills of writing, from brainstorming to revision, edition, and publication; to explore the various methods for idea development and self-expression.

Course Description: Students will explore various types of brainstorming activities. Students will learn to address audience and purpose in their creative works. Students will cover characterization, general creativity, descriptive writing, dialogue, and plot. Students will share their works and be offered constructive criticism on their pieces in order to grow. This course is an introductory course, so all levels of writers are welcome. The focus is on content and idea generation, not technical English requirements.

Requirements: Students will be graded on written projects and activities. Most pieces will be shared for a grade. The final grade for the course will be derived from a combination of several formal pieces, practice activities, and the presentation of several written pieces.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

CREATIVE WRITING 2 Grades 10, 11, 12 Semester .5 Credit

Purpose: Creative Writing II is an advanced level of the creative writing curriculum. This class is designed for students who have successfully completed Creative Writing and are looking to advance their skills. This class is aimed at students who are serious about pursuing writing as a career OR students who are interested in studying creative writing techniques at a higher level.

Course Description: Students will focus on publishing, marketing, and career aspects that students would need in order to pursue this as a career. Students will also cover higher level skills in characterization, plot devices, and genre writing.

Requirements: Students should be prepared to write frequently and share their pieces for critique. Students will write both promoted and free-choice writings and be expected to keep a portfolio of finished pieces.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

☐ **CULINARY ARTS SPECIALITY** Grades 10, 11 Semester .5 Credit

Purpose: This course is designed for students who have an interest in baking and pastry arts and would like to gain an understanding of the fundamentals of baking.

Course Description: Students will learn the basics of mixing, shaping and baking for several baked goods including quick breads, yeast breads, cakes, pastry doughs, cookies, pies, sauces, glazes, plated desserts, and some international baked foods. In addition, students will be introduced to decorating techniques of cakes and plated desserts. Students will gain hands-on experience creating a variety of baked goods and desserts.

Requirements: Individual class work, teacher demonstrations summaries, group and individual labs, test and quizzes.

Prerequisites: Food Prep (Refer to page 9 for specific grading and percentage guidelines).

EXPLORATORY ART Grade 9 Semester .5 Credit

Purpose: Exploratory Art will enable ninth grade students to develop his/her art abilities and appreciation for art. Problem solving, self-expression, aesthetic awareness, and critical thinking skills will be enhanced.

Course Description: Students in Exploratory Art class will explore a variety of different materials and will develop skills and techniques in two and three-dimensional art production. Projects will include the areas of drawing, painting, printmaking, design, pen and ink, collage and mixed media. Students will search for meaning and direction in their work by choosing and evaluating ideas and subject matter that communicate self-expression. Art works from various cultures and master artists will be viewed and discussed as each unit dictates.

Requirements: Students will show confidence in their ability to create and complete works of art in all areas.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

☐ **FOOD PREPARATION** Grades 10,11,12 Semester .5 Credit

Purpose: Food Preparation is designed for all students who want to learn basic preparation skills of food and who desire to study the nutritional needs of the body and learn basic methods of food preparation. Completion of the course will provide the student with the skills for selecting, purchasing and preparing foods for a healthy body.

Course Description: This course will focus on the dietary needs of the body and methods of food preparation to insure results that are nutritionally sound. Students will select recipes and preparation methods aiming to achieve good health. This course is a two-fold approach, the presentation of theory and the participation in food labs. Specific Content: A detailed focus on preparing specific groups of foods such as dairy, quick/yeast breads, eggs, fruit, vegetables, menu planning, nutrition etc. Emphasis on safety and sanitation, disease prevention, supermarket shopping, coping in the kitchen, kitchen equipment, and lab participation.

Requirements: Each student must keep a folder of all given materials. Tests and quizzes will be given periodically; however, students are evaluated primarily on class participation and projects. Laboratory skills and class participation will be graded regularly. Some out of class work may be given along with several small projects.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

□ FRENCH 1

Grades 9,10,11,12

Full Year

1 Credit

It is strongly recommended that a student complete a minimum of two years of the same language. Once a language is begun, it is preferable to complete the entire sequence available before moving on to another language.

Purpose: French 1 is designed to meet the needs of the college bound student who wants to learn to speak, read and write another language. The principal goal is to learn to communicate in the target language. Upon completion of this course, the student will be able to discuss in English many cultural differences, to comprehend aurally simple French dialogs based on everyday situations and to be able to respond orally in French to what he has heard or to ask in French for additional information.

Course Description: French 1 is an introductory course designed to teach the student the basic language needed to communicate with native speakers in real-life situations. Such situations may include making introductions, ordering food and beverages, asking for directions, getting to know someone, etc.

Requirements: Class participation is a must as it allows the student to practice the language. Students should come to class prepared for the day's lesson. The language of instruction is combined English and French, and students will be expected to speak French as much as possible in class. Students will receive homework on a weekly basis, which provides direct practice of the lesson. In addition to homework, students should study at least 10-15 minutes/day.

Prerequisites: Good understanding of the English language with at least a 77% average in English (Refer to page 9 for specific grading and percentage guidelines).

□ FRENCH 2

Grades 10,11,12

Full Year

1 Credit

Purpose: This course is designed for the student who needs 2 credits of a foreign language for college admission or for an individual who wants to be in better control of his/her communicative skills. Upon completion of this course the student will have discussed and debated the importance of studying a foreign language; have read about and discussed various aspects of French and Francophone culture; speak French using a mixture of memorized material and original language in an expanded number of contexts; understand spoken utterances on familiar topics with greater accuracy and less repetition than in Level 1; read authentic texts for main meaning and important details; and write short letters, notes and essays related to material studied in class and personal interests.

Course Description: French 2 is a course designed to review the basics learned in French 1 and to further expand the student's proficiency in the language through the presentation of many new structures, contexts and functions. As in French 1, we will talk in the language much more often than we will talk about it! The student will use the language in meaningful, real-life situations that he/she might encounter in France or another part of the Francophone world such as ordering food and beverages, making purchases, setting up appointments, asking for information, etc.

Requirements: Class participation is a must as it allows the student to practice the language. Students should come to class prepared for the day's lesson. The language of instruction is French, and students will be expected to speak French as much as possible in class. Students will receive homework on a daily basis, which provides direct practice of the day's lesson. In addition to homework, students should study at least 10-15 minutes/day.

Prerequisites: French 1 (Refer to page 9 for specific grading and percentage guidelines).

□ FRENCH 3

Grades 11,12

Full Year

1 Credit

Purpose: French 3 is a course designed for the student who would like to go beyond the basic knowledge learned in lower level courses in order to be more proficient in French and to use the language more creatively in a greater number of contexts. In this course, as in French 1 and 2, the emphasis will be on real-life communication. In other words, we will use the language the way it is used by native speakers in situations one might encounter in France or another French-speaking country.

Course Description: French 3 students will examine a greater number of cultural topics and will be provided with opportunities to broaden their vocabulary and increase their control of grammatical structures. Although we will continue to work on all four skills (listening, speaking, reading, and writing) and culture, in this course there will be a greater emphasis on writing than in French 1 and 2. At the end of French 3, students will be able to initiate and sustain a face-to-face conversation in French using past, present, and future time; express emotions and more complex thoughts, use basic grammatical structures with greater ease and accuracy; understand native speaker speech on topics beyond mere survival needs (personal history, culture, emotions, etc.); read articles, advertisements, letters, short literary texts, etc. with a greater understanding of nuance and detail; and write letters, summaries, journal entries, essays, and compositions on familiar topics with a greater degree of accuracy and use of idiomatic expressions.

Requirements: Students should expect homework on a daily basis and must come to class ready to participate. In addition to written homework, students should expect to study 15-20 minutes each evening. **The course will be taught in French, and students are expected to use the target language when interacting with classmates and with the teacher.**

Prerequisites: French 2 (Refer to page 9 for specific grading and percentage guidelines).

FRENCH 4 Grade 12 Full Year 1 Credit

Purpose: French 4 is the highest level of French normally offered at the high school and affords students the opportunity to move their language skills toward an advanced level of proficiency in all skill areas (speaking, reading, writing, listening) and the study of culture.

Course Description: Students will work toward increased fluency while reinforcing their production with accuracy gained from the continuing study of grammar and vocabulary. As in lower level courses, students will spend most of their time learning to use the language in real-life contexts and situations. In addition to the language itself, French 4 students will also explore French and Francophone culture in greater depth through music, authentic documents from the target cultures, and literary texts. At the end of French 4, students will be able to initiate and sustain and close a face-to-face conversation in French on a large range of topics; begin to narrate and describe using connected discourse; present and support their opinion on a number of issues and use circumlocution to make themselves understood; understand native speaker speech on a greater variety of topics with fewer repetitions; read longer prose including newspaper/magazine articles and literary texts with a greater understanding of nuance and detail; and write letters, summaries, journal entries, essays and compositions on more complex topics with a greater degree of accuracy, use of idiomatic expressions, and variety of language. ***This level is considered to be at the Honors level and will receive a .05 accelerator.*** Students may participate in the Saint Francis University's College in High School program in conjunction with this course. Saint Francis University charges a fee (approximately 160.00) for registration and credits.

Requirements: Students should expect to have homework on a daily basis and must come to class prepared to participate. In addition to homework, students should plan to study 15-20 minutes each evening. The course is taught in French, and students will be expected to converse among themselves and with the teacher in the target language. Course work will be done both individually and in small groups. All requirements and expectations as dictated by the CHS (College in High School) program and Saint Francis University will be fulfilled.

Prerequisites: French 3 (Refer to page 9 for specific grading and percentage guidelines).

FRENCH 5 Grades 10, 11, 12 Full Year 1 Credit

Purpose: French 5 is an independent study course for the student who is motivated to continue to study French beyond level 4. Students will work independently during another French class.

Course Description: The course objectives are to complete a systematic review of French grammar of levels 1-4, to develop reading skills through the study of authentic texts and to continue the development of speaking, writing and listening skills. Students will do one oral presentation and one composition per marking period.

Requirements: The Student is required to follow due dates and meet with the teacher a minimum of four times a marking period after school for oral communication activities and clarification of concepts. A list of assignments will be given each marking period. It is the student's responsibility to set up times to meet with the teacher in order to get help with any concept that may be challenging.

Prerequisites: French 4 with a grade of 92 or above (Refer to page 9 for specific grading and percentage guidelines).

GERMANY: AN EXPERIENTIAL PERSPECTIVE Grades 10, 11, 12 Semester .5 Credit

Purpose: This course is open to 10th, 11th, or 12th graders currently enrolled in German 1, 2, 3, or 4.

Course Description: This course, taught in German, will focus on the culture of modern-day Germany including the arts, literature, geography, and travel. The course is required for all GAPP participants, but it is open to any student interested in a closer study of the German experience.

Requirements: Students will communicate only in German. Students will complete a project outlining a one-month trip to Germany

and demonstrate ability to speak and understand German in a family atmosphere. The final exam, to be done in German, will consist of an oral report or roundtable presentation focusing on the student's hometown or what he or she has learned about Germany.

Prerequisites: German 1 or teacher's recommendation; desire to learn more about contemporary Germany (Refer to page 9 for specific grading and percentage guidelines).

☐ GERMAN 1

Grades 9,10,11,12

Full Year

1 Credit

It is strongly recommended that a student complete a minimum of two years of the same language. Once a language is begun, it is preferable to complete the entire sequence available before moving on to another language.

Purpose: German 1 is an introduction to the language and culture of the people of the German-speaking countries. It encourages immediate use of German in simple writing, reading, listening and speaking exercises.

Course Description: Students will learn basic conversation skills. They will learn to identify and describe themselves, their families and their friends. Students will learn to ask and answer questions about their health, their moods and their activities. Students will also focus on the practicalities of everyday, teen-age life: shopping, going to school, buying tickets for concerts and movies, doing chores, engaging in sports and hobbies, extending and declining invitations, and expressing opinions and desires.

Requirements: Students will communicate orally in German whenever possible. They will complete frequent written assignments and take frequent oral and written exams, including a midterm and a final, to measure their progress in the language. Students will keep a notebook for class notes, handouts, and new vocabulary.

Prerequisites: A willingness to meet and/or correspond with German native speakers; a willingness to learn about other cultures and respect the differences. The student must have at least a 77% average in English (Refer to page 9 for specific grading and percentage guidelines).

☐ GERMAN 2

Grades 10,11,12

Full Year

1 Credit

Purpose: German 2 further develops the language skills acquired in German 1 by increasing students' linguistic abilities.

Course Description: Students will learn to increase their communication skills in order to deal with the world around them. They will shop for food, order in restaurants, make small talk, get a driver's license, visit and get lost in a new place, write letters, make comparisons and evaluations, apologize, and make requests. Within the context of letters to the editor, a house rental and a photo-album, students will learn to use the language to express surprise, to protest, and to consider options. Students will talk about teen magazines, television programs, mass transportation, the rooms of a house, and vacations. Group activities include planning a trip in a travel agency, staging a fairy tale, and visiting a restaurant. Students will also be notified of opportunities to visit and/or study in a German-speaking country.

Requirements: Students will communicate orally in German whenever possible. They will complete frequent written assignments and take frequent oral and written exams, including a mid-term and a final, to measure their progress in the language. Students will keep a notebook for class notes and handouts, and new vocabulary.

Prerequisites: German 1 (Refer to page 9 for specific grading and percentage guidelines).

☐ GERMAN 3

Grades 11,12

Full Year

1 Credit

Purpose: German 3 is for students who wish to further their knowledge of the language and culture of the German-speaking countries. The skills developed will solidify basic technical language skills and help prepare some students for college language placement tests.

Course Description: Students will expand their ability to cope with social situations specific to German-speaking countries and to consider the expansion of the European community and Germany's role in Europe. They will learn to evaluate intentions, to judge, to express personal preferences and to give accounts in the past tense. Students will deal more extensively with culture and the German heritage: science and technology, architecture, history, music, literature and German-American influence. Students will become acquainted with important names and facts in these fields of human endeavor and read their first pieces of German literary prose. Proficiency will be the major aim of this course.

Prerequisites: All band and/or orchestra students will be scheduled for instrumental lessons (Refer to page 9 for specific grading and percentage guidelines).

□

□ **INTERMEDIATE GUITAR** Grades 10,11,12 Semester .5 Credit

Purpose: To offer all students the opportunity to learn and play a musical instrument (guitar) who may not be interested in performing with the band and/or the orchestra. This course will also allow students to explore a variety of styles of music not offered in other performance electives.

Course Description: Students will learn the basic techniques of playing the guitar as well as the fundamentals of note reading, chord patterns, and composing music. Students will expand their individual skills while performing a variety of musical styles and genres and will also have the opportunity to perform with others in a class ensemble.

Requirements: Development of technique and individual practice.

Prerequisites: Introduction of Guitar (Refer to page 9 for specific grading and percentage guidelines).

□ **INTRODUCTION TO DRAMA/WRITER'S WORKSHOP** Grade 9 Semester .5 Credit

Purpose: The purpose of "Introduction to Drama/Writer's Workshop" is designed for students who wish to explore the theatre as a form of creative expression as well as provide students with the opportunity to experiment with various types of written expression. The "Drama" portion of the elective course will be taught in the 1st half of the 18 week semester. The "Workshop" portion of the elective course will be taught in the 2nd half of the 18 week semester.

Course Description: Students should expect to study and experiment with improvisation, mime, interpretive readings, poetry, one act plays and/or multiple act plays. Students will explore character study, human and social context, historical drama, and various playwrights and authors and their influence in the theatre. In addition, students will perform a play as a culminating activity. Also, students will be expected to write daily on the topics of their own choosing, to share compositions in progress by reading aloud to classmates in small and large groups, and to attempt to publish their work in various writing magazines. In addition to being writers and readers, students will serve as an immediate audience for their classmates. Both oral and written responses to compositions, including suggestions for improvement, will help student writers refine skills and develop new techniques.

Requirements: Students will be expected to actively participate in all on-stage activities (readings, improvisation, etc.) In addition, they will have several research projects concerning costumes, the history of theatre and creative writing of various scenes for class. There are some quizzes and students will frequently complete in-class assignments that are relevant to the works that we study. Also, students will be graded primarily on a portfolio submitted at the end of the marking period. Other smaller assignments will be scored throughout the marking period. Students can expect dialogical lessons, as well as free writing exercises and use of journals.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines)

□ **INTRODUCTION OF GUITAR** Grade 9, 10, 11, 12 Semester .5 Credit

Purpose: Introduction of Guitar will introduce students to the basic guitar chords, note reading, and introductory ensemble skills. In addition, students will study and perform simple strumming patterns, and introductory finger-picking skills.

Course Description: This class uses acoustic guitars to explore note reading, chords and some tabs on the guitar. Students will explore basic strumming techniques, finger picking, and accompaniment patterns. Students will be able to play simple melodies, harmonies, and accompaniment patterns together as an ensemble. In addition, alternate tuning methods will be introduced and different musical genres explored as part of the class.

Requirements: Playing tests and note identification quizzes will be given periodically. In addition, students will be graded on performance and preparation on a weekly basis. Guitars and materials are provided.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

□ INTROCUATION TO THEATRE

Grades 10,11,12

Semester

.5 Credit

Purpose: The Introduction to Theatre course exists for the student who desires a deeper appreciation of drama. At the completion of this course the student should possess skills, attitudes, and understandings in the following dramatic areas: sensory perception, imagination, stage movement, voice and language development, discipline and self-concept, improvisation, characterization, playwriting, and directing.

Course Description: Introduction to Theatre uses a student-centered approach in the development of skills, attitudes, and understandings of drama. The course will involve the learner in various dramatic activities: problem resolution in a dramatic context, participation in dramatic plays, the assumption of roles through imitation, improvisation, the incorporation of the technical aspects of drama, analysis of drama, and the functions of theatre management.

Requirements: Each student will research, rehearse, and perform at least four dramatic character studies during the year. Six outside criticisms will be completed with a focus on dramatic performance or artistic interpretation. Participation in at least two dramatic productions within the school district will be required. A brief one-act play will be written and performed by each student in the course. Daily class work and workshop participation will complete the course requirements.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

□ JAZZ BAND

Grade 10,11,12

Full Year

1 Credit

Purpose: The Jazz Band is an auditioned ensemble that meets during the school day and is designed to give students the experience of performing in a traditional big band setting (sax, trumpet, trombone, drum set, piano, bass, and guitar). Students will learn fundamental performance techniques in a variety of jazz styles and genres.

Course Description: The Jazz Band studies and performs music in a big band setting by the jazz masters such as Duke Ellington and Count Basie, as well as by contemporary composers. Emphasis is placed on improvisation and performance of a variety of jazz styles including swing, bop, Latin, ballads, funk, etc.

Requirements: All members must attend all scheduled rehearsals, concerts, adjudication festivals, and performances, and maintain a superior practice routine. Students must also perform in Concert Band and/or Symphonic Wind Ensemble, as well as with the Marching Band (exception may be granted by the director for guitar, bass, and piano players). Students' academic achievement must be satisfactory to be eligible to participate in the Jazz Band due to field trips and extra performances.

Prerequisites: Successful audition and approval of the director. (Refer to page 9 for specific grading and percentage guidelines).

□ LATIN 1

Grades 9,10,11,12

Full Year

1 Credit

It is strongly recommended that a student complete a minimum of two years of the same language. Once a language is begun, it is preferable to complete the entire sequence available before moving on to another language.

Purpose: Latin 1 is a classical language. Its study will help students with English and with the future study of French and Spanish. Latin is also of great benefit to any student interested in the fields of medicine or law. Upon completion of Latin 1, students will be able to see how their own English vocabulary is derived mainly from Latin, they will be able to read a Latin passage effectively, and they will be able to translate short sentences from Latin-English and English-Latin.

Course Description: Latin 1 focuses on proper pronunciation rules, Latin grammar, vocabulary, word study, and translation. In addition to these skills that are necessary to work with the language properly, students will also gain an appreciation of the Roman culture from videos and stories. By the end of their first year of Latin, students will be able to use three noun declensions, three adjective declensions, four verb conjugations, six noun cases, four verb tenses, and approximately 400 vocabulary words as they are found in sentences and stories.

Accelerated Latin Option: After completing Unit 2, motivated students who would like to work ahead will have that option. Permission from teacher and parents is required. If students complete all coursework for Latin 2, they will receive a Pass grade and schedule into Latin 3 the following year.

Purpose: Law exists to present to the students with broad general knowledge of the legal processes and to give them the opportunity to react to these processes. Upon completion of this course, students will be aware of their legal rights and responsibilities as minors and as adults in the business world and as consumers.

Course Description: This course first acquaints the student with the sources & system of laws under which Americans live. This information is divided into the following categories: constitutional law, common law, statutory law, administrative law, and international law. Attention centers next on laws dealing with people in their relation to each other (civil law) or to society as a whole (criminal assault/battery, trespass, nuisance, negligence, etc.). Under criminal law, students learn about laws dealing with public wrongs: felonies, misdemeanors, and summary offenses. The American Judicial System -- the function, organization, and the work of the federal & state court systems -- is the next topic under consideration. Special emphasis is given to youth and the legal system. The study of contracts is probably the most important phase of business law because in modern society it is impossible to go through life without incurring contractual obligations. Special emphasis is given to the contracts of minors, sales contracts, and warranties. Students will learn laws dealing with employment so that they may understand their rights under Social Security, Workers' Compensation, and union contracts. Other topics covered are consumer oriented: "Renting an Apartment," "Buying a House," "Family Insurance Protection," "Buying and Insuring a Car," and "Wills and Intestacy."

Requirements: Students will demonstrate a vocabulary competency of all legal terms through notes written in notebook, class participation, quizzes and standardized tests. Students will demonstrate analytical skills when applying legal principles to specific cases in class discussions and on tests. Students will keep a law notebook consisting of class notes, vocabulary definitions and opinions to specific cases. All of the above and test results will be used for grading purposes.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

□ **MUSIC THEORY**

Grades 10,11,12

Semester

.5 Credit

Purpose: This course is designed for the student who already has a working knowledge of music. Students will develop the skills necessary to study music beyond high school by expanding their knowledge of the theoretical principles of music such as melody, harmony, rhythm and tonality.

Course Description: Music Theory is both a lecture course and a laboratory experience. Students will first learn through lecture and exercises but will quickly begin composing works of their own for eventual class performance. Time will be spent on the computer exploring the practical applications of music technologies.

Requirements: Notes and tests, as well as composition projects completed outside of class.

Prerequisites: Prior musical training (i.e., band, orchestra, chorus, music lessons) and permission of instructor (Refer to page 9 for specific grading and percentage guidelines).

□ **MYTHS AND LEGENDS**

Grade 9

Semester

.5 Credit

Purpose: Mythology is a cross-curricular theme that plays an integral role in popular culture, art, literature, music, and advertising. By increasing the students' knowledge and awareness of mythology, they are better able to analyze allusions in text and how it has influenced our culture.

Course Description: This course is an introduction to Greek mythology for students who are interested in classical mythology, and exploring how it influences our culture. Students will read and discuss stories dealing with the Greek gods (such as Zeus and Eros), titans (such as Cronus), heroes (such as Hercules), and adventures (such as the Trojan War). Students will learn how myths were developed to describe historical events, the origin of the world, and reasoning for events/occurrences around them, and to serve as lessons for behavior. Students will apply this knowledge to recognize, locate, and explain references and allusions to mythology in popular culture, art, literature, music, and advertising.

Requirements: Students will read and discuss stories dealing with Greek gods, heroes, and adventures. There will be a variety of graded activities including group work, class work, quizzes, tests, art projects, as well as writing myths..

Prerequisites: The students will read and discuss stories dealing with Greek gods, heroes, and adventures. There will be a variety of graded activities including group work, class work, quizzes, tests, art projects, as well as writing myths. (Refer to page 9 for specific grading and percentage guidelines).

□ ORCHESTRA 9

Grade 9

Full Year

1 Credit

Purpose: This Orchestra is an intermediate orchestra designed to give the student further experience in a large ensemble. At the completion of this course the student should possess proficient fundamentals of string playing to be eligible for the high school orchestra curriculum.

Course Description: Students in Orchestra 9 are scheduled for three to five 42 minute periods of orchestra rehearsals per week. In addition, each student receives one 42 minute lesson per week as part of a homogeneous group. Students are taught advanced techniques in order to play their instruments with good tone quality, good intonation, accurate rhythm, and adequate technique for their level of experience; they develop skills of independent playing, sensitivity to ensemble blend and balance, and respond accurately to conducting gestures.

Requirements: Each student through individual and ensemble playing will demonstrate knowledge of steady beat, rhythmic accuracy, tone production, phrasing, and musicianship by adapting their uses in the orchestral literature. Students must be willing participate in all phases of the orchestra including participation in rehearsals, concerts, and a weekly rotating sectional lesson. The student's academic achievement must be satisfactory to participate in the orchestra program. Numerous instrumental concepts are introduced and reviewed using selected orchestral literature and exercise in the rehearsal and lesson setting.

Prerequisites: Successful completion of Orchestra 8, a full year of orchestra instrumental lessons, and recommendation of junior high instrumental music teacher (Refer to page 9 for specific grading and percentage guidelines).

□ ORCHESTRA

Grades 10,11,12

Full Year

1 Credit

Purpose: This course exists for the student who desires orchestral performing experiences. It is open to any stringed instrument player who has performed satisfactorily in the junior high orchestra. Wind and percussion players are selected from the Symphonic Wind Ensemble by the Band and Orchestra Directors. At the completion of this course, students should demonstrate music reading skills and instrumental playing techniques acceptable at the senior high school level.

Course Description: Orchestra integrates all families of musical instruments and provides for the advanced study of orchestral literature from the various musical periods. Musical growth is stimulated through rehearsals and performance expectations. This course facilitates improvement of reading skills and provides a medium for the investigation of a great portion of musical literature--the symphonic repertoire. Some comparisons of stylistic trends and forms in related arts are coordinated with the study of the orchestral repertoire. Orchestra is scheduled the same period as Wind Ensemble and chorus. Many students are members of more than one performing organization.

Requirements: Students will participate in all concerts presented by the orchestra. Pupils will arrive at rehearsals with all needed music, instruments, and equipment. When necessary, students will practice musical compositions on an individual basis in order to perform the music at the expected proficiency level.

Prerequisites: Junior High Orchestra. Wind players must be members of the Wind Ensemble (Refer to page 9 for specific grading and percentage guidelines).

□ PSYCHOLOGY 1

Grades 10,11,12

Semester

.5 Credit

Purpose: Psychology 1 is designed to meet the needs of senior high students who want to learn about the science of behavior and how this science relates to their individual lives. Completion of this course will prepare the student with a good background for further study in college, and also enable them to use psychological principles in dealing with personal problems.

Course Description: Psychology 1 will focus on major concepts and theories in psychology, and students will be able to compare and contrast these theories. Basic skills in psychological research will be learned, and students will be able to devise simple experiments. Students will examine psychological theories and develop critical thinking skills rather than blindly accepting these theories. Students will express themselves orally and in written form, and build arguments logically and persuasively. Students will be able to take psychological theories and concepts and apply them to their own lives through a series of non-threatening activities.

Requirements: Students will pass chapter tests and periodic quizzes. Book reports, assignments, classroom participation, and study guide evaluations will be important. Independent research projects will be available for interested students. Students will be required to utilize psychology skills and exercises to further enhance understanding of material.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

□ **PSYCHOLOGY 2** Grades 10,11,12 Semester .5 Credit

Purpose: Psychology 2 is designed to meet the needs of students who want to continue work in human behavior that was initiated in Psychology 1. Completion of this course will provide the student with an in-depth background in Introductory Psychology.

Course Description: Psychology 2 will focus on the following topics: developmental psychology, personality, abnormal behavior, treatment, and social behavior. Theories of psychologists relating to these topics will be examined and discussed. Emphasis will be to get the students more actively involved in the subject of psychology through guest speakers, field trips, audio-visual materials, experiments, small group activity, demonstrations, role-playing and learning games. The emphasis will be placed on helping students learn to love and appreciate psychology.

Requirements: Students will pass chapter tests and periodic quizzes. Book reports, assignments, classroom participation, and study guide evaluations will be important. Independent research projects will be available for interested students. Students will be required to utilize psychology skills and exercises to further enhance understanding of material.

Prerequisites: Psychology 1 (Refer to page 9 for specific grading and percentage guidelines).

□ **ROCK, RAP, AND REVOLUTION** Grades 10,11,12 Semester .5 Credit

Purpose: This course provides students with the opportunity to explore contemporary issues, styles, and genres of music and the music industry, as well as gain an appreciation for music through understanding of basic music concepts. This course is designed to enable students to become intelligent life-long consumers of music, regardless of their musical background.

Course Description: Students will have the opportunity to experience how music has evolved through the last half century through the study of modern styles, messages, and entertainment. Emphasis is placed on music's role as a means of communication and artistic expression in today's society.

Requirements: A complete notebook and journal, participation in class discussion, written and listening assignments, course projects. No prior music experience is necessary.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

□ **RUSSIAN 1** Grade 10, 11, 12 Semester 1 Credit

Purpose: To introduce students to the Russian language, culture and history and to prepare students to study Russian at the university level.

Course Description: Student will learn to read, write, and speak Russian at an elementary level. They will be introduced to a variety of topics, including but not limited to: family, school, work, sports, weather, time, and shopping.

Requirements: Students must be willing to learn a new alphabet, study vocabulary and speak in the classroom setting.

Prerequisites: Students must have completed at least two years of a consecutive foreign language (Refer to page 9 for specific grading and percentage guidelines).

□ **RUSSIAN 2** Grade 10, 11, 12 Semester 1 Credit

Purpose: Russian 2 is available for those students who wish to continue with their study of a Slavic language. Upon completion of Russian 2, students should possess a firm knowledge of the skills necessary for reading, writing, pronouncing and understanding Russian properly.

Course Description: In Russian 2, student will cover more advanced Russian grammar, will continue learning new vocabulary on themes with which they are familiar in addition to expanded topics. Students will become more proficient in Russian-English and English-Russian translation. Students will read various Russian stories in Russian. Further study of Russian culture will be incorporated

participation in projects and activities. Students will be required to do an independent project that relates to a current sociological problem.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

SPANISH 1 Grades 9,10,11,12 Full Year 1 Credit

It is strongly recommended that a student complete a minimum of two years of the same language. Once a language is begun, it is preferable to complete the entire sequence available before moving on to another language.

Purpose: Spanish 1 is designed for students with average or above average verbal ability who wish to learn to speak, read, and write a second language. Completion of the first year of Spanish should enable the student to speak Spanish with pronunciation acceptable to a native speaker and to read and write Spanish using the present tense and useful everyday vocabulary.

Course Description: Spanish 1 is a class where the student will speak Spanish, not English, as much as possible. The student must repeat sentences in Spanish, substitute new words in sentences in Spanish, answer guided questions in Spanish, and answer open-ended questions in Spanish. The student will study vocabulary and continuously use the vocabulary in speaking, reading and writing throughout the year. The student will study and use structure and grammar rules throughout the year. The student will read and discuss in English the culture of Spanish-speaking countries.

Requirements: The student must speak in Spanish, not English, and as much as possible from the first day of the school year to the last day. Homework from the text, from workbooks and from handouts will be assigned on a regular basis. Frequent quizzes will be given on specific vocabulary and grammar sections from the text. Chapter tests are given every several weeks on a large amount of material. Final exams are given at the end of the school year. Willingness to participate in speaking language.

Prerequisites: Sufficient interest and a good background in the English language with at least a 77% average in English (Refer to page 9 for specific grading and percentage guidelines).

SPANISH 2 Grades 10,11,12 Full Year 1 Credit

Purpose: Spanish 2 is for the student who has the ability and interest to continue his study of a second language. The student will continue to speak, read and write in Spanish. Completion of Spanish 2 should enable the student to speak Spanish with pronunciation acceptable to a native speaker and to read and write Spanish using the present tense and one past tense and vocabulary of interest to students and teenagers.

Course Description: Spanish 2 is a class where the student will continue to speak in Spanish, not English as much as possible. The student will review the vocabulary and grammar studied in Spanish 1. He will then continue his study of present tense regular and irregular verbs. He will then study one past tense in Spanish. The student will also continue his study of the structure of the language and the rules of grammar. Vocabulary study will be expanded. The student will continuously use the verbs, grammar and vocabulary in speaking, reading and writing throughout the year. The student will read and discuss in Spanish the culture of Spanish-speaking countries.

Requirements: The student must speak in Spanish, not English, and as much as possible from the first day of the school year to the last day. Homework from the text, from workbooks and from handouts will be assigned on a regular basis. Frequent quizzes will be given on specific vocabulary and grammar sections from the text. Unit tests are given every several weeks on a large amount of material. Semester and final exams are given in January and at the end of the school year.

Prerequisites Spanish 1 (Refer to page 9 for specific grading and percentage guidelines).

SPANISH 3 Grades 11,12 Full Year 1 Credit

Purpose: Spanish 3 is for the student who has the proven ability and interest to continue his study of a second language. The student will continue to speak, read and write in Spanish. Completion of Spanish 3 should enable the student to speak Spanish with pronunciation acceptable to a native speaker; to read and write in Spanish in the present and past tenses; and to read, write and use orally the present tense of the subjunctive mood.

SPEECH COMMUNICATIONS/INTRODUCTION TO JOURNALISM

Grade 9 Semester .5 Credit

Purpose: The purpose of “Speech Communications/Introduction to Journalism” is designed for students who wish to improve their oral communication skills and to acquire a working knowledge of the fundamentals of journalism such as news gathering, writing, editing, photography, design and publication in addition to applying the skills necessary to write and publish news articles consistent with the standards of print journalism. The “Speech” portion of the elective course will be taught in the 1st half of the 18 week semester. The “Journalism” portion of the elective course will be taught in the 2nd half of the 18 week semester.

Course Description: This course provides students with the skills needed to actively communicate orally in a variety of situations ranging from informal to formal speaking. Students will actively participate in informative and persuasive speaking, oral interpretation and storytelling, group discussion and debate. Students will learn to adjust speaking techniques for a variety of audiences. Also, the course enriches the student’s understanding of the history and evolution of print and digital newspapers in a democratic society. Various article and publication formats are addressed in addition to the ethical principles guiding the industry. The course explores the reporting-style of writing by teaching the basic skills of print journalism including – but not limited to – headlining, captioning, interviewing, fact-checking, writing leads, composing articles, editing and publishing. The essentials of photojournalism are also presented.

Requirements: Students are required to perform in front of an audience. The student must participate in daily readings and discussions. In addition, the upkeep of a student journal is required. Homework and staff assignments are assigned regularly and quizzes, exams and projects are administered periodically. Experience using publishing software and a camera is beneficial but not required. The student must meet deadlines and be willing to work during study halls and attend after-school meetings and events if requested to gather school event news.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

SYMPHONIC WIND ENSEMBLE Grades 10,11,12 Full Year .5 or 1 Credit

Purpose: This course is for the advanced instrumentalist who will perform musical works that demand the highest proficiency of instrumental technique, style, and expression.

Course Description: The Symphonic Wind Ensemble is an auditioned group and provides an advanced experience for those students who are exemplary performers. The repertoire performed by this group is of the highest caliber and will provide a challenge to all students through its technical demand and expressive quality. Expectations are placed on superior practice regiments and preparation outside of the rehearsal setting.

Requirements: All members must complete a successful audition, attend all scheduled rehearsals, concerts, performances, and festivals, and maintain a superior practice routine. All members must also attend all scheduled Marching Band rehearsals, band camp, football games, parades, and other performances. Students must be members of the Marching Band to participate. Exceptions may be made at the discretion of the director to complete the required instrumentation (string bass, piano, etc.). Students will be selected to perform as instrumentalists for the full Orchestra.

Prerequisites: Audition and approval of instructor (Refer to page 9 for specific grading and percentage guidelines).

TECHNICAL THEATRE Grades 10, 11,12 Semester .5 Credit

Purpose: Technical Theatre is for the student who plans to continue his/her education after high school graduation. Upon the completion of this course the student should possess advanced skills in the areas of acting, directing, and technical theatre.

Course Description: Performance and Production uses a student-centered approach in the development of skills, attitudes, and understandings of acting, directing, and technical theatre. The course will be heavily centered in the following areas: Ensemble Acting, Dramatic Problem Solving, Improvisation, Characterization, Playwriting, Directing, Technical Theatre, and Theatre Management.

Requirements: Each student will research, design, rehearse, and perform at least eight major character studies during the year. Two major dramatic productions will be designed and performed by the class with each member participating in various aspects of the production. Research into the development of acting, directing, and technical theatre will be completed and presented in a series of workshops for the course. A major design project will be completed by each student, encompassing one of the following: Set Design, Lighting Design, Costume Design, or Special Effects Design.

Prerequisite: Introduction to Drama or previous stage experience as determined by the instructor (Refer to page 9 for specific grading and percentage guidelines).

□ **TV PRODUCTION**

Grades 9

Semester

.5 Credit

Purpose: The purpose of this course is to provide students the opportunity to explore TV media in depth and produce a daily TV news show. Students will participate in a daily TV morning news show rotating as producer, floor manager, reporter, writer, camera person and/or announcer. They will strengthen oral communication skills, writing skills, and creativity by scheduling, interviewing, scripting, reporting, and announcing. Students will also gain technical knowledge in audio and video production.

Course Description: Most production work is done on deadlines. Daily commitment to the production and early arrival at school is required (generally 7:00 – 7:15 A.M.) Students will also be required to participate in all or most of the jobs necessary to produce a daily news show. Depending on the role or assignment, some out-of-class work will be required. Willingness to give up some study halls or stay late is also required.

Requirements: Teacher recommendation and application is required. Experience using a camcorder and editing software is a plus but not required. Class size will be limited.

Prerequisites: Application must be submitted to the Guidance Office (Refer to page 9 for specific grading and percentage guidelines).

□ **VOCAL ENSEMBLE (FANTAZIA)**

Grades 10,11,12

Full Year

1 Credit

Purpose: This course is designed to provide the advanced vocal student the opportunity to sing a wide variety of styles of choral music while focusing on comprehensive musicianship.

Course Description: Fantazia is an auditioned group designed to strengthen and challenge the musical skill of its exceptional performers. Repertoire will include sacred and secular music which support the development of music reading skills, vocal technique, and music comprehension skills including theory, appreciation, and history.

Requirements: Students must participate in all scheduled rehearsals and performances.

Prerequisites: Audition to be given in the spring semester prior to enrollment and approval of instructor (Refer to page 9 for specific grading and percentage guidelines).

HEALTH & PHYSICAL EDUCATION

(All students must take **four** credits.)

□ HEALTH

Grade 9

.5 Credit

Purpose: Health Education is designed to provide for the social, mental, emotional and physical development of each child. At the completion of this course, the student will be provided with health information and decision making skills that will assist him/her to make mature judgments about both present and future health decisions.

Course Description: The scope of Health Education will cover: Alcohol, Drugs and Tobacco, Mental and Social Health, First Aid, Human Sexuality, AIDS, Nutrition, Cardiovascular Health, Communicable Diseases, Fitness Concepts, and Body Systems.

Requirements: All students will be required to perform satisfactorily on objective and essay tests and quizzes. Homework will be assigned and will include text readings, outside readings as well as written assignments. The student is also expected to participate in class discussions and oral reports. Students may also be assigned independent or group projects and written exercises and essays.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

□ HEALTH

Grades 10

.5 Credit

Purpose: Health Education, a required course for graduation, is offered to the students as a three-dimensional subject covering the physical, mental, and social aspects of each area of concentration. In order to help students form habits and attitudes leading to good health practices, the curriculum is geared to learning situations relating to environment, family, and society.

Course Description: Health Education units are taught through a semester long course as an integral part of the physical education year, but Health will constitute a single grade independent of Physical Education. Health Education will meet for one semester, five days a week during the student's sophomore year. New students or transfer students to the district will be required to complete health unit for graduation. The Health Education course consists of nine units:

A Healthy Foundation
Physical Activity & Nutrition
Mental & Emotional Health
Promoting Safe & Healthy Relationships
Body Systems

Human Reproduction Growth & Development
Tobacco, Alcohol, & other Drugs
Diseases & Disorders
Injury Prevention & Environmental Health

Requirements: All students will be required to perform satisfactorily on objective and essay tests and quizzes. Homework will be assigned and will include text readings, outside readings as well as written assignments. The student is also expected to participate in class discussions and oral reports. Students may also be assigned independent or group projects and written exercises and essays.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

□ LIFEGUARDING

Grades 10,11,12

Semester

.5 Credit

Purpose: To provide entry-level lifeguard participants with the knowledge and skills to prevent, recognize and respond to aquatic emergencies, provide professional-level care for breathing and cardiac emergencies, injuries and sudden illnesses until emergency medical services personnel take over.

Course Description: The American Red Cross Lifeguarding course is to provide entry-level lifeguard participants with the knowledge and skills to prevent, recognize and respond to aquatic emergencies, provide professional-level care for breathing and cardiac emergencies, injuries and sudden illnesses until emergency medical services personnel take over.

Requirements: Students must be present for **ALL** classes. Only students who pass all skill requirements and exams will receive certification.

Prerequisites: Students **MUST** be a minimum of 15 years of age, swim 300 yards continuously demonstrating rhythmic breathing, tread water for 2 minutes, and complete a timed event in 1 minute and 40 seconds. (Refer to page 9 for specific grading and percentage guidelines). Students are responsible to pay a class fee that will cover the certification, class manual, and First Aid Equipment (students will keep this equipment upon completion of the class). Students will also be responsible for providing their own swimsuit.

*****Grading:** This class will also take the place of your physical education requirement for (1) one school year. You will receive a physical education grade based on participation/attendance, dress, and quizzes/exams. (1) 25% regular uniform, (2) 25% participation, and (3) 50% classwork and written exams.

☐ **PHYSICAL EDUCATION** Grade 9 2 or 3 periods weekly .5 Credit

Purpose: Physical Education is designed for all students who attend junior high regardless of physical, mental, or social skills. Students will be able to participate in various activities, which will develop them physically, mentally, socially, and emotionally.

Course Description: Students will spend a major part of class time learning physical skills and participating in game situations to practice these skills. Also rules of various games, etiquette, execution, and scoring will be stressed. The Physical Education program will consist of instruction in and knowledge of a variety of types of activities such as individual sports, individual and conditioning exercises, team sports and lifetime sports. The course will also involve learning the fundamentals and rules of these activities.

Requirements: At the end of the year, the students will have acquired a working knowledge of the fundamentals and through participation will have improved the performance of these fundamentals and skills. They will also be able to demonstrate teamwork, cooperation and observance of safety rules.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

☐ **PHYSICAL EDUCATION** Grades 10,11,12 .5 Credit

Purpose: Physical Education meets five days a week for one semester each year in grade(s) 10, 11, & 12. Physical Education is required by the curriculum regulations of the State Board of Education each year for graduation. Participating in the activity selections made available encourages the importance of staying active throughout one's adult life.

Course Description: The Selective Physical Education program is designed to expose students to a variety of lifetime activities. Golf, archery, tennis, swimming, camping, etc., are offered in addition to developing overall physical fitness that will help to build both the physical and behavioral skills needed to be physically active throughout life. All activities will begin with basic skills and progress towards more complex movements enabling the student to perform all skills in an activity or game situation. Physical Education will constitute a single grade separate from Health Education.

Student Supplies not covered by District Funds: Students are responsible for providing their own physical education uniform, including shoes and swimsuit.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

ELECTIVES

(All students must take **five** credits.)

- ACCOUNTING 1** Grades 10,11,12 Full Year 1 Credit

Purpose: The Accounting 1 course is for any student seriously interested in learning accounting. The course may be an elective for students in any curriculum. At the completion of this course, students should be able to perform entry-level work in accounting as a general office clerk or an accounting clerk. The material taught in Accounting 1 may also be of benefit to students from a personal standpoint or as a basic foundation for additional study of accounting in high school or beginning accounting at a university, college, or business school.

Course Description: Accounting 1 includes all the steps done manually in an accounting cycle for both service businesses and merchandising businesses organized as proprietorships and partnerships. Students will learn how to start an accounting system as they master the accounting equation. Learning progresses through analyzing and recording transactions from narrative statements and from source documents into journals, posting journal entries from the journals into different ledgers, preparing an 8-column work sheet with adjustments, preparing financial statements, recording and journalizing adjusting and closing entries into a journal, posting adjusting and closing entries to a general ledger, and preparing a Post-Closing Trial Balance. In addition, students will learn how to prepare check stubs, write checks, and reconcile a bank statement.

Requirements: Accuracy, neatness, and legibility of writing are essential for work in accounting. Students must enjoy the challenge of working with numbers and be meticulous, organized workers. Each student is required to do **daily** class work. Chapter problem tests and study guide (theory) tests are given at the end of each chapter.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

- ACCOUNTING 2** Grades 11, 12 Full Year 1 Credit

Purpose: The Accounting 2 course is for all students who have successfully completed Accounting 1. At the completion of this course, the students should be able to perform entry level work as an accounting clerk or a specialized accounting clerk. The material taught in Accounting 2 may also be of benefit to students from a personal standpoint or as a basic foundation for additional study of accounting at a university, college, or business school.

Course Description: Accounting 2 includes all the steps done in an accounting cycle for service and merchandising businesses (including partnerships) using an automated accounting system for the computer. This computerized program provides a realistic approach to automated accounting principles. Material and concepts not taught in Accounting 1 will be included in Accounting 2 as follows: payroll systems; accounting cycle using special journals; accounting for sales tax, bad debts, plant assets and depreciation, disposing of plant assets; accounting for notes, accrued revenue, and accrued expenses; and accounting for partnerships and corporations.

Requirements: Excellent attendance is absolutely critical as some accounting problems are done on the microcomputer in class only. Each student is required to do daily class work. Chapter (problem solving) tests are given at the end of each chapter.

Prerequisites: Accounting 1, skill in typing or keyboarding would be very helpful for working on the microcomputer. **NO PRIOR COMPUTER COURSES OR EXPERIENCE ARE NECESSARY** (Refer to page 9 for specific grading and percentage guidelines).

- ACCOUNTING 3** Grade 12 Full Year 1 Credit

Purpose: To provide students with knowledge for entrance into higher education or the workforce.

Course Description: This course will cover specific areas of accounting, accounting control systems, general accounting adjustments, corporation accounting, management accounting, and cost accounting.

Requirements: Students will demonstrate ability to complete accounting forms; apply knowledge to complete a business simulation covering the above topics and shadow an accountant.

Prerequisites: Accounting 1 and Accounting 2 (Refer to page 9 for specific grading and percentage guidelines).

□ **ADVANCED PLACEMENT MICRO ECONOMICS**

Grade 11, 12

Full Year

1 Credit

Purpose: An opportunity for interested students to earn college credit while fulfilling PA state economics standards through a rigorous college level course. This course will introduce students to complex economic concepts at the individual decision level.

Course Description: The purpose of an AP course in microeconomics is to give students a thorough understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the economic system. It places primary emphasis on the nature and functions of product markets, and includes the study of factor markets and of the role of government in promoting greater efficiency and equity in the economy. Students will examine the role and impact the choices each of these decisions makers play in the overall economy and learn to evaluate the outcome of economic actions.

Requirements: Students must demonstrate successful performance on objective exams on text content; written essay or analytical papers, assigned at regular intervals; and class discussions. A concluding exam will follow each unit. Objective exams, written papers, class discussions, essay exams and projects carry approximately equal grading weight. Performance on the College Board exam in May has no bearing on the course grade. Students are expected to take Standardized Advanced Placement test at the end of the school year at the current cost. Based on the performance on the exam, some colleges will exempt the student from taking an entrance level course during the first year of enrollment. Students will also be required to complete a graded summer assignment designed to introduce them to the basic concepts of economic thinking. Failure to complete the summer assignment will necessitate a withdrawal from the course. Students will have a summer assignment due before August.

Prerequisites: AP course, Social Studies class and teacher recommendation. Due to enrollment limitations, scores on a written readiness screener exam will be evaluated as a criteria for selection (Refer to page 9 for specific grading and percentage guidelines).

□ **CARDIOVASCULAR LAB**

Grades 10, 11, 12

Full Year

.5 Credit

Purpose: The main purpose of this class will be to develop fitness by increasing activity levels and promoting healthy life-long habits.

Course Description: The outcome of this class is to help students understand the significance of physical activity and living a healthy lifestyle through the development of individualized fitness plans. This class will help students develop and establish healthy, lifelong physical activity patterns. The *Tigers Fit For Life* booklet, in conjunction with ATN's personal fitness series, "The You Zone", and it's nutritional series, "The Eating Zone", Fitnessgram and Physical Best will provide comprehensive instruction and information to make healthier life choices. Students will be able to monitor their own health and physical activity levels, evaluate their Healthy Fitness Zone and Fitnessgram and analyze ways to be more successful in living healthier lifestyles and meeting Pennsylvania Standards for Health and Safety.

Requirements: Students must dress in uniform, keep fitness log, completion of log book, attendance, and participation.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

□ **CHIMROCK**

Grades 10,11,12

Full Year

.5 Credit

Purpose: This course includes the marketing, production and design of the student yearbook, *The Chimrock*. At the end of the course, the finished yearbook will be distributed to the student body.

Course Description: Yearbook production begins with the selling of advertisements to generate revenue. Next, students select thematic content, design the cover and end sheets of the yearbook, and then begin the arduous task of designing each page. Each page of the yearbook must be laid out, all captions and copy must be written and typed, all photographs must be cropped and identified, and final copies must be drawn and properly labeled. Students must meet deadlines, which are established by the yearbook company in order to insure that the book is completed by the conclusion of the school year.

Requirements: The student must be willing to sell advertisements, stay for after-school meetings, take pages and photographs home for completion and identification, and be willing to be cooperative and dedicated to the production of a book which will be a lasting memento for him.

Prerequisites: The student must apply for membership on the yearbook staff, and he must be able to rearrange his schedule if necessary. There are a limited number of staff positions available. These positions will be filled with teacher recommendations (Refer to page 9 for specific grading and percentage guidelines).

CIVIL WAR: CAUSES AND CONSEQUENCES Grade 10 and 11 Semester .5 Credit

Purpose: To examine historical topics relating to the American Civil War (1861-1865). This course will explore the social, political, and economic causes and consequences of the Civil War, as well as the experiences of individual soldiers and civilians during the conflict.

Course Description: Students will investigate topics relating to the American Civil War by examining a variety of media, including primary source documents, music and images. Students will evaluate the causes and lasting cultural impacts of this conflict, as well as the contributions and struggles of various groups during this time period. Major topics of study will include the political and economic landscape before, during, and after the war. Students will discuss the role of slavery as a catalyst for the breakdown of the Federal Union and the efforts of reconstruction after the war. Students will experience the war's effect on the home front of people in both the Union and Confederate States.

Requirements: Students will complete projects relating to the American Civil War and analyze a variety of media including primary source documents, poetry, music, and images.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

COMPUTER-AIDED ENGINEERING (CAE) 1 Grades 10,11,12 Semester .5 Credit

Purpose: To foster and engage students through a realm of engineering design through a project based approach where they will gain valuable communication and problem-solving skills.

Course Description: The course will introduce students to computer-aided drafting and design. Students will explore technical sketching techniques, basic two-dimensional CADD drawing creation and editing techniques, parametric solid modeling, and the engineering design process. Students can expect to use industry-leading software such as AutoCAD, Inventor, and SolidWorks to aid in project conceptualization and working drawings for communication specific design intent. Sample projects may include the Google Cardboard VR System, Mousetrap Vehicles, Electric Vehicles, and Individual Design Projects.

Requirements: Completion of various board drawings, group and individual design projects.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

COMPUTER-AIDED ENGINEERING (CAE) 2 Grades 11,12 Semester .5 Credit

Purpose: To foster and engage students through a problem solving and project based approach using computer-aided drafting and design skills to solve engineering-based problems and design challenges.

Course Description: The course is the continuation of the computer-aided design thread begun in CAE 1. The objective of the course is to enhance and fine tune the skills developed in the previous course through the use of specific projects and open-ended problems. Again, students can expect to use industry-leading software such as AutoCAD, Inventor, Revit and SolidWorks to aid in project conceptualization and working drawings for communication specific design intent. Sample projects may include a team design project, home design, and a year-long independent Design Project.

Requirements: Completion of various board drawings, group and individual design projects, Assembly Drawings, and Prototyping.

Prerequisites: Computer-Aided Engineering 1 (Refer to page 9 for specific grading and percentage guidelines).

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- **CONSTRUCTION TECHNOLOGY** Grades 10,11,12 Semester .5 Credit

Purpose: Students will learn to use tools and materials for basic home maintenance.

Course Description: Units will include plumbing repairs, fasteners and hardware; ordering materials; basic electrical repairs; door and window repairs; setting up a home workshop; insulation; cement work; care of tools and equipment; and related careers. This course will emphasize hands-on activities.

Requirements: A notebook will be required.

Fees: Students will pay a \$20.00 flat fee for materials they will be using in the laboratory setting.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

- **COOPERATIVE EDUCATION WORK EXPERIENCE** Grades 12 Full Year 2 Credits

Purpose: The purpose of the course is to provide students with an opportunity to gain job skills and training while working at actual employment sites. At the completion of the year, the student will have made the successful transition from student to employee in the world of work.

Requirements: Each student must find his/her own employment site. The student will be required to complete monthly forms related to the workstation. An on-the-job evaluation will be completed by the employer each marking period to determine marking period grades. Each student must maintain passing grades in all subjects and have a good attendance record.

Prerequisites: The student's employment site must be approved by the co-op coordinator. Recommendations by teachers and counselors will also be considered, along with attendance records (Refer to page 9 for specific grading and percentage guidelines).

- **COOPERATIVE WORK EXPERIENCE ASSISTANT** Grade 12 Full Year 1 Credit

Purpose: The co-op office aide will assist the co-op coordinators with various office duties that occur on a daily basis. This extra assistance will provide more time for the coordinators to meet with the students concerning work place issues.

Course Description: The co-op office aide will be responsible for clerical duties as they pertain to the co-op program. These duties can include the following: answering the phone and taking messages, recording daily student attendance, inputting co-op data, delivering materials and messages, filing, completing mailings, organizing office records, and other assigned duties as needed.

Prerequisites: Submission of application to the co-op office, excellent attendance record, prefer a first period time slot (Refer to page 9 for specific grading and percentage guidelines).

- **DISCOVERING PHOTOGRAPHY** Grades 10, 11, 12 Semester .5 Credit

Purpose: This course is intended to introduce 35mm photography to interested students who plan to take further photography courses, digital in high school or any photography in college and is a great supplemental class that would complement a student's study in other art, history, and/or science courses.

Course Description: Students will study the photographers, artists, and scientists throughout photography's history and how they used and developed the technical aspects of taking a photograph congruent to the times. All aspects of taking and making a photograph using 35mm cameras will be studied and practiced.

Requirements: Participation in classroom activities, care of cameras and equipment. Students must pay for film, paper, dry mount tissue, and negative page (average of about \$45.00).

Prerequisites: Art 1 in high school or Introduction to Art in 9th grade helpful (Refer to page 9 for specific grading and percentage guidelines).

□ **DRAMA ASSISTANT** Grade 10, 11, 12 Full Year .5 Credit

Purpose: The Drama assistant program exists for the motivated Drama 1, 2 or 3 students who has a desire to work on the special projects and activities involved in the extensive Drama program at the Senior High. The program will give the student a hands-on experience with the daily activities of producing and publicizing the performing arts program in current production. Writing, editing, and the distribution of publicity information and production projects will be the central focus of this experience. They will utilize available media to generate ticket sales and publicity.

Course Description: The Drama assistant will help with the publicity and production projects of the performances scheduled at the Senior High. They will assist with special projects including but not limited to: Show Publicity, Editing, Costumes, Make-up, Sets, Props, and Lighting as required. This position is one of responsibility and dedication that will relate to the success of Theatrical Productions in our building.

Requirements: The Drama assistant must have completed or be currently enrolled in Drama 1, 2, or 3, and have a sincere interest in the overall success of our productions. They will give themselves an effort grade each semester that reflects their time spent on the assigned projects.

Prerequisites: Drama 1, 2, or 3 (Refer to page 9 for specific grading and percentage guidelines).

□ **ENGINEER BY DESIGN** Grade 9 Semester .5 Credit

Purpose: The Engineering by Design class for ninth grade is a course for any student who wants to increase their knowledge in the field of Engineering. At the end of the course, students will have the knowledge of what an Engineer is and what he or she does on a daily basis.

Course Description: Students in this course will participate in lessons that include STEM (Science, Technology, Engineering and Mathematics). The lessons that will be taught in this course will involve activities in engineering design, forces, problem solving, transportation and solid modeling. Students will also be introduced to 3D printing.

Requirements: The students will participate in classroom discussions to develop the hands-on/minds-on skills needed to be successful in this course. Students will also submit assignments and projects on time and follow the technology education safety rules and procedures.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

□ **ENGINEERING BY DESIGN** Grades 11, 12 Semester .5 Credit

Purpose: To prepare students to understand and apply technological concepts and processes. This is a National Standards based course developed by the ITEEA-CATTS Consortium to address the need for increased emphasis on the STEM initiative.

Course Description: The course is designed to engage students in open-ended problem solving, learn and apply the engineering design process, and use some of the same industry-leading technology and software that is used in the world's top companies. Topics covered include: problem identification, formulation of the problem, and proposed solution(s). Students will utilize advanced CADD techniques to assist in these design challenges. Students will also develop the ability to use a 3_d Printer to meet their design needs, create functional prototypes, etc..

Requirements: Students are required to apply the design process to solve problems in and beyond the laboratory.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

□ ENGINEERING/MANUFACTURING STUDIES

Grade 10, 11, 12

Semester

.5 Credit

Purpose: To foster and engage students through a problem solving and project based approach using production skills to solve engineering-based problems and design challenges.

Course Description: The Engineering Manufacturing Studies course is designed to introduce students to the principles that influence the decisions made in the world of engineering and manufacturing. Students will use a team-based approach to learn communication skills, problem-solving skills, and other skills that apply to the manufacturing and engineering processes. Each student will be expected to play an active role in the class manufacturing project. Upon completion of the course, all will be required to have maintained a daily lab journal, produce a manufactured project, and prepare and deliver a report summarizing their experience.

Requirements: Completion of various production projects along with group and individual design projects.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

□ ENTREPRENEURISM

Grades 10, 11, 12

Semester

.5 Credit

Purpose: The purpose of this class is to expose students to the world of Small Business. Topics include, planning, organizing, and running a small business.

Course Description: This course will explore what it takes to become a business owner. It will help students understand why decisions are made in a company, and what purpose those decisions have. We will also cover how to obtain financing for the start of a business and how to prepare a Business Plan that is acceptable to financiers. Other topics will be risk management, human resource management, barriers to entry, and company promotion.

Requirements: Students must be willing to learn concepts that will help them build toward owning their own business. Basic math skills and graph reading are needed. Students must participate in various class activities, research, and various other assignments. Students must meet the various deadlines.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

□ HONORS ENGINEERING PHYSICS

Grades 10, 11, 12

Semester

.5 Credit

Purpose: To expose students to open ended problem solving, and project based assessments, physics, mathematical modeling through STEM related topics through hands on learning. Possible topics and projects include: remote sensing, nanotechnology, and physics or sports safety equipment, aerodynamics and impact testing for cars, electronic circuits, biomechanical modeling, and trajectory projects, or coding.

Course Description: This course is designed as a student centered cooperative learning environment, as well as individual projects, with inquiry labs and activities. The course focuses on mathematical/computer modeling, problem solving, and electronic/gear computations. Real world applications of physics will be studied.

Requirements: Students will be required to complete reading, homework, laboratory assignments, student journals, as well as, additional preparation outside of class is needed for success in the class. All student work will be graded. This includes and is not limited to: labs, activities, homework, quizzes/exams, and projects. Concurrently signed up for Honors Engineering and Robotics.

Prerequisites: Honors Chemistry 1 or concurrently taking Honors Chemistry 1 (Refer to page 9 for specific grading and percentage guidelines).

□ HONORS ENGINEERING AND ROBOTICS

Grades 10, 11, 12

Semester

.5 Credit

Purpose: To expose students to open ended problem solving, and project based assessments, physics, mathematical modeling, remote sensing, and STEM related topics through hands on learning. Example projects and lessons will include: physics of sports safety equipment, aerodynamics, and impact testing for cars, electronic breadboard, biomechanical modeling, and trajectory projects (Punkin' Chunkin').

Course Description: This course is designed as a student centered cooperative learning environment, as well as individual projects, with inquiry labs and activities. The course focuses on mathematical/computer modeling, problem solving, and electronic/gear computations. Real world applications of physics will be studied in areas such as sporting equipment, biomechanics, speed, trajectory, electronic breadboards, and design engineering.

Requirements: Students will be required to complete reading, homework, laboratory assignments, student journals, as well as, additional preparation outside of class is needed for success in the class. All student work will be graded. This includes and is not limited to: labs, activities, homework, quizzes/exams, and projects. Concurrently signed up for Honors Engineering Physics.

Prerequisites: Honors Chemistry 1 or concurrently taking Honors Chemistry 1 (Refer to page 9 for specific grading and percentage guidelines).

□ HONORS EUROPEAN LITERATURE

Grades 10

Full Year

1 Credit

Purpose: To enhance student understanding of literature at an advanced level, improve student preparation for the AP test, and to challenge our best and brightest students.

Course Description: Honors European History is a course that is designed for 10th grade students taking the AP European History class. This course will study the literature from approximately 1300 to present written by European authors. These students will read literature and para-literary documents from this time period to develop their literary and analytical skills and in discussion and writing. The course will parallel the historical timeline as presented in the AP European History class. By coupling these classes, students will more fully comprehend how literature is a reflection of history and how history is affected by the literature it produces.

Requirements: Students must be enrolled in AP European History and Honors English 10 to take this course.

Prerequisites: Honors English 9 and Honors History 9 (Refer to page 9 for specific grading and percentage guidelines).

□ HUMAN ANATOMY AND PHYSIOLOGY

Grade 9

Semester

.5 Credit

Purpose: Human Anatomy and Physiology is designed to give students an introduction to the human body. It also provides students with health career exploration opportunities.

Course Description: Human Anatomy and Physiology is a one-semester elective designed to give students an introduction to the structure and function of the human body. Students study each body system beginning at the cellular level while also learning the interactions among the systems. In addition, the students are introduced to various occupations within the medical field through in-class visits from medical professionals and field trips.

Requirements: Students are expected to successfully complete homework projects, and lab dissections. Tests will be given at the completion of each chapter.

Prerequisite: Eighth grade students are required to write a one-page essay explaining their reasons for requesting the course. Essays are to be submitted to the Guidance Office. Class size is limited. (Refer to page 9 for specific grading and percentage guidelines).

□ INTRODUCTION TO 3D PRINTING

Grade 10, 11, 12

Semester

.5 Credit

Purpose: This semester long course will expose students to open ended problem solving and project based assessments, computer-aided modeling, various 3D printing technologies, and other STEM related topics through hands on learning.

Course Description: Students will learn about the evolution of digital fabrication with a full overview of the manufacturing industry and related technologies. Each hands on project based learning (PBL) course will let students design and fabricate 3D objects using computer aided design (CAD) software and 3D printers. They will experience the design process and become familiar with the advantages and limitations of each 3D printing technology in terms of precision, resolution, and material capabilities. Students will analyze real industry cases, and apply 3D printing technology appropriately while gaining hands on experience with leading 3D printing technologies employed in manufacturing today.

Requirements: The students will participate in classroom discussions to develop the hands-on/minds-on skills needed to be successful in this course. Students will also submit assignments and projects on time and follow the technology education safety rules and procedures.

Prerequisite: CAE I or Engineering Design (May take concurrently), and Algebra (Refer to page 9 for specific grading and percentage guidelines).

□ INTRODUCTION TO BUSINESS

Grade 9

Semester

.5 Credit

Purpose: Introduction to business is designed to give students an opportunity to learn about basic business topics with emphasis on accounting and banking. This course not only offers a starting point for building a career, but it teaches students how to organize and summarize personal financial facts. At the end of the course, students will have knowledge of the language of business and some experience in personal money management.

Course Description: Introduction to Business is a course intended to introduce the students to the world of business and help prepare them for the economic roles of consumer, worker, and citizen. This course will serve as a background for other business courses students may take in high school and in college, assist students with consumer decision-making, prepare students for future employment, and help students effectively perform their responsibilities as a citizen.

Requirements: Students are expected to learn the business terms presented. They must complete a final accounting project and the practice set described above. If students are absent, they must make up all work. Daily assignments, class participation, work habits and chapter tests are also used for grading purposes.

Prerequisite: (Refer to page 9 for specific grading and percentage guidelines).

□ MARKETING 1

Grades 10,11,12

Full Year

1 Credit

Purpose: Marketing 1 is a course of study designed to train students for careers in marketing. The skills, attitudes, and knowledge, which are utilized in the marketing field, are needed in approximately one out of every four jobs in the U.S. Students will study product development, pricing, distribution, advertising, customer buying behaviors, and demographics of customers. This course is an excellent beginning to the student who is considering a career in the business sector of the economy.

Course Description: Marketing 1 is a course of study designed as an introductory course to the field of marketing and to the business environment. Although lectures will be given on many topics, this course is intended to be hands-on with many in-class discussions, projects, and activities. Topics that will be covered include the following: Personal Selling, Retailing, Human Relations, product distribution, applied math skills, advertising and display techniques. Students in this course will be expected to work individually as well as part of a team. Many in-class as well as out-of-class activities and projects will be given throughout the year. Textbook will be given and graded periodically, and tests will be given. Announced and unannounced quizzes will be given at the teacher's discretion. Class participation in activities, projects, class discussions, and role-play activities is essential. Projects will include doing research on Marketing subjects, and writing summaries and conclusions from that research. Field trips, related to business/marketing, will be followed by summary and evaluation. Students will apply all marketing learning to all aspects of running *The Jungle*, HAHS school store.

Requirements: This course will require students to actively participate in a number of projects and activities. Tests will be given at the end of each unit and quizzes (announced and unannounced) will be given at the teacher’s discretion over the duration of a unit. Class participation is essential to the student’s progress. Students should be prepared to research subjects and summarize that research.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

MARKETING 2 Grades 11, 12 Full Year 1 Unit

Purpose: Marketing 2 is a course of study designed to train students for careers in marketing. This course will give students a chance to analyze marketing and service-related situations, then give an oral and written presentation of their findings.

Course Description: Practical skills related to marketing and the business environment, which are beneficial to any student interested in pursuing further education in the business curriculum. Although lectures will be given on many topics, this course is intended to be very hands-on with many in-class discussions, projects, papers, presentations, guest speakers, and other appropriate activities. Students in this course will be expected to work individually as well as part of a team. Many in-class as well as out-of-class activities and projects will be given throughout the year. Class participation in activities, projects, class discussions, presentations, and role-playing activities is essential. Students will apply all marketing learning to all aspects of running *The Jungle*, HAHS school store.

Requirements: This class will require students to actively participate in a number of projects and activities. Tests will be given at the end of each chapter and unit and quizzes will also be given. Homework may be given and class participation is essential to the student’s progress.

Prerequisites: Successful completion of Marketing 1.

MARKETING 3 Grade 12 Full Year 1 Unit

Purpose: Marketing 3 is a course of study designed to train students for careers in marketing. This course will give students a chance to analyze marketing and service-related situations and delve into more advanced topics related to marketing. It will also allow the student to explore marketing-related fields, participate in real-world projects, and find a job in marketing.

Course Description: This course is the third in a series of three marketing courses. Practical skills related to marketing and the business environment, which are beneficial to any student entering the world of work, will be covered. Although lectures may be given on many topics, this course is intended to be very hands-on with many in-class discussions, projects, and activities. Topics which may be covered include the following: Service and Non-Profit Marketing, International Marketing & Trade, Cultural Differences in Behavior, Current Marketing Trends, and Obtaining a Job in Marketing. Students in this course will be expected to work individually as well as part of a team. Many in-class as well as out-of-class activities and projects will be given throughout the year. Tests may be given periodically. Class participation in activities, projects, class discussions, and role-play activities is essential.

Requirements: This course will require students to actively participate in a number of projects and activities. Students will apply all marketing learning to all aspects of running *The Jungle*, HAHS school store. Tests may be given at the end of each learning unit and projects may also be given. Class participation is essential to the student’s progress and success.

Prerequisites: Successful completion of Marketing 2.

PERSONAL FINANCE Grade 10, 11, 12 Semester .5 Credit

Purpose: Focus on topics to help students plan a secure financial future.

Course Description: This course will explore financial planning tools using a step-by-step approach to help students identify and evaluate choices as well as understand the consequences of decisions in terms of opportunity costs. It will explore sources of personal income, savings and consumer spending patterns in the United States. This course will help in the development of techniques for planning and budgeting consumption expenditures and savings, with special emphasis on the use of saving allocations to achieve personal goals: real fundamentals of financial planning so they can make informed choices related to spending, saving, borrowing, and investing that leads to long-term financial security.

Requirements: Participate in various class activities and assignments.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

□ PRODUCTION TECHNOLOGY

Grades 10, 11, 12

Semester

.5 Credit

Purpose: To foster and engage students through a problem solving and project based approach using production skills to solve engineering-based problems through production.

Course Description: This course is designed to provide for the students a basic understanding of manufacturing processes used in production. Upon completion of the course, the student will be able to perform a variety of problem-solving activities related to tools, materials, processes, tests and measurements. Students will construct individual projects with some degree of self-dependence. They will incorporate principles of design, planning, and safe operation of tools/machines into their projects. Under the direct supervision of the instructor, students are provided with basic skills using measuring tools, hand tools, machines and material processing. Physical, mechanical, and chemical properties of industrial materials will be studied. Through the experience of working directly with industrial materials, the student will develop an appreciation for research/design, craftsmanship, safety, orderly procedure, and a sense of pride.

Requirements: Completion of various production projects along with group and individual design projects. Students will be required to read assigned material, complete information and operation sheets, participate in group discussions, and with acquired skills complete required exercises and projects related to content area.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

□ RESEARCH AND DEVELOPMENT IN ENGINEERING

Grade 12

Semester

.5 Credit

Purpose: The Research and Development course is designed to provide students with opportunities to solve problems and make decisions in engineering and manufacturing.

Course Description: This course will provide students with methods and strategies for solving problems common in manufacturing and engineering firms. The students will learn the basic principles that drive decisions in the work world and will use these principles for making decisions that optimize results. The students will use a team approach as they establish a “company” for the purpose of utilizing these decision-making principles.

Requirements: Students will be expected to participate in a project in which they will establish a company for the purpose of researching, designing, creating and marketing a product. Students will be expected to complete daily assignments and to take regular quizzes and tests. Attendance and participation at an internship appreciation activity is required.

Prerequisites: Enrolled in the engineering cluster of the Associate Degree Prep program and successful completion of the Engineering/Manufacturing Studies course (Refer to page 9 for specific grading and percentage guidelines).

□ ROBOTIC TECHNOLOGY

Grade 9

Semester

.5 Credit

Purpose: The Robotic Technology class for ninth grade is a course for any student who wants to increase their knowledge in the fast growing field of Robotics. At the end of the course, students will have the knowledge of what Robotic Technology is and what types of jobs involve the use of Robotic Technology.

Course Description: Students in this course will participate in lessons that include STEM (Science, Technology, Engineering and Mathematics). The lessons that will be taught in this course involve how signals are sent, current and voltage, how much a motor will lift and how gear ratios affect speed and torque. Students will also program their robots to complete a maze and complete a radio control challenge.

Requirements: The students will participate in classroom discussions to develop the hands-on/minds-on skills needed to be successful in this course. Students will also submit assignments and projects on time and follow the technology education safety rules and procedures.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

□ SEA, AIR, AND LAND ENGINEERING APPLICATIONS

Grade 10, 11, 12

Semester

.5 Credit

Purpose: In the Sea, Air, and Land Challenge, teams of high school students learn the engineering process through the design of a system relevant to the Department of Defense. The systems are then used to compete in challenges that mimic missions encountered by the military, national security agencies and first responders.

The Sea, Air, and Land Challenge provides the opportunity for high school students to tackle difficult engineering tasks while working with educators and industry mentors. Teams had sixteen weeks to design unmanned vehicles and intelligence, surveillance and reconnaissance (ISR) payloads to complete in predefined sets of challenges.

SEA CHALLENGE: In this challenge, teams developed a submersible to search for components of another unmanned submersible which has sunk. Teams must be able to discover and identify objects that are located on the seafloor and pick them up. They will then have to place them into a vessel that will transport them to the surface while continuing to search.

AIR CHALLENGE: There are a number of contained forest fires that require precise, aerial water drops due to their remote location. The exact location of these fires is not known, so a pilot must detect the correct location for the drop, and then carefully target the location with water drop. In the future, unmanned aircraft will perform this task to reduce costs and risks to pilots. Unlike a manned aircraft, which has an experienced pilot, the unmanned aircraft must carry its own sensors to detect the fire, and a method to remotely actuate the payload to drop the water. The first task in this challenge will be to perform payload drops into the fire areas. In addition to this task, in a normal firefighting operation, the ability to take pictures and provide situational awareness is also critical. Thus, the cameras that are used to detect the fire, may also be used to determine the location of firefighters, fire trucks or structures. This challenge provides the opportunity to build a payload that could one day perform these types of task on an unmanned aircraft.

LAND CHALLENGE: In this challenge, we assume there are people trapped in a city building after an earthquake. The path to the building is deemed unsafe because of fear the structure will collapse. However, there are multiple individuals that require critical supplies to stay alive. The robot must deliver supplies to the trapped people and remove hazardous materials and obstacles that are preventing rescue personnel from safely entering the structure.

Course Description: This course is designed to advance, engage and stimulate student interest in the field of engineering through an in-depth advanced experimental approach. This course teaches 10th through 12th grade students the engineering/design process using mechanisms, machines, and robotic systems. Students will actively explore the applied practices of various engineering fields while studying and performing tasks in small groups. These practices include: designing, prototyping, analyzing, and improving existing designs and solving open ended problems. Students will use a variety of industry standard software as well as testing devices, tools, materials, and machines while applying mathematical and scientific concepts to resolve real world problems. Students who complete this course will have an in-depth understanding of engineering problem solving skills.

Requirements: A basic knowledge of matrix algebra, physics, and/or some programming is necessary but not all students need to be at the same level in math and science. A strong algebra and geometry background is helpful. Students will be expected to conduct in-depth individual and group research, participate in class discussions and create presentations on their findings and designs.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

□ SENIOR HIGH TIGER TV

Grades 10,11,12

Full Year

1 Credit

Purpose: To provide interested students with the opportunity to create our morning announcement program and to create promotional and informational videos for the school.

Course Description: Students will be instructed and apply camera skills, computer skills, public speaking, video editing, storyboarding and other broadcasting skills associated with our morning program. In addition, students will create and produce short video projects that highlight the activities of the school throughout the year.

Requirements: Rating and recommendation from a teacher.

Prerequisites: None (Refer to page 9 for specific grading and percentage guidelines).

☐ **SPORTS AND ENTERTAINMENT MARKETING**

Grades 10, 11, 12

Semester

.5 Credit

Purpose: To expose the students to a highly lucrative career in the marketing industry.

Course Description: Students will be exposed to the hugely popular sports and entertainment marketing industry. Topics include: Intro to Sports and Entertainment Marketing, College and Amateur Sports, Professional Sports, Marketing products and services through sports legal issues and much more.

Requirements: Exams/quizzes, projects, creative thinking, to writing assignments.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

☐ **SPORTS AND ENTERTAINMENT MANAGEMENT**

Grades 10, 11, 12

Semester

.5 Credit

Purpose: Students to explore an exciting career in the world of managing entertainment and sports productions.

Course Description: The basic principles of planning, organizing, implementing, controlling, decision making, and coordinating, as applied to sports and entertainment, are explored in this class. Students will learn concepts that are used to promote and manage entertainment and sports venues.

Requirements: Students will participate in class activities, research and report writing.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

☐ **STEM ROBOTICS**

Grade 10, 11, 12

Semester

.5 Credit

Purpose: To prepare students to understand the connections between computer science, electrical and mechanical engineering. Science and math concepts are an integral part of the curriculum. Students will interact in a real world environment with all STEM objectives.

Course Description: The course explores the fundamentals of robotic design using the VEX robotics system. In a flexible format, students will learn about engineering and engineering problem solving by working individually and in groups to complete a series of design challenges. The course will place emphasis on mechatronic and programming principles. The students will learn basic programming skills that will be applied to complete more complex tasks such as automation and environmental sensing. Students will design, model, build, and test a variety of different robot configurations and document the process by keeping an Engineering Notebook

Requirements: Students are required to apply the design process to solve problems in and beyond the laboratory.

Prerequisite: (Refer to page 9 for specific grading and percentage guidelines).

☐ **STEM ROBOTICS II**

Grade 10, 11, 12

Semester

.5 Credit

Purpose: The VEX Robotics Competition exists to solve this problem. Through its uniquely engaging combination of teamwork, problem solving, and scientific discovery, the study of competitive robotics encompasses aspects of STEM. You're not building VEX robots because a future job will involve tightening shaft collars on a metal bar – you're executing an engineering design and problem-solving process that resembles the same mindset used by rocket scientists, brain surgeons, and inventors around the world. The VEX Robotics Competition is not just a game that was invented because it is fun to play – it is a vehicle for teaching (and testing) teamwork, perseverance in the face of hardship, and provides a methodology to approach and solve new challenges with confidence.

Course Description: The course explores the fundamentals of robotic design using the VEX robotics system. In a flexible format, students will learn about engineering and engineering problem solving by working individually and in groups to complete a series of design challenges. Each year, an exciting engineering challenge is presented in the form of a game; the VEX Robotics Competition. .

Requirements: A basic knowledge of algebra and/or some programming. JAVA/Introduction to Computer for Humanities/RobotC. Students, with guidance from teachers and industry mentors will build innovative robots and compete year-round in a variety of matches.

Prerequisite: (Refer to page 9 for specific grading and percentage guidelines).

□ STEM ROBOTICS III

Grade 10, 11, 12

Semester

.5 Credit

Purpose: The VEX Robotics Competition exists to solve this problem. Through its uniquely engaging combination of teamwork, problem solving, and scientific discovery, the study of competitive robotics encompasses aspects of STEM. You're not building VEX robots because a future job will involve tightening shaft collars on a metal bar – you're executing an engineering design and problem-solving process that resembles the same mindset used by rocket scientists, brain surgeons, and inventors around the world. The VEX Robotics Competition is not just a game that was invented because it is fun to play – it is a vehicle for teaching (and testing) teamwork, perseverance in the face of hardship, and provides a methodology to approach and solve new challenges with confidence.

Course Description: A lab-based course that uses a hands-on approach to focus on the construction and programming of autonomous mobile robots as well as problem solving strategies. Students will work hands-on in teams to design, build, program and document their progress. Topics may include motor control, gear ratios, torque, friction, sensors, decision-making, propulsion systems and locomotive systems. Course information will be tied to lab experiments

Requirements: Knowledge of algebra and/or some programming. JAVA/Introduction to Computer for Humanities/RobotC. Students will work in groups to build and test increasingly more complex mobile robots, culminating in an end-of-semester robot contest.

Prerequisite: STEM Robotics, STEM Robotics II. (Refer to page 9 for specific grading and percentage guidelines).

□ STUDENT LIBRARY ASSISTANT

Grade 9

Semester

.5 Credit

Purpose: The Student Library Assistant course will prepare students with the knowledge and skills necessary to perform assigned duties and to support the librarian in providing courteous and efficient customer service to the HAJHS community..

Course Description: Student Library Assistant is an introductory course for students who are interested in acquiring credit for library service. Students will learn shelving procedures, book repairs, processing of new books and materials, maintaining the library's physical space, and how to check-in/check-out books and Chromebooks using the library management software, in addition to creating displays and updating bulletin boards. They will also catalog library books and materials within the library management software, assist with the setup and promotion of the fall and/or spring book fairs, design and promote special library projects, and assist in school and community promotion of the JH Library.

Requirements: Students will complete an orientation, and afterwards they will complete the tasks and duties listed on a daily task sheet. In addition to skills-based assessments, checklists and rubrics will be utilized to evaluate student performance.

Prerequisite: Submission of application. The application combined with the applicant's scheduling availability will be considered. NOTE: This is a selective process, and there is a limit to the number of students who are accepted.

□ WOOD CRAFT

Grades 10,11,12

Semester

.5 Credit

Purpose: The Wood Craft course is designed to provide an opportunity for students who wish to explore some basic experiences with woodworking.

Course Description: Wood Craft offers the student an opportunity to gain basic knowledge and experience with woodworking tools, machines, fasteners, and adhesives.

Specific Content: Wood Craft provides the student with an opportunity to experience the correct use of hand tools as well as operate basic power tools used in wood product fabrication. Safety, creativity, planning as well as cooperative interaction with others is important.

Fees: Students will pay a \$20.00 flat fee for materials they will be using in the laboratory setting.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

□ WOOD TECHNOLOGY 1

Grades 10, 11, 12

Full Year

1 Credit

Purpose: To foster and engage students through a problem solving and project based approach using production skills to solve engineering-based problems and design challenges.

Course Description: This course is designed to provide the student with a basic understanding of materials and how they are processed. Upon completion of the course, the student will be able to perform a variety of problem-solving activities related to tools, materials, processes, tests, and measurements. Students will construct individual projects with some degree of self-dependence. They will incorporate principles of design, planning, and the safe operation of tools and machines into their projects. Under the direct supervision of the instructor, the students are provided with basic skills using measuring tools, hand tools, and machines. Some of the basic materials that will be used are woods, plastics, and non-ferrous metals. Physical, mechanical, and chemical properties of these materials will be studied. Through the experience of working directly with the industrial materials, the student will develop an appreciation for research and design, craftsmanship, safety, and orderly procedures.

Requirements: Completion of various production projects along with group and individual design projects. Students will be required to read assigned material, complete information and operation sheets, participate in group discussions, and with acquired skills complete exercises and projects related to content area.

Fees: Students will pay a \$20.00 flat fee for materials they will be using in the laboratory setting.

Prerequisites: (Refer to page 9 for specific grading and percentage guidelines).

□ WOOD TECHNOLOGY 2

Grade 11, 12

Full Year

1 Credit

Purpose: To foster and engage students through a problem solving and project based approach using production skills to solve engineering-based problems and design challenges.

Course Description: This course is designed to provide the student with a more advanced level of understanding materials and how they are processed. Upon completion of the course, the student will be able to perform a variety of problem-solving activities related to tools, materials, processes, measurements, and tests. Students will independently construct projects with help from the instructor when needed. They will incorporate principles of design, planning, and the safe operation of tools and machines into their projects. Under the direct supervision of the instructor, the students are provided with the higher level skills needed to complete the more advanced projects. Some of the materials that will be used are woods, plastics, and non-ferrous metals. The physical, mechanical, and chemical properties of these materials will be studied. Through the experience of directly working with the industrial materials, the student will develop a higher level of appreciation for research and design, craftsmanship, safety, and orderly procedures.

Requirements: Completion of various production projects along with group and individual design projects. Students will be required to read assigned material, complete information and operation sheets, participate in group discussions, and with acquired skills complete exercises and projects related to content area.

Fees: Students will pay a \$20.00 flat fee for materials they will be using in the laboratory setting.

Prerequisites: Materials Technology I (Refer to page 9 for specific grading and percentage guidelines).

□ WORK EXPERIENCE

Grades 11,12

Full Year

3 Credits

Purpose: The Work Experience Program is designed to provide on-the-job training for students' interested and willing to work in vocational areas of choice in cooperation with local business and industry. It is one of several Transition Program options to help prepare students for the post-school world of work.

Course Description: Students enrolled in the program will attend the high school for part of the day for academic studies and then report to their community job site. Individualized instruction devoted to work related issues such as: job search techniques, interview skills, resume preparation, work place etiquette, etc., and other work issues are also part of the Work Experience Program.

Requirements: Students will work at the job site a minimum of 10 hours per week. They will maintain a weekly/monthly log of the hours worked. Periodic visits to the work site by the coordinator are done to evaluate the student's success. The employer will also

