PROGRAM OF STUDIES
2020-2021

Grades 9-12

South Fayette High School
3640 Old Oakdale Road, McDonald, Pennsylvania 15057
Phone 412-221-4542/Fax 724-693-9843

Dr. Laura M. Hartzell, Principal
TBD, Assistant Principal
# TABLE OF CONTENTS

## SCHOOL DISTRICT INFORMATION:

*School District Administration, Faculty and Staff* ........................................................................ i

*High School Faculty and Staff* ........................................................................................................... ii

## ACADEMIC INFORMATION:

- Grading System ................................................................................................................................. 1
- Honor Roll ........................................................................................................................................... 1
- Determination of QPA ......................................................................................................................... 2
- Class Rank .......................................................................................................................................... 2
- Weighted Quality Points ..................................................................................................................... 2
- Honors and Advanced Placement Courses Offered ........................................................................ 3
- College in High School Courses Offered ........................................................................................ 4
- Make-Up Work ................................................................................................................................... 5
- Extra Credit ......................................................................................................................................... 6
- Return of Tests .................................................................................................................................... 6
- PowerSchool ....................................................................................................................................... 6
- State-Mandated Assessments ............................................................................................................ 6
- Homework Policy .............................................................................................................................. 7
- Extracurricular Eligibility .................................................................................................................. 8
- NCAA Eligibility ............................................................................................................................... 10
- Graduation Requirements ................................................................................................................ 11
- Scheduling .......................................................................................................................................... 11
- Student Online Scheduling ............................................................................................................... 12
- Drop/Add Policy ............................................................................................................................... 12
- Math Tutorial Program ..................................................................................................................... 12
- Individual Career Portfolio/Senior Exit Interview ......................................................................... 12
- South Fayette School Career Clusters ............................................................................................ 14

## COURSE INFORMATION:

*Business Technology and Computer Science* .................................................................................. 25

*English Department* .......................................................................................................................... 36

*Fine Arts and Early Childhood Development Departments* ..................................................... 45

*World Language Department* ....................................................................................................... 52

*Independent Study* .......................................................................................................................... 57

*Mathematics Department* ................................................................................................................. 58

*Parkway West Career and Technology Center* ........................................................................... 65

*Physical Education Department* ...................................................................................................... 70

*Science/Technology Department* ................................................................................................... 72

*Social Studies Department* ............................................................................................................. 83

*Special Education Department* ....................................................................................................... 95
### Table 1 - School District Board Members

<table>
<thead>
<tr>
<th>NAME AND PHONE EXTENSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Leonard Fornella, President (433)</td>
</tr>
<tr>
<td>Mr. Alan Vezzi, Vice President (431)</td>
</tr>
<tr>
<td>Mr. William Ainsworth (446)</td>
</tr>
<tr>
<td>Mr. Paul Brinsky (432)</td>
</tr>
<tr>
<td>Mrs. Teresa Burroughs (443)</td>
</tr>
<tr>
<td>Mrs. Lena Hannah (438)</td>
</tr>
<tr>
<td>Mr. Thomas Iagnemma (445)</td>
</tr>
<tr>
<td>Dr. Jennifer Iriti (436)</td>
</tr>
<tr>
<td>Mr. Todd Petrillo (434)</td>
</tr>
</tbody>
</table>

### Table 2 - Listing of District Administration

<table>
<thead>
<tr>
<th>NAME AND PHONE EXTENSION</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Kenneth Lockette (413)</td>
<td>Superintendent</td>
</tr>
<tr>
<td>Dr. Jeffrey Evancho (408)</td>
<td>Assistant to the Superintendent for Secondary Education</td>
</tr>
<tr>
<td>Mrs. Stephanie DeLuca (348)</td>
<td>Assistant to the Superintendent for Elementary Education</td>
</tr>
<tr>
<td>Mr. Brian Tony (406)</td>
<td>Director of Finance</td>
</tr>
<tr>
<td>Mrs. Maria Brewer Aguilar (416)</td>
<td>Assistant Director of Finance</td>
</tr>
<tr>
<td>Dr. Laura Hartzell (242)</td>
<td>High School Principal</td>
</tr>
<tr>
<td>TBD (265)</td>
<td>High School Assistant Principal</td>
</tr>
<tr>
<td>Ms. Kristin Deichler (224)</td>
<td>Middle School Principal</td>
</tr>
<tr>
<td>Mr. Kevin Maurer (224)</td>
<td>Assistant Middle School Principal</td>
</tr>
<tr>
<td>Mr. Tom Kaminski (336)</td>
<td>Intermediate School Principal (3-5)</td>
</tr>
<tr>
<td>Ms. Kristen Johnson (328)</td>
<td>Intermediate School Assistant Principal (3-5)</td>
</tr>
<tr>
<td>Mrs. Laurie Gray (612)</td>
<td>Elementary School Principal (K-2)</td>
</tr>
<tr>
<td>Mr. Tyler Geist (337/328)</td>
<td>Elementary School Associate Principal (K-2)</td>
</tr>
<tr>
<td>Mrs. Gretchen Tucci (415)</td>
<td>School Psychologist/Asst. Director of Student Support Services</td>
</tr>
<tr>
<td>Dr. Conchetta Bell (404)</td>
<td>School Psychologist/Asst. Director of Student Support Services</td>
</tr>
<tr>
<td>Mr. Mark Keener (225)</td>
<td>Director of Athletics</td>
</tr>
<tr>
<td>Mrs. Aileen Owens (402)</td>
<td>Director of Technology and Innovation</td>
</tr>
<tr>
<td>Mr. Rob Warfield (245)</td>
<td>Network Systems Administrator</td>
</tr>
<tr>
<td>Mrs. Lee Ann Jubas (662)</td>
<td>Network Systems Specialist</td>
</tr>
<tr>
<td>Mrs. Kimberly Sahady (556)</td>
<td>Technology/Staff Training Specialist</td>
</tr>
<tr>
<td>Mr. Brandon Soubie (452)</td>
<td>Director of Transportation</td>
</tr>
<tr>
<td>Mrs. Tricia Wood (279)</td>
<td>Director of Food Service</td>
</tr>
<tr>
<td>Mr. Steve Timmins (129)</td>
<td>Director of Facilities</td>
</tr>
<tr>
<td>Mr. Reggie Hale (217)</td>
<td>Maintenance Manager</td>
</tr>
<tr>
<td>Mr. Steve Lower (238)</td>
<td>Custodial Manager</td>
</tr>
</tbody>
</table>

### Table 3 - High School Counseling Department

<table>
<thead>
<tr>
<th>NAME AND PHONE EXTENSION</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mrs. Chris Lane (252)</td>
<td>School Counselor (A thru K)</td>
</tr>
<tr>
<td>Mrs. Julia Martin (251)</td>
<td>School Counselor (L thru Z)</td>
</tr>
<tr>
<td>Mrs. Emily Sharro (254)</td>
<td>College and Career Counselor</td>
</tr>
<tr>
<td>Mr. Tanner Jones (425)</td>
<td>Social Worker</td>
</tr>
<tr>
<td>Mrs. Dana Bloom (250)</td>
<td>Assistant for Guidance</td>
</tr>
</tbody>
</table>
Table 4 - High School Administrative Office Staff

<table>
<thead>
<tr>
<th>NAME AND PHONE EXTENSION</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mrs. Kathy Demnyan (240)</td>
<td>Assistant for Athletics and Student Activities</td>
</tr>
<tr>
<td>Mrs. Jodi Holley (221)</td>
<td>Assistant to the Principal</td>
</tr>
<tr>
<td>Mrs. Alice Kamphaus (222)</td>
<td>Assistant for Attendance and Student Center</td>
</tr>
<tr>
<td>Mrs. Julie Karabinos (241)</td>
<td>Assistant to the Principal</td>
</tr>
<tr>
<td>Mrs. Penny Miller (223)</td>
<td>Nurse</td>
</tr>
<tr>
<td>Mr. Joe Silhanek (235)</td>
<td>Dean of Students</td>
</tr>
<tr>
<td>Sergeant Jeff Sgro (732)</td>
<td>Security Resource Officer</td>
</tr>
</tbody>
</table>

Table 5 - High School Faculty

<table>
<thead>
<tr>
<th>NAME AND PHONE EXTENSION</th>
<th>DEPARTMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mrs. Barth</td>
<td>Business Technology</td>
</tr>
<tr>
<td>Ms. Capelli</td>
<td>Special Education</td>
</tr>
<tr>
<td>Mr. Caprio</td>
<td>Business Technology</td>
</tr>
<tr>
<td>Mrs. Carranza-Wood</td>
<td>Instrumental Music</td>
</tr>
<tr>
<td>Ms. Cerchiaro</td>
<td>Social Studies</td>
</tr>
<tr>
<td>Mrs. Chaves</td>
<td>World Language - Spanish</td>
</tr>
<tr>
<td>Mrs. Clonan</td>
<td>World Language - Spanish/Department Chair</td>
</tr>
<tr>
<td>Ms. Crapis</td>
<td>Science</td>
</tr>
<tr>
<td>Mrs. Dennison</td>
<td>Early Childhood Development</td>
</tr>
<tr>
<td>Mrs. Dorsey</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Mr. Eldridge</td>
<td>Physical Education and Health</td>
</tr>
<tr>
<td>Mrs. Elek</td>
<td>Vocal Music</td>
</tr>
<tr>
<td>Mrs. Endy</td>
<td>World Language - French</td>
</tr>
<tr>
<td>Mrs. Fink</td>
<td>English as a Secondary Language</td>
</tr>
<tr>
<td>Mr. Flannery</td>
<td>Business Technology/Department Chair</td>
</tr>
<tr>
<td>Mr. Fraser</td>
<td>English</td>
</tr>
<tr>
<td>Mr. Garlick</td>
<td>Technology Education</td>
</tr>
<tr>
<td>Ms. Grinko</td>
<td>Science</td>
</tr>
<tr>
<td>Dr. Gutshall</td>
<td>Science/Department Chair</td>
</tr>
<tr>
<td>Mrs. Habib</td>
<td>Science</td>
</tr>
<tr>
<td>Mrs. Hackworth</td>
<td>Social Studies</td>
</tr>
<tr>
<td>Ms. Hallet</td>
<td>Special Education</td>
</tr>
<tr>
<td>Mr. Hausman</td>
<td>English</td>
</tr>
<tr>
<td>Mr. Hobbs</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Mr. Iagnemima</td>
<td>Physical Education/Department Chair</td>
</tr>
<tr>
<td>Mr. Isaac</td>
<td>Science</td>
</tr>
<tr>
<td>Ms. Jenkins</td>
<td>English</td>
</tr>
<tr>
<td>Mr. Jones</td>
<td>Guidance/Social Worker</td>
</tr>
<tr>
<td>Mr. Klein</td>
<td>Social Studies</td>
</tr>
<tr>
<td>Mrs. Lane</td>
<td>Guidance Counselor (A thru K)</td>
</tr>
<tr>
<td>Mrs. Lortz</td>
<td>Computer Science</td>
</tr>
<tr>
<td>Mrs. Lutz</td>
<td>Special Education</td>
</tr>
<tr>
<td>Mrs. Marchinsky</td>
<td>English</td>
</tr>
<tr>
<td>Mrs. Martin</td>
<td>Guidance Counselor (L thru Z)</td>
</tr>
<tr>
<td>Mrs. Matz</td>
<td>English</td>
</tr>
<tr>
<td>TBD</td>
<td>Art/Department Chair</td>
</tr>
<tr>
<td>Mr. McArdle</td>
<td>Social Studies</td>
</tr>
<tr>
<td>Mrs. McCafferty</td>
<td>Special Education</td>
</tr>
<tr>
<td>Mrs. McCullough</td>
<td>Computer Science</td>
</tr>
<tr>
<td>Mr. McGowan</td>
<td>Science</td>
</tr>
<tr>
<td>NAME AND PHONE EXTENSION</td>
<td>DEPARTMENT</td>
</tr>
<tr>
<td>--------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>Ms. McGuire</td>
<td>Science</td>
</tr>
<tr>
<td>Mr. Mikan</td>
<td>Social Studies</td>
</tr>
<tr>
<td>Mrs. Miller</td>
<td>Nurse</td>
</tr>
<tr>
<td>Mrs. Okel</td>
<td>Science</td>
</tr>
<tr>
<td>Mrs. Palmer</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Mrs. Pappas</td>
<td>Special Education</td>
</tr>
<tr>
<td>Mrs. Perry</td>
<td>Business Technology</td>
</tr>
<tr>
<td>Mrs. Quirk</td>
<td>Enrichment Coordinator</td>
</tr>
<tr>
<td>Mrs. Rabi</td>
<td>English and Theatre Arts</td>
</tr>
<tr>
<td>Ms. Reed</td>
<td>English</td>
</tr>
<tr>
<td>Mr. Reasey</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Ms. Roche</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Mrs. Rogowicz</td>
<td>Special Education</td>
</tr>
<tr>
<td>Mrs. Roth</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Mrs. Rudy</td>
<td>Special Education</td>
</tr>
<tr>
<td>Mr. Salvucci</td>
<td>Social Studies</td>
</tr>
<tr>
<td>Mrs. Scott (Rihtarchik)</td>
<td>English</td>
</tr>
<tr>
<td>Mr. Sekelik</td>
<td>Social Studies</td>
</tr>
<tr>
<td>Mr. Seybert</td>
<td>Science</td>
</tr>
<tr>
<td>Mrs. Sharro</td>
<td>College and Career Counselor</td>
</tr>
<tr>
<td>Mrs. Shrewsbury</td>
<td>English</td>
</tr>
<tr>
<td>Mr. Silhanek</td>
<td>Social Studies/Department Chair</td>
</tr>
<tr>
<td>Mrs. Simon</td>
<td>Librarian</td>
</tr>
<tr>
<td>Mrs. Sirc</td>
<td>Mathematics/Department Chair</td>
</tr>
<tr>
<td>Mr. G. Smith</td>
<td>English/Department Chair</td>
</tr>
<tr>
<td>Mr. T. Smith</td>
<td>Social Studies</td>
</tr>
<tr>
<td>Mrs. Smyczek</td>
<td>Special Education/Department Chair</td>
</tr>
<tr>
<td>Mr. Stewart</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Mrs. Surloff</td>
<td>World Language – Spanish</td>
</tr>
<tr>
<td>Ms. Surunis</td>
<td>English</td>
</tr>
<tr>
<td>Mrs. Tupper</td>
<td>String Orchestra</td>
</tr>
<tr>
<td>Mrs. Ullom</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Mrs. Wiernik</td>
<td>World Language - German</td>
</tr>
<tr>
<td>Mr. Winans</td>
<td>Science</td>
</tr>
<tr>
<td>Mr. Yeager</td>
<td>Business Technology</td>
</tr>
<tr>
<td>Dr. Yerace</td>
<td>Social Studies</td>
</tr>
</tbody>
</table>
South Fayette High School  
PROGRAM OF STUDIES

GRADING SYSTEM

The evaluation of pupil progress and achievement is the responsibility of each member of the professional staff of South Fayette High School. Grades will reflect a student’s progress as to the quality of performance and the educational growth of the student.

Grading will be by percentage points and based upon points earned for course requirements such as tests, projects, reports and class participation. Grades will be reported as percentages.

Specific requirements established by each individual teacher for every course will be distributed to students, discussed with each class, posted in classrooms, and will be on file in the Main Office for your review.

The grading scale is as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Scale</th>
<th>Quality Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>100 - 98%</td>
<td>4.25</td>
</tr>
<tr>
<td>A</td>
<td>97 - 93%</td>
<td>4.00</td>
</tr>
<tr>
<td>A-</td>
<td>92 - 90%</td>
<td>3.75</td>
</tr>
<tr>
<td>B+</td>
<td>89 - 88%</td>
<td>3.25</td>
</tr>
<tr>
<td>B</td>
<td>87 - 83%</td>
<td>3.00</td>
</tr>
<tr>
<td>B-</td>
<td>82 - 80%</td>
<td>2.75</td>
</tr>
<tr>
<td>C+</td>
<td>79 - 78%</td>
<td>2.25</td>
</tr>
<tr>
<td>C</td>
<td>77 – 73%</td>
<td>2.00</td>
</tr>
<tr>
<td>C-</td>
<td>72 – 70%</td>
<td>1.75</td>
</tr>
<tr>
<td>D</td>
<td>69 – 65%</td>
<td>1.00</td>
</tr>
<tr>
<td>F</td>
<td>64 – Below</td>
<td>--</td>
</tr>
<tr>
<td>I</td>
<td>*Incomplete</td>
<td>--</td>
</tr>
</tbody>
</table>

*Indicates that the student has not completed all course requirements. Course work must be completed within ten (10) school days or the student will receive an "F" for any work not completed.

W - Indicates the student withdrew from the course within the required time limit. No penalty accompanies this grade.

WF - Indicates course withdrawal after the established limit. The student receives a failure grade in the course. This does affect the QPA of a student.

HONOR ROLL

Honor Roll will be determined by grades earned during each of the four nine-week periods.

Highest Honor: Students who achieve a 4.00 Quality Point Average and above will be placed on the Highest Honor Roll.

High Honor: Students who achieve a 3.75 Quality Point Average and above will be placed on the High Honor Roll.

Honor: Students who achieve a 3.25 Quality Point Average and above will be placed on the Honor Roll.
DETERMINATION OF GRADE POINT AVERAGE

To calculate a GPA for any given quarter take the quality points assigned to each grade and multiply each by the credit assigned to that specific course. Add all of those amounts and divide by the total number of credits taken. This will give you the GPA for that quarter.

Calculation Example

<table>
<thead>
<tr>
<th>Course</th>
<th>Grade</th>
<th>Quality Points</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP English</td>
<td>96</td>
<td>5.00</td>
<td>1.0</td>
</tr>
<tr>
<td>Economics 12</td>
<td>91</td>
<td>3.75</td>
<td>1.0</td>
</tr>
<tr>
<td>Advanced Art IIIA</td>
<td>95</td>
<td>4.00</td>
<td>.5</td>
</tr>
</tbody>
</table>

\[ 5 \times 1 = 5 \]
\[ 3.75 \times 1 = 3.75 \]
\[ 4 \times .5 = \frac{2}{10.75} = \frac{2}{2.5} = 4.3 \text{ GPA} \]

The cumulative GPA is calculated based on the final grade for each course taken.

CLASS RANK

Class Rank is calculated at the end of the year only in grades nine and ten and at the end of each quarter in grades eleven and twelve. Valedictorian and Salutatorian will be determined at the end of the third nine weeks in grade twelve. Class rank is determined by ranking the students in order according to cumulative quality grade point average.

Class rank will not be listed on transcripts and will not be disclosed by the District. Class rank will be maintained internally.

Class rank will be kept privately for scholarship purposes. Students should mark “my school does not rank” when completing college applications. South Fayette will continue to recognize the Valedictorian and Salutatorian until the Class of 2023.

WEIGHTED QUALITY POINTS

Students who enroll in Honors and Advanced Placement (“AP”) classes and receive a letter grade of "C-" or above will earn quality points based on the following scales:

<table>
<thead>
<tr>
<th>Table - 8 - Grading Scale for Honors Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>A+</td>
</tr>
<tr>
<td>A</td>
</tr>
<tr>
<td>A-</td>
</tr>
<tr>
<td>B+</td>
</tr>
<tr>
<td>B</td>
</tr>
<tr>
<td>B-</td>
</tr>
<tr>
<td>C+</td>
</tr>
<tr>
<td>C</td>
</tr>
<tr>
<td>C-</td>
</tr>
<tr>
<td>D</td>
</tr>
<tr>
<td>F</td>
</tr>
</tbody>
</table>
### HONORS AND ADVANCED PLACEMENT COURSES OFFERED

The following courses are identified as Honors and Advanced Placement courses for the 2020-2021 School Year. This selection was based on the content of the curriculum and/or the consideration that the course was above the requirements for graduation as outlined in the Student Handbook and Program of Studies.

**Honor Courses:**

- Honors English 9
- Honors English 10
- Honors English 11
- Honors English 12
- Honors Argument - CHS
- Honors Geometry
- Honors Algebra II
- Honors Linear Algebra - CHS
- Honors PreCalculus
- Honors Calculus - CHS
- Honors Statistics and Probability - CHS
- Honors Human Anatomy & Physiology
- Honors Biology
- Honors Chemistry
- Honors Physics
- Honors Civics 9
- Honors World Cultures 10
- Honors American Cultures 11 - CHS
- Honors Economics 12
- World Language - 4th Level (Honors) - CHS
- Honors Management and Marketing Applications - CHS
- Honors Multi-Media III – CHS
- Honors Python III

---

<table>
<thead>
<tr>
<th>Grade</th>
<th>Scale</th>
<th>Quality Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>100 - 98%</td>
<td>5.25</td>
</tr>
<tr>
<td>A</td>
<td>97 - 93%</td>
<td>5.00</td>
</tr>
<tr>
<td>A-</td>
<td>92 - 90%</td>
<td>4.75</td>
</tr>
<tr>
<td>B+</td>
<td>89 - 88%</td>
<td>4.25</td>
</tr>
<tr>
<td>B</td>
<td>87 - 83%</td>
<td>4.00</td>
</tr>
<tr>
<td>B-</td>
<td>82 - 80%</td>
<td>3.75</td>
</tr>
<tr>
<td>C+</td>
<td>79 - 78%</td>
<td>3.25</td>
</tr>
<tr>
<td>C</td>
<td>77 – 73%</td>
<td>3.00</td>
</tr>
<tr>
<td>C-</td>
<td>72 – 70%</td>
<td>2.75</td>
</tr>
<tr>
<td>D</td>
<td>69 – 65%</td>
<td>1.00</td>
</tr>
<tr>
<td>F</td>
<td>64 – Below</td>
<td>--</td>
</tr>
</tbody>
</table>
AP Courses:
AP English 11: Language and Composition
AP English 12: Literature and Composition
AP Calculus AB - CHS
AP Calculus BC – CHS
AP Biology
AP Chemistry
AP Physics
AP U.S. History
AP Economics
AP U.S. and Comparative Government and Politics - CHS
AP European History – CHS
AP French - CHS
AP Music Theory
AP Computer Science
On-Line AP Courses as Approved

Prerequisites for admission to Honors and Advanced Placement courses for the 2019-2020 School Year will be as follows:

1. To stay on the same level of course (Honors to Honors, AP to AP), a percentage grade of 80% or above is needed in the previous course in that departmental area

2. To move UP one level (Regular to Honors, Honors to AP), a percentage grade of 85% or above is needed in the previous course in that departmental area

3. To move UP TWO levels (Regular to AP), a percentage grade of 93% or above is needed in the previous course in that departmental area, plus completion of a "skills packet" developed by the teacher to "bridge" any gaps that would be missing between a regular course and the highly significant rigor in an AP college-level course, as well as strong teacher recommendation

4. Overall QPA of 3.0 or better

5. Teacher recommendation (per Program of Studies)

Students who do not meet the overall QPA of 3.0 or better criteria but DO meet the other two criteria may file an appeal through the Guidance Department to have their case reviewed.

COLLEGE IN HIGH SCHOOL COURSES OFFERED

The following courses are College in High School courses for the 2019-2020 School Year. This selection was based on approval by the partnering college/university. Students enrolled in these courses can earn college credit from the partnering college/university.

College in High School Courses:
Argument - CHS
Leadership Studies II – Advanced Leadership Studies - CHS
College in High School Courses: (cont.)
Honors Calculus – CHS
Honors Linear Algebra - CHS
Honors Statistics and Probability – CHS
Honors Multi-Media III - CHS
Honors Management and Marketing Applications - CHS
Honors American Cultures 11 – CHS
World Language - 4th Level (Honors) – CHS
A.P. Calculus AB - CHS
A.P. Calculus BC – CHS
A.P. French - CHS
A.P. U.S. & Comparative Government & Politics - CHS
A.P. European History – CHS

MAKE-UP WORK

The following guidelines have been established for make-up work in the high school.

1. If a student is absent from class for one (1) day, he/she upon return to school is required to submit all work due that was assigned prior to the day of absence and take test(s) assigned prior to the day of absence provided no new material on the test was taught that day.

2. If a student is absent from class for more than one (1) day, the student has make-up days equivalent to the number of days absent from the day he/she returns to school to make-up all work (tests, quizzes, assignments, etc.). It is the responsibility of the student to meet with the teacher before or after class to make proper arrangements and secure the information needed regarding the tests, etc., that needs to be completed.

3. In extenuating circumstances, when a student has been absent due to illness, accident, etc. for more than seven (7) consecutive days, provisions may be made to extend the timeline for make-up work.

4. Students who fail to fulfill their responsibilities for make-up work will receive a "0" for the work, tests, etc. not completed.

*Students who are absent from class for excused reasons, including approved school activities, must be given the opportunity to make up all work and cannot be penalized academically for not being present in class, provided they complete all make-up work according to the above guidelines.

Students who participate in an approved school activity must check with their teachers to receive information concerning classroom work previous to participating in the activity.

Approved school activities include those listed on the daily bulletin, field trips, school programs, athletic events, etc. Visits to the Guidance Office, other teacher's areas, writing lab, etc., are not legitimate reasons to be absent from a scheduled class unless previously approved by the scheduled classroom teacher.
EXTRA CREDIT

Each classroom teacher is expected to provide students with a clear understanding of the assessment practices related to their individual course. Grades assigned should reflect the achievement based upon the specific criteria expected in the course and outlined by the teacher. Individual extra credit assignments will not be given by teachers so that a student may improve his/her letter grade. Teachers may at their discretion assign projects, presentations, problems, etc. that result in bonuses. In this case, however, all students share equal opportunities to participate.

NOTE: The purpose of "extra credit" is not to allow students to gain enough points to significantly alter a final or quarter grade. Extra credit allows a teacher to make an improved judgment of a student’s academic capability.

RETURN OF TESTS

The assessment practice of testing provides the student and teacher information regarding the level of achievement. Testing provides the feedback to the teacher that is needed to revise teaching style, to reteach material and to develop guidelines for pacing instruction. The student is able to view areas of proficiency and deficiency and adjust appropriately.

All tests will be returned to and discussed with the students within one (1) week of the administering of the test. It is the sole responsibility of the student to share the test results with the parent and also the sole responsibility of the student to seek assistance in the event that he/she believes that a grade assigned was inaccurate. Common assessments and major projects will not be sent home with students, but will be available for review by parents/guardians within the school building.

POWERSCHOOL

South Fayette High School utilizes PowerSchool to record student’s grades and attendance. Students and parents are expected to monitor their grades throughout the academic year. Concerns regarding grades should be directed to the classroom teacher first and then to the student’s school counselor. In the event a student is failing a class at the end of a quarter, semester or year, teachers will contact parents to discuss the student’s progress in that particular course.

It is recommended that parents contact the teacher or make an appointment to meet with them if their child is failing. In this way, the parent/guardian will know specific causes of the deficiency and may be given suggestions for helping their child improve.

STATE-MANDATED ASSESSMENTS

To graduate from South Fayette High School, the following is required:

   (a) Successful completion of all course work required by the School District.
   (b) Successful completion of a culminating Senior Graduation Project.
   (c) Demonstrated “Proficiency” on all state-mandated assessments.
Students may demonstrate Proficiency by:

(a) Attaining a designation of “proficient” or above on all state-mandated assessment.
(b) Attaining a designation of “proficient” or above on any re-take test in each area where they were not formerly proficient.
(c) Completing the alternative pathway to proficiency as determined by the PA Department of Education (Class of 2017 and beyond) which are correlated to standards at an equivalent designation of Proficient or above.

For all students who do not meet “Proficiency” on state-mandated assessments by Grade 12, students must complete a portfolio demonstrating evidence of proficiency in that subject and must participate in tutoring as offered by the School District. Notification will be received in the form of a letter for students who need to complete this requirement.

Students who have not demonstrated Proficiency in any of the ways indicated above will not be eligible to receive a high school diploma at graduation. Consistent with our current procedure for graduation, students who are one (1) or two (2) credits (or requirements) short of meeting graduation eligibility may participate in the Commencement Ceremony but will not receive a diploma until such time that the requirements are met.

- Students who are not Proficient in Math will be considered to be one (1) requirement short for graduation.
- Students who are not Proficient in English will be considered to be one (1) requirement short for graduation.
- Students who are not Proficient in Science will be considered to be one (1) requirement short for graduation.
- Students who are not Proficient in three (3) requirements, as indicated above, may not participate in the Commencement Ceremony, even if they are eligible in all other areas.

In order to earn their diploma, the School District will offer in the summer, at parents’ expense, programs in each subject area so that students may be provided the opportunity to obtain proficiency.

**HOMEWORK POLICY**

Each student has the responsibility to develop good work and study habits. The student in preparing the assignment should:

1. Make sure he/she understands the assignment -- its purpose, when it is due, how it should be done.
2. Ask for further explanation if original directions are not completely understood.
3. Arrange to make up missed assignments as required by the teacher.
4. Budget time for homework. Anticipate 90-120 minutes of cumulative homework daily. When study time is provided during the school day, the student should take advantage of it. Long-term assignments should be planned so they do not have to be done all at once. Honors or advance placement courses may require additional time for assignments.
5. Analyze study habits and take advantage of available study helps.
6. Write homework in a neat and legible manner on appropriate paper.

EXTRACURRICULAR ELIGIBILITY

South Fayette Township School District encourages all students to participate in extracurricular activities. The only activities in which ineligible students may participate are those that are written into and considered part of the regular course curriculum. It is the responsibility of each individual coach or sponsor to prohibit students who are ineligible from participating (this includes practice). Each coach or sponsor will be provided with a list of all students who are ineligible. All students will be treated equitably. Students who are suspended from school may not participate (play or practice) in any extracurricular activities. The following Classifications of Eligibility are in effect at South Fayette High School:

Weekly Eligibility

*Grades of Students who participate in Athletics, and major activities, including Spring/Fall Drama Productions, Marching Band, Choir, Select Choir, Spring Musical and other activities requiring multiple days absent from school (i.e, DC Trip, Band/Chorus Trip).

1. Teachers will be provided weekly with a list of students who are registered as a participant in each athletic activity. On Friday morning (7:45 a.m.) of each week, teachers will be required to indicate any students who are in danger of failing ("D" average) or failing their course for the current 9-week period. Students must receive one (1) warning during each grading period prior to being designated as failing a course.

2. The lists will be compiled by the Athletic Director. Any student who is failing two (2) or more courses will be considered ineligible for the following week (Monday through Saturday). The student will be notified by the coach. That student is not permitted to practice or participate during that time. The Athletic Policy recommends that athletes ineligible for this reason attend the Wednesday after school tutorial program (2:10-5:30 p.m.). This may be required by other activity sponsors at their discretion.

3. As indicated by the ineligibility lists, students who are carrying a "D" average in one (1) or more subjects for two (2) successive weeks will be recommended by the Athletic Policy to attend the Wednesday after school tutorial program (2:10-5:30 p.m.). This student is not ineligible; however, the School District is making every attempt to promote support for the student who is encountering academic difficulty. If deemed necessary, the coach may waive this section at his/her discretion.

Nine-Week Academic Eligibility

*Grades of all students in Grades 9-12 are reviewed

At the end of each nine-week period, (at the end of the year, final average will be used) report cards for all students will be reviewed.

To be eligible for attendance at school functions and/or participation in extracurricular events, a student must pursue a curriculum approved by the principal and must not be failing two (2) or more courses. Evaluation or subject credits shall conform with the standards established by the Pennsylvania Department of Education. A student ineligible for this reason will be denied participation in all extracurricular activities, school dances and non-curricular events for a period of twenty (20) school days. Parents/guardians will be notified by mail of this ineligibility.
Year-to-Year Eligibility

*Students’ eligibility will be reviewed after twenty (20) school days. Students may be declared eligible after this period.*

Students are ineligible to participate in interscholastic athletics and extracurricular activities if they fail two (2) or more courses in the previous academic year. Students may participate if they complete the necessary remedial course work over the summer. Seventh (7th) through twelfth (12th) grade students are governed by these rules except in the case of the failure of two 6-week or 9-week courses. Students who fail two (2) of these courses may participate in the following academic year. Seventh (7th) through twelfth (12th) grade students who fail two (2) or more full year courses are ineligible to participate in interscholastic athletics and/or extracurricular activities.

Attendance Eligibility

*Attendance reports for all students, Grades 9 - 12 are reviewed*

A student who is absent from school during a semester for a total of twenty (20) or more school days shall not be eligible for attendance at school functions and/or participation in extracurricular activities until he/she has been in attendance for a total of sixty (60) days following his/her twentieth (20th) day of absence, except that where there is a consecutive absence of five (5) or more school days, due to confining injury, death in the immediate family, court subpoena, quarantine, or to attend a religious activity/function which the church requires its members to attend, or an absence of five (5) or more school days due to the same confining illness, such absence may be waived from the application of this rule by the School District Attendance Committee. Parents/guardians of students in this category will be notified by mail of this ineligibility.

Substance Use/Abuse

Any activity participant known by his/her sponsor to use alcoholic beverages or stimulant-depressive drugs during the course of his or her membership in that activity may be issued consequences that impact participation in the activity and may lead to dismissal from that activity. Any decision relative to participation in future activities will be left to the discretion of individual sponsors and the Administrative Staff. The consequences of the Drug and Alcohol Policy as set forth by the Board of School Directors of the South Fayette Township School District will be adhered to for this offense in addition to those described above if the occurrence was at school, on school grounds, or at a school function.

Code of Ethics

It is the duty of all concerned with school activities:

1. To emphasize the proper ideals of sportsmanship, respect, and ethical conduct.
2. To stress the values derived from good citizenship.
3. To show cordial courtesy to fellow students, visitors, and others.
4. To establish a positive relationship among participants.
5. To encourage leadership, use of initiative, and good judgment among participants.

STUDENTS WHO VIOLATE THE CODE OF CONDUCT OF THE SOUTH FAYETTE TOWNSHIP SCHOOL DISTRICT WILL BE DISCIPLINED ACCORDING TO ITS POLICY. ANY STUDENT WHO IS SUSPENDED FROM SCHOOL WILL NOT BE PERMITTED TO PARTICIPATE IN ANY EXTRACURRICULAR ACTIVITY DURING THE TIME OF SUSPENSION OR OTHER DISCIPLINARY CONSEQUENCE.
NCAA DIVISION I ELIGIBILITY

As per the National Collegiate Athletic Association (“NCAA”) Initial Eligibility Clearinghouse, students must meet the Core Course Requirements outlined by the NCAA prior to August 1, 2019.  **Note:** Students enrolling on or after August 1, 2019, please see below for new requirements.  Visit websites [www.eligibilitycenter.org](http://www.eligibilitycenter.org) and [www.ncaa.org](http://www.ncaa.org) for this information.

1. Graduate from high school.
2. Successfully complete a core curriculum of at least 16 academic courses.
3. Attain a grade-point average (based on a maximum of 4.000) and a combined score on the SAT verbal and mathematical sections or a composite score on the ACT based on the NCAA Division index sliding scale.

**NOTE:** To compete in Division I, students enrolling on or after August 1, 2019, must earn a minimum 2.300 GPA in 16 core courses, 10 of which must be completed before the start of the seventh semester (seven of those courses must be in English, math or natural or physical science, and all 10 courses are “locked in” for purposes of GPA calculation), and must earn a combined SAT or ACT sum score that matches your core-course GPA on the NCAA index sliding scale.

**NCAA INITIAL ELIGIBILITY - CORE COURSE REQUIREMENT**

**16 Core Courses:**

- 4 years of English
- 3 years of Mathematics (*Algebra I or higher*)
- 2 years of Natural/Physical Science (*1 year must be a Lab Science*)
- 1 year of additional English, Math or Science.
- 2 years of Social Science
- 4 years of additional core courses (*from any area listed above, or from World Language, Non-Doctrinal Religion or Philosophy*)

Students who do not complete all coursework at South Fayette High School may be in jeopardy of not having enough core courses to meet NCAA Clearinghouse requirements. This includes students attending Parkway AVTS, transfer students, etc. These students must notify the Guidance Department of their desire to participate in intercollegiate sports so that proper course work can be planned.

**PLEASE CONTACT THE HIGH SCHOOL GUIDANCE DEPARTMENT FOR A COMPLETE DESCRIPTION AND GUIDELINES FOR NCAA ELIGIBILITY.**  Also visit websites [www.eligibilitycenter.org](http://www.eligibilitycenter.org) and [www.ncaa.org](http://www.ncaa.org) for more information.
GRADUATION REQUIREMENTS

*The requirements for graduation shall be the successful completion of all coursework and studies that demonstrates expected levels of proficiency consistent with curricular objectives in grades nine (9) through twelve (12).

The Board requires that each candidate for graduation shall have earned a minimum of:

- Twenty-five (25 credits)

The following courses are required:

- 4.0 credits in English/Language Arts
- 4.0 credits in Social Studies
- 3.0 credits in Science (including Lab Science)
- 3.0 credits in Mathematics (including Algebra I, Geometry, and Algebra II or their equivalency)
- 1.0 - 2.0 credits of World language (students must successfully complete Level II)
- 1.0 credit of Technology Literacy (students must demonstrate proficiency in Courses 560 and 592)
- .25 credits – Writing and Public Speaking
- .50 credits – College and Career Planning
- .75 credits of Senior High Health/Physical Education
- 5 to 9 credits of Electives
- 1.0 credit for successful completion of the Senior Graduation Project

*Students attending Parkway West Career and Technology Center will be required to have a total of 25 credits and World Language, College and Career Planning, and World Cultures will be waived.

SCHEDULING

Scheduling for the following school year will be done each spring. The Program of Studies will be made available to all students for the South Fayette Township School District. Discussions of this curriculum guide will be conducted for all classes by the Guidance Counselors and Principal. A “Parent/Guardian Scheduling Night” will be scheduled so that parents/guardians interested in general explanations of courses of study may hear them.

Schedule Changes

1. Students will be permitted to make any adjustments in their course selections according to the timetable that accompanies the scheduling information. Changes in Honors or AP classes should also follow the timetable. **HONORS AND AP COURSES MAY NOT BE DROPPED ONCE STUDENT ONLINE SCHEDULING IS COMPLETED!**

2. All course selections will take place by completing a “Schedule Change Request Form” and/or requesting the counselor to schedule an appointment to discuss options. **AFTER THE DEADLINE, CHANGES WILL ONLY BE MADE FOR THE FOLLOWING REASONS:**

   (a) A computer scheduling error occurred.
   (b) You failed a course, need to repeat it and the change did not occur. (Usually this change will automatically occur).
   (c) You desire to add an additional elective course in place of a resource/study period. (This will only be considered if the course you desire to schedule is not full.)
If a student believes that he/she has a unique situation that warrants a schedule change, the student may schedule a conference through the counselor that must include the student's parent/guardian, counselor, principal and teacher. The information related to the request should be presented and a final decision will be made. Absolutely no changes will be considered without this conference being held.

**STUDENT ONLINE SCHEDULING**

Students in Grades 10, 11, and 12 will have an opportunity to schedule their classes online according to the schedule set forth for Student Scheduling. The administrative/guidance team will schedule incoming ninth grade students.

**DROP/ADD POLICY**

All students will receive a tentative schedule before leaving school for the summer or during the summer months. Because students in Grades 10-12 select their schedule, **NO courses may be dropped or added after Student Online Scheduling.** Beyond that time and for students in Grade 9, changes will only occur IF:

(a) there is an error in the schedule that affects graduation requirements or

(b) students would like to drop a study hall and take an elective class offered during that same period, providing the elective class is not closed due to enrollment capacity

No schedule changes of any kind will be made after the first five (5) days of a semester.

If a student drops a course after the first five (5) days of a semester, he/she will receive a “WF” indicating withdrawal failing for the final grade. This grade will be included in calculating QPA and class rank.

A student may not drop a course if he/she is unable to select another course that maintains his/her enrollment in a minimum of 6.5 credits (juniors and seniors) or 7.0 credits (freshmen and sophomores).

Administrators may have a need to change schedules to balance class sizes, balance lunches, or for other reasons as needed.

**MATH TUTORIAL PROGRAM**

Each Wednesday after school, for 3.25 hours, math tutorial services are offered to students in grades 9-12. Bus transportation is provided, if necessary. Students must remain in the tutorial session the entire time unless signed out by a parent/guardian.

**INDIVIDUAL CAREER PORTFOLIO/SENIOR EXIT INTERVIEW**

The faculty and administration at South Fayette Township School District believe that an Individual Career Portfolio/Senior Exit Interview will challenge our students to go beyond the high school curriculum and reflect upon their expanded knowledge, skills, dispositions, and experiences gained at South Fayette. The Individual Career Portfolio/Senior Exit Interview is a learning process for students to better understand their career interests, strengths, and abilities. The culminating Exit Interview will take place in the Spring of their Senior year. Career Portfolios and Senior Exit Interviews provide an avenue for creativity and the demonstration of
individual experiences, talents, and abilities. It is our goal to provide opportunities for students to explore future possibilities related to their career interests to become lifelong learners and productive citizens.

The project is in compliance with the requirements of the Pennsylvania Department of Education’s Chapter 339 Plan, which requires high school students to accumulate eight (8) career-related portfolio artifacts in their Individual Career Portfolio. Students will receive instruction, guidance, and class time to complete required artifacts. Although students will be afforded time during the school day for these activities, ultimately the responsibility for completion lies with the student.

The Individual Career Portfolio/Senior Exit Interview will demonstrate student competencies in oral communication, written communication, technology utilization, and professionalism. All Senior Exit Interviews will be evaluated by faculty review panels that will assess if the student is able to apply, analyze, synthesize, evaluate, and communicate information with significant knowledge and understanding.

It is our hope that each student will derive a sense of pride and accomplishment by completing an Individual Career Portfolio/Senior Exit Interview that reflects his/her interests and abilities. The opportunity to explain one’s knowledge, explore possible career paths, and apply learning to real-life situations will continue to help our students grow and promote their skills long after they leave South Fayette Township School District.

Parents are strongly encouraged to work with the school and their child. We can work together and can jointly assist your child in becoming a confident, ethical, empathetic, and responsible global citizen.
### SOUTH FAYETTE SCHOOL CAREER CLUSTERS

#### Science, Technology, Engineering and Mathematics
- Architecture and Construction - Electrical Systems, HVAC, Welding
- Information and Technology
- Manufacturing - making
- Engineering
- AutoTech & Autobody
- Cyber Security
- Computer Science

#### Entry Level Careers
- Aerospace Technician, Software Assistant, Telecommunications Technician, Computer Support Specialist, Conservationist, Accounting Clerk, Banker, Assembler, Boiler Operator, Boilermaker, Bookbinders and bindery workers, Electronic Assembler, Expediter, Fabricator, Fiberglass Laminator/Fabricator, Floor Assembler, General Laborer, Material Handler, Packaging Engineer, Painting and Coating Worker, Photographic Processor, Precision Assembler, Processing Worker, Production Painter, Production Worker, Semiconductor Processor, Tool and Die Maker, Tool Crib Attendant, Tool, Die, and Gauge Maker, Tutor, Warehouse Associate, Warehouse Worker, Woodworker

#### Technical Level Careers

#### Professional Level Careers
Core and Elective Courses

**Entry level:**
- Python I
- AP Computer Science P
- Cyber Security
- Biology
- Chemistry I
- Chemistry II
- Forensic Science
- Algebra 1
- Geometry
- Public Speaking
- Parkway

**Technical Level:**
- Java
- Python I
- AP Computer Science P
- Cyber Security
- Biology
- Honors Biology
- Chemistry I
- Honors Chemistry I
- Chemistry II
- Honors Human Anatomy and Physiology
- Forensic Science
- Physics
- Honors Physics
- Civics

**Professional Level Careers:**
- Python I
- AP Computer Science A
- Cyber Security
- Data Science
- Honors Civics
- Honors Biology
- AP Biology
- Honors Human Anatomy and Physiology
- Honors Chemistry
- Chemistry II
- AP Chemistry
- Honors Physics
- AP Physics
- Precalculus
Professional Level Careers Contd.:

- Honors Precalculus
- Calculus
- AP Calculus (AB and/or BC)
- Statistics
- AP US History
- AP Economics
- Psychology
- AP U.S. and Comparative Government and Politics
- Honors Management and Marketing Applications

Accounting Clerk: Algebra, Statistics
Actuary: Algebra, Trigonometry, Calculus I and II, Linear Algebra, Statistics
Air Traffic Controller: Algebra, Trigonometry, Calculus I and II, Linear Algebra, Statistics, Geometry
Animator: Algebra, Trigonometry, Linear Algebra, Geometry, 3D Modeling
Architect: Algebra, Trigonometry, Calculus I and II, Linear Algebra, Statistics
Astronaut: Algebra, Trigonometry, Calculus I and II, Linear Algebra, Statistics
Banker: Algebra
Biostatistician: Algebra, Trigonometry, Calculus I and II, Linear Algebra, Statistics
Cryptanalyst: Algebra, Trigonometry, Calculus I and II
Urban Planner: Algebra, Trigonometry, Calculus I and II, Geometry, and Statistics
Geologist: Algebra, Linear Algebra, Biochemistry, Statistics

Enrichment Activities
Westinghouse Science Honors Institute, Science Bowl, Science Olympiad, Future Business Leaders of America
Competitive Events, Accounting I, Accounting II, Business Calculations, Introduction to Financial Math,
Economics, Graphic Design, Securities and Investments, Computer Problem Solving, Cyber Security, Help Desk,
Insurance & Risk Management, Introduction to Information Technology, Networking Concepts, Personal
Finance, Computer Applications, Database Design and Applications, Spreadsheet Applications,
WordProcessing, Underwater Robotics, STEM Club, TSA, Banking & Financial Systems, Network Design, 3D
Animation, Coding and Programming, Computer Game and Simulation Programming, Mobile Application
Development, Website Design, Virtual Business Finance Challenge,
Pittsburgh Regional Science and Engineering Fair, Global Leadership Certificate Program, Model United Nations
Committees - World Health Organization, CMU Society of Women Engineers High School Day
Westinghouse Engineering Day, Calcu-Solve Competition

Business, Finance, and Entrepreneurship

- Business & Mgmt
- Corporate Training
- Finance
- Hospitality & Tourism
- Manufacturing - logistics and controlling
- Marketing
- Transportation, Distribution & Logistics
<table>
<thead>
<tr>
<th>Entry Level Careers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank Teller, Sales Associate, Event Planner, Bookkeeper, HR Assistant, Payroll Assistant, Financial Examiner, Insurance Sales, Recruiter, Brand Assistant, Fundraiser, Entrepreneur, Public Relations Specialist, Front Desk Manager, Travel Agent, Driver, Receptionist, Bill Collector, Real Estate Agent, Tour Guide, Translator, Concierge</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Technical Level Careers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web Page Designer, Data Entry, Animator, Game Designer, Financial Planner, Marketing Assistant, Buyer, Loan Officer, Logistcian, Tax Examiner, Brand Manager, Market Research Analyst, Compensation &amp; Benefits Manager, Hotel/Restaurant Manager, Social Media Manager, Operations Research, Corporate Trainer, Advertising Coordinator, Auditor, Compliance Officer, Budget Analyst, Underwriter, Cost Analyst, Credit Counselor, Financial Analyst, Insurance Coding, Public Relations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Professional Level Careers</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEO, CFO, COO, VP, HR Manager, Sales Manager, CPA, Inventory Manager, Auditor, Human Resources, Advertising Manager, Real Estate Broker, Operations Manager/Director, Supply Chain Manager, Corporate President, Stock Broker, Business Educator, Financial Manager, Actuary, Hospital Administrator, Teacher, Tax Attorney, Computer Solutions Provider, Corporate Analyst, Mortgage Broker, Economist, Risk Management, Corporate Trainer, Sports Management, Labor &amp; Employment Attorney, Intellectual Property Attorney, International Law</td>
</tr>
</tbody>
</table>

### Core and Elective Courses

**Entry Level**
- Presentation Applications
- Accounting IA
- Accounting IB
- Excel
- College & Career
- Business Management
- Sports & Entertainment Marketing
- Media I
- Web Page Design
- Public Speaking
- Economics
- Psychology
- Sociology
- Parkway

**Technical Level**
- 3D Modeling
- Gamemaker
- Web Page Design
- Media II Accounting II
- Presentation Applications
Technical Level Contd.

- Excel
- Podcasting
- Photoshop
- College & Career
- Honors Economics

Professional Level

- Honors Management
- Presentation Applications
- Media III
- College & Career
- International Business
- AP Economics

Enrichment Activities


Health and Medicine

- Health Sciences
- Human Services
- VET Tech.
- Cosmetology
- Health Assistant
- Sports Medicine
## Entry Level Careers
- Home Care Aide
- Medical Assistant
- Medical Secretary
- OT Aide
- Psychiatric Aide
- Medical Biller
- Medical Insurance
- Lab Technician
- Nursing Assistant
- Research Assistant

## Technical Level Careers
- Vet Tech
- Cosmetologist
- Medical Device Technician
- Pharmacy Technician
- Respiratory Therapist
- Dietician and Nutritionist
- Radiologic and MRI Technicians
- Dental Hygienist
- Phlebotomist
- Nuclear Medicine Technologist
- Radiation Therapist
- EMT
- Ultrasound Technician
- Medical Coding
- Personal Training
- OSHA Investigator

## Professional Level Careers
- Researcher
- Veterinarian
- Medical Doctor
- Physician Assistant
- Physical Therapist
- Occupational Therapist
- Nurse
- Speech Language Pathologist
- Athletic Trainer
- Hospital Administrator
- Forensic Scientist
- Pharmacist
- Teacher/Professor
- Biomedical Engineer
- Mortician
- Coroner
- Detectives
- Pathologist
- Genetic Counselor
- Geneticist
- Genetic Engineer
- Psychologist
- Psychiatrist
- Social Worker
- Therapist
- Medical Translator
- Psychiatric Nurse
- Audiologist
- Gerontologist
- Mental Health Counselor

## Core and Elective Courses

### Entry Level:
- Biology
- Chemistry I
- Chemistry II
- Forensic Science
- Public Speaking
- Statistics
- Algebra
- Parkway

### Technical Level:
- Biology
- Honors Biology
- Chemistry I
- Honors Chemistry I
- Chemistry II
- Forensic Science
- Physics
- Honors Physics
- Health
- Gym/Lifetime Fitness
- Child Development
- Child Psychology
- Algebra II
Professional Level:
- Honors Biology
- AP Biology
- Honors Human Anatomy and Physiology
- Honors Chemistry
- Chemistry II
- AP Chemistry
- Honors Physics
- AP Physics
- Precalculus
- Honors Precalculus
- Calculus
- AP Calculus (AB and/or BC)
- Statistics
- Geometry

Art and Communications
- AV/Tech & Film
- Journalism and Broadcasting
- Performing Arts
- Printing Tech.
- Telecommunications
- Visual Arts
- Culinary
- Graphic Design

<table>
<thead>
<tr>
<th>Entry Level Careers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barista, Line Cook, Copy Editor, YouTuber, Podcaster, Freelance: Actor, Artist, Musician, Stagehand, Composer, Customer Service Representative, Travel Agent, Motivational Speaker</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Technical Level Careers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sous Chef, Photographer, Technical Writer, Lighting Designer, Stage Manager, Set Designer, Stagehand, Sound Engineer, Light Engineer, Stage Construction, Instrument Repair, Graphic Design, Recording Engineer, Printmaker</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Professional Level Careers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actor, Film Director, Graphic designer, Interior Designer, Songwriter, Head Chef, Screenwriter, News Reporter, Publisher, Lawyer, Document Designer, Artist, Copywriter, Closed Captioner, Journalist, Reporter, Photojournalist, Blogger, Stagehand, Sound Engineer, Light Engineer, Stage Construction, Instrument Repair, Graphic Design, Actor, Artist, Musician, Art Educator, Music Educator, Arts Management/Business,</td>
</tr>
</tbody>
</table>
Recording Engineer, Music Therapist, Composer, Art Therapist, Music Industry Merchandising, Advertising, Music Critic, Art Critic, Choreographer, Ethnomusicologist, Music Historian, Art Historian, Museum Curator, Imagineer, Animator, Game Designer

Core and Elective Courses

- Theatre I
- Theatre II
- Writing & Public Speaking
- Stage Production
- Screenwriting
- Game Design
- Broadcast Journalism
- Print Journalism
- Yearbook
- 3D Modeling

Core and Elective Courses Contd.

- Game Programming
- Mythology
- Storytelling by Design
- Poetry
- Foundations of Art I
- Intermediate Art II
- Advanced Art III
- Pro Art IV
- Creativity & Innovation
- Concert Choir
- Select Choir
- Treble Ensemble
- Digital Piano & Music Theory I & II
- AP Music Theory
- Concert Band
- Wind Ensemble
- Orchestra
- Photoshop
- Python
- Presentation Applications
- Podcasting
- Philosophy
- American Cultures
- World Languages
- Geometry
Education, Public Service and International Affairs

- Professional Support Services
- Community/ Nonprofit
- Govt. & Public Admin.
- Law & Public Safety
- Education

### Entry Level Careers

Public Works, Travel Agent, Tour Guide, Tutor, Uber Driver, Sanitation, Child Care Provider, Correction Officer, Dispatchers, Postal worker, Assistant Teacher

### Technical Level Careers

Police Officer, Military, Security Guard, Cartographer, Paralegal, Legal Secretary, Child Care Lead, Firefighter, State Police/Highway Patrol, Flight Attendant, Border Patrol, Docent, Court Reporter, Government Agency Investigator, City Planning, Skilled Laborer

### Professional Level Careers

Teacher, Lawyer, Judge, Judicial Clerk, Politician, Social Worker, Translator, Interpreter, Diplomat, FBI Agent, Director of Non-Profit Organization, Psychologist, Sociologist, Liaison Officer, Fiel, Researcher, Economist, Product Localization Manager, Anthropologist, Historian, Curator, Clergy, Symbologist, Hotel Management, Fundraiser, Professor/Adjunct Professor, Lobbyist

Public Relations Specialist, Principal, Superintendent of Schools, Librarian, Researcher, Intelligence Officer, Cultural Resource Manager, Park Ranger, School Counselor, DEA

Child Care Assistant Director, Child Care Director, Curriculum Specialist/Supervisor, Math Coach, Reading Coach, School Administrator, Educational Researcher, Life Coach, International Marketing, International Business, Broadcast Journalism, Business Law

### Core and Elective Courses

- All world language courses
- Civics
- Honors Civics
- AP US & Comparative Government and Politics
- AP Euro
- Psychology
- Sociology
- Leadership I and II
- SAT Prep
- English, Honors English, AP English
- World Cultures
- Economics
- Honors Economics
- AP Economics
- American Cultures
Core and Elective Courses

- Honors American Cultures
- Biology
- Chemistry
- Physics
- AP US History
- Child Psychology
- Philosophy
- Early Childhood Development
- Forensics
- Child Psychology
- Early Childhood Development
- Independent Study
- Podcasting
- Keyboarding
- Computer Classes
- Media I
- Public Speaking
- Yearbook
- Print Journalism
- Parkway

Agriculture and the Environment

- Sustainability
- Food Chain Management
- Natural Resource Management
- Environmental Science
- Agriculture (Farming)
- Agribusiness

<table>
<thead>
<tr>
<th>Entry Level Careers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmer, Sanitation Engineer, Landscaper, Park Ranger, Environmentalist</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Technical Level Careers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydraulics Technician, Sales Specialist, Environmental Health Specialist, Game Warden, EPA Investigator, Natural Gas Drilling</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Professional Level Careers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agronomis, Agricultural Engineer, Environment Specialist, Ecologist, Environmental Lobbyist, Statistician, Zookeeper, Animal Geneticist, Food Scientist, Biochemist, Environmental Engineer, Agricultural Lawyer, Agriculture Economist, City Planner, Science Teacher</td>
</tr>
</tbody>
</table>
Core and Elective Courses

Entry Level:
- Biology
- Chemistry I
- Chemistry II
- Exploratory Science
- Civics
- Parkway

Technical Level:
- Biology
- Honors Biology
- Chemistry I
- Honors Chemistry I
- Chemistry II
- Physics
- Honors Physics
- Exploratory Science
- Algebra
- Geometry
- Public Speaking

Professional Level:
- Honors Biology
- AP Biology
- Honors Human Anatomy and Physiology
- Honors Chemistry
- Chemistry II
- AP Chemistry
- Honors Physics
- AP Physics
- Precalculus
- Honors Precalculus
- Calculus
- AP Calculus (AB and/or BC)
- Statistics
- AP Psychology
- World Languages
- Writing/Public Speaking
### BUSINESS AND COMPUTER SCIENCE DEPARTMENT

Table 10 - Business, Computer, Info. Tech. Dept. Courses

<table>
<thead>
<tr>
<th>COURSE #</th>
<th>BUSINESS COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>070</td>
<td>Multi-Media I</td>
</tr>
<tr>
<td>071</td>
<td>Multi-Media II</td>
</tr>
<tr>
<td>865</td>
<td>Honors Multi-Media III - CHS</td>
</tr>
<tr>
<td>074</td>
<td>PhotoShop</td>
</tr>
<tr>
<td>199</td>
<td>International Business</td>
</tr>
<tr>
<td>201</td>
<td>3D Modeling</td>
</tr>
<tr>
<td>560</td>
<td>Excel – Office 2016 – 10th Graders</td>
</tr>
<tr>
<td>561</td>
<td>Web Page Design</td>
</tr>
<tr>
<td>562</td>
<td>Business Management and Entrepreneurship</td>
</tr>
<tr>
<td>568</td>
<td>GameMaker Programming I</td>
</tr>
<tr>
<td>800</td>
<td>Podcasting</td>
</tr>
<tr>
<td>569</td>
<td>Accounting 1A</td>
</tr>
<tr>
<td>570</td>
<td>Accounting 1B</td>
</tr>
<tr>
<td>582</td>
<td>College and Career Planning – 11th Graders</td>
</tr>
<tr>
<td>585</td>
<td>Sports and Entertainment Marketing</td>
</tr>
<tr>
<td>192</td>
<td>Honors Management and Marketing Applications - CHS</td>
</tr>
<tr>
<td>592</td>
<td>Presentation Applications – 9th Graders</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COURSE #</th>
<th>COMPUTER SCIENCE COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>583</td>
<td>Introduction to Java Programming</td>
</tr>
<tr>
<td>589</td>
<td>AP Computer Science P (Principles)</td>
</tr>
<tr>
<td>586</td>
<td>AP Computer Science A</td>
</tr>
<tr>
<td>859</td>
<td>Introduction to Python Programming</td>
</tr>
<tr>
<td>781</td>
<td>Cyber Security</td>
</tr>
<tr>
<td>782</td>
<td>Data Science</td>
</tr>
<tr>
<td>783</td>
<td>Python II</td>
</tr>
<tr>
<td>1010</td>
<td>Honors Python III</td>
</tr>
<tr>
<td>1009</td>
<td>Designing and Inventing with Computer Science and Engineering</td>
</tr>
</tbody>
</table>

*CHS – College in High School course

**Note:** For all Honors and AP courses, a summer assignment is required.
SFSD COMPUTER SCIENCE PATHWAY GRADES 9-12

This pathway is designed with multiple entry points based on the understanding that the PA Department of Education is planning to make computer science a mandatory graduation requirement in the future. Therefore, any student may take Python I. There is no prerequisite for this. In addition, AP CS P is a nationally designed course having no prerequisite. Students may take this for their CS course. However, we highly suggest – but do not require – students to take Python I or Intro to Java before taking AP CS P.

For students who are planning to take computer science or enter an engineering field in the future we suggest taking Intro to Java, AP CS A, Python III and AP CS A during their high school experience. For students who are interested in entering the field of data science or data analytics we suggest the data science course. We suggest cybersecurity and CS/Engineering for students interested in learning more about other career opportunities in CS related fields including computer hardware and infrastructure.

FOUNDATIONAL CS CLASSES
(Suggested to be taken first in the pathway)

DEC. 2023

EXTENDING THE FOUNDATIONAL CS CLASSES FOR COLLEGE BOUND CS/ENGINEERING STUDENTS

Prerequisites: Python I & I

DEC. 2023

EXTENDING THE PATHWAY FOR INTERESTED STUDENTS

DEC. 2023

Key:
No Prerequisite =
Prerequisite =
Sequence =

Note: This section is not meant to be linear. Students can take Java and AP CS A before taking Python III and AP CS P. It depends on the student’s readiness.

Note: This section contains entry-level courses that relate to CS but are not considered to be a CS programming course. They are for students interested in exploring opportunities but who are not pursuing a future in CS/Engineering. No prerequisites are necessary.
BUSINESS

070 - MULTI-MEDIA I
Prerequisite: None
One Semester – Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: Have you always wanted to make movies, but were unsure just how to put one together? This elective course introduces students to digital video and editing techniques. The focus of the course will be on using technology to enhance video productions by using the Adobe Premiere Pro editing software.

Students will learn how to effectively use the high definition cameras and software to add appropriate digital enhancements. Ultimately, students will demonstrate their knowledge of the technology by planning, producing, and editing their own video projects, to possibly be used as programming on SF-TV 3.

071 - MULTI-MEDIA II
*This course can be taken multiple times and will be offered each semester throughout high school.
Prerequisite: Successful Completion of Multi-Media I with a 75% and Teacher Recommendation
One Semester - Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: You have all seen SF-TV 3—why not create the videos that are shown on it each day? This project-based elective course builds on the skills learned in Multi-Media I. Students will acquire or enhance skills in the techniques of all facets of video production (including storyboards, filming, assessing, and capturing raw footage), as well as audio and video editing via Adobe Premiere Pro. Students will not only produce on-air programming for SF-TV 3, but also participate in local contests and create materials for the district. Through their varied efforts working with video production, students will further develop important life and career skills such as responsibility, organization, problem solving, and teamwork. This course does require students to be self-sufficient and sometimes film outside of school. *This course can be taken multiple times with a teacher recommendation and will be offered each semester throughout high school.

865 – HONORS MULTI-MEDIA III (HONORS LEVEL COURSE) - CHS
*Point Park University - College in High School Program Option
Prerequisites: Successful Completion of Multi-Media I and Multi-Media II and teacher recommendation
Full Year – Five Periods Per Week – 1.0 Credits

COURSE DESCRIPTION: Honors Media III is a project-based elective course that will allow students to advance their video production skills, as they produce the major projects of the year viewed by both the School District and community. Students will create various content including instructional videos, Public Service Announcements, documentaries, commercials, short films, and more. Technical aspects of producing, directing, cinematography, and film editing will be covered. Honors Media III students are expected to be self-motivated, creative, goal-oriented, and willing to devote the necessary time to complete their projects. Due to the various productions required of the course, students will need to be responsible, reliable, and self-disciplined to complete the projects before the set deadlines. This course will be aligned with Point Park University’s Cinema Arts curriculum and will give students the option to earn college credits. Students can elect to register with Point Park and earn 3 credits for $250 if they complete the course with a 70% or better. Students do not have to register with Point Park to take this course.
074 - PHOTOSHOP
Prerequisite: None
One Semester - Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: Ever wanted to create your own magazine cover or place yourself on the red carpet alongside your favorite actor/actress? This course gives you that opportunity! Adobe Photoshop is the favorite image manipulation and editing tool of the professional graphics industry. It enables photographs, pictures, and graphics files to be edited and offers a dazzling array of drawing, special effects, and filtering tools. Knowing where to start with such a comprehensive and feature-filled program can be daunting. This course aims to equip new users with the basics. Techniques will be explained and demonstrated, and participants will then be given the opportunity to practice and create original projects to be displayed outside of the Media Room and shared on SF-TV 3.

199 – INTERNATIONAL BUSINESS
Prerequisite: None
One Semester - Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: Students enrolled in this course will learn the foundations of international business and how they differ from U.S. markets. The course will also include discussions on global business environments and how they impact decision making in foreign markets as well as international banking, finance and investments. The students will also explore international business communications and cultures as well as ethical and social responsibilities in a global economy.

201 – 3D MODELING
Prerequisite: None
One Semester - Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: In 3D Modeling, students will learn 3D modeling techniques that professionals use. They’ll use 3DS Max to manipulate and sculpt pure imagination into substantial digital art, resulting in a portfolio of original projects that they can use when applying for an internship, higher education, or a job. These items can be utilized in the gaming courses to incorporate the student created 3D models into gaming software and animation programs.

560 - EXCEL - OFFICE 2016
*This is a required graduation course for all 10th Grade Students.
Prerequisite: None
One Semester - Five Periods per Week - .5 Credit

COURSE DESCRIPTION: Students will experience a critical-thinking, problem-solving approach in preparing to master the latest edition of spreadsheet software. In-depth coverage will include spreadsheet concepts such as order of precedence, function syntax (sum, count, average, minimum, maximum, median, payment, round, and if statements), absolute and relative cell references, what-if analysis, and goal seek. New enhancement features include themes, Live Preview, cell styles, and conditional formats. Additionally, students will learn ways to manipulate data and construct graphs.
561 - WEB PAGE DESIGN  
Prerequisite: None  
One Semester – Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: This elective course is an introduction to Microsoft Web Expression and Cascading Style Sheets. Students will learn the fundamentals of building a basic Web site, including the planning and decision-making process involved in creating Web pages, Web sites, and style sheets. Students will work with styles, images, links, templates, data tables, inline frames, forms, and other elements to add interactivity to Web sites.

562 - BUSINESS MANAGEMENT AND ENTREPRENEURSHIP  
Prerequisite: 10th, 11th and 12th Grade Students  
One Semester – Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: This one-semester academic/business course is designed for the 10th, 11th, and 12th grade student who intends to study business in college, explore the possibility of owning/managing their own business, or wants to gain an understanding of business operations.

The course will provide a critical understanding of the following topics:
- Types of businesses (sole proprietorship, partnership, corporation)
- Business communication
- Motivation & leadership
- Ethics
- Human resources
- Conflict and stress

Activities and assessments will promote critical thinking and decision making, while addressing the importance of using technology effectively in business.

568 - GAMEMAKER PROGRAMMING I  
Prerequisite: None  
One Semester – Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: Students will receive an introduction to basic programming by creating 2D executable games with the Game Maker software. Students will design their games based on the Game Maker scripting language. The game design process of planning, implementing, reviewing, and adjusting will be utilized as students create and program their games. Problem-solving skills will be used and improved to debug programming errors. Major topics include: Sprites (pictures), objects, rooms, backgrounds, instances, user interface, managing variables, managing game iteration, creating the scores, play-test evaluation, game evaluation, game timers, high scores, and sound.
800 - PODCASTING

Prerequisite: None
One Semester - Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: Podcasting combines major skills emphasized by both the English and Business Departments. The course will focus on students being able to work collaboratively within a group, write to an audience, learn new forms of technology, and find a meaningful and positive voice. Students will listen to popular podcasts, research different forms of this medium, and develop and record their own podcasts. This will be done all while working with peers and learning the process of what it takes to make their effort meaningful and successful.

ACCOUNTING COURSES

Today, accountants are actively involved in the analysis and interpretation of financial data and they work with other executives in decision-making and problem solving activities. Thus, many folks in top management have accounting backgrounds. Accounting is an interesting and in-demand profession. It is an ideal platform for any business career, and accredited accountants are highly employable and enjoy the benefits of an interesting profession recognized throughout the world. What is interesting about accounting, unlike that of other fields like engineering and science, is that accountants are needed in both booming economies and in recessionary economies.

Accounting is an invaluable tool that enables students to understand business! It is truly the language of business. Accounting helps people understand business in their careers and in their personal lives. If you like business and are going to college for a business-related major, accounting is a great foundation for almost any business career! It is highly recommended that all students who are pursuing a business-oriented field of study in college enroll in at least one semester of Accounting.

569 - ACCOUNTING IA

Prerequisite: Successful Completion of Algebra I
One Semester – Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: Accounting IA is a one-semester business course designed to familiarize students with the “language of business.” It is designed for nearly all students who wish to further their knowledge of business management and decision-making. This course introduces the student to careers in accounting and to positions where accounting knowledge is useful. The course will help students understand complicated issues in the business world and provide working knowledge of business structure and characteristics of proprietorships, corporations, and partnerships.

In Accounting IA, students will work with a sole proprietor as a service business completing the first nine (9) textbook chapters. Students become aware of how financial data is processed and will be able to process this data within the Accounting Cycle, which includes: journalizing, posting, preparing a worksheet, preparing balance sheets and income statements, recording adjusting and closing entries, and preparing a post-closing trial balance. The semester will conclude with an introduction to Automated Accounting showing the student how data can be manipulated via the computer.
**570 - ACCOUNTING IB**  
*Prerequisite: Successful completion of Accounting IA*  
*One Semester – Five Periods Per Week - .5 Credit*

**COURSE DESCRIPTION:** Accounting IB is a continuation of the material covered in Accounting IA. This second semester of accounting is strongly recommended for the college-bound student majoring in accounting or a business career.

Students will work with a partnership as a merchandising business completing eight (8) additional textbook chapters. Students will be able to work with subsidiary ledgers and controlling accounts, process transactions involving credit card sales and sales tax, work in an expanded journal to record transactions, prepare payroll records, and prepare all steps in the accounting cycle for a partnership. In addition, heavy emphasis will be placed on giving the student exposure to the automated and spreadsheet software used to record data and build financial statements and graphs.

Current events in the business world will be discussed. Students may use the Internet to acquire current, relevant material.

**582 - COLLEGE AND CAREER PLANNING**  
*This is a required graduation course for all 11th Grade Students. A requirement for course credit is completion of the “Senior Portfolio”.*  
*Prerequisite: None*  
*One-Semester – Five Periods Per Week - .5 Credit*

**COURSE DESCRIPTION:** The focus of this course will be to provide viable skills for:

- career development through the clusters while adding career- and college-based documents to individual senior career portfolios
- selecting the post-secondary educational program to best fit the student’s career choice
- preparing required real-life applications for college acceptance and seeking financial assistance possibilities
- producing competitive interviewee candidates for employment
- financial literacy awareness
- educational/professional goals, motivation, and insight for beyond the first five years of high school

Writing assessments will be completed after units modeling the appropriate writing style based on the unit concepts. At least four (4) writing assessments will become part of the student’s senior portfolio.

**585 - SPORTS AND ENTERTAINMENT MARKETING**  
*Prerequisite: None*  
*One Semester – Five Periods Per Week - .5 Credit*

**COURSE DESCRIPTION:** This course will use the world of sports and entertainment to teach the foundations of marketing. Each basic marketing function will be incorporated throughout the class with an emphasis on how these functions relate to sports and entertainment.
This course will provide a critical understanding of the following topics:

- The four P’s of marketing (product, place, price, promotion)
- Industry history
- Consumer behavior
- Technology in marketing
- Product placement
- Primary marketing functions
- Social media as a marketing tool

Lectures, activities and assessments will promote critical thinking and decision making while using technology to demonstrate the ever-changing world of marketing.

**192 - HONORS MANAGEMENT AND MARKETING APPLICATIONS (HONORS LEVEL COURSE) – CHS**

*Point Park University - College in High School Program option*

Prerequisite: Successful Completion of “Business Management and Entrepreneurship” and “Sports and Entertainment Marketing” with an 85% or better in both courses and teacher recommendation

One Semester – Five Periods Per Week - .5 Credit

**COURSE DESCRIPTION:** This honors-level course will be aligned with Point Park University’s Sport Art and Entertainment Management curriculum and will provide students, who complete the course with an 80% or better, with college credit. Students, who successfully complete this course and elect to attend Point Park University, will receive three (FREE) college credits for Point Park’s SAEM 101 course.

This course will provide a critical understanding of the following topics:

- Current events
- Event management and event marketing
- Banking and financial systems
- Sport and entertainment law
- Event and live music management
- Promotion and distribution of an event
- Ticketing
- Product development and pricing strategies
- Corporate sponsorship and fundraising

This course will feature a project that utilizes Point Park University’s resources and facilities. There will be an emphasis on using technology as tool to plan, manage and market an actual event.
592 - PRESENTATION APPLICATIONS

*This is a required graduation course for all 9th Grade Students.*

Prerequisite: None

One Semester – Five Periods Per Week - .5 Credit

**COURSE DESCRIPTION:** Students will manipulate this presentation graphics software package to create professional-quality visual presentations on paper and as on-screen slide shows. Focus will be placed on incorporating effective and appropriate elements of design, such as tables, SmartArt graphics, bitmapped images, AutoShapes, themes and templates. Videos, sound clips, and animations will also be used to enhance the quality and creativity of presentations. In addition, students will sharpen their oral presentation skills by giving informative and persuasive speeches.

**COMPUTER SCIENCE**

583 – INTRODUCTION TO JAVA PROGRAMMING

Prerequisite: None

One Semester – Five Periods Per Week - .5 Credit

**COURSE DESCRIPTION:** Java programming will provide the opportunity for students to learn an object-oriented language and to learn object-oriented programming. The course is aimed at learning how to program in Java and developing Java applications. The major topics to be covered are: Basic Elements of Java; Introduction to Objects and Input/Output; Control Structures Using Selection; and Control Structures Using Repetition.

589 - AP COMPUTER SCIENCE P (PRINCIPLES) (ADVANCED PLACEMENT COURSE)

*It is recommended that a student in the AP Computer Science Principles course should have successfully completed a first-year high school algebra course with a strong foundation in basic linear functions and composition of functions, and problem-solving strategies that require multiple approaches and collaborative efforts. In addition, students should be able to use a Cartesian (x, y) coordinate system to represent points in a plane. It is important that students and their advisors understand that any significant computer science course builds on a foundation of mathematical and computational reasoning that will be applied through the study of the course.*

Prerequisite: None

One Semester – Five Periods Per Week - .5 Credit

**COURSE DESCRIPTION:** AP Computer Science Principles introduces students to the central ideas of computer science, instilling the ideas and practices of computational thinking, and inviting students to understand how computing changes the world. Students develop innovative computational artifacts using the same creative processes artists, writers, computer scientists, and engineers use to bring ideas to life.

To appeal to a broader audience, including those often underrepresented in computing, this course emphasizes the vital impact advances in computing have on people and society. The course goes beyond the study of machines and systems and gives students the opportunity to investigate computing innovations that span a variety of interests and to examine the ethical implications of these new technologies.

In partnership with the National Science Foundation, the AP Program collaborated with secondary and postsecondary educators and members of computer science educational professional organizations to develop the AP Computer Science Principles curriculum framework.
This new AP Computer Science Principles course is complementary to AP Computer Science A. Students can take these courses in any order or at the same time, as schedules permit. Both courses include rigorous computer science content and skills that can be built on to complete further science, technology, engineering, mathematics, and computing studies. It is important to note that the AP Computer Science Principles course does not have a designated programming language. Teachers have the flexibility to choose a programming language(s) that is most appropriate for their students to use in the classroom. We will be implementing Python language.

586 - AP COMPUTER SCIENCE A
Prerequisite: Successful Completion of Introduction to Java Programming with a grade of 85% or higher.
One Semester – Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: The AP Computer Science course is a continuation course in computer science. Because the design and implementation of computer programs to solve problems involve skills that are fundamental to the study of computer science, a large part of the course is built around the development of computer programs that correctly solve a given problem. These programs should be understandable, adaptable, and, when appropriate, reusable. At the same time, the design and implementation of computer programs is used as a context for introducing other important aspects of computer science, including the development and analysis of algorithms, the development and use of fundamental data structures, the study of standard algorithms and typical applications, and the use of logic and formal methods. In addition, the responsible use of these systems is an integral part of the course.

859 - INTRODUCTION TO PYTHON PROGRAMMING
*This course assumes no prior programming experience, but students should have algebra readiness.
Prerequisite: None
One Semester – Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: This course is a one-semester introduction to programming in Python, with an emphasis on critical thinking, problem solving, and creativity. Specific topics include functions, variables, expressions, conditionals, loops, strings, lists, graphics, and animations, as well as top-down design, testing, and debugging. The course’s main goal is for students to learn the fundamentals of programming, to enjoy coding, and to be able to use programming creatively to help solve problems in a variety of domains. Introduction to Programming will provide sufficient rigor to be interesting and pedagogically compelling. The outcome for the course is that students will be able to solve problems through code.

781 – CYBER SECURITY
Prerequisite: None
One Semester – Five Periods Per Week - .5 Credit (Gr. 9, 10, 11, 12)

COURSE DESCRIPTION: This course will introduce fundamentals of Cybersecurity, such as cybersecurity goals, vulnerabilities, threats and risks. Students will also learn to use the methods and tools for cybersecurity vulnerability scanning and risk assessment. The course will also explore the technical issues involved with computers and information technology. Topics include computer hardware and components, operating systems, file storage, networking fundamentals, digital media, database systems, and Internet structure and organization.
782 – DATA SCIENCE
Prerequisite: None
One Semester – Five Periods Per Week - .5 Credit (Gr. 9, 10, 11, 12)

COURSE DESCRIPTION: The Intro to Computing and Data Science course is offered as one semester to students in grades 9th through 12th. This course is offered to all students with varying backgrounds and experience in computer science education. All students, including those who are not interested in computer science as a career, can participate in this course. This course introduces computer programming in an engaging, fun and creative way through simulation programming. It also provides the computational thinking skills of programming, algorithm development, and data analysis that can be utilized in other classes.

783 – PYTHON II
Prerequisite: Successful completion of Introduction to Python
One Semester – Five Periods Per Week - .5 Credit (Gr. 9, 10, 11, 12)

COURSE DESCRIPTION: Computer Science and computational problem solving are fundamental skills for engaging the 21st-century marketplace of ideas and economies. We believe that all students should have the opportunity to learn these skills as they will use them in whatever career they are likely to enter. There are 5 Units to the course, using the custom graphics package and non-graphical contexts. The course requires completion of Introduction to Python. Each Unit provides content for the topic to be investigated, a worked problem(s) to illustrate and let students explore the topic, a set of exercises to hone their mastery of the topic, some end-of-unit exercises that require students to use and synthesize all the topics found in that Unit, and a creative task that lets them further explores the topics in the Unit in a manner driven by their interests. Students will develop an understanding of for loops, 1D Lists, 2D Lists, Sounds and graphics, game development, and Strings. As students progress the course alternates between graphics and non-graphics contexts to ensure students have a wide exposure to the richness of computational domains in which to solve problems. We expect students will have greater affinity for some domains more than others, but we want to ensure that all students are exposed to all domains. At the end of the course, students will have engaged in a substantial learning experience and should be able to computationally solve a wide range of problems. The course provides its own browser-based Integrated Development Environment (IDE) that the students will use to create and run their programs. It encompasses an editor and compiler and a custom graphics package. Students will have the opportunity for instant feedback to questions as well.

1010 – HONORS PYTHON III
Prerequisite: Successful completion of Python I and Python II
One Semester – Five Periods Per Week - .5 Credit (Grades 10, 11, 12)

COURSE DESCRIPTION: Python III is designed for students who have completed our Python I and Python II courses. This course builds on those foundations, covering some additional programming and CS topics, and then applying and extending computational problem-solving skills in a variety of application areas. Units will apply computation to areas such as art, science, music, math, data analysis and visualization, simulations, game design, web applications, security, machine learning and artificial intelligence, and more.
1009 – DESIGNING AND INVENTING WITH COMPUTER SCIENCE AND ENGINEERING
Prerequisite: None
One Semester – Five Periods Per Week - .5 Credit (Grades 9, 10, 11, 12)

COURSE DESCRIPTION: The course is designed to incorporate external devices and use Python programming to manipulate various components of those devices. Each student will be able to apply what learned concepts into real world activities. An introduction to Python course is encouraged but not required. The course is targeted to students interested in science-based careers including medicine, engineering, architecture, and math related fields. Working individually and in teams, students will learn circuitry and how to design and program external devices while incorporating Python programming.

ENGLISH DEPARTMENT

Table 11 - English Courses

<table>
<thead>
<tr>
<th>COURSE #</th>
<th>ENGLISH COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>030</td>
<td>English 9 WI</td>
</tr>
<tr>
<td>032</td>
<td>Honors English 9 WI</td>
</tr>
<tr>
<td>040</td>
<td>English 10 WI</td>
</tr>
<tr>
<td>042</td>
<td>Honors English 10 WI</td>
</tr>
<tr>
<td>050</td>
<td>English 11 WI</td>
</tr>
<tr>
<td>052</td>
<td>Honors English 11 WI</td>
</tr>
<tr>
<td>057</td>
<td>AP English 11: Language and Composition WI</td>
</tr>
<tr>
<td>060</td>
<td>English 12 WI</td>
</tr>
<tr>
<td>062</td>
<td>Honors English 12 WI</td>
</tr>
<tr>
<td>065</td>
<td>AP English 12: Literature and Composition WI</td>
</tr>
<tr>
<td>1007</td>
<td>Honors Argument - CHS</td>
</tr>
<tr>
<td>066</td>
<td>English Language Learners (&quot;ELL&quot;)</td>
</tr>
<tr>
<td>067</td>
<td>Screenwriting</td>
</tr>
<tr>
<td>072</td>
<td>Writing and Public Speaking WI</td>
</tr>
<tr>
<td>075</td>
<td>Mythology Across Cultures</td>
</tr>
<tr>
<td>076</td>
<td>The Poetic Imagination: From Homer to Hip-Hop</td>
</tr>
<tr>
<td>077</td>
<td>The American Short Story</td>
</tr>
<tr>
<td>125</td>
<td>Game Design</td>
</tr>
<tr>
<td>202</td>
<td>Print Journalism</td>
</tr>
<tr>
<td>203</td>
<td>Broadcast Journalism</td>
</tr>
<tr>
<td>204</td>
<td>Shakespeare for Everyone</td>
</tr>
<tr>
<td>205</td>
<td>Storytelling by Design</td>
</tr>
<tr>
<td>575</td>
<td>Yearbook Publication</td>
</tr>
<tr>
<td>590</td>
<td>SAT Prep</td>
</tr>
<tr>
<td>850</td>
<td>Theatre Arts I</td>
</tr>
<tr>
<td>851</td>
<td>Theatre Arts II</td>
</tr>
<tr>
<td>862</td>
<td>Stage Production</td>
</tr>
</tbody>
</table>

*WI = Writing Intensive
*CHS – College in High School course

Note: For all Honors and AP courses, a summer assignment is required.
030 - ENGLISH 9 (WI)
Prerequisite: 9th Grade Students
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: English 9 is an introduction to literature and composition course with a focus on thematic understandings of humanity acquired through the study of the major literary forms including the novel, poem, drama, and short story. Major works studied include Animal Farm, Lord of the Flies, Romeo and Juliet, and To Kill a Mockingbird. Poems and short stories are selected from our literature anthology. Students will learn to read closely and communicate effectively through their speech and writing.

032 - HONORS ENGLISH 9 (HONORS LEVEL COURSE) (WI)
Prerequisite: In accordance with Advanced Course Prerequisites.
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: Ninth grade Honors English is a course designed to examine the writing process, short stories, non-fiction, fiction, drama, and poetry. The collection of novels read includes 1984, Animal Farm, Bless the Beasts and Children, To Kill a Mockingbird, and Romeo and Juliet. Each novel or drama read will incorporate vocabulary lessons. Tests on these works are both objective and written essay formats. In addition, students will select three (3) novels and use them to complete outside reading and projects. Following the most modern MLA guidelines, students will learn the process of researching by creating a research project. Other written assessments include creative, critical, and reflective pieces. Writing samples will be included in the students' senior high writing portfolios.

Students enrolled in Honors English 9 will be required to:
1. Read three (3) additional books approved by the teacher and prepare a project on each.
2. Conduct research and write an informative paper using MLA format.
3. Successfully complete tests, quizzes, projects, written assignments, and a mid-term and final examination.

Students choosing Honors level and Advanced Placement courses should be aware of required summer readings and preparation for each course. All Honors level and Advanced Placement courses will require summer preparation previous to the first day of school. Failure to complete required summer preparation will significantly affect the student’s first nine-week grade during the following academic year. Students will demonstrate mastery of their summer readings on a graded assignment.

040 - ENGLISH 10 (WI)
Prerequisite: 10th Grade Students
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: Tenth grade English is a course designed to examine the elements of major literary forms from various regions around the world including Africa, Asia, the Middle East, Russia, and Latin America. A superb collection of outstanding literature of important authors ranges from classic to contemporary. Emphasis is placed on elements that enhance appreciation of short stories, nonfiction, poetry, and novels. Students complete many literature-based writing assignments during the year and write a position paper after receiving intensive instruction about this process. All students will give an oral presentation of their research papers with the aid of PowerPoint. Novels read and studied in detail during the year include the following: Things Fall Apart, Night, and The House on Mango Street. All students participate in Career Shadow Day.
042 - HONORS ENGLISH 10 (HONORS LEVEL COURSE) (WI)
Prerequisite: In accordance with Advanced Course Prerequisites.
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: Tenth-grade Honors English is a course designed to examine the elements of major literary forms in connection with specific regions around the world. A superb collection of outstanding literature of important authors ranges from Africa, Asia, Latin America and Europe. Emphasis is placed on elements that enhance appreciation of short stories, drama, poetry, non-fiction and novels. Students complete several literature-based writing assignments during the year and write a research paper after receiving intensive instruction about this process. The research paper assignment is coordinated with the Senior Graduation Project. Honors English 10 writing assignments and research papers are longer in length and more difficult than assignments given in the regular English 10 course. Writing assignments include creative and critical response questions to help enrich and broaden students’ interpretation of novels or dramas. Vocabulary lessons accompany all literature units. Novels and the drama read and studied in detail during the year include the following: Death and the King’s Horseman, Things Fall Apart, Siddhartha, Night, The Death of Ivan Ilyich, and The House on Mango Street.

Students will be required to independently read outside novels or dramas as approved by the teacher. Projects on these works will be both analytical and creative in nature.

Students choosing Honors level and Advanced Placement courses should be aware of required summer readings and preparation for each course. All Honors level and Advanced Placement courses will require summer preparation previous to the first day of school. Failure to complete required summer preparation will significantly affect the student’s first nine (9) week grade during the following academic year. Students will demonstrate mastery of their summer readings on a graded assignment.

Students enrolled in Honors English 10 will be required to do the following:

1. Read additional books and complete analytical/creative projects on the selected books.
2. Conduct research and write a position research paper using the MLA format. Students will orally present their research to the class with the aid of PowerPoint.
3. Successfully complete chapter tests, quizzes, projects, mid-term exam and final exam.

050 - ENGLISH 11 (WI)
Prerequisite: 11th Grade Students
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: English 11 is a survey course of American literature that incorporates the history of each literary movement into the literary pieces examined. English 11 is a course designed to examine the writing process, short stories, non-fiction, fiction, drama, and poetry. The collection of novels is full of American classics: Of Mice and Men, The Crucible, and The Great Gatsby. Integrated with literature is practice in thinking skills, vocabulary, composition, and grammar skills. Components of the Senior Graduation Project are also part of the English 11 curriculum, and include: selecting a topic, creating a thesis statement, creating bibliography cards, creating note cards, and participating in Career Shadow Day.
052 - HONORS ENGLISH 11 (HONORS LEVEL COURSE) (WI)
Prerequisite: In accordance with Advanced Course Prerequisites
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: Honors English 11 is a course that recognizes the major authors, periods, and works of American literature. Literary units are comprised of poetry, short stories, dramas and novels, which include: A Separate Peace, The Great Gatsby, and The Adventures of Huckleberry Finn. The drama unit includes The Crucible.

Integrated with literature is practice in critical thinking skills, intensified composition activities and review of language skills. Students will become more competent in communication skills through various projects designed for individual research and group discussions. During the second semester, the student must read a novel from a given supplementary list of American authors. All students participate in Career Shadow Day. Components of the Senior Graduation Project are also part of the Honors English 11 curriculum and include selecting a topic, creating a thesis statement, creating bibliography cards, creating note cards, and participating in Career Shadow Day.

Students choosing Honors level and Advanced Placement courses should be aware of required summer readings and preparation for each course. All Honors level and Advanced Placement courses will require summer preparation previous to the first day of school. Failure to complete required summer preparation will significantly affect the student's first nine-week grade during the following academic year. Students will demonstrate mastery of their summer readings on a graded assignment.

057 - AP ENGLISH 11: LANGUAGE AND COMPOSITION (ADVANCED PLACEMENT COURSE) (WI)
Prerequisite: In accordance with Advanced Course Prerequisites.
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: The English 11 AP Language and Composition course is intended to prepare students for the AP Language and Composition exam. The course has been set up to address the guidelines of the AP English course description from the College Board. It is designed to give students an experience comparable to a first-year college composition course by encouraging the development of the student’s abilities to read, to write, and to communicate effectively.

Students will be given opportunities to read from a variety of genres including non-fiction, fiction, and poetry and to write in such modes as analysis, exposition, persuasion, and narration which reflect the student’s understanding of purpose, audience, and rhetorical devices both in the author’s work and in the student’s own writing.

The American Literature read during the school year will serve to model the ways in which a writer might use a variety of rhetorical devices. Students will write analytical essays on both fiction and non-fiction prompts. In addition to the writing, students will frequently take part in Socratic Seminars during which they will create interpretive questions about the texts, discuss such concepts as author's purpose, tone, and effectiveness of the literature, and reflect on their seminars both orally and in writing to further display their understanding of the material. Finally, students will augment their understanding and proficient use of language through study of grammar and usage and in extensive study of tier three vocabulary that they will be asked to incorporate into all areas of their learning.
060 - ENGLISH 12 (WI)
Prerequisite: 12th Grade Students
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: The senior literature program begins with the Anglo-Saxon period. Beginning with 449 AD, the study of English literature and literary history proceeds through the Medieval Period, Elizabethan Age, Restoration and Eighteenth Century poetry and prose, the Romantic Age, and concludes with the Victorian Age. The course covers basic grammar, MLA format, and written and oral composition skills. The novel/drama program includes the study of *Wuthering Heights*, *Macbeth*, and *Frankenstein*.

062 - HONORS ENGLISH 12 (HONORS LEVEL COURSE) (WI)
Prerequisite: In accordance with Advanced Course Prerequisites
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: Honors English 12 is a survey course of English literature that emphasizes literary history. The literature program begins with the Anglo-Saxon Period or Middle-Ages. From 449 AD our course of study continues to the Medieval Period, Elizabethan Age, Jacobean Age, the Puritan Age, the Restoration and Eighteenth Century, the Romantic Age, the Victorian Age, and concludes with contemporary English literature. The Honors student is expected to improve and perform advanced writing skills more often than in regular English 12 and to exhibit analytical thinking abilities through additional readings.

The novel/drama program includes reading the following: *Wuthering Heights*, *Pygmalion*, *Brave New World*, *Frankenstein*, *Macbeth*, and *Hamlet*.

Students enrolled in Honors English 12 will be required to:

1. Read one additional book approved by the teacher and prepare written reports based on these resources. *(Independent reading)*
2. Conduct research which demonstrates conceptual understandings of the major themes in the curriculum. Students will be individually responsible for project completion and oral presentations to the class. *(Summer work)*
3. Successfully complete chapter tests, quizzes, projects and a mid-term and final examination.

Students choosing Honors level and Advanced Placement courses should be aware of required summer readings and preparation for each course. All Honors level and Advanced Placement courses will require summer preparation previous to the first day of school. Failure to complete required summer preparation will significantly affect the student’s first nine-week grade during the following academic year. Students will demonstrate mastery of their summer readings on a graded assignment.

065 - AP ENGLISH 12: LITERATURE AND COMPOSITION (ADVANCED PLACEMENT COURSE) (WI)
*Students choosing AP courses should be aware of required summer readings and preparation for each course. All Honors level and AP courses will require summer preparation prior to the first day of school. Failure to complete required summer preparation will significantly affect the student’s first nine-week grade during the following academic year. Students will demonstrate mastery of their summer readings on a graded assignment.*
Prerequisite: In accordance with Advanced Course Prerequisites
Full Year—Five Periods per Week—1.0 Credit
COURSE DESCRIPTION: AP English Literature is a college-level course conducted at a college-level pace. In this course, students are expected to engage daily in a higher level of critical thinking than is expected in a regular or Honors-level English class. This course is designed to prepare the student for the year-end AP Literature and Composition exam as well as the rigors of post-secondary literary study. The AP Literature course emphasizes the techniques of poetry and its rhetorical effect and intent, as well as those of fiction and drama. Students will be expected to analyze the elements of style (tone, diction, syntactical and rhetorical devices), figurative language, sound devices, prosody, form, and structure present in our various readings.

Students are required to both exhibit and develop their critical thinking and writing skills through intense close reading, textual analysis, interpretive discussion, and analytical writing.

Course readings are recommended by the College Board and are frequently included on the AP Literature exam. Novel and drama selections will include much of the following: A Doll’s House, Brave New World, Dubliners, Frankenstein, Hamlet, Hedda Gabler, The Joy Luck Club, Macbeth, The Metamorphosis, Rosencrantz and Guildenstern Are Dead, The Scarlet Letter, Song of Solomon, Things Fall Apart, The Things They Carried, Wuthering Heights, and a significant body of selected poetical works.

1007 – HONORS ARGUMENT – CHS
Prerequisites: None
Full Year – Five Periods Per Week – 1.0 Credit

COURSE DESCRIPTION: This Honors English 11 course is designed to introduce students to the fundamentals of research and argument construction and analysis, along with the study of American fiction and non-fiction. Defense of an argument is presented both verbally and in writing. Topics of this course include an introduction to argument, types of argument, constructing an argument, research methods and evidence, delivery of argument, and criticism of arguments. Students will also study fiction, non-fiction, and poetry from the Pre-American, Revolutionary, Romantic, Realist, Modernist, and Postmodernist eras of American literary history. Students may elect to receive transferable college credit from The University of Pittsburgh for a fee.

066 - ELL (ENGLISH LANGUAGE LEARNERS)
Prerequisite: None
Full Year – Five Periods Per Week – 1.0 Credit

COURSE DESCRIPTION: South Fayette Township School District offers a K-12 English Language Learners (ELL) Program. The ELL Program is designed to provide non-native English-speaking students with the language skills they need to participate successfully in content area classes. To meet this goal, ELL instruction addresses the ELL and Pennsylvania Academic Standards in Reading, Writing, Speaking, and Listening to enable full participation. The emphasis placed on achieving benchmarks is adjusted to the needs of the individual student. An underlying objective is to provide a source of support as the student seeks to understand and adapt to his or her new cultural and academic setting. ELL teachers work to develop an appreciation of their students’ strengths within the school setting and to ensure full access to the range of educational opportunities available at South Fayette Township School District.

If you have any questions regarding English Language Learners, please call Student Support Services office at 412-221-4542, Ext. 8-428-#. 
067 - SCREENWRITING
Prerequisite: None
One Semester – Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: Why do we cry at movies? Or cheer? Why do thrillers put us on the edge of our seats? This course will help students understand, critique, and write dramatic stories for modern media including movies, games, and television. Students will develop skills in creative writing, awareness, provisional acting, collaborative storytelling, and creative self-confidence as they craft their own original script.

072 - WRITING AND PUBLIC SPEAKING (WI)
Prerequisite: 9th Grade Students
One Semester - A or B Day Rotation - .25 Credit

COURSE DESCRIPTION: Writing and Public Speaking is designed to augment the English curriculum and enhance student reading, writing, listening, and speaking skills. Students will write thesis statements and outlines prior to delivering oral presentations. Students will present a personal introduction, informative demonstration, and a persuasive speech as well as evaluate peer presentations. Students will also learn how to successfully develop and complete an impromptu speech. Practice in writing mechanics is also incorporated during the semester.

075 - MYTHOLOGY ACROSS CULTURES
Prerequisite: None
One Semester – Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: This course will examine mythology from various cultures and time periods, identifying and analyzing themes, character, allegory and other literary elements. Ultimately, the course will seek to discover how mythology can reflect and influence the values and culture of a people. Students will write analytical papers, as well as participate in discussions and creative projects.

076 - THE POETIC IMAGINATION: FROM HOMER TO HIP-HOP
Prerequisite: None
One Semester – Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: The Poetic Imagination is a survey poetry course. Students will study the history of poetic forms from the epic to the modern open forms, from the sun-soaked fields of Italy and France to the gritty urban landscapes of today. Additionally, poetry is as much process as product, so students will have an opportunity to imagine and craft their own poems modeled on the forms introduced in class. Furthermore, students will be expected to share and present their poetry in a variety of live and digital formats.

077 - THE AMERICAN SHORT STORY
Prerequisite: None
One Semester – Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: The course will explore the development of the short story in the United States from its romantic beginnings to its modern form. It will move chronologically and focus on the literary elements and the historical and social forces that shaped the opinions and viewpoints of some of the greatest writers of our nation. The course will revolve around reading and analyzing these short stories, and it will focus heavily on the student’s ability to discuss and write about the literature in insightful and creative ways.
125 - GAME DESIGN THEORY
Prerequisite: None
One Semester – Five Periods Per Week -.5 Credit

COURSE DESCRIPTION: “Gaming” does not only mean playing video games. Gamers also play and create board games, card games, simulations, and participate in interactive stories. This course breaks down the theories of game design step-by-step. Students learn the fundamentals through the development of paper prototypes that allow them to experience the iterative process of a variety of games. Final projects will include building their own original game and the creation of a game design portfolio.

202 – PRINT JOURNALISM
Prerequisite: None
One Semester – Five Periods Per Week -.5 Credit

COURSE DESCRIPTION: Print Journalism is a semester course designed for students in grades 9th through 12th interested in journalism. This course will introduce students to journalistic style writing, editing skills and techniques. Students will learn to recognize news, conduct interviews, report and collect information, and then write in a variety of formats, including news, feature and narrative, opinion and news features. The course additionally provides instruction on media ethics and the responsibilities of both the media and individual’s digital citizenship.

203 – BROADCAST JOURNALISM
Prerequisite: None
One Semester – Five Periods Per Week -.5 Credit

COURSE DESCRIPTION: Broadcast Journalism is a semester course designed for students in grades 9th through 12th interested in journalism. The course will develop the foundations of theory and practice of television and media. Students will conduct interviews, report and collect information, and then write scripts in a variety of formats, understanding the relationship and importance of audio and video in broadcast formats. The course will focus on key historical events in broadcasting (both radio and television), broadcast announcing, journalistic writing for broadcast and multimedia, on-camera performance, radio production and the influences of broadcast media on society. Students will also learn how to edit and prepare copy for broadcast.

204 – SHAKESPEARE FOR EVERYONE
Prerequisite: None
One Semester – Five Periods Per Week -.5 Credit

COURSE DESCRIPTION: Shakespeare for Everyone is an introductory course designed to familiarize students with and illustrate the range and diversity of the greatest writer in the English language. We will sample not just his tragedies but familiarize ourselves with Shakespeare’s history, comedy, and romance plays as well. The course will teach students the conventions of Shakespearean drama using active, experiential drama lessons employed by authentic Shakespearean actors and highlight the thematic range of Shakespeare’s work.
205 – STORYTELLING BY DESIGN
Prerequisite: None
One Semester – Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: Storytelling by Design is a semester course utilizing human-centered design thinking in a project-based environment to craft stories that will resonate with audiences and inspire social change. Throughout the course, you will learn to develop robust storytelling skills, integrate your stories into dynamic presentations, and document and record your stories to share with others. You will leave this course with the PRES framework for establishing leadership presence, vital storytelling tools, and a rehearsed presentation that can serve as a model for future exhibitions. Anyone interested in learning how to better communicate their ideas through storytelling should find this course rewarding.

575 - YEARBOOK PUBLICATION
Prerequisite: Excellent writing and organizational skills as evidenced by teacher recommendation
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: This elective course is designed for students who wish to design and publish the school yearbook. Emphasis is placed on interviewing sources, writing copy, taking photographs, designing pages, and using the computer (proficient in word processing and desktop publishing) to create the final product. Additionally, students will work with the yearbook budget, design artwork, and work cooperatively and independently to complete tasks and meet deadlines. Students must also participate in fundraising activities. A good work ethic is a must for this course.

590 - SAT PREP (ELECTIVE)
Prerequisite: None
One Semester – Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: SAT Prep is a semester course designed for the college bound 11th and 12th grade student who desires to increase his or her level of preparedness for taking the SAT (Scholastic Aptitude Test). The course provides instruction for both math and verbal sections as well as test taking skills such as pacing, eliminating incorrect answers, and comprehending the scoring for the exam. The English section provides instruction in the elements of writing, language, reading comprehension, and the skills necessary to complete test questions by increasing the student’s vocabulary. The math section will provide instruction in arithmetic, algebraic, geometric and trigonometric topics along with strategies for solving the multiple choice and grid-in questions that are found on the SAT math sections.

850 - THEATRE ARTS I
Prerequisite: None
One Semester - Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: Students will begin the class learning the techniques of improvisation through theatre games, creating spontaneous creativity and imagination. These acting games help to develop concentration, character development, and sharpen humor—all part of successful acting and improvising. Students will become familiar with theatre terminology and will develop techniques for unique character portrayals. Students will also have experiences with pantomimes, monologues, and short scene work.

The final unit of the class will be focused on students developing their own short productions that will then be performed in class.
851 – THEATRE ARTS II
Prerequisite: Theatre Arts I
One Semester - Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: Students will learn advanced acting techniques, as well as the fundamentals of play directing. The students also will become familiar with the works of famous playwrights or novelists by reading and performing cuttings from well-known plays, musicals, or novels. Students will perform these plays for an audience during class time.

Another unit within the course will be playwriting, which will focus on visualizing action, initiating conflict, developing characters, and constructing dialogue.

862 - STAGE PRODUCTION
*Please note: If you have previously taken Stage Production, you are not permitted to repeat this class again.
Prerequisite: None
One Semester - Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: Students will study the technical and aesthetic aspects of the stage: scene design, stage lighting, set construction, prop building and design, sound, special effects, scenery painting, costume design, and stage make-up techniques. Students will experience hands-on activities for both the spring and fall school Productions.

FINE ARTS AND EARLY CHILDHOOD DEVELOPMENT DEPARTMENT

Table 12 – Early Childhood Courses

<table>
<thead>
<tr>
<th>COURSE #</th>
<th>EARLY CHILDHOOD COURSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>761</td>
<td>Early Childhood Development</td>
</tr>
</tbody>
</table>

Table 13 – Band Courses

<table>
<thead>
<tr>
<th>COURSE #</th>
<th>BAND COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>197</td>
<td>String Orchestra</td>
</tr>
<tr>
<td>817</td>
<td>Concert Band</td>
</tr>
<tr>
<td>818</td>
<td>Wind Ensemble</td>
</tr>
</tbody>
</table>

Table 14 - Choir Courses

<table>
<thead>
<tr>
<th>COURSE #</th>
<th>CHOIR COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>891</td>
<td>Select Choir</td>
</tr>
<tr>
<td>941</td>
<td>Women’s Ensemble</td>
</tr>
<tr>
<td>945</td>
<td>Concert Choir (Mixed Ensemble)</td>
</tr>
<tr>
<td>764</td>
<td>Digital Piano and Musicianship I</td>
</tr>
<tr>
<td>765</td>
<td>Digital Piano and Musicianship II</td>
</tr>
<tr>
<td>766</td>
<td>AP Music Theory</td>
</tr>
</tbody>
</table>
Table 15 - Art Courses

<table>
<thead>
<tr>
<th>COURSE #</th>
<th>ART COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>840</td>
<td>Foundations of Art IA</td>
</tr>
<tr>
<td>841</td>
<td>Foundations of Art IB</td>
</tr>
<tr>
<td>842</td>
<td>Intermediate Art IIA</td>
</tr>
<tr>
<td>843</td>
<td>Intermediate Art IIB</td>
</tr>
<tr>
<td>844</td>
<td>Advanced Art IIIA</td>
</tr>
<tr>
<td>845</td>
<td>Advanced Art IIIB</td>
</tr>
<tr>
<td>847</td>
<td>Pro Art IVA</td>
</tr>
<tr>
<td>848</td>
<td>Pro Art IVB</td>
</tr>
<tr>
<td>849</td>
<td>More Drawing, Painting, and Fun Sculptures</td>
</tr>
</tbody>
</table>

Note: For all Honors and AP courses, a summer assignment is required.

761 - EARLY CHILDHOOD DEVELOPMENT
Prerequisite: Juniors and seniors who have successfully completed Developmental Child Psychology or are taking it first semester. Only those sophomores who have successfully completed Child Psychology as a Freshmen.
Full Year – Five Days Per Week – 1.0 Credit

COURSE DESCRIPTION: This course is designed to prepare students for a career in the early childhood education field, child development field, and/or skills for working with young children. The students apply theories learned in Developmental Child Psychology to assist in the operation of a preschool and work one-on-one with the children. During this course, students will further explore topics such as, but not limited to, child development; classroom guidance; health, safety and wellness of children; observing and assessing students; and curriculum planning. In addition, student may have opportunities to work with Elementary and Intermediate age students. Students will also assist with the concluding graduation ceremony and field trip.

BAND

197 – STRING ORCHESTRA
Prerequisite: None
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: String Orchestra is a performing ensemble for students in grades 9th through 12th. The focus of this ensemble will be on improving the fundamental principles of music - tone, technique, rhythm, scales, articulation, dynamics, and interpretation – through the performance and study of music on an orchestral string instrument (violin, viola, cello, or string bass). An eclectic repertoire of music, including traditional and contemporary string orchestra literature, chamber music, and popular music, will be rehearsed and performed. The String Orchestra will present a winter and a spring concert annually. (Additional performances may be added at the discretion of the director. Members will be given timely and proper notice for any additional performances.) All members are required to perform in each scheduled performance. Due to the nature of this course, students are required to attend after school rehearsals/sectionals prior to each performance, as scheduled by the director.

Exceptional students will be selected and encouraged to represent the South Fayette School District through participation in PMEA (Pennsylvania Music Educators Association) festivals, our high school Pit Orchestra and Jazz Ensemble, and other instrumental ensembles in the area.
**817 - CONCERT BAND**  
*Prerequisite: Teacher recommendation or successful completion of “Little Green Machine” Marching Band audition.*  
*Full Year - Five Periods Per Week - 1.0 Credit*

**COURSE DESCRIPTION:** Concert Band is a performing ensemble for students in grades 9th through 12th. The focus of this ensemble will be on improving the fundamental principles of music - tone, technique, rhythm, scales, articulation, dynamics, and interpretation – through the performance and study of music. An eclectic repertoire of music, including traditional and contemporary wind ensemble literature, orchestral transcriptions, marches, jazz, and popular music, will be rehearsed and performed. Presently, the Concert Band presents a winter and a spring concert annually. (Additional performances may be added at the discretion of the director. Members will be given timely and proper notice for any additional performances.) All members are **required** to perform in each scheduled performance. Due to the nature of this course, students are required to attend after school rehearsals/sectionals prior to each performance, as scheduled by the director. Those Concert Band members that have also successfully auditioned for the “Little Green Machine” Marching Band will be required to attend all marching band performances and after school rehearsals.

Exceptional students will be selected and encouraged to represent the South Fayette School District through participation in PMEA (Pennsylvania Music Educators Association) festivals, WACA (Western Allegheny County Area) Honors Band, our high school Pit Orchestra and Jazz Ensemble, and other instrumental ensembles in the area.

---

**818 – WIND ENSEMBLE**  
*Prerequisite: Successful completion of the Wind Ensemble audition and must be a member of the “Little Green Machine” Marching Band (in order to ensure proper instrumentation, exceptions may be made at the discretion of the director)*  
*Full Year - Five Periods Per Week – 1.0 Credit*

**COURSE DESCRIPTION:** Wind Ensemble is a performing ensemble for students in grades 10th through 12th with an advanced musical ability. The focus of this ensemble will be on expanding upon the fundamental principles of music studied in Concert Band through the study of advanced concepts and skills and the continued development of musicianship and artistry. Advanced repertoire will be rehearsed and performed. Members of this ensemble must establish a daily practice routine so that they are able to perform with exceptional tone quality, accuracy, and expression. Private lessons are **HIGHLY** recommended.

Presently, the Wind Ensemble presents a winter and a spring concert annually. (Additional performances may be added at the discretion of the director. Members will be given timely and proper notice for any additional performances.) All members are **required** to perform in each scheduled performance. Due to the nature of this course, students are required to attend after school rehearsals/sectionals prior to each performance, as scheduled by the director.

Exceptional students will be selected and encouraged to represent the South Fayette School District through participation in PMEA (Pennsylvania Music Educators Association) festivals, WACA (Western Allegheny County Area) Honors Band, our high school Pit Orchestra and Jazz Ensemble, and other instrumental ensembles in the area.
CHOIR

891 - SELECT CHOIR
Prerequisite: By audition and/or teacher recommendation
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: The Senior High Select Choir is a performance ensemble for 10th through 12th grade students that are exemplary in the required skills. It allows students the opportunity to improve their vocal and dance abilities through public performances of music of various styles and genres as well as cultivate their musicianship skills. Musicianship is also an essential component of this course. The class meets every day of the school year. Students must audition to become a member of this ensemble. At present, students enrolled in this course will be involved in the Holiday Concert, Spring Concert and Commencement Exercises as well as other various performances that are scheduled throughout the school year. Students must be academically eligible to participate in these performances and to fulfill the requirements of the course. Outstanding students will be given opportunity to audition for PMEA Events such as Honors Choir and District Choir.

941 - WOMEN’S ENSEMBLE
Prerequisite: None
Full Year - Five Periods Per Week – 1.0 Credit

COURSE DESCRIPTION: The Women’s Ensemble is a performance ensemble for 9th through 12th grade female students that provides students the opportunity to improve vocal abilities through public performances of music of various styles and genres. Music appreciation and reading skills are also enhanced through written and performance-based activities. Public performance of choral repertoire culminates the experience. Therefore, students enrolled in this course must perform in the Holiday Concert and Spring Concert to fulfill the requirements of the course.

945 - CONCERT CHOIR (Mixed Ensemble)
Prerequisite: None
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: The Concert Choir (Mixed Ensemble) is a performance ensemble for 9th through 12th grade students that provides students the opportunity to improve vocal abilities through public performances of music of various styles and genres. Music appreciation and reading skills are also enhanced through written and performance-based activities. Public performance of choral repertoire culminates the experience. Therefore, students enrolled in this course must perform in the Holiday Concert and Spring Concert to fulfill the requirements of the course.

764 – DIGITAL PIANO AND MUSICIANSHIP I
Prerequisite: None
One Semester – Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: Digital Piano and Musicianship I is a one-semester course designed to teach music fundamentals. Students will perform assignments on classroom Yamaha Clavinova Digital pianos and learn the basics of music reading on the grand staff with simple meter signatures. The theory component to this class is a sequential course of instruction in music reading and writing which includes pitch identification, note values, time signatures, enharmonic notes, scales, key signatures, expression terminology, and intervals. There is no prerequisite for this course.
766 - DIGITAL PIANO AND MUSICIANSHIP II
Prerequisite: Successful Completion of Digital Piano and Musicianship I. This course runs concurrently with Digital Piano and Musicianship I and III.
Prerequisite: Successful completion of Digital Piano and Musicianship I
One Semester – Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: Digital Piano and Musicianship II is a one-semester course designed to build upon the music fundamentals taught in Digital Piano and Musicianship I. Students will perform assignments on classroom Yamaha Clavinova Digital pianos and further learn the basics of music reading on the grand staff with simple and compound meter signatures. The theory component to this class is a sequential course of instruction in music reading and writing which includes intervals, scales, chords, major and minor key signatures, modes, and music analysis. Prerequisite for this course is successful completion of Digital Piano and Musicianship 1 or successfully testing out of that course.

766 - AP MUSIC THEORY (ADVANCED PLACEMENT COURSE)
Prerequisites: Either two (2) subsequent years in a performance ensemble at the high school level, successful completion of Digital Piano and Musicianship II or pass a placement exam if student studied music outside of school.
Full Year – Five Days Per Week – 1.0 Credit

COURSE DESCRIPTION: AP Music Theory is a course for students in grades 11th through 12th with an advanced understanding of music fundamentals. Students will complete college-level coursework in common practice tonal harmony, simple and compound rhythm and meter, score analysis, melodic, harmonic, and rhythmic dictation, notation and scoring, solfeggio, and rudiments/terminology associated with music.

ART
840 - FOUNDATIONS OF ART IA
Prerequisites: None (first time taking Art since 8th grade)
One Semester - Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: Time in the art room will be devoted to laying a broad theoretical and informational skill base for each student and to acquaint the student with tools, safety, terminology, techniques and methods. Students will explore topics to study such as the 7 Elements of Art, the 7 Principles of Design, the 5 basic shapes, gray scales, pen and ink, drawings and paintings from resources, life, and imagination. There will also be small poster design, along with an introduction to hand-building in ceramics. This course is designed to give a strong foundation and to build confidence.

841 - FOUNDATIONS OF ART IB
Prerequisites: 9th through 12th Grade Students; Successful completion of Art IA; or teacher recommendation.
One Semester – Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: Time in the art room will be devoted to laying and applying a broad theoretical and informational skill base for each student and to acquaint the student with tools, safety, terminology, techniques, and methods. These students will have the chance to work/hand build with clay, create a detailed 2 pt. or 3 pt. perspective drawing, and draw/paint from resources, life and imagination. Creativity, imagination is stressed more from here on out. These classes provide students the opportunity to improve their artistic skills. These classes are sequential, systematic, structural approaches to art skills and concepts. Artistic behavior and practice is a must.
**842 - INTERMEDIATE ART IIA**
Prerequisites: 10th through 12th Grade Students; Successful completion of Art IA and Art IB; or teacher recommendation. New students entering the School District may show sketchbooks, drawings, paintings, sculptures or be tested by the Art Teacher and placed accordingly. Art I, II, III students run concurrently and are in the same classroom.
One Semester – Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: The Art II-A course will continue with an intermediate, informational skill base for each student and further acquaint the student with more tools, techniques, and methods. Manipulative skills and techniques are taught step by step; however, creativity, imagination is emphasized and encouraged throughout the program. These students will get the chance to create banners, develop a transformation, work on painting with watercolors, study color theory, complete a scratchboard, create a small poster design, and work with hand building with clay. All art students must be academically eligible to participate in opportunities in fieldtrips and group activities outside the classroom.

**843 - INTERMEDIATE ART IIB**
Prerequisites: 10th through 12th Grade Students; Successful completion of Art II-A; or teacher recommendation. New students entering the School District may show sketchbooks, drawings, paintings, sculptures or be tested by the Art Teacher and placed accordingly. Art I, II, III students run concurrently and are in the same classroom.
One Semester - Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: The Art II-B course will continue with the informational skill base for each student and further acquaint the student with more tools, techniques, and methods. Manipulative skills and techniques are taught step by step; however, creativity is emphasized and encouraged throughout the program. These students will work with clay, paper mache creative, imaginative, expressive masks, draw/paint a still life, experiment in different mediums, and learn various painting techniques. These classes provide students the opportunity to improve their artistic skills. These classes are sequential, systematic, structural approaches to art skills and concepts. Artistic behavior and practice is a must.

**844 - ADVANCED ART IIIA**
Prerequisite: 11th and 12th Grade Students. Successful completion of Art II A and Art II B; or teacher recommendation. New students entering the School District may show sketchbooks, drawings, paintings, sculptures or be tested by the Art Teacher and placed accordingly. Art I, II, III students run concurrently and are in the same classroom.
One Semester - Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: The Art III-A course is designed to continue with an advanced informational skill base for each student and further acquaint the student with more tools, techniques and methods. Manipulative skills and techniques are taught step by step; however, creativity is emphasized and encouraged throughout the program. These students will get the chance to create banners, create a small poster design, draw detailed line drawings from life and detailed line drawings from the student’s imagination using oil pastels, chalk pastels, pen and ink, various art pencils, and colored pencils. Students will study painting techniques in watercolor, acrylics, and oils. Students will hand build with clay and enjoy pots, bowls, mugs on the potter’s wheel. Experiences explore art of various styles and genres.
845 - ADVANCED ART IIIB
Prerequisite: 11th and 12th Grade Students. Successful completion of Art IIIA; or teacher recommendation. New students entering the School District may show sketchbooks, drawings, paintings, sculptures or be tested by the Art Teacher and placed accordingly. Art I, II, III students run concurrently and are in the same classroom. One Semester - Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: The Art III-B course will continue with the informational skill base for each student and further acquaint the student with more tools, techniques, and methods. Manipulative skills and techniques are taught step by step; however, creativity is emphasized and encouraged throughout the program. These students will get the chance to work in ceramics, be introduced to airbrush and learn basic principles, experiment, and then do a small project while learning very important clean-up procedures of all airbrush equipment. Subtractive sculpture will also be fun to create. This class continues with various art styles and genres. These classes provide students the opportunity to improve their artistic skills. These classes are sequential, systematic, structural approaches to art skills and concepts. Artistic behavior and practice is a must.

847 - PRO ART IV A
Prerequisite: 12th Grade Students. Successful completion of Advanced Art IIIA and Advanced Art IIIIB; or teacher recommendation. New students entering the School District may show sketchbooks, drawings, paintings, sculptures or be tested by the Art Teacher and placed accordingly. One Semester – Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: The Pro Art IV-A course will continue to build a strong, competitive portfolio for art schools, colleges or universities. Art competitions are encouraged. All art work should be creative and imagination is emphasized and encouraged throughout the program. Projects may include, but are not limited to, topics such as: Large drawings and paintings, small poster designs, holiday windows, ceramics, hand building and potter’s wheel, very realistic drawings paintings from life, portraits, expressive portraits, Drawings, Paintings, and Sculptures Portfolio Review. There is more one-on-one time to reach professional level work in the student’s concentration and artistic interests. Pro Art IV students are typically in the same classroom as Art Elective Students. 2019-2020 will be Cartooning and Caricatures... Peer-tutoring is encouraged with upper level art students assisting lower level art students.

848 - PRO ART IV B
Prerequisite: 12th Grade Students. Successful completion of Advanced Art IIIA and Advanced Art IIIB, Pro Art IVA; or teacher recommendation. New students entering the School District may be tested by the Art Teacher and placed accordingly. One Semester – Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: The Pro Art IV-B course will continue with developing rich, authentic, art experiences. Creativity is emphasized and encouraged throughout the program. Projects may include, but are not limited to topics such as: Weekly Sketch Book, ceramics of their choice, airbrush continued, Lion Hall, Drawings, Paintings, Sculptures Portfolio Review.

849 – MORE DRAWING, PAINTING, AND FUN SCULPTURES
Prerequisites: None
One Semester – 5 Periods Per Week - .5 Credit - Offered once every four (4) years – first and second semester.

COURSE DESCRIPTION: The Art Elective – More Drawing, Painting, and Fun Sculptures will focus on positive and negative spaces. Young artists will learn and have some fun and “experienced artists” will be challenged. Students will create loose sketches, grid/graph drawings, paint these drawings then create 3-dimensional sculptures using plaster of paris and found objects, among other things.
WORLD LANGUAGE DEPARTMENT

Table 16 – World Language Courses

<table>
<thead>
<tr>
<th>COURSE #</th>
<th>WORLD LANGUAGE COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>420</td>
<td>German I</td>
</tr>
<tr>
<td>421</td>
<td>German II</td>
</tr>
<tr>
<td>422</td>
<td>German III</td>
</tr>
<tr>
<td>802</td>
<td>Honors German IV – CHS</td>
</tr>
<tr>
<td>430</td>
<td>Spanish I</td>
</tr>
<tr>
<td>431</td>
<td>Spanish II</td>
</tr>
<tr>
<td>432</td>
<td>Spanish III</td>
</tr>
<tr>
<td>838</td>
<td>Honors Spanish IV – CHS</td>
</tr>
<tr>
<td>435</td>
<td>AP Spanish</td>
</tr>
<tr>
<td>440</td>
<td>French I</td>
</tr>
<tr>
<td>441</td>
<td>French II</td>
</tr>
<tr>
<td>442</td>
<td>French III</td>
</tr>
<tr>
<td>785</td>
<td>Honors French IV – CHS</td>
</tr>
<tr>
<td>445</td>
<td>AP French - CHS</td>
</tr>
</tbody>
</table>

*CHS – College in High School course

*Note: For all Honors and AP courses, a summer assignment is required.

*In order to graduate from South Fayette High School, students are required to achieve second-level proficiency in a world language.

*Students may choose to change their language when starting at the high school; however, they must successfully complete two (2) levels of the same language to meet the graduation requirement.

420 - GERMAN I
Prerequisite: None
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: German I introduces the basics of German grammar along with vocabulary that allows for general conversation on various topics. Listening comprehension and basic speaking skills are emphasized, as well as comparisons between the German culture and that of the United States. Students are encouraged to speak German in class so that they become comfortable with speaking the language.

421 - GERMAN II
Prerequisite: Successful Completion of German I with a grade of 75% or higher.
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: This is a four-skills language course, in which the students will develop and expand their listening, speaking, reading, and writing skills in German. As the students expand their vocabulary and become more comfortable in expressing themselves in German, they will be able to participate in conversation on a greater variety of everyday topics, such as entertainment, family, holidays, and travel. German culture is presented in context of these topics. Students also write several short compositions on a variety of topics. In addition, they write and perform dialogues and role-plays, and create cards, brochures and posters.
422 - GERMAN III
Prerequisite: Successful Completion of German II with a grade of 75% or higher.
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: German III demands a higher degree of performance from students. The class is conducted in German to a greater extent. In return, students begin to develop real proficiency in communicating in German. Students read more extensive texts, such as short stories and graded readers, and write several short compositions on a variety of topics. The discussion of German culture and its comparison to American culture continues in context with the topics of each lesson.

802 - HONORS GERMAN IV (HONORS LEVEL COURSE) (WI) – CHS
*University of Pittsburgh – College in High School Program Option
Prerequisite: In accordance with Prerequisites for Advanced Courses; Successful Completion of German III with a grade of 85% or higher and Teacher Recommendation
Full Year – Five Periods Per Week – 1.0 Credit

COURSE DESCRIPTION: This course is a College in High School course and is the equivalent to Intermediate German 1 (GER003) at Pitt. High school students will take this course as their fourth-year German course, with the understanding that they have completed three years of high school German. In this course, students will continue to develop their German language skills by engaging with a variety of cultural topics and themes of the German-speaking countries, such as the story of the Weiße Rose, a resistance group during the Third Reich, and German reunification. Building on the grammar they have learned in previous semesters, and expanding their vocabulary, students will grow their reading, speaking, writing and listening skills. The course emphasizes meaningful, contextualized communication and comprehension, and it is conducted in German. Students will be working towards the B1-level according to the CEFR (Common European Framework of Reference).

430 - SPANISH I
Prerequisite: None
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: Spanish I provides the student with the opportunity to have an active and flexible command of the language through personal involvement and communicative activities. The approach used in acquiring this language stresses hearing and speaking as the two most important areas at this level. Spanish and Spanish-American culture are introduced.

431 - SPANISH II
Prerequisite: Successful completion of Spanish I with a grade of 75% or higher.
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: The second level of Spanish reinforces speaking and listening skills acquired in Level I. More complex grammar is presented and reading and writing skills are developed significantly. The emphasis remains upon usable and relevant communicative use of Spanish within a cultural context.
**432 - SPANISH III**

*Prerequisite: Successful completion of Spanish II with a grade of 75% or higher.*

*Full Year - Five Periods Per Week - 1.0 Credit*

**COURSE DESCRIPTION:** Spanish III continues the development of all language skills with special emphasis on more complex Spanish grammar concepts along with creative writing experiences, reading of abbreviated novels, contemporary topics, and vocabulary building activities. Students prepare oral presentations throughout the year.

---

**838 - HONORS SPANISH IV (HONORS LEVEL COURSE) (WI) – CHS**

*University of Pittsburgh – College in High School Program Option*

*Prerequisite: In accordance with Prerequisites for Advanced Courses; Successful Completion of Spanish III and Teacher Recommendation.*

*Full Year – Five Periods Per Week – 1.0 Credit*

**COURSE DESCRIPTION:** Spanish 0003, Intermediate Spanish, is the third semester of the Spanish Language Program in the Department of Hispanic Languages and Literatures. This course builds on and expands the language skills acquired in the first two semesters of Spanish or Spanish 15. It is designed to develop communicative proficiency. It combines content-based language instruction with an interactive task-based approach and focuses in all relevant language skills: listening, speaking, reading, and writing. Culture is integrated in all aspects of the program. Each chapter will focus around a topic, and vocabulary, grammar, and culture presentation and practice will be linked to the theme chapter. Because you might have limited opportunities to speak or hear Spanish, classroom time is devoted to developing your competence in these two areas. Therefore, your instructor will speak only in Spanish to you during the class, and you will be expected to do the same with your instructor and classmates. Strategies for listening comprehension and developing speaking skills will be taught in class.

---

**435 - AP SPANISH (ADVANCED PLACEMENT COURSE) (WI)**

*Prerequisite: In Accordance with the Prerequisites for Advanced Courses, Successful Completion of Spanish IV and Teacher Recommendation.*

*Full Year - Five Periods Per Week - 1.0 Credit*

**COURSE DESCRIPTION:** The course’s primary goals, aligned with the national standards are to communicate in Spanish, understand other cultures, connect with other disciplines and acquire information, develop insight into our own language and culture, and participate in the global community.

This course is organized to enable students to develop the skills and abilities as delineated in the AP Spanish Language course description in order to maximize student success on the Advanced Placement exam and will learn strategies for maximizing the usefulness of exam features and for complete understanding of AP exam questions.

Students will further develop proficiency in all three modes of communication – interpretive, presentational, and interpersonal. A review of grammatical structures and introduction to more advanced grammatical structures will assist them on an as-needed, contextualized basis. Students will continue to experience the language through authentic mediums such as newspapers, radio, television, authentic literature, poetry, magazines, internet sources, art, film, native speakers, and modern culture. Students will be able to take notes from authentic oral and written sources, write emails and write formal essays. Using spoken Spanish, students will be able to speak informally in simulated conversations and with classmates. In addition, students will be able to give formal presentations to the class on a variety of topics. Finally, students will be able to use grammatical structures proficiently in both written and spoken tasks. Instruction and communication in the
classroom are entirely in Spanish. This course is demanding and is designed to provide interesting and challenging opportunities to develop student abilities beyond the level they might obtain in a less demanding class. This course is comparable to a third year university language course.

Students who enroll in this course will take the Advanced Placement Spanish Language examination given in May of each school year. Based on the results of this examination, students may qualify for college credit and/or advanced college courses.

440 - FRENCH I
Prerequisite: None
Full Year – Five Periods Per Week – 1.0 Credit

COURSE DESCRIPTION: In French I, students develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures. This communication is evidenced in all four language skills - listening, speaking, reading and writing - with emphasis on the ability to write in and comprehend the language. Students will begin to explore and study the themes of Personal and Family Life, Home Life, School Life, Social & Community Life. This course's primary goals, aligned with the national standards, are to: communicate in French, understand other cultures, connect with other disciplines and acquire information, develop insight into one’s own language and culture, and participate in the global community.

441 - FRENCH II
Prerequisite: Successful Completion of French I with a grade of 75% or higher.
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: Students in French II will continue speaking in the present tense and will learn to speak, write, listen, and read in the past tense. The class will be conducted in French for 75-80% of the time and students are expected to use the French they know in class to the best of their ability. Students will be assessed via oral and written exams, projects, in-class participation, and homework. We will explore the themes of community life, home life, school life, leisure life, vacation and travel, daily routine and personal health. This course’s primary goals, aligned with the national standards, are to: communicate in French, understand other cultures, connect with other disciplines and acquire information, develop insight into our own language and culture, and participate in the global community.

442 - FRENCH III
Prerequisite: Successful Completion of French II with a grade of 75% or higher.
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: Students in French III will be able to discuss future plans, give advice to others to help solve problems, talk about what they would do if they were in a given situation, produce a French cooking show, execute an emergency room conversation, plan a trip to a French-speaking nation, in addition to many other authentic activities that will prepare the students for potential situations faced in French-speaking countries. Additional main themes of the course cover: driving and transportation, chores, fashion and clothes, education and career plans, entertainment/arts, nature and wildlife, current events, daily life, and travel. The course is conducted in French for 80-85% of the class period. This course’s primary goals, aligned with the national standards, are to: communicate in French, understand other cultures, connect with other disciplines and acquire information, develop insight into our own language and culture, and participate in the global community.
785 - HONORS FRENCH IV (HONORS LEVEL COURSE) – CHS
*University of Pittsburgh – College in High School Program Option
Prerequisite: In accordance with Prerequisites for Advanced Courses; Successful Completion of French III and Teacher Recommendation.
Full Year – Five Periods Per Week – 1.0 Credit

COURSE DESCRIPTION: Speak French well enough to ask and answer questions on a variety of topics important in francophone cultures beyond those needed to “survive” in the foreign culture. Indeed, you will gain the ability to talk about more than yourself and your immediate surroundings; you will be able to talk about politics, social issues, the future, and the media. Gradually, you will find it easier to add detail to your statements and to link ideas together into more complex sentences. You should see an increased ability to reference past or future events with less hesitation and greater accuracy. Understand French well enough to grasp main ideas and some supporting details in short conversations (spontaneous or recorded) pertinent to topics mentioned above. Read and understand main ideas and many details of literary and non-literary texts. Write longer and more cohesive paragraphs than you wrote as a beginner. Make comparisons among francophone cultures’ products, practices, and perspectives as defined by ACTFL and between them and your own. State the main grammatical structures of French: word-formation, sentence structure, gender resolution, agreement.

445 - AP FRENCH - CHS (ADVANCED PLACEMENT COURSE)
Prerequisite: In Accordance with the Prerequisites for Advanced Courses, Successful Completion of French IV and Teacher Recommendation
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: This course’s primary goals, aligned with the national standards, are to: communicate in French, understand other cultures, connect with other disciplines and acquire information, develop insight into one’s own language and culture, and participate in the global community. This course is organized to enable students to develop the skills and abilities as delineated in the AP French Language course description in order to maximize student success on the Advanced Placement exam. Students will be familiar with the Advanced Placement format and will learn strategies for maximizing the usefulness of exam features and for complete understanding of AP exam questions. Students will further develop their proficiency in the French language. A review of grammatical structures and introduction to more advanced grammatical structures will assist them on an as-needed, contextualized basis. As per the AP guidelines, students should be prepared for homework each night to review previously learned grammar and vocabulary and to reinforce newer material individually. Students will continue to experience the language via authentic resources such as (but not limited to): radio, television, newspaper, film, and native speakers. Students will focus on communication strategies for success in authentic situations. This course is comparable to a second/third year university language course, and students who enroll in this course may take the Advanced Placement French Language examination given in May of each school year. Based on the results of this examination, students may qualify for college credit and/or advanced college courses. The entire course will be conducted in French, and students are expected to comply with this policy. This course is demanding and is designed to provide interesting and challenging opportunities to develop student abilities beyond the level they might obtain in a less demanding class. This course also follows the University of Pittsburgh College in High School format, which requires students to complete certain assignments as part of the Pitt course. All of the aforementioned requirements are also requisites of the University, but if enrolled in the course, students have the opportunity to earn 3 college credits for this CHS course.
INDEPENDENT STUDY

960 - INDEPENDENT STUDY
Prerequisite: 11th and 12th Grade Students
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: The goal of the Independent Study program is to allow seniors to identify a specific area of interest that meets one of three individual goals:

1. academic advancement
2. career preparation or
3. community service.

The Independent Study experience allows the self-motivated student to pursue an area of personal interest beyond the confines of the classroom. Students must apply for Independent Study status as part of the course selection process. Students will be interviewed by the Enrichment Coordinator and a contract for Independent Study will be mutually agreed upon.

Students are advised that Independent Study requires strong personal initiative, long-range planning and the willingness to develop and present the results of their study. Before considering application for Independent Study, parents and guardians must consider the following:

1. The School District will only consider a program if the student is able to meet all requirements for graduation as outlined in the Student/Parent Handbook.
2. The master schedule may not be conducive to scheduling times needed to meet the needs of an independent study.
3. Students must be able to demonstrate the educational significance of their participation in an independent study program.
4. A student participating in the program will develop specific goals and objectives with their independent study supervisor, the principal, and guidance counselor. These will be approved prior to the student entering the independent study program.
5. A written agreement will be made outlining the responsibilities of the student, parent and school. If the student fails to fulfill his/her responsibilities in relation to the independent study, he/she may not graduate.
6. No transportation (if needed) for the independent study will be provided by the School District.
7. The independent study supervisor must be willing to communicate and cooperate with all school officials.
8. The application as well as the daily logs submitted must be completed in a professional manner, using proper writing techniques.
9. After approval and completion of the independent study, the student must complete and submit a written report that addresses the goals and objectives that were established prior to the independent study approval. This report must demonstrate attainment of the goals and objectives and or valid reasons why they were not attained. The report must be in accordance with acceptable levels of writing for students at the 12th grade level. The report must be approved and accepted by the supervisor and school official.
962/963 - INDEPENDENT STUDY WITH ON-LINE ELECTIVE COURSES
Prerequisite: 10th through 12th Grade Students, Parental Permission - .5 Credit

COURSE DESCRIPTION: The on-line elective course offerings are designed for the highly motivated, self-disciplined student who wants to further their learning or pursue an area of interest that is not currently available at South Fayette High School. Parental approval is required prior to scheduling. Students are limited to one online elective per semester. Students will be assigned one period during the school day to complete the online coursework independently, following the guidelines prescribed by the providers offering the online high school programs. Percentage/letter grades for these courses come directly from the institution offering the course. The registration fee will be paid by the School District; however, it is the responsibility of the family to cover any additional costs, such as books or course materials, when required. Students will choose their course at the start of the semester from a current list of providers. The school and parent must approve the course prior to registration.

MATHEMATICS DEPARTMENT

<table>
<thead>
<tr>
<th>COURSE #</th>
<th>MATH COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>331</td>
<td>Algebra I</td>
</tr>
<tr>
<td>340</td>
<td>Geometry</td>
</tr>
<tr>
<td>345</td>
<td>Honors Geometry</td>
</tr>
<tr>
<td>350</td>
<td>Algebra II</td>
</tr>
<tr>
<td>351</td>
<td>Honors Algebra II</td>
</tr>
<tr>
<td>352</td>
<td>Algebra III with Trigonometry</td>
</tr>
<tr>
<td>360</td>
<td>Honors PreCalculus</td>
</tr>
<tr>
<td>361</td>
<td>Calculus</td>
</tr>
<tr>
<td>362</td>
<td>Calculus</td>
</tr>
<tr>
<td>363</td>
<td>Differentiated Math</td>
</tr>
<tr>
<td>211</td>
<td>Honors Calculus - CHS</td>
</tr>
<tr>
<td>212</td>
<td>AP Calculus AB - CHS</td>
</tr>
<tr>
<td>213</td>
<td>AP Calculus BC - CHS</td>
</tr>
<tr>
<td>369</td>
<td>Statistics and Probability</td>
</tr>
<tr>
<td>214</td>
<td>Honors Statistics and Probability - CHS</td>
</tr>
<tr>
<td>590</td>
<td>SAT Prep (Elective)</td>
</tr>
</tbody>
</table>

*CHS – College in High School course

Note: For all Honors and AP courses, a summer assignment is required.
SEQUENCING OF MATHEMATICS COURSES

Table 18 – Table of Sequencing of Mathematics Courses

<table>
<thead>
<tr>
<th>If student is currently taking . . .</th>
<th>Then the next course in the sequence is . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algebra I</td>
<td>Geometry or Honors Geometry*</td>
</tr>
<tr>
<td>Geometry</td>
<td>Algebra II or Honors Algebra II*</td>
</tr>
<tr>
<td>Honors Geometry</td>
<td>Algebra II or Honors Algebra II*</td>
</tr>
<tr>
<td>Algebra II</td>
<td>Algebra III with Trigonometry or PreCalculus</td>
</tr>
<tr>
<td>Honors Algebra II</td>
<td>Algebra III with Trigonometry, PreCalculus or Honors PreCalculus*</td>
</tr>
<tr>
<td>Algebra III with Trigonometry</td>
<td>PreCalculus, Honors PreCalculus*, Honors Statistics and Probability* or Statistics and Probability</td>
</tr>
<tr>
<td>PreCalculus</td>
<td>Calculus, Honors Calculus*, Honors Statistics and Probability* or Statistics and Probability</td>
</tr>
<tr>
<td>Honors PreCalculus</td>
<td>Calculus, Honors Calculus,* AP Calculus AB*, Honors Statistics and Probability* or Statistics</td>
</tr>
<tr>
<td>Honors Calculus</td>
<td>AP Calculus BC*, Honors Statistics and Probability*, Statistics and Probability or Honors Linear Algebra</td>
</tr>
<tr>
<td>AP Calculus AB</td>
<td>AP Calculus BC*, Honors Statistics and Probability*, Statistics and Probability or Honors Linear Algebra</td>
</tr>
</tbody>
</table>

Students are given the ability to move within the framework listed above. Dependent upon the freshman math course, here are the most typical sequences in high school:

Table 19 – Typical Math Courses Sequence

<table>
<thead>
<tr>
<th>Typical Sequence:</th>
<th>Honors Sequence:</th>
<th>AP Sequence:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 9 – Geometry</td>
<td>Grade 9 – Honors Geometry</td>
<td>Grade 9 – Honors Algebra II</td>
</tr>
<tr>
<td>Grade 10 – Algebra II</td>
<td>Grade 10 – Honors Algebra II</td>
<td>Grade 10 – Honors PreCalculus</td>
</tr>
<tr>
<td>Grade 11 – Algebra III with Trigonometry</td>
<td>Grade 11 – Honors PreCalculus</td>
<td>Grade 11 – AP Calculus AB</td>
</tr>
<tr>
<td>Grade 12 – PreCalculus or Honors PreCalculus</td>
<td>Grade 12 – Honors or AP Calculus</td>
<td>Grade 12 – AP Calculus BC or Honors Linear Algebra</td>
</tr>
</tbody>
</table>

* All Honors and AP Placements will follow the requirements set forth in each individual course.

NOTE: ELECTIVE MATH CREDITS DO NOT COUNT TOWARD MATHEMATICS GRADUATION CREDITS.

331 – ALGEBRA I
*The students are required to have a scientific calculator.*
Prerequisite: Successful Completion of Pre-Algebra or Transition Mathematics
Full Year – Five Periods Per Week – 1.0 Credit

COURSE DESCRIPTION: Students enrolled in Algebra I will study characteristics of our number system and how those characteristics are applicable to problem situations, which may arise in the real world, or in disciplines other than mathematics. This class emphasizes problem solving, critical thinking and reasoning. Topics include proportional reasoning, statistics, probability, equations, linear functions and graphs, number patterns, inequalities, systems of equations, exponential functions, absolute values, polynomials, factoring, quadratic functions, and rational functions.
**340 – GEOMETRY**

*The students are required to have a scientific calculator.*

Prerequisite: Successful Completion of Algebra I with a 75% or Better

Full Year – Five Periods Per Week – 1.0 Credit

**COURSE DESCRIPTION:** In this course, students will learn the concepts of geometry including coordinate geometry, logic, parallel lines, congruent triangles, quadrilaterals, similarity, right triangles, trigonometry, and circles. Students will be expected to explore, research, evaluate and apply concepts using technology and incorporating algebraic concepts.

**345 – HONORS GEOMETRY (HONORS LEVEL COURSE)**

*The students are required to have a scientific calculator.*

Prerequisite: In accordance with the prerequisites for Advanced Courses and Successful Completion of Algebra I with 85% or better as well as a strong teacher recommendation.

Full Year – Five Periods Per Week – 1.0 Credit

**COURSE DESCRIPTION:** This is a rigorous course in which students will discover the concepts of Geometry while implementing their knowledge from Algebra I. Honors Geometry differs from regular Geometry in that the topics are covered at a faster pace and with more depth. Topics studied include coordinate geometry, logic, parallel lines, congruency, quadrilaterals and polygons, circles, similarity, Pythagorean Principles and trigonometry. Students will be expected to explore, research, evaluate and apply concepts using technology and incorporating algebraic concepts.

Students choosing Honors level and Advanced Placement courses should be aware of required summer readings and preparation for each course. All Honors level and Advanced Placement courses will require summer preparation previous to the first day of school. **Failure to complete required summer preparation will significantly affect the student’s first nine-week grade during the following academic year.**

**350 – ALGEBRA II**

*The students are required to have a graphics calculator. (TI-83 or TI-84 Recommended)*

Prerequisite: Successful Completion of both Algebra I and Geometry with a 75% or Better

Full Year – Five Periods Per Week – 1.0 Credit

**COURSE DESCRIPTION:** This course includes the study of systems of linear equations, inequalities, polynomials, rationals, irrational and complex numbers, trigonometric laws and applications, and quadratic functions. Students will study statistics and probability throughout the course. Emphasis is on problem-solving strategies, applications to the real world with other disciplines, and critical thinking. Graphics calculators are used to explore and investigate mathematical concepts.

**351 – HONORS ALGEBRA II (HONORS LEVEL COURSE)**

*The students are required to have a graphics calculator. (TI-83 or TI-84 Recommended)*

Prerequisite: In Accordance with Prerequisites for Advanced Courses and Successful Completion of Honors Geometry with at least an 80% or Geometry with at least an 85% AND Algebra I with at least an 85% as well as a strong teacher recommendation.

Full Year – Five Periods Per Week – 1.0 Credit

**COURSE DESCRIPTION:** This is a rigorous course to prepare students for a PreCalculus course. It differs from Algebra II in that the topics are covered at a faster pace and with more depth. Included are the study of quadratic functions, exponentials, rationals and logarithmic functions, statistics, matrices, polynomials,
irrational and complex numbers, trigonometric laws and applications. Emphasis is on problem-solving strategies, applications to the real world and other disciplines, and critical thinking. Graphics calculators are used to explore and investigate mathematical concepts.

Students choosing Honors level and Advanced Placement courses should be aware of required summer readings and preparation for each course. All Honors level and Advanced Placement courses will require summer preparation previous to the first day of school. Failure to complete required summer preparation will significantly affect the student’s first nine-week grade during the following academic year.

352 – ALGEBRA III WITH TRIGONOMETRY
*The students are required to have a graphics calculator. (TI-83 or TI-84 Recommended)
Prerequisite: Successful completion of Algebra II or Honors Algebra II with a grade of 75% or better.
Full Year – Five Periods Per Week – 1.0 Credit

COURSE DESCRIPTION: This course is a study of advanced algebra topics, as well as circular and trigonometric functions. Algebra III with Trigonometry will emphasize the inter-relationships of algebraic functions and trigonometric functions. Topics will include solving and graphing polynomial, rational, trigonometric, exponential and logarithmic equations and functions. Trigonometric topics will include solving triangles, degree and radian measures, unit circles and identities. The concept of multiple representations will be embedded throughout the course. Students will be required to solve problems analytically, graphically and numerically.

801 - HONORS LINEAR ALGEBRA – CHS (HONORS LEVEL COURSE)
Prerequisite: Students must have completed Calculus AB or Honors Calculus with an 85% or better.
Full Year – Five Periods Per Week – 1.0 Credit

COURSE DESCRIPTION: *University of Pittsburgh – College in High School Program option. This course is designed for students interested in taking a college-level course with the option of earning 3 credits from the University of Pittsburgh. This course is designed to prepare the students for eventual studies in Computer Science, Multivariable Calculus, and further topics in engineering, mathematics and science. Students will study systems of equations, vectors, vector spaces, linear transformations and matrix representations, determinants, eigenvalues, and a variety of applications. This course will also review probability models, logics and proofs.

355 - PRECALCULUS
*The students are required to have a graphics calculator. (TI-83 or TI-84 Recommended)
Prerequisite: Successful Completion of Honors Algebra II, Algebra III with Trigonometry or Statistics. Due to gaps in course content Non-Honors students are not permitted to enroll in PreCalculus unless they earn 90% or better in regular Algebra II, have a strong teacher recommendation and complete summer work to cover topics not covered in Algebra II but necessary for PreCalculus.
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: The main focus of this course is the study of functions. The functions covered will include: polynomial, radical, rational, exponential, logarithmic and logistic functions. Trigonometry is covered including right triangle trigonometry, use of the unit circle, identities and oblique triangles. There will be an introduction into conics for the students. Real World application problems as well as series and sequences will be covered. There is a strong emphasis on modeling, and problem solving.
**360 - HONORS PRECALCULUS (HONORS LEVEL COURSE)**

*The students are required to have a graphics calculator. (TI-83 or TI-84 Recommended)*

Prerequisite: In Accordance with Prerequisites for Advanced Courses and Successful Completion of Honors Algebra II or Algebra III with Trigonometry as well as teacher recommendation. The move from a Non-Honors Algebra II to Honors PreCalculus is considered a move UP TWO levels and students will be scheduled according to the Prerequisites outlined.

Full Year - Five Periods Per Week - 1.0 Credit

**COURSE DESCRIPTION:** The purpose of this Honors level course is to prepare students for Calculus. The main focus of this course is the continued in-depth study of functions (polynomial, radical, rational, exponential, logarithmic, and trigonometric), as well as sequences series and conics. There is a strong emphasis on modeling, the use of technology, and problem solving. In additional traditional assessment techniques, students will be expected to work from the text, and research and complete written projects to demonstrate mastery of the concepts covered in class. Honors PreCalculus differs from regular PreCalculus in that the topics are covered at a faster pace and with more depth.

Students choosing Honors level and Advanced Placement courses should be aware of required summer readings and preparation for each course. All Honors level and Advanced Placement courses will require summer preparation previous to the first day of school. **Failure to complete required summer preparation will significantly affect the student's first nine-week grade during the following academic year.**

**362 - CALCULUS**

*The students are required to have a graphics calculator.*

Prerequisite: Successful Completion of PreCalculus or Honors PreCalculus with a grade of 75% or better.

Full Year - Five Periods Per Week - 1.0 Credit

**COURSE DESCRIPTION:** The purpose of this course is to provide students an introduction to calculus topics. The main focus of this course is to provide students with the fundamental calculus topics they will encounter in a college level course. The topics covered include an in-depth study of functions, graphs and trigonometry. The calculus topics include limits, derivatives, application of derivatives, integrals, applications of integrals. The students will be assessed using tests, quizzes, classroom work as well as projects to demonstrate mastery of the topics covered.

Students choosing this Calculus course will have an introduction to calculus topics. This course is NOT designed to give college credit. **Students will NOT be given the option of College in High School or AP Credit for this course.**

**363 – DIFFERENTIATED MATH**

Prerequisite: Teacher recommendation

Full Year - Five Periods Per Week - 1.0 Credit

**COURSE DESCRIPTION:** Individualized learning and building mathematical skills are the primary goals of this course. Students enrolled in this course have been identified by their previous math teacher or by a diagnostic examination for students entering the district. The candidates for this course are identified as needing this course based on measured gaps in learning that would prevent the student from being successful in the next in-sequence course. Each student who enrolls in this course will take a diagnostic examination using the ALEKS computer program to determine the specific areas in which he or she has mathematical needs. Each student will have his or her own learning plan with individual goals for the course, with the underlying purpose being to provide students the support they need to learn the mathematics needed to graduate high school and be successful either in college studies or in the workforce.
211 - HONORS CALCULUS (HONORS LEVEL COURSE) - CHS
*The students are required to have a graphics calculator. (TI-89 Recommended)
*University of Pittsburgh - College in High School Program Option
Prerequisite: In Accordance with Prerequisites for Advanced Courses and Successful Completion of Honors PreCalculus or PreCalculus as well as a strong teacher recommendation.
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: This course is designed for students interested in taking a college level course with the option of earning 4 credits from the University of Pittsburgh. Students taking this course will study calculus from a syllabus distributed by the University of Pittsburgh. Semester and final tests will be provided by the University of Pittsburgh. Topics covered in this course include a brief review of PreCalculus topics, limits, differential and integral calculus methods and applications. In addition to traditional assessment techniques, students will be expected to work from the text and research and complete several written projects to demonstrate mastery of the concepts covered in the class.

Students choosing Honors level and Advanced Placement courses should be aware of required summer readings and preparation for each course. All Honors level and Advanced Placement courses will require summer preparation previous to the first day of school. Failure to complete required summer preparation will significantly affect the student's first nine-week grade during the following academic year.

212 - AP CALCULUS AB (ADVANCED PLACEMENT COURSE) - CHS
*University of Pittsburgh - College in High School Program Option
Prerequisite: In Accordance with the Prerequisites for Advanced Courses and completion of Honors PreCalculus as well as a strong teacher recommendation.
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: This course is designed for students looking for a rigorous study of calculus topics. This course will consist of a full year study of calculus and related topics equivalent to a college level course. The majority of the year will be devoted to the areas of limits, differential calculus and integral calculus. It is assumed that students enrolled in this course have mastered all topics covered in PreCalculus. This course is designed to prepare students for taking the AP Mathematics: Calculus AB exam, which students will be required to take in May. Students will also have the option of earning 4 college credits through the University of Pittsburgh for this course.

Students choosing Honors level and Advanced Placement courses should be aware of required summer readings and preparation for each course. All Honors level and Advanced Placement courses will require summer preparation previous to the first day of school. Failure to complete required summer preparation will significantly affect the student's first nine-week grade during the following academic year.

213 - AP CALCULUS BC (CALCULUS II) (ADVANCED PLACEMENT COURSE) - CHS
*University of Pittsburgh - College in High School Program Option
Prerequisite: In accordance with the Prerequisites for Advanced Courses and completion of AP Calculus AB or Honors Calculus as well as a strong teacher recommendation.
Full Year – Five Periods Per Week – 1.0 Credit

COURSE DESCRIPTION: This course is designed for students looking for a rigorous study of calculus topics. This course will quickly review the three topics covered in a typical Calculus I course (Limits, Derivatives and Integrals). The course then turns its focus on the following topics: Advanced Integration Techniques, Parametric, Polar and Vector Functions, Concept of Series (Geometric, Applications, Harmonic), Series of
Constants, Taylor Series, Maclaurin Series and tests for convergence. Additional topics may include multivariable calculus and the use of technology in exploring topics. Upon completing this course, students will be prepared to take the Calculus BC exam, which students will be required to take in May.

Students choosing Honors level and Advanced Placement courses should be aware of required summer readings and preparation for each course. All Honors level and Advanced Placement courses will require summer preparation previous to the first day of school. Failure to complete required summer preparation will significantly affect the student's first nine-week grade during the following academic year. Students will also have the option of earning four (4) college credits through the University of Pittsburgh for this course.

369 - STATISTICS AND PROBABILITY
*The students are required to have a graphics calculator. (TI-83 or TI-84 Recommended)

Prerequisite: Successful completion of Algebra III with Trigonometry, PreCalculus, or Honors PreCalculus with a grade of 75% or better. Consideration will be allowed for students to enter this course from Algebra 2 but only with a math recommendation and student and parent acknowledge this will not fulfill college entrance requirements of 1 semester of Trigonometry.

Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: The Statistics Class is an introduction course that teaches methods and terminologies of descriptive and inferential statistics. Students who complete this course will see topics that include: statistical analysis, graphic presentation of data, measures of central tendency, measures of dispersion, univariate and bivariate data, the normal curve and its applications, correlation, regression models, sample surveys and experiments, probability, probability and sampling distributions, confidence intervals, and hypothesis testing.

214 - HONORS STATISTICS AND PROBABILITY (HONORS LEVEL COURSE) - CHS
*The students are required to have a graphics calculator. (TI-83 or TI-84 Recommended)
*University of Pittsburgh - College in High School Program Option

Prerequisite: In Accordance with Prerequisites for Advanced Courses and Successful Completion of Algebra III with Trigonometry or higher as well as teacher recommendation.

Full Year – Five Periods Per Week – 1.0 Credit

COURSE DESCRIPTION: The Honors Statistics Class is an introduction course that teaches methods and terminologies of descriptive and inferential statistics. Students who complete this course will see topics that include: statistical analysis, graphic presentation of data, measures of central tendency, measures of dispersion, univariate and bivariate data, the normal curve and its applications, correlation, regression models, sample surveys and experiments, probability, probability and sampling distributions, confidence intervals, hypothesis testing, chi-square tests, and analysis of variance. In addition, students will be able to conduct their own analyses of standard one-sample or two-sample data sets, follow statistical reasoning, and read statistical reports with understanding.

Students choosing Honors level and Advanced Placement courses should be aware of required summer readings and preparation for each course. All Honors level and Advanced Placement courses will require summer preparation previous to the first day of school. Failure to complete required summer preparation will significantly affect the student's first nine-week grade during the following academic year.
590 - SAT Prep (Elective)

*This course is an elective and students will NOT be given mathematics credit toward graduation but will receive elective credit.

Prerequisite: None

One Semester – Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: SAT Prep is a semester course designed for the college bound eleventh and twelfth grade student who desires to increase his or her level of preparedness for taking the SAT (Scholastic Aptitude Test). The course provides instruction for both math and verbal sections as well as test taking skills such as pacing, eliminating incorrect answers, and comprehending the scoring for the exam. The English section provides instruction in the elements of writing, language, sentence completion, reading comprehension, and the skills necessary to complete test questions by increasing the student’s vocabulary. The math section will provide instruction in arithmetic, algebraic, geometric and trigonometric topics along with strategies for solving the multiple choice and grid-in questions that are found on the SAT math sections.

Parkway West Career and Technology Center  
(Website - http://www.parkwaywest.org)

Career Majors

*Students who successfully complete Parkway West CTC programs may be eligible to earn articulated college credit from several post-secondary institutions. The following are a few examples:

POST-SECONDARY INSTITUTIONS:
Belmont College
Butler County Community College
California University of Pennsylvania
Community College of Allegheny County
Empire Beauty School
Indiana University of Pennsylvania
ITT Technical Institute
New Castle School of Trades
Pennsylvania College of Technology
Pittsburgh Technical Institute
Robert Morris University
Rosedale Technical Institute
The Art Institute of Pittsburgh
Triangle Tech, Inc.
University of Northwestern Ohio

*Scholarships and awards from the above post-secondary institutions and from industry may also be available.

AUTO BODY REPAIR

The Auto Body Repair program is certified by the National Automotive Technology Education Foundation (NATEF) and provides instruction in the most current techniques for repair and replacement of damaged automobile parts. Students learn to repair collision damage and to replace quarter panels, door skins, and fenders. The curriculum also includes painting, MIG welding, collision repair, frame straightening, and damage
analysis. Students gain experience in mixing and tinting paint, custom painting, computerized estimating, and auto detailing. Practical experience is also provided through a full-service auto body repair shop. Students have the opportunity to earn PPG Blue Level Paint and ICar MIG Welding certifications. They are also eligible to earn I-Car Points. (3 credits)

AUTOMOTIVE TECHNOLOGY

Automotive Technology is certified by the National Automotive Technology Education Foundation (NATEF) and affiliated with all of the major automotive manufacturers through Automotive Youth Educational Systems (AYES). Students prepare to take the Pennsylvania State Inspection License examination. Students learn basic vehicle maintenance, repair, and replacement of drive trains, brake systems, chassis components, and fuel and electrical systems. Special emphasis is placed on troubleshooting and engine performance via the use of state-of-the-art electronic diagnostic equipment. Practical experience is also provided in the auto repair shop. Under the Automotive Youth Educational Systems (AYES) apprenticeship program, students may qualify to become an apprentice working under mentor technicians. Students can earn certifications from AYES, the National Institute for Automotive Service Excellence (ASE), and the Coordinating Committee for Automotive Repair (CCAR). (3 credits)

CONSTRUCTION CLUSTER

During a student's first year at Parkway West CTC, he/she will select one program that he/she would like to participate in for one quarter. This program will be guaranteed to occur at some point during the students first year. Students will then be randomly scheduled for the remainder of the school year. The construction cluster program includes: CARPENTRY, ELECTRICAL SYSTEMS TECHNOLOGY, HVAC/R and WELDING TECHNOLOGY. (3 credits)

Carpentry

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

Electrical Systems Technology

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

Heating, Ventilation, Air-Conditioning and Refrigeration

The Heating, Ventilation, Air-Conditioning and Refrigeration (HVAC/R) which has been newly renovated with state-of-the industry equipment, provides instruction in basic and advanced electrical theory, troubleshooting and repair of residential and commercial heating, air-conditioning, and refrigeration systems. Students will be given the opportunity to earn a ten hour Occupational and Health Administration (OSHA) Construction Card.
**Welding Technology**

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

**COSMETOLOGY**

The Cosmetology program prepares students to perform technical services including all aspects of hair, skin/nail beautification, and personal maintenance. These skills are supported and reinforced with theoretical background including sanitation, chemistry, anatomy, and physiology, as well as structure, function, and disorders of the hair, skin, nails, and scalp. The Cosmetology program helps students develop into well-rounded professionals, who practice real-world services in Parkway’s salon, which is open to the public two days a week. Utilizing an integrated approach to teaching and learning, students learn about interpersonal relations, professional attitude, and career fundamentals along with technical 75 knowledge and skills. The techniques and abilities acquired in the program are practiced and tested on mannequins, classmates, and the general public. Students who are able to attend this program for three years will have the opportunity to earn 1,250 hours of state-regulated course requirements to take the state licensing exam to be licensed cosmetologist which encompasses providing services to the public for hair, skin, and nails. Students who are able to take one or two years of instruction in this program, may choose from the following specialized licensed fields: (3 credits)

**Nail Technician License** – This license requires 200 hours of instruction and can be complete within one semester. An individual holding a nail technician license is qualified to perform nail technology services only.

**Cosmetology Teacher License** – Prerequisite for this course is to have successfully passed at least one of the above licenses. This license requires 500 hours of required studies and can be completed within one year. An individual holding a teacher’s license is qualified to perform the functions of a teacher in whichever specialized area the individual has obtained licensure.

**CULINARY ARTS**

The Culinary Arts program provides practical instruction in the preparation of banquet, buffet, and a la carte styles of food preparation. Practical experience is provided through the operation and management of an in-house, full-service restaurant and beyond the restaurant environment to provide goods and services for Parkway’s food store, where pastries and select meats are sold. Students learn to design cakes, sculpt ice, and prepare many different types of cuisine. First-year students spend one school year in Culinary Arts Level I. Second and third-year students will advance into Culinary Arts Levels II and III. Senior students who have completed at least two years of Culinary Arts will have the opportunity to earn both the National Restaurant Association’s ServSafe certification and the American Culinary Federation certification. (3 credits)
DIESEL TECHNOLOGY

Diesel Technology is part of virtually every aspect of today’s transportation, construction, and manufacturing industries. In Diesel Technology, students will learn about the operation, maintenance, and overhaul of diesel powered equipment. Diesel engines are found in military vehicles, trucks, trains, buses, construction and agricultural equipment. As the diesel equipment industry expands, the demand for mechanics and technicians to repair and maintain diesel equipment will continue to grow. (3 credits)

GRAPHIC ARTS & PRODUCTION TECHNOLOGY

The Graphic Arts & Production Technology program is an instructional program that prepares individuals to apply technical knowledge and skills to plan, prepare and execute commercial and industrial visual images and print products using mechanical and digital graphic and printing equipment. Students learn desktop publishing, layout, composition, digital printing and bindery as well as photography and other art techniques. Emphasis is on typographical layout and design using computer graphics, digital printing, bindery and finishing techniques, ink and color preparation. Students will also learn large format digital printing with application of a wide variety of output and vinyl applications including heat press and apparel design. (3 credits)

CYBER SECURITY & NETWORK TECHNOLOGY

The Cyber Security & Network Technology program prepares students who are interested in networking and computer diagnostics want to be a part of an industry that never stands still for entry level positions within the information technology field. Beginning with Cisco IT Essentials, PC hardware and software, network operating systems are introduced. Students initially prepare for CompTIA A+ and CompTIA Server+ certifications and then, through the Cisco CCNA Discovery course, students learn networking concepts based on typical networks that one might encounter in a home or small office, or in larger, more complex enterprise models. Finally, students can prepare for the Cisco CCENT and Cisco CCNA certifications. (3 credits)

HEALTH OCCUPATIONS TECHNOLOGY

The Health Occupations Technology program provides students the opportunity to participate in a wide-range of real-world clinical and job shadowing experiences at many different local healthcare providers. Clinical experiences may include: child care, long term care, emergency nursing, recovery room nursing, radiology, medical records, operating room observation, pharmacy, physical/occupational therapy, and/or lab technician. Students will have the opportunity to earn and complete the American Heart Association “CPR for Healthcare Providers” certification and the following certifications in relation to the HealthCare industry: Pennsylvania State Nurse Aide Registry (C.N.A). For first and second year students, instruction begins with anatomy, physiology and medical terminology. Special attention is given to medical office examinations, treatment and patient care. Personal Care Home Direct Care Staff: For first and second year students, this component offers a competency test from the PA Department of Public Welfare and it prepares students to work in a personal care home as a direct care giver.
**Pharmacy Technician Certification** (CPhT): After successful completion of this one-year twelfth grade course, students will assist the pharmacist in a variety of tasks. Module and lab work includes: controlled substances, laws and regulations, drug classifications, frequently prescribed medications, prescription information, preparing/dispensing prescriptions, calculations, sterile products, unit dose and repackaging.

**Phlebotomy Technician Certification** (CPT): This is a one semester certification course directed towards twelfth grade students. Module and lab work includes: anatomy and physiology, infection control, safety and compliance, patient preparation, collection techniques, and processing collected samples. Students must demonstrate a minimum of thirty successful Venipunctures and ten successful capillary punctures. (3 credits)

**PUBLIC SAFETY TECHNOLOGY**

The Public Safety Technology program focuses on careers relating to emergency medical services, firefighting, law enforcement, and emergency management services. In order to successfully complete the program, students must meet minimum proficiency levels in all public safety areas. Instruction is provided in disaster situations/management, hazardous materials handling, pre-hospital medical care, map reading, firefighting, the judicial system, and emergency dispatching. Students have the opportunity to earn the following certifications: Emergency Medical Technician- Basic (EMT-B), Basic Vehicle Rescue (BVR), Emergency Vehicle Operators Course (EVOC), Hazardous Materials Recognition and Identification (Haz-Mat R&I), and multiple Federal Emergency Management Agency certifications. (3 credits)

**VETERINARY ASSISTANT TECHNOLOGY**

The Veterinary Assistant Technology or ‘Vet Tech’ Program prepares students to work in an entry level position in a veterinary practice aiding the veterinarian and the veterinary technician. A sample of the 77 Veterinary Assistant’s responsibilities include maintaining the medical records, scheduling, client education, laboratory procedures, nursing duties, surgical preparation and assisting. Students will also have a solid educational base on which to build a post-secondary degree. This program may lead to additional career pathways such as Animal Trainer, Animal Breeders, Non-Farm Animal Caretakers, Laboratory Animal Caretakers, Groomers, Animal Control Worker, Veterinary Technician, Veterinary Technologist, and Veterinarian. Upon accreditation, students may become eligible to earn the following certifications; Purina Certified Weight Coach; Pharmacy Technician; and Veterinary Assistant. (3 credits)
SPORTS MEDICINE AND REHABILITATION THERAPY TECHNOLOGY (SMARTT)

The Sports Medicine and Rehabilitation Therapy Technology (SMARTT) Program prepares students to work in the field of physical therapy, occupational therapy and sports medicine. Students will develop skills in prevention, diagnosis, differential diagnosis, assessment, prognosis and the rehabilitation of injuries and other health conditions. Students will learn the principles of developing a plan of care including: evaluation, interventions (exercise, manual therapy, modalities and neuro re-education), assessment, goal setting and discharge. Students will also learn how to develop a proper diet for healthy individuals and tailor it for special populations through a comprehensive understanding of nutrition. Upon successful completion, students should be able to assist in the development and implementation of a plan of care for healthy and special populations. Careers available directly out of the program could include: Personal Trainer, Coach, Physical Therapy Aid. This program also provides a solid educational base on which to build a post-secondary degree or advanced certification. Careers available with additional post-secondary schooling include: Personal Trainer, Athletic Trainer, Physical Therapist, Physical Therapist Assistant, Occupational Therapist, Certified Occupational Therapist Assistant, Strength and Conditioning Coach, Medical and Exercise Physiology researcher, Sports Psychologist, Dietitian and Exercise Physiologist. (3 credits)

PHYSICAL EDUCATION DEPARTMENT

<table>
<thead>
<tr>
<th>COURSE #</th>
<th>PHYSICAL EDUCATION COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>615</td>
<td>Partners in Physical Education</td>
</tr>
<tr>
<td>628</td>
<td>Lifetime Fitness</td>
</tr>
<tr>
<td>630</td>
<td>Physical Education for 9th and 10th Grade</td>
</tr>
<tr>
<td>646</td>
<td>Adaptive Physical Education</td>
</tr>
<tr>
<td>641</td>
<td>Senior High Health</td>
</tr>
</tbody>
</table>

**615 – PARTNERS IN PHYSICAL EDUCATION**

Prerequisite: Students must be in 10th, 11th, or 12th Grade. Interested students will require a referral from a member from the high school physical education staff and guidance counselor. *Class size will be determined based on a ratio of 1.0 Partner to a single Athlete with a maximum of 10 students serving as Partners.

Full Year - For Students in the Life Skills Program (Athletes) – Five periods per week – 1.0 credit
One Semester - Students (Partners) – Five periods per week - .5 credit

COURSE DESCRIPTION: This specially designed course is for students with disabilities or medical restrictions who are not able to fully participate in the unrestricted physical education program or students who can benefit from additional physical activity in an adapted Physical Education class. These students are joined by students without disabilities or restrictions. Together all students help each other achieve Physical Education goals. The varied activities included in the physical education program contribute to the physical, mental, and social wellbeing of all students involved. This course will not only focus on the physical wellbeing of the students but it will also contribute to facilitating meaningful social interactions between students with and without disabilities.
628 - LIFETIME FITNESS
*This class may only be taken one semester per school year.
Prerequisite: 11th and 12th Grade Students
One Semester – Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: This course will be a combination of an individual, non-competitive fitness regime (in the fitness center) and lifelong recreational activities that will occur in the gym, outdoors on the school campus or in the community, or a location that would require student travel. This course will include moderate to vigorous activities that will contribute to the student’s physical fitness and health through the use of heart rate monitors and other technology that is applicable. Students will be expected to understand how the health and skill related components of fitness are used when participating in a sport, strength training, or cardiovascular endurance activities. This class may only be taken one semester per school year. The primary focus of this class is to teach students how to design and perform fitness activities for their lifetime. This will be done by using heart rate monitors, pedometers, cardiovascular equipment, strength training equipment and pre-designed fitness programs. These activities will require students to perform in their training heart rate zones on a regular basis. Activities may include but are not limited to, recreational sports such as volleyball and basketball, cardiovascular activities such as bike riding, treadmill walking/running, aerobic dance programs, and strength training with free weights, body weight (such as rock climbing) or resistance machines. This class will include some classroom instruction, written work and assessments.

630 - PHYSICAL EDUCATION FOR 9TH AND 10TH GRADE
Prerequisite: 9th and 10th Grade Students
One Semester – A or B Day - .25 Credit

COURSE DESCRIPTION: The ninth and tenth grade physical education program will provide students opportunities to participate in individual, team and recreational activities. The course has been structured to focus on different units every other year so that tenth graders will not repeat the same activities they had in 9th grade. This course is required of all 9th and 10th graders for graduation.

646 - ADAPTIVE PHYSICAL EDUCATION
Prerequisite: Medical Prescription from a Physician or IEP
One Semester – Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: Adaptive Physical Education is designed for students who because of a medical condition are not able to participate fully in the regular unrestricted physical education program or for students who can benefit from physical activity in a restricted class. Programs are structured in cooperation with medical services and the student’s physician, so as to offer a diversified program of developmental activities, games, rhythms, and sports. These programs are specifically designed to suit the interests, capacities, and limitations of the student’s medical condition and/or their limitations. These students may be integrated to varying degrees in regular activities or units that are consistent with their functional capabilities. An individualized program could combine both modified and remedial activities to provide alternatives to the regular physical education program or may be applied in addition to participation in regular physical education class programs. Students must present a medical prescription and specific documentation from a physician in order to be admitted to this class.
641 - SENIOR HIGH HEALTH
Prerequisite: None
One Semester – A or B Day -.25 Credit

COURSE DESCRIPTION: The primary focus is to educate students to acquire and use the knowledge and skills necessary to promote a state of complete physical, mental and social well being, and to understand wellness while promoting good health habits. The course units will also cover mental and emotional wellness, nutrition, tobacco, alcohol, diseases, human sexuality/ HIV/AIDS.

The State Department of Education mandates HIV/AIDS instruction in Health Education. Parents or guardians have the opportunity to review this course of study. If the parent or guardian does not wish their child to participate in the HIV/AIDS instructional program, they may exempt their child by issuing a written statement to the administration. Alternative programs will be provided.

SCIENCE AND TECHNOLOGY DEPARTMENT

Table 21 - Science Courses

<table>
<thead>
<tr>
<th>COURSE #</th>
<th>SCIENCE COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>240</td>
<td>Biology</td>
</tr>
<tr>
<td>241</td>
<td>Honors Human Anatomy and Physiology (WI)</td>
</tr>
<tr>
<td>245</td>
<td>Honors Biology (WI)</td>
</tr>
<tr>
<td>248</td>
<td>AP Biology (WI)</td>
</tr>
<tr>
<td>250</td>
<td>Honors Chemistry (WI)</td>
</tr>
<tr>
<td>255</td>
<td>Chemistry</td>
</tr>
<tr>
<td>256</td>
<td>Chemistry II</td>
</tr>
<tr>
<td>258</td>
<td>AP Chemistry (WI)</td>
</tr>
<tr>
<td>260</td>
<td>Honors Physics (WI)</td>
</tr>
<tr>
<td>266</td>
<td>Physics</td>
</tr>
<tr>
<td>267</td>
<td>AP Physics (WI)</td>
</tr>
<tr>
<td>784</td>
<td>Problem Solving by Design – Gr. 10, 11, 12 (Sem. 1 only)</td>
</tr>
<tr>
<td>290</td>
<td>Forensic Science</td>
</tr>
<tr>
<td>1011</td>
<td>Astronomy</td>
</tr>
<tr>
<td>1014</td>
<td>Meteorology</td>
</tr>
<tr>
<td>1013</td>
<td>Introduction to Ecology and Environmental Science</td>
</tr>
<tr>
<td>1012</td>
<td>Applied Physics and Engineering</td>
</tr>
<tr>
<td>COURSE #</td>
<td>TECHNOLOGY EDUCATION COURSES</td>
</tr>
<tr>
<td>----------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>206</td>
<td>Architectural Drafting I</td>
</tr>
<tr>
<td>207</td>
<td>Explore Laser Manufacturing and Design</td>
</tr>
<tr>
<td>208</td>
<td>Additive Manufacturing</td>
</tr>
<tr>
<td>209</td>
<td>Underwater Robotics I</td>
</tr>
<tr>
<td>706</td>
<td>Computer-Aided Drafting 2D</td>
</tr>
<tr>
<td>707</td>
<td>Computer-Aided Drafting 3D</td>
</tr>
<tr>
<td>712</td>
<td>Technological Design and Systems</td>
</tr>
<tr>
<td>713</td>
<td>Physical Technologies I</td>
</tr>
<tr>
<td>714</td>
<td>Engineering Design I</td>
</tr>
<tr>
<td>715</td>
<td>Engineering Design II</td>
</tr>
<tr>
<td>721</td>
<td>Advanced Manufacturing and Engineering</td>
</tr>
</tbody>
</table>

*WI = Writing Intensive  
*CHS – College in High School course

Note: For all Honors and AP courses, a summer assignment is required.

SCIENCE

240 - BIOLOGY  
Prerequisite: None  
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: Biology is the science of living things. Keeping in mind the assertion that science should be a verb and not a noun, much of the course is based on the experimental approach. In all applicable areas, the student gains knowledge of biology demonstrations and laboratory investigations. Major biological themes are stressed throughout, rather than memorization of loosely related facts. Biology is divided into four main areas: (1) biological aspects of the cell, DNA and reproduction; (2) genetics; (3) ecology; and (4) lowest to most complex organisms with emphasis on the relationship between structure and function. Successful completion of this course leaves the student with a better awareness of life around him/her and of the process of science in general.

241 - HONORS HUMAN ANATOMY & PHYSIOLOGY (HONORS LEVEL COURSE) (WI)  
Prerequisite: In accordance with prerequisites for Advanced Courses; Successful completion of Biology or Honors Biology and Chemistry or Honors Chemistry.  
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: Honors Human Anatomy and Physiology is designed to present content that will benefit students preparing for a career in medicine, nursing, research, or any other health related field. The course is designed to approach the human body by system. A great deal of emphasis will be placed on structure and function and comparative anatomy through various organ dissections. A culminating mammalian dissection of the fetal pig will be performed as well to assess the students' abilities to relate each system at the level of the organism.
Students choosing Honors Human Anatomy and Physiology should be aware that this is a college-level course. The teacher acts as the facilitator, and the students are responsible for a great deal of laboratory analysis and studying outside of the classroom.

Students choosing Honors level and Advanced Placement courses should be aware of required summer readings and preparation for each course. All advanced courses will require summer preparation previous to the first day of school. Failure to complete required summer preparation will significantly affect the student’s first nine-week grade during the following academic year.

245 - HONORS BIOLOGY (HONORS LEVEL COURSE) (WI)
Prerequisite: In accordance with Prerequisites for Advanced Courses.
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: Honors Biology is a course designed to examine living things. Keeping in mind the assertion that science should be a verb and not a noun, the course is based on the experimental approach as well as research methodology. The student gains knowledge of biology through methods of inquiry, such as laboratory experiments and research. Demonstrations, research completed by the student, and laboratory investigations are employed. Major biological themes are stressed throughout, rather than memorization of loosely related facts. Honors Biology is divided into four main areas: (1) biological aspects of the cell, DNA and reproduction; (2) genetics; (3) ecology; and (4) lowest to most complex organisms with emphasis on the relationship between structure and function. Honors Biology students will spend more time researching topics and writing reports than will students in regular biology. Successful completion of this course leaves the student with a better awareness of life around him/her, excellent laboratory skills, and skills in research methodology.

Students enrolled in Honors Biology will be required to:

1. Conduct research that demonstrates conceptual understanding of the major themes in the curriculum. Students will be individually responsible for project completion.
2. Successfully complete chapter tests, quizzes, projects and a mid-term and final examination.

Students choosing Honors level and Advanced Placement courses should be aware of required summer readings and preparation for each course. All Honors level and Advanced Placement courses will require summer preparation previous to the first day of school. Failure to complete required summer preparation will significantly affect the student's first nine-week grade during the following academic year.

248 - AP BIOLOGY (ADVANCED PLACEMENT COURSE) (WI)
Prerequisite: In Accordance with Prerequisites for Advanced Courses; Successful Completion of both Biology AND Chemistry; Successful Completion of OR Concurrent Enrollment in Honors Anatomy and Physiology is highly recommended.
Full Year – Five Days per Week with two consecutive academic periods of laboratory work every other day 1.5 Credits

COURSE DESCRIPTION: Advanced Placement Biology is a college level course that is taught at a college pace, and therefore makes demands on each student equivalent to those in an introductory college Biology course. The amount of outside work and preparation is substantially greater than required in an Honors course. The two main goals of AP Biology are to help students develop a conceptual framework for modern biology and to help students gain an appreciation of science as a process. The ongoing information explosion in biology makes these goals even more challenging! Primary emphasis in an Advanced Placement Biology course is on developing an understanding of concepts as well as application of these concepts rather than on simply
memorizing terms and technical details. Essential to this conceptual understanding are the following: a grasp of science as a process rather than simply an accumulation of facts; personal experience in scientific inquiry and laboratories; recognition of unifying themes that integrate the major topics of biology; and application of biological knowledge and critical thinking to environmental and social concerns. Students will develop advanced inquiry and reasoning skills, such as designing a plan for collecting data, analyzing data, applying mathematical routines, and connecting concepts in and across domains. The result will be readiness for the study of advanced topics in subsequent college courses — a goal of every AP course. In order to facilitate personal experiences in scientific inquiry and biology, this course also requires two consecutive academic periods of laboratory work every other day for the entire school year.

Students enrolled in AP Biology will be expected to complete readings, assignments, projects, and AP Biology practice exams outside of class time.

Students choosing Honors level and Advanced Placement courses should be aware of required summer readings and preparation for each course. All Honors level and Advanced Placement courses will require summer preparation previous to the first day of school. Failure to complete required summer preparation will significantly affect the student's first nine-week grade during the following academic year.

250 - HONORS CHEMISTRY (HONORS LEVEL COURSE) (WJ)
Prerequisite: In accordance with Prerequisites for Advanced Courses; Successful Completion of Algebra I, Biology and Geometry
Full Year – Five Periods Per Week – 1.0 Credit

COURSE DESCRIPTION: Chemistry is the study of matter and its structure and interaction. The course utilizes a semi-mathematical approach to inorganic chemistry consisting of the behavior and activities of elements and their chemical compositions. Organic chemistry is introduced with the emphasis on organic nomenclature. The course is structured to facilitate a "hands on" environment. The course is designed to develop and promote a foundation for deductive reasoning. Relationships are drawn to "everyday" chemical phenomenon in the discussion of chemical compounds and their behavior. Mathematical problem solving relates and proves known chemical information to aid in the understanding of the scientific principles. This course requires higher order thinking skills and is recommended for the college bound and technical school student.

The following topical areas are included: (1) measuring and calculating; (2) matter; (3) chemical formulas; (4) the mole concept; (5) chemical reactions; (6) atomic structure; (7) electron clouds and probability; (8) the periodic properties; (9) chemical bonding; (10) molecular structure; and (11) the behavior of liquids and gases.

Students choosing Honors level and Advanced Placement courses should be aware of required summer readings and preparation for each course. All Honors level and Advanced Placement courses will require summer preparation previous to the first day of school. Failure to complete required summer preparation will significantly affect the student's first nine-week grade during the following academic year.
**255 - CHEMISTRY**  
Prerequisite: Successful completion of Biology  
*Full Year – Five Periods Per Week – 1.0 Credit*

**COURSE DESCRIPTION:** This course will provide a basic understanding of chemistry. Students will examine the composition of matter and changes that it can undergo. Topics of study include: lab safety, the scientific method, dimensional analysis, analyzing data, chemical and physical properties, atomic structure, electrons in atoms, periodic law, ionic compounds, covalent bonding, chemical reactions, the mole, stoichiometry, states of matter, gases, energy and chemical change, as well as acids and bases. Another goal of this course is to increase the scientific literacy of high school students by applying the fundamental chemical concepts covered during the year to everyday life and emphasizing chemistry's impact on society.

**256 - CHEMISTRY II**  
Prerequisite: Successful completion of Chemistry or Honors Chemistry with a 75% or better  
*Full Year – Five Periods Per Week – 1.0 Credit*

**COURSE DESCRIPTION:** Chemistry II is designed for students interested in building on the base of knowledge acquired during their first year course in chemistry. Success in Chemistry II is dependent on the mastery of Chemistry I material, since Chemistry II builds on Chemistry I. The course provides a practical, hands-on approach to chemistry, and features decision-making activities, which give students practice in applying their chemistry knowledge in a variety of situations. This second year chemistry course includes stoichiometry, solutions and solubility, equilibrium, redox reactions, electrochemistry, nuclear chemistry, hydrocarbons and organic chemistry.

**258 - AP CHEMISTRY (ADVANCED PLACEMENT COURSE) (WI)**  
Prerequisites: In accordance with Prerequisites for Advanced Courses; Successful Completion of Algebra II and Honors Chemistry or Chemistry with highest departmental recommendation.  
*Full Year – Five Days per Week with two consecutive academic periods of laboratory work every other day – 1.5 Credits*

**COURSE DESCRIPTION:** Advanced Placement Chemistry is a college level course that is taught at a college pace, with demands equivalent to those of a full year of General Chemistry taken during the first year at a college or university. It is a rigorous math-based course, with a strong laboratory component. AP Chemistry is intended for students who have demonstrated a willingness to commit considerable time to studying and completing assignments outside of class. The amount of necessary outside work and preparation is substantially greater than required of an Honors course. It is assumed that the student will spend at least five hours a week in unsupervised individual study.

This course will cover the fundamental principles of chemistry in depth with an emphasis on reasoning and problem solving. The course will develop the student's ability to incorporate mathematical skills in the solution of chemistry problems, both through the use of written problems and laboratory activities. Students will be expected to do extensive writing, and to keep a thorough and accurate ongoing laboratory notebook. Topics of study include: atomic theory and structure, stoichiometry, chemical reactions, gases, liquids, and solids, solutions, kinetics, chemical equilibrium, acids and bases, thermochemistry, and electrochemistry.

Students choosing Honors level and Advanced Placement courses should be aware of required summer readings and preparation for each course. All Honors level and Advanced Placement courses will require summer preparation previous to the first day of school. Failure to complete required summer preparation will significantly affect the student's first nine-week grade during the following academic year.
260 - HONORS PHYSICS (HONORS LEVEL COURSE) (WI)
Prerequisite: In accordance with Prerequisites for Advanced Courses, successful completion of Chemistry, Algebra I and Geometry and successful completion of OR concurrent enrollment in Algebra II or higher is highly recommended
Full Year – Five Periods Per Week – 1.0 Credit

COURSE DESCRIPTION: Physics is the study of matter and energy and their interrelationship. Honors Physics addresses a few fundamental topics in physics, namely mechanics (the science of how and why things move) and wave motion and sound. The physics laboratory is aimed at reinforcing the theoretical content of the course by providing hands-on experience with the subject material. All content material discussed is approached scientifically with mathematical reinforcement. Demonstrations of all concepts are presented. This course is designed for the college-bound student or those entering a technical field including engineering, computer design and technologies and the medical fields. This course heavily requires the use of mathematics to understand physics concepts and problems.

The following topics are studied in depth, conceptually and mathematically, in Honors Physics: (1) Measurement and Mathematics of Physics; (2) Kinematics in One Dimension; (3) Vectors; (4) Kinematics in Two Dimensions -- Projectile Motion; (5) Dynamics -- Forces and Newton’s Laws of Motion; (6) Circular Motion; (7) Newton’s Law of Gravitation and Keplers’ Laws; (8) Work, Power and Conservation of Energy; (9) Conservation of Momentum and Collisions; (10) Rotational Kinematics and Dynamics; (11) Simple Harmonic Motion and (12) Wave Motion.

Students choosing Honors level and Advanced Placement courses should be aware of required summer readings and preparation for each course. All Honors level and Advanced Placement courses will require summer preparation previous to the first day of school. Failure to complete required summer preparation will significantly affect the student’s first nine-week grade during the following academic year.

266 - PHYSICS
Prerequisite: Recommended “C” average or better in Algebra I, Geometry, and Chemistry
Full Year – Five Periods Per Week – 1.0 Credit

COURSE DESCRIPTION: Physics is a fundamental science course designed to give students an understanding of the physical principles associated with everyday living. Physics involves the study of motion, forces, energy and waves. The following areas in physics are studied in the course:

1. Mechanics – this includes the study of measurement and mathematics of physics, kinematics in one dimension, freefall, vectors, projectile motion, forces and Newton’s laws of motion and gravitation, center of mass/gravity, circular motion and the pendulum, work, power, conservation of energy and the conservation of momentum and collisions

2. Waves and Optics – includes the study of wave motion, sound, light, reflection, refraction, concave and convex mirrors, and concave and convex lenses

This Physics course is a “hands-on,” laboratory intensive program that requires the student to complete laboratory reports reflecting their experimental results and conclusions. Mathematics is critical to developing all of the principles involved and discussed in the course. The course will give students a solid conceptual and mathematical understanding of fundamental physics principles.
267 - AP PHYSICS (ADVANCED PLACEMENT COURSE) (WI)
Prerequisite: In accordance with Prerequisites for Advanced Courses, successful completion of Honors Physics or Physics with highest departmental recommendation; successful completion of PreCalculus with 85% or better OR concurrent enrollment in PreCalculus.
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: AP Physics will continue where Honors Physics left off. This course is structured to help students prepare for the AP Physics 1 exam. The course is designed as an introduction to conceptual and mathematical information regarding the behavior of waves and sound, optics, mechanics, electricity, magnetism, electromagnetic induction and early quantum theory. Students will investigate these areas with "hands on" laboratory experiences and demonstrations which promote open-ended inquiry and critical thinking. This course is intended for the college bound student or those students entering a technical field such as engineering, computer science and technologies, and medical fields. AP Physics requires the extensive use of algebra, geometry, trigonometry and some calculus.

The following topics of study are included: (1) mechanics inquiry investigations and review; (2) waves, sound and light; (3) geometric optics; (4) wave/physical optics; (5) static electricity; (6) current electricity; (7) series, parallel and combination circuits; (8) magnetism; (9) electromagnetic induction; (10) early quantum theory and models of the atom.

Students choosing Honors level and Advanced Placement courses should be aware of required summer readings and preparation for each course. All Honors level and Advanced Placement courses will require summer preparation previous to the first day of school. Failure to complete required summer preparation will significantly affect the student's first nine-week grade during the following academic year.

784 – PROBLEM SOLVING BY DESIGN
Prerequisite: None
1st Semester Only – Five Periods per Week - .5 Credit - Gr. 10, 11, 12

COURSE DESCRIPTION: This one semester hands on class will teach using systematic methods to solve real world problems. These methods will include scientific methods, engineering methods, and human centered design methods. The course will apply these problem solving methods to real world problems in the students’ home life, the school, the community, and for local business partners. The students will learn skills in observation and inquiry, problem identification, problem framing and reframing, solution ideation, rapid prototyping and iteration, presentation, and solution justification. The course will require significant public presentation by the students.

290 - FORENSIC SCIENCE
Prerequisite: Successful completion of both Biology and Chemistry
Full Year – Five Periods Per Week – 1.0 Credit

COURSE DESCRIPTION: Forensic Science is the study and application of basic scientific concepts and technologies related to solving crimes. Through the study of forensic science techniques, students will be given the opportunity to explore and further understand how basic scientific concepts apply to this fascinating and increasingly popular area. By incorporating a problem-solving approach to science education, all students will be engaged in exciting and innovative ways. Forensics provides a novel approach to teaching “real world” applications of science, mathematics, and other disciplines.
This course will include acquiring and/or reviewing the knowledge of the basic science concepts utilized in forensics. These scientific principles will then be applied and authenticated through the discussion of realistic scenarios and by engaging in concrete learning activities such as laboratory experiments, research assignments, and the completion of case study examples. This course will encourage those interested in a career in forensic science to further pursue this area of interest, while at the same time offer those students who are simply curious further application of multiple science skills.

1011 – ASTRONOMY
Prerequisite: None
Semester Course – Five Days Per Week - .5 Credit (Grades 11, 12)

COURSE DESCRIPTION: A semester long science course that is an introduction to astronomy for high school students. The course will examine astronomy as a scientific discipline in the context of other sciences, explore the formation, nature, and fate of the planet, the solar system, the galaxy, and the universe. It will include a lab component for students. It will also examine contemporary topics in astronomy, cosmology, and observational equipment.

1014 – METEOROLOGY
Prerequisite: None
Semester Course – Five Days Per Week - .5 Credit (Grades 11, 12)

COURSE DESCRIPTION: A semester long science course that is an introduction to meteorology for high school students. The course will examine meteorology as a scientific discipline in the context of other sciences and the role the atmosphere and its interactions with the hydrosphere, the biosphere, and the geosphere determine the weather and climate of the planet. It will include a lab component for students. The course will also briefly examine the causes and effects of climate change.

1013 – INTRODUCTION TO ECOLOGY AND ENVIRONMENTAL SCIENCE
Prerequisites: Successful completion of Biology/Honors Biology AND Chemistry/Honors Chemistry
Full Year – Five Days Per Week – 1.0 Credit (Grades 11, 12)

COURSE DESCRIPTION: Ecology is the study of organisms’ interactions with both the living and non-living factors in an environment. This course studies the different levels of ecology, including the organism, a population, a community, an ecosystem, and a biome. These levels are affected by the planet’s biodiversity, efforts of sustainability, and history of natural selection, which culminate into the current conditions on Earth.

1013 – APPLIED PHYSICS AND ENGINEERING
Prerequisite: Successful completion of Physics
Full Year – Five Days Per Week – 1.0 Credit (Grade 12)

COURSE DESCRIPTION: This course will cover physics topics not already covered in physics or physics honors including electric charge and fields, electrical potential, circuit electricity (DC and AC), and static equilibrium. Additionally, it would expand upon (for physics honors students) or introduce (for physics regular students) rotational kinematics, energy, and momentum. The course is designed to provide students with a working knowledge of concepts of physics and their application to problem solving through project based learning activities. These activities may include building and testing static structures and building and testing robotic systems.
TECHNOLOGY EDUCATION

The Technology Education classes are grouped into two focused pathways. The *Computer-Aided Engineering Pathway* is currently comprised of 4 classes that are to be taken in a specific order. This pathway primarily utilizes current computer technology and software, although the advanced classes will be using some tools, equipment, and training centers to perform prototype construction and other hands-on activities. The Computer-Aided Drafting 2D class is the foundations class where all students must begin. This class will provide an introduction to computer-aided drafting and beginner level computer and software orientation and configuration skills. Technical sketching, design, and basic two-dimensional drawings, layout, construction, and editing units will provide a solid foundation and exposure to this first pathway. Students interested in pursuing this pathway may advance into the Engineering Design classes. The *Manufacturing Engineering Pathway* is currently comprised of 4 classes, also to be taken in a specific order. Technological Design and Systems is this pathway’s foundations class. In this class, students will begin learning computer-aided drawing and design for two- and three-dimensional solid modeling and machining applications. Also, students will begin completing hands-on learning activities at several training centers: Electrical and Pneumatic Control Systems. This pathway incorporates into the curriculum in the advanced classes, Plastics Technology training and Robotics and Computer Programming training. All advanced classes require teacher’s recommendation.

<table>
<thead>
<tr>
<th>Computer-Aided Engineering Pathway:</th>
<th>Manufacturing Engineering Pathway:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer-Aided Drafting 2D</td>
<td>Technological Design and Systems</td>
</tr>
<tr>
<td>Computer-Aided Drafting 3D</td>
<td>Physical Technology</td>
</tr>
<tr>
<td>Engineering Design I</td>
<td>Advanced Manufacturing I</td>
</tr>
<tr>
<td>Engineering Design II</td>
<td>Advanced Manufacturing II</td>
</tr>
</tbody>
</table>

206 – ARCHITECTURAL DRAFTING I

*Prerequisite: None*

*Full Year - Five Periods Per Week - 1.0 Credit*

**COURSE DESCRIPTION:** This course will introduce students to architectural design and its systems, documentation, and presentation variables. Students will explore the world of Residential and Commercial architectural design. The content will span from residential and commercial design, layout, and specifications to utilizing architectural desktop software to create electrical and mechanical animated presentation drawing solutions. Construction systems and their varied installations can easily be applied to completing drawing problems. All students will design blueprints as a culminating project with accompanying portfolio and presentation.

207 – EXPLORE LASER MANUFACTURING AND DESIGN

*Prerequisite: None*

*One Semester – Five Periods Per Week - .5 Credit*

**COURSE DESCRIPTION:** Students will utilize the 3 lasers to apply raster, vector, rotary and 3D applications. They will also begin to use Coreldraw and other software programs to give them varied means of designing their projects.
208 – ADDITIVE MANUFACTURING  
Prerequisite:  None  
One Semester – Five Periods Per Week - .5 Credit  

COURSE DESCRIPTION:  Students will explore the world of 3D printing with varied thermoplastics for rapid prototyping applications as well as utilization of Plastics Injection modeling. Different materials engineering curricula will also be introduced.

209 – UNDERWATER ROBOTICS I  
Prerequisite:  Students must have completed CAD 2D or Technology Design and Systems  
Full Year - Five Periods Per Week - 1.0 Credit  

COURSE DESCRIPTION:  The course will explore the world of underwater exploration and design and manufacturing of robotic systems to solve specific environmental and engineering related real world problems. This focus will result in a team of students creating a company, Board of Directors, marketing and advertising portfolio, as well as a well-designed and fully functioning Scout or Ranger class UROV, to be an entry in the International MATE UROV regional competition at Villanova University every year. It is the goal and intent of this class to compete at the International level, which varies in location, but is usually in a place on or near one of the coasts.

706 - COMPUTER-AIDED DRAFTING 2D  
Prerequisite:  None  
One Semester – Five Periods Per Week - .5 Credit  

COURSE DESCRIPTION:  The purpose of this course is to give students an understanding of engineering and architectural drawings and the skills needed to produce these drawings by using various computerized drawing and design programs. Students will learn the proper way to develop different types of drawings, such as: orthographic projections, multiview drawings, auxiliary and section views, using proper line techniques, dimensioning and software techniques. The ANSI drafting standards will be addressed.

707 - COMPUTER-AIDED DRAFTING 3D  
Prerequisite:  Successful completion of Computer-Aided Drafting 2D  
One Semester – Five Periods Per Week - .5 Credit  

COURSE DESCRIPTION:  The primary goal of this class is to use concepts and procedures learned from AutoCAD 2D modeling and apply them towards constructing 3D wire frame, surface, and 3D solid models. Also, students will use these drawings to construct multi-view manufacturing and engineering drawings, in addition to correlated documentation plus presentation of their graphical solutions. An introduction to Inventor software and Architectural Design Software will be discussed and applied towards the creation of drawing portfolios. Students who want to pursue the engineering design classes should earn a "B" minimum in this class.
712 - TECHNOLOGICAL DESIGN AND SYSTEMS
Prerequisite: None
One Semester - Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: Technological Design and Systems is one of two foundation courses in the technology education department for all students in Grades 9th through 12th. This exciting, hands-on course provides an overview of the universal systems model, technological design processes and problem solving, and introduction to graphic communication: CAD. Students, working alone or in groups, will build a foundation for technological literacy by developing, producing, testing, and assessing solutions to technological problems. An introduction to electrical systems, fluid systems, and Master CAM 2D milling software will be covered.

713 - PHYSICAL TECHNOLOGIES I
Prerequisite: Successful completion of Technological Design and Systems
One Semester - Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: This course is focused on applying new technological methods, software, and equipment towards computer-aided manufacturing systems (Mill and Lathe Intro), electrical and electronic systems, pneumatic systems, and 3D design and drawing applications. Students will be rotated through training stations in groups and complete numerous hands-on exercises and learning activities.

714 - ENGINEERING DESIGN I
Prerequisite: Successful completion of Computer-Aided Drafting
One Semester - Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: This course will include an in-depth exploration into many fields of engineering and how each impacts our society, environment, and technological literacy. The course will emphasize electrical, mechanical, structural, architectural and computer-aided engineering: series and parallel circuits, computer aided 2D and 3D design, CAD/CAM/CNC design and control systems. An introduction to robotics and computer programming systems will be introduced. All OSHA/ASME/ANSI standards and regulations will be reviewed as appropriate. Students' will develop a drawing and design portfolio for every prototype engineered. This course will also introduce students to architectural design and its systems, documentation, and presentation variables. The content will span from residential design, layout, and specifications to site plans, foundations, floor plans, and roof structures. Basic construction methods and BOCA code regulations will be reviewed.

715 - ENGINEERING DESIGN II
Prerequisite: Successful completion of Engineering Design I
One Semester – Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: This course will advance the skills taught in Engineering Design I. Units and projects will be focused on: 1) Electronics: transformers, control logic, sequencing control, timer systems, 2) Robotics/Computer Programming: application development, flexible manufacturing cells, quality control, production control, 3) Advanced CNC/CAM geometry and toolpaths, 4) Plastics Technology: injection molding operations and chemistry properties, 5) Structural Engineering: Skyscraper and Truss construction. Students will research, design, layout, and manufacture a customized manufacturing prototype design. All OSHA/ASME/ANSI standards and regulations will be reviewed as appropriate. Students will develop a drawing and design portfolio for every prototype engineered. Further introduction to architectural design topics will feature building systems and the application of electrical and mechanical systems. Mass elements and groups, creation of a multi-storied building, and commercial and industrial drawing problems and applications will be reviewed and discussed.
721 - ADVANCED MANUFACTURING AND ENGINEERING

Prerequisite: Successful completion of Technological Design and Systems and Physical Technologies I.

Full Year - Five Periods Per Week - 1 Credit

COURSE DESCRIPTION: Students accepted into this class will focus on an intensive program of studies related to enriching and enhancing their software skills and applications of CAD/CAM & CNC programs and equipment. Basic to advanced machine coding will be introduced, computer-aided manufacturing 2D and 3D geometry and toolpath development, advanced electronics and pneumatics competencies and skills, and plastics extrusion technology will be covered. This class is designed to prepare students to enter into the Mechatronics and/or the Polymer Technician apprenticeships. There is also the possibility of job placement for eligible class candidates.

SOCIAL STUDIES DEPARTMENT

Table 23 - Social Studies Courses

<table>
<thead>
<tr>
<th>COURSE #</th>
<th>SOCIAL STUDIES COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>130</td>
<td>Civics 9</td>
</tr>
<tr>
<td>132</td>
<td>Honors Civics 9 (WI)</td>
</tr>
<tr>
<td>140</td>
<td>World Cultures 10</td>
</tr>
<tr>
<td>142</td>
<td>Honors World Cultures 10 (WI)</td>
</tr>
<tr>
<td>150</td>
<td>American Cultures 11</td>
</tr>
<tr>
<td>219</td>
<td>Honor American Cultures 11 - CHS (WI)</td>
</tr>
<tr>
<td>154</td>
<td>AP United States History 11 (WI)</td>
</tr>
<tr>
<td>160</td>
<td>Economics 12</td>
</tr>
<tr>
<td>162</td>
<td>Honors Economics 12 (WI)</td>
</tr>
<tr>
<td>164</td>
<td>AP Economics (WI)</td>
</tr>
<tr>
<td>215</td>
<td>AP U.S. and Comparative Government and Politics - CHS</td>
</tr>
<tr>
<td>219</td>
<td>AP European History - CHS</td>
</tr>
<tr>
<td>170</td>
<td>Psychology</td>
</tr>
<tr>
<td>171</td>
<td>Sociology</td>
</tr>
<tr>
<td>185</td>
<td>Developmental Child Psychology</td>
</tr>
<tr>
<td>190</td>
<td>Leadership Studies I: A Historical, Contemporary and Comparative Perspective</td>
</tr>
<tr>
<td>217</td>
<td>Leadership Studies II– Advanced Leadership Studies - CHS</td>
</tr>
<tr>
<td>198</td>
<td>Philosophy</td>
</tr>
<tr>
<td>1005</td>
<td>Modern History Through Pop Culture</td>
</tr>
<tr>
<td>1006</td>
<td>Applied Positive Psychology</td>
</tr>
</tbody>
</table>

*WI – Writing Intensive
*CHS – College in High School course

Note: For all Honors and AP courses, a summer assignment is required.
130 - CIVICS 9
Prerequisite: 9th Grade Students
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: This course will provide students with a basic understanding of how the government of the United States functions at the national, state, and local levels. The duties and responsibilities of citizenship will be determined. Students will be required to recall early English laws and the influence they had on American laws. The Constitution of the United States will be discussed in great detail, with an emphasis being place upon the Bill of Rights. Other key amendments will be examined. A unit devoted to the Civil Rights Movement in the United States will be presented. As an extension of this unit, universal human rights will be discussed. The American political system and the election process will be traced, evaluating the role of the media in Presidential elections. The three branches of the federal government will be thoroughly examined, and students will realize how each branch checks the power of the other. The US as a world leader will be defined, as well as examining Pennsylvania as part of a global society. A brief unit on Economics will be presented to familiarize students with types of economic systems. Finally, the primary components of Pennsylvania State History will be introduced.

132 – HONORS CIVICS 9 (ADVANCED COURSE) (WI)
Prerequisite: In accordance with Prerequisites for Advanced Courses
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: This course will provide students with an extensive understanding of how the government of the United States functions at the national, state, and local levels. The course commences with determining why government is necessary and focusing on the intent of George Orwell in Animal Farm. Citizenship and immigration trends to the United States will be investigated. Students will conduct research into early English Law to determine its effect on the creation of the United States Constitution. Each article contained within the Constitution will be analyzed. The Bill of Rights will be scrutinized and all remaining amendments will be evaluated for their significance in the lives of American citizens. Students will conduct research on the Civil Rights Movement and determine its impact on American society. As an extension of this unit, universal human rights will be discussed. The uniqueness of the American political system and the election process will be traced, evaluating the role of the media in Presidential elections. Each branch of the federal government will be studied in great detail. Students will demonstrate a firm comprehension of how one branch checks the power of another and how they interact. Landmark Supreme Court decisions will be investigated and evaluated for their importance. The US as a world leader will be defined, as well as examining Pennsylvania as part of a global society. A smooth transition will be made into a unit on Economics, discriminating between the types of economic systems. Finally, students will peruse the key components of Pennsylvania State History.

Students enrolled in Honors Civics 9 will be required to:

1. Complete the assigned summer project for Honors Civics 9.
2. Analyze specific readings and write position papers.
3. Give oral, written, and technological presentations on topics assigned throughout the year.
4. Conduct research that will demonstrate competency of the major themes within the curriculum.
5. Read one book approved by the teacher and prepare a report.
6. Demonstrate mastery of the objectives set forth for Honors Civics 9 Honors by successfully taking the chapter tests, quizzes, and completing unit projects.

Students choosing Honors level and Advanced Placement courses should be aware of required summer readings and preparation for each course. All advanced courses will require summer preparation previous to the first day of school. Failure to complete required summer preparation will significantly affect the student's first nine-week grade during the following academic year.
**140 - WORLD CULTURES 10**  
*Prerequisite: 10th Grade Students*  
*Full Year - Five Periods Per Week - 1.0 Credit*

**COURSE DESCRIPTION:** World Cultures is divided into seven major units, with each one examining non-Western cultural regions of the world. Every unit examines the geography, history, culture, and contemporary events of that particular region from a thematic approach. The overarching themes of the course—cultural conflict, tolerance, and interdependence—will be reinforced in each unit of study. The course begins with an introductory unit on geography, culture, development, and globalization. Subsequently, the units are divided into six major geographic regions of the world—sub-Saharan Africa, South Asia, East Asia, the Middle East, Eastern Europe & Russia, and Latin America. An emphasis will be placed on the rise of India and China.

An in-depth approach to relevant global issues will continually challenge students to view the world from multiple perspectives, and express their growth by means of an effective and creative writing style. The overarching theme of the course is the culture clash that has occurred, and is still occurring, whenever people of different races, ethnicities, and religions come in contact with one another. Ultimately, students will have a better understanding of and appreciation for the many ways of life that make this world such a fascinating place in which to live.

**142 – HONORS WORLD CULTURES 10 (ADVANCED COURSE) (WI)**  
*Prerequisite: In accordance with Prerequisites for Advanced Courses*  
*Full Year - Five Periods per Week - 1.0 Credit*

**COURSE DESCRIPTION:** World Cultures is the study of non-Western cultures. The overarching themes of the course—cultural conflict, tolerance, and interdependence—will be reinforced in each unit of study. The course begins with an introductory unit on geography, culture, development, and globalization. Subsequently, the units are divided into six geographic regions of the world—sub-Saharan Africa, South Asia, East Asia, the Middle East, Russia and Eastern Europe, and Latin America. Significant time will be spent investigating the rise of India and China. Students will explore the political, economic, social, and cultural characteristics of each region. Students will be expected to analyze, discuss, and clearly express ideas about the overarching themes of the course throughout the year. The World Cultures curriculum emphasizes geographic literacy, modern history, and contemporary issues in each area of study. The relevance of the course is reinforced by the study of weekly current international news events. The Honors World Cultures curriculum is of increasing importance as we prepare students to function as citizens of a global society. This course will be offered concurrently with Honors English 10, which will create opportunities for interdisciplinary instruction and enrichment activities.

Students choosing Honors level and Advanced Placement courses should be aware of required summer readings and preparation for each course. All advanced courses will require summer preparation previous to the first day of school. Failure to complete required summer preparation will significantly affect the student's first nine-week grade during the academic year.

**Students enrolled in Honors World Cultures will be required to:**
1. Complete the assigned summer project for Honors World Cultures
2. Analyze specific readings and write position papers.
3. Give oral, written, and technological presentations on topics assigned throughout the year.
4. Conduct research that will demonstrate competency of the major themes within the curriculum.
5. Demonstrate mastery of the objectives set forth for Honors World Cultures by successfully taking the unit tests, quizzes, and completing unit projects.
150 - AMERICAN CULTURES 11
Prerequisite: 11th Grade Students
Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: American Cultures for 11th grade students emphasize the study of United States history from the 1890’s to the present. Various approaches are used to stress political and economic developments, social and cultural growth, and America’s position as a world power during this time period. In this course the student can explore new ideas and learn about peoples and events in the past that have shaped our world today.

219 - AMERICAN CULTURES HONORS 11 (ADVANCED COURSE) (WI) - CHS
*University of Pittsburgh - College in High School Program Option
Prerequisite: In accordance with Prerequisites for Advanced Courses
Full Year – Five Periods Per Week – 1.0 Credit

COURSE DESCRIPTION: Honors American Cultures is the study of American domestic and foreign issues, from the end of the Civil War to the Present, with a particular focus on the time period of the 1890’s to the present. The United States grew during the 20th century into one of the most formidable powers in world history, and this class will tell the story of how that occurred. Various approaches are used to stress political and economic developments, social and cultural growth, military conflicts, and America’s eventual position as a world power during this period. In this course, students explore new ideas and learn about people and events in the past that have shaped our world today. By the end of the course, students will discuss challenges that America faces in the 21st century. The students are responsible for learning the regular classroom coursework supplemented with class readings, research activities, and reports.

Students enrolled in American Cultures Honors 11 will be required to:
1. Research people identified as important to American Cultures and deliver no less than two people presentations each quarter.
2. Complete a research project each quarter, including an essay that incorporates information from a variety of sources, on an important aspect of American Cultures.
3. Complete quizzes and unit exams with a high degree of accuracy.
4. Read primary and secondary source materials for each unit and answer supplemental unit reading questions based upon those articles.
5. Participate in class debates and discussions.
6. Incorporate prior knowledge, class information, and readings into thorough and engaging essay responses.
7. Keep up with nightly reading assignments and be prepared on a daily basis to contribute to class dialogue.
8. Evaluate and reflect on their prior work throughout the year.

The overall purpose of this course is to specifically prepare students who wish to study a field of the Social Sciences in college, and to generally prepare all students for college level work. To that end, students enrolled in this course should be aware that they will encounter both primary and secondary reading in the class, and that it is absolutely essential they read and understand all material given to them throughout the year. Writing opportunities will be provided on unit tests, unit supplemental questions, and quarter projects, which will require students to integrate source material from class readings as well as outside research for the quarter projects. In the course, we will also cover study strategies, research tips, and writing tactics that will benefit students in this course and beyond.
This course has been approved as the equivalent of HIST 0601: US History from 1865 to the Present at the University of Pittsburgh. Thus, this class will follow the guidelines from the University of Pittsburgh in giving students an introduction to American history from the Civil War to the present, which emphasizes selected topics on changes in American society and politics as an earlier agrarian society became an industrial-urban one and as the nation took up an ever larger role in world affairs. **Students will also have the option of earning 3 college credits through the University of Pittsburgh for this course.**

Students choosing Honors level and Advanced Placement courses should be aware of **required summer readings and preparation** for each course. All advanced courses will require summer preparation previous to the first day of school. Failure to complete required summer preparation will significantly affect the student’s first nine-week grade during the following academic year.

**154 - AP UNITED STATES HISTORY 11 (ADVANCED COURSE) (WI)**
*Prerequisite: In accordance with Prerequisites for Advanced Courses*
*Full Year - Five Periods Per Week - 1.0 Credit*

**COURSE DESCRIPTION:** Advanced Placement United States History is a college level course that is taught at a college pace. Successful completion of the course and passage of the exam in May can result in college credits. It is designed to study United States history from the Age of Exploration and Discovery up to and including present-day happenings. Students must have well-developed reading and writing skills as well as a willingness to devote considerable time to homework and study to succeed in this course. The course is lecture based and is reading and writing intensive. Much emphasis is placed on critical and evaluative thinking skills, essay writing, and interpretation of primary documents and secondary resources. The amount of outside work and preparation is substantially greater than required in an Honors course. Throughout the year, students will be introduced to sample questions and essays commonly found on the AP Exam. Several weeks are spent in intensive review preparing students to take the exam. As this is an AP course, all students enrolled are required to take the corresponding exam in May.

Students choosing Honors level and Advanced Placement courses should be aware of **required summer readings and preparation** for each course. All advanced courses will require summer preparation previous to the first day of school. Failure to complete required summer preparation will significantly affect the student’s first nine-week grade during the following academic year.

**160 - ECONOMICS 12**
*Prerequisite: 12th Grade Students*
*Full year - Five Periods Per Week - 1.0 Credit*

**COURSE DESCRIPTION:** Economics is designed to give students a basic idea of the theories behind economic decision making and the various systems that are in place that affect our everyday lives. After taking this course, students will be able to: analyze the economies of the world, determine the relationship between the consumer and producer in the economy, analyze the role of the United States government in the American economy, evaluate individual and aggregate decision making, and develop personal financing skills. The year is broken into five units:

**Unit I: Basic Concepts in Economics** - which introduces the basic elements of Economics.
**Unit II: Macroeconomics** - which evaluates how the economy is measured and affected by government.
**Unit III: International Trade** - which shows the importance of trade in the global economy today.
**Unit IV: Microeconomics** - which focuses on the structure and decision making of businesses in the economy.
**Unit V: Personal Finance** - which provides students with the necessary tools to make smart financial decisions in their lives after high school.
**162 - HONORS ECONOMICS 12 (ADVANCED COURSE) (WI)**

*Prerequisite: In accordance with Prerequisites for Advanced Courses*

*Full Year - Five Periods Per Week - 1.0 Credit*

**COURSE DESCRIPTION:** Honors Economics will cover all of the fundamental economic concepts that are mentioned in the standard Economics class. In addition, this course promotes critical thinking and problem solving aimed to motivate Honors students. Students will also take current economic issues and explain them within the context of the basic theories.

Students enrolled in Honors Economics 12 will be required to:

1. Demonstrate an understanding of the major themes throughout the curriculum.
2. Write essays of an expository, narrative, persuasive, and descriptive nature.
3. Examine a variety of real-world issues related to economic concepts discussed.
4. Identify problems and suggest alternative solutions in written and oral form.
5. Make connections between events that occur within our own economy and the world.
6. Evaluate decision-making to determine the reasoning behind decisions and their effects.

Students choosing Honors level and Advanced Placement courses should be aware of required summer readings and preparation for each course. All advanced courses will require summer preparation prior to the first day of school. Failure to complete required summer preparation will significantly affect the student's first nine-week grade during the following academic year.

**164 - AP ECONOMICS (MACROECONOMICS AND MICROECONOMICS) (ADVANCED COURSE) (WI)**

*Prerequisite: In accordance with prerequisites for advanced course*

*Full Year - Five Periods Per Week - 1.0 Credit*

**COURSE DESCRIPTION:** AP Economics is comprised of two courses: AP Microeconomics and AP Macroeconomics. This course helps students develop critical-thinking skills through the understanding, application, and analysis of fundamental economic concepts. Students apply quantitative and mathematical skills to support and justify economic theory. Students will also apply economic logic to a wide variety of real-world and hypothetical situations throughout the course.

**Microeconomics:** This course introduces students to the way in which a free market economic system resolves the basic social questions of what goods and services to produce, how scarce resources are organized to produce these goods, and to whom the goods are distributed once they are produced. Students explore the components of the market system, supply and demand, and how they interact under conditions ranging from perfect competition to monopoly. Students determine the prices for resources within a society and understand the efficient wage rate for workers. The course concludes with a look at government intervention and the creation of public goods.

**Macroeconomics:** The purpose of the course is to expose students to the economic way of thinking by looking at how the economy works on a macro, or large scale. After a brief introduction to the basic economic principles, students examine theories which explain the economic behavior of different economic agents, including the behavior of financial and monetary systems. Using simple models, we will look into determination of aggregate, economy-wide variables such as overall output, unemployment, and inflation. The course concludes with a unit on international trade and currency, and their impact on aggregate variables.
215 - AP U.S. AND COMPARATIVE GOVERNMENT AND POLITICS (AP UNITED STATES GOVERNMENT AND POLITICS /AP COMPARATIVE GOVERNMENT AND POLITICS) (ADVANCED COURSE) (WI) – CHS

*University of Pittsburgh - College in High School Program Option (US Government)

Prerequisites: Junior or Senior Standing, an interest in Government and Politics, strong reading, writing and analytical skills. In accordance with Prerequisites for Advanced Courses.

Full Year – Five Periods Per Week – 1.0 Credit

COURSE DESCRIPTION: AP Government and Politics is the equivalent of two semesters of traditional college level introductory courses in American government and politics, and to the comparative study of state systems and their political components. The course is an elective for Junior and Senior students.

The course is designed to give students a critical perspective on government and politics in the United States through examination of the fundamental ideological and philosophical traditions and ideas underlying the democratic government established by the constitution, and their role in that government. In the first half of the course, students will focus on specific portions of American Government in preparation for the AP U.S. Government and Politics exam, including constitutional underpinnings of American Government; political beliefs and behaviors; political parties, interest groups, the mass media; the institutions of American Government, specifically government agencies and the bureaucracy; public policy; and civil rights and civil liberties.

The second half of the course will be devoted to the comparison of different government forms in preparation for the Comparative Government and Politics exam, and attempting to determine why so many varieties of governments exist, and where the United States fits into global politics. We will specifically use Great Britain from the Industrialized World; Russia and China from the Developing World; and Mexico, Iran, and Nigeria from the Third World; as model case studies, but will not be limited just to these nations. After an introduction to the study of Comparative Politics, the class will move into discussing sovereignty, authority, and power; political institutions and public policy from a comparative standpoint; citizens, society, and the state; and political and economic change. One of the primary goals of the course is to increase understanding of the political traditions, values, and structures of political systems. The work involved concerns the study of political science theory and methodology, and its application to the analysis of specific countries.

At the end of the year, students will engage in discussions of the History of Democratization, American Political Thought, American Foreign Policy in the 20th century through today, and the role of International Organizations in the world today.

The course is a college level course and is taught as such. It is lecture based and is both reading and writing intensive. It is a fast-paced course and much outside work and preparation is required to be successful. The overall purpose of this course is to specifically prepare students who wish to study a field of the Social Sciences in college, and to generally serve as a strong foundation for all those seeking a college education. To that end, students enrolled in this course should be aware that they will encounter extensive primary and secondary reading in the class, and that it is absolutely essential they read and understand all material given to them throughout the year. Students will be given outside readings from contemporary sources (such as major newspapers, journals, and magazines), as well as speeches and policy statements, and will be expected to follow national and international politics and events during the course of the school year. Even for students who may not wish to study Government and Politics in college, these areas impact everyone, from the fields of science, medicine, and engineering, to business, education, and international relations. This course will better help students navigate the legal procedures and regulations relating to a variety of fields, as well as the impact that government has on our everyday lives.
Students choosing Honors level and Advanced Placement courses should be aware of required summer readings and preparation for each course. All advanced courses will require summer preparation previous to the first day of school. Failure to complete required summer preparation will significantly affect the student’s first nine-week grade during the following academic year. **Students will also have the option of earning 4 college credits through the University of Pittsburgh for this course.**

**219 - AP EUROPEAN HISTORY (ADVANCED COURSE) (WI) - CHS**

*University of Pittsburgh - College in High School Program Option*

**Prerequisite:** In accordance with prerequisites for Advanced Courses; Junior or Senior Standing

**Full Year - Five Periods per Week – 1.0 Credit**

**COURSE DESCRIPTION:** The study of European history since 1450 introduces students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which they live. This course provides the foundation for understanding the development of contemporary institutions, the role of continuity and change in present-day society and politics, and the evolution of current forms of artistic expression and intellectual discourse.

In addition to providing a basic narrative of events and movements, the goals of AP European History are to develop (a) an understanding of some of the principal themes in modern AP European history, (b) an ability to analyze historical evidence and historical interpretation, and (c) an ability to express historical understanding in writing.

AP European History is lecture based and reading and writing intensive. Emphasis is placed on critical and evaluative thinking skills, essay writing, and interpretation of primary documents and secondary resources. This college level course demands a serious commitment and a high degree of personal responsibility. Students will need to devote considerable time to the course outside of class. Students enrolled in AP European History will be required to take the AP exam in May, which may result in college credits. **Students will also have the option of earning 3 college credits through the University of Pittsburgh for this course.**

Students choosing Honors level and Advanced Placement courses should be aware of required summer readings and preparation for each course. All advanced courses will require summer preparation previous to the first day of school. Failure to complete required summer preparation will significantly affect the student’s first nine-week grade during the following academic year

**170 - PSYCHOLOGY**

**Prerequisite:** None

**One Semester - Five Periods Per Week - .5 Credit**

**COURSE DESCRIPTION:** Psychology is the scientific study of behavior and mental processes from conception until death. Students will study the history of psychology, including its founders, and will be introduced to the contemporary theoretical perspectives and various careers within the field of psychology. The methods used to conduct psychological research will be analyzed. Students will examine the levels of consciousness and theories of learning and personality. The stages, processes, and kinds of memory will be explored as well as the components of intelligence. Additionally, the history and development of intelligence tests will be discussed. Finally, students will have an opportunity to learn about some of the psychological disorders described in the Diagnostic and Statistical Manual, Fourth Edition. Ultimately, students will gain more insight into the way people think and behave, while developing practical applications for enriching their own lives.
171 - SOCIOLOGY
Prerequisite: None
One Semester - Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: Sociology is the scientific study of human society and social behavior with a specific focus on the social interactions of humans. The theories and work of the early founding sociologists will be examined and applied to social factors and phenomenon influencing society today. Students will learn about and study the many aspects of culture, the structure and stratification of society, the socialization process, the benefits of social institutions such as the family, religion, and education, the problems created by social deviance, and finally the catalysts and means of social change and modernization. Students will have the opportunity to make connections across time and place with the material presented. Finally, they will apply the information to their own lives through the completion of assigned individual and group projects. Students will leave the course with a thorough understanding of the diverse facets of society and the dynamics that contribute to the maintenance of human societies and relationships.

185 - DEVELOPMENTAL CHILD PSYCHOLOGY
Prerequisite: None
One Semester - Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: This course serves as a prerequisite for students desiring to enroll in the Early Childhood Development Program. As students progress through the semester, they will be introduced to the physical, social, emotional, and intellectual domains of development. The theorists who have made major contributions to the field of child psychology will be studied, including Jean Piaget, Erik Erikson, Lawrence Kohlberg, and Lev Vygotsky. The developing child will be examined within the context of the family and effective parenting skills, parenting styles, and sibling influences will be discussed. The physical, social, emotional, and intellectual development of children ages four to six will be explored. Additionally, students will make observations in the Early Childhood classroom to further their understanding of the development of young children.

190 - LEADERSHIP STUDIES I: A HISTORICAL, CONTEMPORARY, AND COMPARATIVE PERSPECTIVE
Prerequisites: No formal prerequisites, however, students should be aware of the independent learning nature of the class, as described below. This course is open to all students in grades 9th through 12th, and is geared primarily towards those who want to be leaders, or those who aspire to be better leaders.
One Semester – Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: What is leadership? The definition of the term is often as varied as those with whom we associate as leaders. And what is the nature, or basis, of leadership? Is leadership merely the study of those individuals who take charge of situations around them for their own selfish benefit, or do these individuals act for a greater societal good? And what makes a good leader? Are leadership skills transferable between disciplines? Are there certain “universal” leadership techniques that can be learned, or are there truly some individuals who really are “destined” to lead?

This class is designed to both answer these questions, as well as empower the next generation of leaders in our society. In the 21st century, leadership skills are more valuable than ever, and will allow students to thrive in our diverse and ever-changing world. Regardless of a student’s chosen path in life, they will constantly be called upon to show leadership. The goal of this class is to help place them on the path to quality leadership in a variety of settings.
One of the strengths for this class is that it is very personal and applicable to a student’s development and everyday life, not to mention their future. This class is meant to be active and engaging, if not exciting. Skills students will learn in this class will prove extremely valuable to them both now and in the future, and students could make this course the most important class they take in their entire high school career.

The class will be broken up into two main sections. The first will be the theories and concepts of leadership. As such, we will study leadership from a variety of backgrounds and viewpoints, utilizing historical texts and contemporary examples, with the goal of identifying important attributes of leadership. As students will learn in this course, there is a difference between “leaders” and “leadership,” and in addition to studying examples of leaders, we will also be looking at leadership as a process, as well. As such, we will utilize different approaches, such as the Relational Leadership Model, to analyze effective leadership. Readings and class discussion will incorporate leadership philosophies, ideas, and examples and will have the goal of helping students see leadership traits, qualities and properties shared by all great leaders as well as how they can improve the leadership process in their own life.

The course has four major units of instruction: an introduction to leadership, leadership on the personal level, leadership on the organizational level, and ethics. Within these four broad areas, we will examine specific elements, such as vision and goal setting, identifying and overcoming obstacles, power and influence, followership, Level 5 Leadership, innovation and creativity, emotional intelligence, kaizen, confident and efficacy of leadership, personality and other variables that influence leadership, organizational culture and change, individual strengths and positive psychology, and integrity and values. Students will also learn about the historical growth of the field of Leadership Studies, as well as specific models of leadership, such as situational and transformational leadership. Students will then have the opportunity to apply lessons to fields such as athletics, business, government and politics, and the military.

The second component of the class will be practical in nature. Students in the class will be expected to participate in community service activities in fields of their choosing. Students will also be expected to join either a school-based or community group of their choosing and actively participate in it by designing and implementing an activity of their choice, and overseeing it to its conclusion. This capstone project will be a culmination of a student’s work in the class, and will allow the students to apply the leadership skills they have studied and learned by supervising a real-world project.

Assessments in the class will be a combination of class participation, journal entries, article reflections, book reviews, movie reviews, and written and oral biographies of leaders. The primary assessment mode used will be reflections, where in each unit students analyze their leadership skills and determine ways they can improve them. Students should be aware that assessment in the class is entirely written in nature and the class requires students to have sufficient motivation and dedication to commit themselves to completing all class assignments. This class welcomes all students who desire to learn about and become better leaders and approach the course and its content with an open mind.

In short, leadership is said to be that magical elixir of excellence, quality results, productivity, and performance. It is the hot topic and emphasized item as perhaps the most important skill one can possess today. It is the goal of this course to give students both a firm grounding of the theory and history of leadership, as well as provide them with a self-designed “leadership template” they can apply in a practical opportunity to grow and recognize the leaders they already are, and can become. As the first part of the two-semester leadership curriculum sequence at the high school, this course links with Leadership Studies II and it is hoped that students would eventually take both courses if possible to maximize their leadership knowledge.
This class will build on the topics students learned in Leadership Studies I. In Leadership Studies I, students learned different definitions and theories of leadership, about themselves as leaders, how to better lead within organizations, and ethical leadership. This class will provide a more in-depth study of leadership as well as give students more tools by which they can be effective leaders. Topics that cannot be adequately discussed in Leadership Studies I will be covered and skills that were introduced in Leadership Studies I will be further built upon. Within this course, several national models of leadership excellence, including the Kouzes & Posner Student Leadership Challenge, Covey’s Seven Habits of Highly Effective Teens, Servant-Leadership, and the Leadership and Social Change Model will be utilized to further enhance the leadership capabilities of students. Students in this course will also learn about Project Management as well as Negotiations and Conflict Resolution.

As in Leadership Studies I, students will be expected to perform community service while enrolled in the course, to keep a journal documenting their experiences, to write reflection essays on the major units of instruction, and also to participate in a capstone leadership project to demonstrate leadership skills.

This course has been approved as the equivalent of LDRSHP 1100/ PUBSRV 1390: Theories of Leadership at the University of Pittsburgh. Thus, this course is designed to acquaint students with multiple theories and practices associated with effective leadership. In answering the question, “what is leadership”, it examines such theories as situational, participative, transformational, and servant leadership. It also addresses those leadership and administrative skills and practices usually associated with effective community organization and professional management. Students will also have the option of earning three (3) college credits through the University of Pittsburgh for this course. This course also is the first class in the sequence for the undergraduate Leadership Certificate the University of Pittsburgh offers.

Additionally, students who complete the two-leadership course sequence at the high school will have completed the requirements for the National Student Council Distinguished Student Leaders Program, administered by the National Association of Secondary School Principals (NASSP) and can also apply for recognition by this program as well.

Students who complete this course should be well-equipped, along with what they learned in Leadership Studies I, to be more effective leaders as well as be prepared to enter into Leadership Development programs at the college level, and also have the necessary knowledge to effect positive change in their community and own life as well. It is the hope that these courses will put students on a lifelong path of learning and self-discovery of leadership.
198 - PHILOSOPHY
Prerequisites: None
One Semester – Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: The chief objective Philosophy is to engage students in the activity of doing philosophy. Although philosophy can be taught as a historical survey or structured around a set of texts, these approaches are less appropriate or effective for high school students than a topical course organized around a set of key questions that invite conversation, analysis, and discussion. Carefully selected thought experiments, case studies, primary and secondary sources readings, and films will be utilized to excite students’ philosophical interests. Students will evaluate arguments and construct arguments of their own. Philosophy can be invaluable because the skills it imparts are transferable to every part of the curriculum that emphasizes clear thinking, reading, and writing.

1005 – MODERN HISTORY THROUGH POP CULTURE
Prerequisites: None
One Semester – Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: This course will focus on pop culture (movies, music, television, video games, sports, news, politics, fashion, technology, etc.) from the 1870’s-present. The course will take an in-depth look at the way pop culture has helped shape, influence, and mold society throughout American history, and how society has in turn impacted pop culture. The course will give students the opportunity to educate and expose themselves to different mediums and information that other courses would not have the ability to offer.

1006 – APPLIED POSITIVE PSYCHOLOGY
Prerequisites: None
One Semester – Five Periods Per Week - .5 Credit

COURSE DESCRIPTION: What is happiness? Do we really know what will make us happy? How can we find the “good life?” One Positive Psychologist noted that “People are like plants: if you get the conditions just right, they will usually flourish.” So, what are those conditions? In this course we will question and then inform our “happiness hypotheses” of what makes life worth living. We will discuss how positive emotions, engagement, relationships, meaning, and accomplishment all help us achieve what Aristotle referred to as “eudaemonia,” or “flourishing.” Throughout the course of the semester we will cover the tools of positive psychology that have been validated through science and research and begin to view people from a strengths-based perspective. Beyond individuals, we will discuss positive organizations and communities. Additional topics include character strengths, compassion, fulfillment, hope, optimism, mindfulness, mind-body wellness, gratitude, flow, satisficing, self-efficacy and motivation, grit, and resilience. Students will also be expected to participate in positive interventions throughout the semester. Ultimately, this course should help you increase your well-being and thriving now and in the future.
LEARNING SUPPORT

Students who participate in the learning support classes have been tested by a certified school psychologist. They must have an average or above average IQ to be eligible for the program. These students receive services from special education teachers and paraeducators. Most of the students are involved in inclusion which means they participate in the regular education curriculum with the necessary adaptations. Some students do not attend regular classes but receive their instruction in the special education class. The School District curriculum is followed with any and all necessary adaptations. All students have IEP’s (Individual Educational Plans) which are mandated by the federal and state governments. All provisions (adaptations, modifications, course additions and deletions) must be followed.

LEARNING SUPPORT WITH A FUNCTIONAL COMPONENT

This program focuses on independent living and vocational skill development. All classes are taught based on goals and objectives in the IEP and all students have access to the general education curriculum with the appropriate adaptations and modifications.

COURSES INCLUDE:

912/913 - Life Quests: Life Quests is a three-credit course. Career Communications teaches prevocational skills. It also prepares students for getting a job and keeping a job. The Health component teaches everyday health skills so that students learn how to stay fit and take care of themselves. In Life Skills, students learn everyday independent living skills and receive training on travel and transportation. As an option, Science and Social Studies may be taken in place of Health and Life Skills.

915 - Work Study: The students in this class learn and practice vocational skills in the school and in the community. The community based component of the Work study program is a co-op program. Students attend school for part of the day and then go to work at a job site for the rest of the school day. The teacher from the co-op program (currently, we are sub-contracting with D.T. Watson Rehabilitation Center) is responsible for and supervising the students at the job site. Students receive credit depending upon the number of hours worked. The employer and the co-op teacher grade the students.

English Language Learners (ELL): South Fayette Township School District offers a K-12 English as a Second Language (ESL) Program through the Allegheny Intermediate Unit. The ESL Program is designed to provide non-native English-speaking students with the language skills they need to participate successfully in content area classes. To meet this goal, ESL instruction addresses the ESL and Pennsylvania Academic Standards in Reading, Writing, Speaking, and Listening to enable full participation. The emphasis placed on achieving benchmarks is adjusted to the needs of the individual student. An underlying objective is to provide a source of support as the student seeks to understand and adapt to his or her new cultural and academic setting. ESL teachers work to develop an appreciation of their students’ strengths within the school setting and to ensure full access to the range of educational opportunities available at South Fayette Township School District.

If you have any questions regarding English as a Second Language, please call the Student Support Services office at 412-221-4542, Ext. 8-428-#.
Mission Statement

The mission of the South Fayette Township School District, in partnership with the community, is to cultivate academic, artistic, and athletic excellence of the whole child by fostering the skills to be confident, ethical, empathetic, and responsible global citizens.