PROGRAM OF STUDIES 2023-2024





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

Dr. Laura M. Hartzell, Principal Mr. Robbie Butts, Assistant Principal

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SOUTH FAYETTE SCHOOL DISTRICT School District Administration, Faculty and Staff

Table 1 – School District Board Members
NAME AND EMAIL
Mr. Leonard Fornella, President – Ifornella@southfayette.org
Mr. Thomas lagnemma, Vice President – tiagnemma@southfayette.org
Mr. Paul Brinsky – pbrinsky@southfayette.org
Mrs. Teresa Burroughs – tburroughs@southfayette.org
Mrs. Lena Hannah – Ihannah@southfayette.org
Dr. Jennifer Iriti – jiriti@southfayette.org
Mr. Jason Olexa – jolexa@southfayette.org
Ms. Prajakta Patankar – ppatankar@southfayette.org
Mr. Joseph Welch – jwelch@southfayette.org

NAME AND PHONE EXTENSION	TITLE
Dr. Michelle Miller (413)	Superintendent
Dr. Kristin Deichler (408)	Assistant to the Superintendent for Secondary Education
Mrs. Cristine Wagner-Deitch (348)	Director of Curriculum
Mr. Brian Tony (406)	Director of Finance
Mr. Christopher Juzwick (416)	Assistant Director of Finance
Dr. Rachel Andler (429)	Director of Student Support Services
Dr. Matthew Callison (424)	Director of Innovation, Strategic Partnerships, and Instructional
	Technology
Mr. Patrick Harrigan (358)	Director of Communications
Dr. Charles Herring (572)	Diversity, Equity, and Inclusion Director
Dr. Laura Hartzell (242)	High School Principal
Mr. Robbie Butts (265)	High School Assistant Principal
Dr. Erin Crimone (236)	Middle School Principal
Dr. Kevin Maurer (224)	Assistant Middle School Principal
Mr. Tom Kaminski (336)	Intermediate School Principal (3-5)
Mrs. Kristen Johnson (328)	Intermediate School Assistant Principal (3-5)
Mr. Tyler Geist (337)	Elementary School Principal (K-2)
Mrs. Pharlan Ives (612)	Elementary School Associate Principal (K-2)
Mrs. Gretchen Tucci (415)	School Psychologist/Asst. Director of Student Support Services
Dr. Conchetta Bell (404)	School Psychologist/Asst. Director of Student Support Services
Mr. Mark Keener (225)	Director of Athletics
Mr. Rob Warfield (245)	Network Systems Administrator
Mrs. Lee Ann Jubas (662)	Network Systems Specialist
To Be Named (556)	Technology/Staff Training Specialist
Mr. Brandon Soubie (452)	Director of Transportation
Mrs. Tricia Wood (279)	Director of Food Service
Mr. Steve Timmins (129)	Director of Facilities
Mr. Athanasios Tsourekis (217)	Maintenance Manager
Mr. Zachary Simpson (238)	Custodial Manager

 Table 3 - High School Counseling Department

NAME AND PHONE EXTENSION	TITLE
Mr. David Houseman (252)	School Counselor (Students Last Name A thru G)
Mrs. Anjelica Lutzo (317)	School Counselor (Students Last Name H thru O)
Mrs. Julia Martin (251)	School Counselor (Students Last Name P thru Z)
Mrs. Emily Sharro (254)	College and Career Counselor
Mr. Tanner Jones (425)	Social Worker
Mrs. Dana Bloom (250)	Assistant for Counseling

Table 4 - High School Administrative Office Staff and Technology Support

NAME AND PHONE EXTENSION	<u>TITLE</u>
Mrs. Kathy Demnyan (240)	Assistant for Athletics and Student Activities
Mrs. Jodi Holley (221)	Assistant to the Principal
Mrs. Kelly DiSciullo (241)	Assistant to the Assistant Principal
Mrs. Marlo Marasco (222)	Assistant for Attendance and Student Center
Mrs. Trina Howells (223)	Nurse
Ms. Sophie Savickas (725)	High School Technology Assistant
Mr. Joe Silhanek (235)	Dean of Students
Sgt. Jeff Sgro (732)	Security Resource Officer

Table 5 - High School Faculty

NAME AND PHONE EXTENSION	DEPARTMENT
Mrs. Barth	Business Technology
Ms. Capelli	Special Education
Mrs. Carranza	Instrumental Music
Ms. Cerchiaro	Social Studies
Ms. Chagnon	Physical Education and Health
Mrs. Chaves	World Language - Spanish
Mrs. Clonan	World Language - Spanish/Department Chair
Ms. Contis	Art
Ms. Crapis	Science
Mr. Del Re	Social Studies
Mrs. Dennison	Early Childhood Development
Mrs. Dorsey	Mathematics
Mrs. Ebersole	Mathematics
Mr. Eldridge	Physical Education and Health/Department Chair
Mrs. Elek	Vocal Music
Mrs. Endy	World Language - French
Mrs. Fink	English as a Secondary Language
Mr. Flannery	Business Technology/Department Chair
Mr. Franjione	Mathematics
Mr. Fraser	English
Mr. Gregg	Social Studies
Ms. Grinko	Science
Dr. Gutshall	Science/Department Chair
Mrs. Habib	Science
Mrs. Hackworth	Social Studies
Ms. Hallett	Special Education
Mr. Hausman	English
Ms. Highberger	English
Mr. Hobbs	Mathematics
Mrs. Hulings	Science
Mr. Isaac	Science

Table 6 - High School Faculty Continued

Table 6 - High School Faculty Continued NAME AND PHONE EXTENSION	DEPARTMENT
Mr. Joyce	Social Studies
Mrs. Karger	English
Mrs. Kay	Physical Education and Health
Mrs. Lortz	Computer Science
Mrs. Lockette	English
Ms. Mannina	English
Mrs. Marchinsky	English
Mr. Marinzel	Business Technology
Mrs. Matz	English
Mr. McArdle	Social Studies
Mrs. McCafferty	Special Education
Mr. McGowan	Science
Mrs. McCullough	Computer Science
Mrs. Merchant	English
Mr. Mikan	Social Studies
Dr. Mital	Science
Mrs. Okel	Science
Mrs. Palmer	Mathematics
Mrs. Pantloni	Art
Mrs. Pappas	Special Education
Mrs. Perry	, Business Technology
, Mrs. Quirk	Enrichment Coordinator
Mrs. Rabi	English and Theatre Arts
Mr. Reasey	Mathematics
Mrs. Rekasie	Librarian
Mrs. Rogowicz	Special Education
Mrs. Roth	Mathematics
Mrs. Rudy	Special Education
Mr. Salvucci	Social Studies
Ms. Schreffler	Special Education
Mr. Schutz	Technology Education
Mrs. Scott	English
Mr. Sekelik	Social Studies
Mr. Seybert	Science
Mrs. Shrewsbury	English
Mr. Silhanek	Social Studies/Department Chair
Mrs. Sirc	Mathematics/Department Chair
Mr. G. Smith	English/Department Chair
Mr. T. Smith	Social Studies
Mrs. Smyczek	Special Education/Department Chair
Mr. Stewart	Mathematics
Mrs. Surloff	World Language – Spanish
Mrs. Tupper	String Orchestra
Mrs. Ullom	Mathematics
Mrs. Wiernik	World Language - German
Mr. Winans	Science
Dr. Yeager	Business Technology
Dr. Yerace	Social Studies

South Fayette High School <u>PROGRAM OF STUDIES</u>

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.

Table 7 – Grading Scale of Academic/Regular Courses		
Grade	Scale	Quality Points
A+	100 - 98%	4.25
Α	97 - 93%	4.00
A-	92 - 90%	3.75
B+	89 - 88%	3.25
В	87 - 83%	3.00
В-	82 - 80%	2.75
C+	79 - 78%	2.25
С	77 – 73%	2.00
С-	72 – 70%	1.75
D	69 – 65%	1.00
F	64 – Below	
Ι	*Incomplete	

The grading scale is as follows:

*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

<u>Course</u>	<u>Grade</u>	Quality Points	<u>Credit</u>	
AP English	96	5.00	1.0	5 x 1 = 5
Economics 12	91	3.75	1.0	3.75 x 1 = 3.75
Advanced Art IIIA	95	4.00	.5	4 x .5 = <u>2</u>
				10.75 ÷ 2.5 = 4.3 GPA

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

CLASS RANK

Class rank will not be listed on transcripts and will not be disclosed by the District. Class rank will be maintained internally and provided to the parent/guardian/student upon request.

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:

Grade	Scale	Quality Points
A+	100 - 98%	4.75
А	97 - 93%	4.50
A-	92 - 90%	4.25
B+	89 - 88%	3.75
В	87 - 83%	3.50
В-	82 - 80%	3.25
C+	79 - 78%	2.75
С	77 – 73%	2.50
С-	72 – 70%	2.25
D	69 – 65%	1.00
F	64 – Below	

Table - 8 - Grading Scale for Honors Courses

Grade	Scale	Quality Points
A+	100 - 98%	5.25
A	97 - 93%	5.00
A-	92 - 90%	4.75
B+	89 - 88%	4.25
В	87 - 83%	4.00
В-	82 - 80%	3.75
С+	79 - 78%	3.25
С	77 – 73%	3.00
С-	72 – 70%	2.75
D	69 – 65%	1.00
F	64 – Below	

HONORS AND ADVANCED PLACEMENT COURSES OFFERED

The following courses are identified as Honors and Advanced Placement courses for the 2023-2024 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:

CMU 15-112: High School Honors Python Honors Algebra II Honors American Cultures 11 – CHS Honors Argument – CHS Honors Biology Honors Business Calculus – CHS Honors Calculus - CHS Honors Chemistry Honors Civics 9 Honors Economics/Political Science 12 Honors English 9 Honors English 10 Honors English 11 Honors English 12 Honors French IV – CHS Honors Geometry

Honors German IV – CHS Honors German V – CHS Honors Healthcare Concepts and Medical Terminology - CHS Honors Human Anatomy & Physiology Honors Linear Algebra – CHS Honors Management and Marketing Applications – CHS Honors Organic Chemistry Honors Physics Honors Precalculus Honors Precalculus Honors Advanced Python III Honors Spanish IV – CHS Honors Statistics and Probability – CHS Honors Video Production 3 – CHS Honors World Cultures 10

AP Courses:

AP Art Studio AP Biology AP Calculus AB - CHS AP Calculus BC – CHS AP Chemistry AP Computer Science A AP Computer Science Principles AP Economics - CHS AP English 11: Language and Composition AP English 12: Literature and Composition - CHS AP European History – CHS AP French – CHS AP Music Theory AP Online Courses as Approved AP Physics: Algebra-Based AP Psychology AP Spanish Language and Culture - CHS AP U.S. and Comparative Government and Politics - CHS AP U.S. History

Prerequisites for admission to Honors and Advanced Placement courses for the 2023-2024 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 student course qualification.
- 4. Overall QPA of 3.0 or better
- 5. Student qualification (per Program of Studies)

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

COLLEGE IN HIGH SCHOOL COURSES OFFERED

The following courses are College in High School courses for the 2023-2024 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:

- AP Calculus AB CHS AP Calculus BC – CHS AP Economics – CHS AP English 12: Lit & Comp. – CHS AP European History – CHS AP French - CHS AP Spanish Language and Culture – CHS AP U.S. & Comparative Government & Politics - CHS Children's Literature – CHS Cybersecurity I - CHS Digital Storytelling - CHS Honors American Cultures 11 – CHS
- Honors Business Calculus CHS Honors Calculus – CHS Honors French IV – CHS Honors German IV – CHS Honors German V – CHS Honors Linear Algebra – CHS Honors Management and Marketing Applications – CHS Honors Management and Marketing Applications – CHS Honors Spanish IV – CHS Honors Spanish IV – CHS Honors Statistics and Probability – CHS Honors Video Production 3 – CHS Introduction to Film - CHS Leadership Studies II – CHS

DUAL ENROLLMENT

Dual Enrollment is an opportunity to earn college credits while in high school where students can take classes during the day, in the evening, on the weekends, or in the early summer session. Dual enrollment is completed in partnership with local colleges/universities and is open to juniors and senior. Individual qualifications differ from each college/university and program. One South Fayette High School credit is awarded for successful completion of a 3-credit college course. The grade from the college course in not included in the South Fayette High School GPA calculation and students are not eligible to take a course that is offered at South Fayette High School. Students are responsible for their own transportation and are also responsible for their tuition payment and fees and must be in current compliance and good standing with South Fayette High School graduation requirements. Finally, students are not permitted to accrue more than seven (7) credits total per academic year at South Fayette High School.

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 prior 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 Counseling Office, other teacher's areas, writing lab, etc., are <u>not</u> legitimate reasons to be absent from a scheduled class <u>unless</u> 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. <u>Individual</u> 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 <u>not</u> 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

With the exception of Advanced Placement and College in High School (CHS) courses, 10% of each course's weighted grade is exclusively reserved for homework and/or participation grades.

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).

- 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) 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. *Visit websites* **www.eligibilitycenter.org** and **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.

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 <u>Parkway AVTS, transfer students, etc.</u> These students must notify the Counseling Department of their desire to participate in intercollegiate sports so that proper course work can be planned.

*PLEASE CONTACT THE HIGH SCHOOL COUNSELING DEPARTMENT FOR A COMPLETE DESCRIPTION AND GUIDELINES FOR NCAA ELIGIBILITY. Also visit websites www.eligibilitycenter.org and 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 05011 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 School 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

- 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.

COURSE WAIVER FORM

The waiver is a contract between the student and parent(s)/guardian(s) and South Fayette Township High School. This waiver will provide for a course placement that supersedes the school's recommendation. Students that complete this waiver understand that this action contains both responsibility and accountability for one's grades and progress. Curricular changes, modifications, and accommodations will not be made for students who complete a waiver for course admission.

<u>Please reference the copy of the waiver form included at the end of The Program of Studies for specific details.</u> <u>Copies are also available in the High School Counseling Office</u>.

STUDY HALL

Students in grades 9, 10, 11, and 12 are permitted to take one semester of a study hall per year. Additionally, students in grades 11 and 12 who are currently enrolled in two or more Advanced Placement (AP) courses are permitted to take a full-year study hall.

STUDENT ONLINE SCHEDULING

Students in current Grades 9, 10, and 11 will have an opportunity to schedule their classes online according to the schedule set forth for Student Scheduling. The administrative and counseling teams 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 current Grades 9-11 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.

WORK RELEASE CREDIT

07010 – Work Release (Part-Time)

Year – 20 hours/week - .5 Credit (Grade 12)

07011 - Work Release (Full-Time)

Year – 40 hours/week - 1.0 Credit (Grade 12)

Seniors that are in good credit standing may choose to pursue credits for work release. Credit will be awarded based on hours completed per week: 20 hours per week will equate to .5 credits and 40 hours per week will equate to 1.0 credit. The opportunity to earn credits extends from August through June when school is in session. Additional requirements include:

- 1. A signed permission form from parents/guardians and a mentor/employer/supervisor.
- 2. Completion of quarterly progress logs.
- 3. Progress monitoring with a mentor and/or supervisor every four and a half weeks.

Credits will be awarded on a pass/fall basis and are GPA neutral.

SOUTH FAYETTE SCHOOL CAREER CLUSTERS

Science, Technology, Engineering and Mathematics

- Architecture and Construction Electrical Systems, HVAC, Welding
- Information and Technology
- Manufacturing making
- Engineering
- Auto Tech & 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

Electrician, Environmental Scientist, Forensic Scientist, Geoscientist, Hydrologist, Data Scientist, Cloud Engineer, Animator, Systems Architect, Applications Development Engineer, Web Development, Digital Marketer, Cybersecurity Analyst, Graphic Designer, Computer Support Specialist, Network Administrator, Automotive Mechanic, Database Administrator, Aircraft Mechanic, Chemical Plant Operator, CNC Machinist, CNC Operator, Coating, Painting, and Spraying Machine Operator, Computer Control Programmer/Operator, Configuration Analyst, Controller, Dairy Processing Equipment Operator, Design Engineer, Designer, Electrical Lineman, Electrician, Electromechanical Technician, Electronic Technician, Equipment Technician, Field Service Technician, Food Technologist, Industrial Engineering Technician, Machine Operator, Machine Tool Cutting Operator, Plant Operator, Plastic Machine Worker, Power Plant Operator, Printing Machine Operators, Process Operator, Production Technician, Safety Technician, Silicon Wafer Fabrication Operator, Surface Mount Technology Machine Operator, Water Processing Technician, Waste Treatment Plant Operator, Computer Technician

Professional Level Careers

Actuary, Air Traffic Controller, Engineer, Architect, Astronaut, Software Developer, Biostatistician, Biologist, Physicist, Computer Programmer, Computer Network Architect, Computer and Information Research Scientist, Cryptanalyst, Patent Lawyer, Information Security Analyst, Urban Planner, Paleontologist, Meteorologist, Pharmacologist, Chemist, Pharmacist, Safety Manager, Teacher, Nurse, Geologist, Manufacturing Production Process Development Maintenance, Installation and Repair, Quality Assurance, Logistics and Inventory Control, Video Game Designer, Sports Analyst, Systems Architect/Engineer, Information Security Analyst, Health, Safety and Environmental Assurance, Meteorologist, Solar Scientist, Climate Scientist

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

Professional Level Careers Contd.

- Chemistry II
- AP Chemistry
- Honors Physics
- AP Physics
- Precalculus
- 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, Linear Algebra, Statistics Geologist: Algebra, Trigonometry, Calculus I and II, Geometry, and 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, Word Processing, 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

Entry Level Careers

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

Technical Level Careers

 Web Page Designer, Data Entry, Animator, Game Designer, Financial Planner, Marketing Assistant, Buyer, Loan Officer, Logistician, Tax Examiner, Brand Manager, Market Research Analyst,
 Compensation & 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

Professional Level Careers

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 & Employment Attorney, Intellectual Property Attorney, International Law

Core and Elective Courses

Entry Level

- Presentation Applications
- Accounting IA
- Accounting IB
- Data Management with Excel
- College & Career
- Business Management
- Sports & Entertainment Marketing
- Video Production 1
- Web Page Design
- Writing and Public Speaking

Entry Level Contd.

- Economics
- Psychology
- Sociology
- Parkway

Technical Level

- 3D Modeling
- Web Page Design
- Video Production 2
- Accounting II
- Presentation Applications
- Data Management with Excel
- Podcasting
- Photography and Editing Basics
- College & Career
- Honors Economics

Professional Level

- Honors Management
- Presentation Applications
- Honors Video Production 3
- College & Career
- International Business
- AP Economics

Enrichment Activities

Future Business Leaders of America Competitive Events, Accounting I, Accounting II, Advertising, Agribusiness, Business Calculations, Business Communication, Business Law, Computer Problem Solving, Cyber Security, Economics, Health Care Administration, Help Desk, Insurance & Risk Management, Introduction to Business, Introduction to Business Communication, Introduction to Business Procedures, Introduction to FBLA, Introduction to Financial Math, Introduction to Information Technology, Introduction to Parliamentary Procedure, Journalism, Networking Concepts, Organizational Leadership, Personal Finance, Political Science, Securities and Investments, Computer Applications, Database Design & Applications, Graphic Design, Publication Design, Spreadsheet Applications, Word Processing, Broadcast Journalism, Client Service, Future Business Leader, Impromptu Speaking, Introduction to Business Presentation, Introduction to Public Speaking, Job Interview, Public Speaking, Sales Presentation, Social Media Campaign, Business Ethics, Emerging Business Issues, Banking & Financial Systems, Entrepreneurship, Global Business, Hospitality Management, Management Decision Making, Management Information Systems, Marketing, Network Design, Parliamentary Procedure, Sports & Entertainment Management, 3D Animation, Business Financial Plan, Coding and Programming, Computer Game & Simulation Programming, Digital Video Production, E-Business, Electronic Career Portfolio, Mobile Application Development, Public Service Announcement, Website Design

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
- Writing and 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

Entry Level Careers

Barista, Line Cook, Copy Editor, YouTuber, Podcaster, Freelance: Actor, Artist, Musician, Stagehand, Composer, Customer Service Representative, Travel Agent, Motivational Speaker

Technical Level Careers

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

Professional Level Careers

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, 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 Arts I
- Theatre Arts II
- Writing & Public Speaking
- Stage Production
- Screenwriting
- Broadcast Journalism
- Print Journalism
- Yearbook
- 3D Modeling
- Programming for Game Design
- Mythology
- Digital Storytelling CHS
- The Poetic Imagination
- Art Survey
- Introduction to Art
- Advanced Art

- Concert Choir
- Select Choir
- Treble Ensemble
- Digital Piano & Music Theory I & II
- AP Music Theory
- Concert Band
- Wind Ensemble
- Orchestra
- Photography and Editing Basics
- 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, Field 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
- 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
- Video Production 1
- Writing and Public Speaking
- Yearbook
- Print Journalism
- Parkway

Agriculture and the Environment

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

Entry Level Careers

Farmer, Sanitation Engineer, Landscaper, Park Ranger, Environmentalist

Technical Level Careers

Hydraulics Technician, Sales Specialist, Environmental Health Specialist, Game Warden, EPA Investigator, Natural Gas Drilling

Professional Level Careers

Agronomist, Agricultural Engineer, Environment Specialist, Ecologist, Environmental Lobbyist, Statistician, Zookeeper, Animal Geneticist, Food Scientist, Biochemist, Environmental Engineer, Agricultural Lawyer, Agriculture Economist, City Planner, Science Teacher

Entry Level:

- Biology
- Chemistry I
- Chemistry II
- Intro. to Ecology and Env. Science
- Civics
- Parkway

Technical Level:

- Biology
- Honors Biology
- Chemistry I
- Honors Chemistry I
- Chemistry II
- Physics
- Honors Physics
- Intro. to Ecology and Env. Science
- Algebra
- Geometry
- Writing and 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 and Public Speaking

BUSINESS AND COMPUTER SCIENCE DEPARTMENT

COURSE #	BUSINESS COURSES	
05017	Video Production 1	
05037	Video Production 2	
05014	Honors Video Production 3 – CHS	
05019	Photography and Editing Basics	
199	International Business	
201	3D Modeling	
05011	Data Management with Excel – 10 th Graders	
561	Web Page Design	
562	Entrepreneurship & Business Management	
05031	Programming for Game Design	
05012	2D Game Design	
800	Podcasting	
569	Accounting IA	
570	Accounting IB	
582	College & Career Planning – 11 th Graders	
585	Sports & Entertainment Marketing	
192	Honors Management & Marketing Applications - CHS	
592	Presentation Applications – 9 th Graders	
05026	Advanced Microsoft Office Specialist	
05030	Personal Finance and Investing	

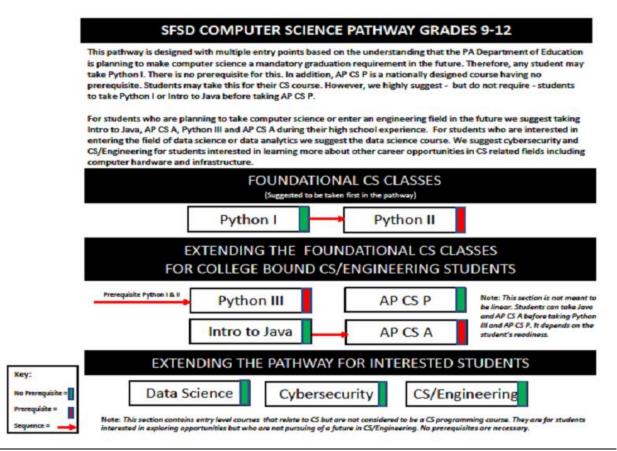
Table 10 - Business, Computer, Info. Tech. Dept. Courses

COURSE #	COMPUTER SCIENCE COURSES
583	Programming with Java I
<i>589</i>	AP Computer Science Principles
586	AP Computer Science A
859	Introduction to Python Programming
783	Python II
1010	Honors Advanced Python III
05029	CMU 15-112: High School Honors Python
782	Data Science
1009	Designing & Inventing with Computer Science and
	Engineering
05034	Cybersecurity IB
05035	Cybersecurity I - CHS

*CHS – College in High School course

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

BUSINESS



05017 - VIDEO PRODUCTION 1

Prerequisite: None Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

COURSE DESCRIPTION: Have you ever wondered what goes into making the commercials you see on TV? This elective course introduces students to digital video shooting and editing techniques. Students will learn the process of video production, from brainstorming to filming on set to editing in Adobe Premiere Pro CC. No previous experience or knowledge is necessary - just bring your creativity!

05037 - VIDEO PRODUCTION 2

Prerequisite: Successful Completion of Video Production I with a 75% Semester - Five Periods Per Week – .5 Credit (Grades 9-12)

COURSE DESCRIPTION: This project-based elective course builds on the skills learned in Video Production 1 and gives students the tools to create more professional videos. Students will not only produce on-air programming for SF-TV 3, but also participate in local contests and create materials for the District. Projects include commercials, PSAs, cinematic shorts, and news packages. Along the way, students will further develop important life and career skills such as responsibility, organization, and teamwork.

05014 - HONORS VIDEO PRODUCTION 3 - CHS

*Point Park University - College in High School Program Option Prerequisites: Successful Completion of Video Production 1 and Video Production 2 and student course qualifications.

If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. Full Year – Five Periods Per Week – 1.0 Credits (Grades 10-12)

COURSE DESCRIPTION: Honors Video Production 3 - CHS 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.

05019 - PHOTOGRAPHY AND EDITING BASICS

Prerequisite: None Semester - Five Periods Per Week - .5 Credit (Grades 9-12)

COURSE DESCRIPTION: Want to create better digital content? Students in this course will use Adobe Photoshop, the favorite image manipulation tool of the industry, to enhance images to create digital media. Students will also be exposed to photography basics and learn to shoot their own images using mirrorless cameras. Projects will range from creating digital ads to posters to photoshoots. Occasionally, students will be required to shoot and complete project work outside of school.

<u>199 – INTERNATIONAL BUSINESS</u>

Prerequisite: None Semester - Five Periods Per Week - .5 Credit (Grades 9-12)

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.

<u>201 – 3D MODELING</u>

Prerequisite: None Semester - Five Periods Per Week - .5 Credit (Grades 9-12)

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.

05011 - DATA MANAGEMENT WITH EXCEL

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

COURSE DESCRIPTION: This class will introduce data management through spreadsheet applications. Students will learn how to create useful and visually appealing spreadsheets in Excel while recognizing the far-reaching applications of the software. This course is designed to ensure students have the tools necessary to not only analyze data, but to successfully input, interpret, and present it to an audience. This introductory course will cover basic skills and prepare students to be in a position to continue to pursue MOS Certification in Excel.

561 - WEB PAGE DESIGN

Prerequisite: None Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

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 - ENTREPRENEURSHIP & BUSINESS MANAGEMENT

Prerequisite: None Semester – Five Periods Per Week - .5 Credit (Grades 10-12)

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.

05031 - PROGRAMMING FOR GAME DESIGN

Prerequisite: None Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

COURSE DESCRIPTION: This one-semester course is intended for students who love gaming and want to design and build original games. Students will earn how to use Unity, a popular game design software program, along with Visual Studio, an IDE used for C# programming, in order to create engaging, interactive games in a variety of genres. Students will get a solid foundation in the basic concepts of game programming. Students will be able to create a variety of scripts to begin creating games in Unity. By the end of this course, students will have created several basic games and will be prepared to take either 2D or 3D Game Design to create more advanced games.

05012 – 2D GAME DESIGN

Prerequisite: Successful completion of Programming for Game Design Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

COURSE DESCRIPTION: This course is designed for students who love gaming and want to learn the fundamentals of creating their own 2D games. Students will use the Unity software to create engaging, interactive games from a variety of genres. Focus will be placed on creating and animating sprites, writing scripts to perform actions in the game, setting up environments, and adding a variety of other aspects to create an engaging game. By the end of the course students will have created several 2D games as well as designed their own 2D game.

800 - PODCASTING

Prerequisite: None Semester - Five Periods Per Week - .5 Credit (Grades 9-12)

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 <u>at least</u> one semester of Accounting.

569 - ACCOUNTING IA

Prerequisite: Successful Completion of Algebra I Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

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 Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

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 <u>required</u> graduation course for all 11th Grade Students. Prerequisite: None 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 & ENTERTAINMENT MARKETING

Prerequisite: None Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

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 & MARKETING APPLICATIONS – CHS

*Point Park University - College in High School Program option Prerequisite: Successful completion of Entrepreneurship & Business Management and Sports and Entertainment Marketing with an 85% or better in both courses and student course qualification. If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. Semester – Five Periods Per Week - .5 Credit (Grade 12)

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 <u>required</u> graduation course for all 9th Grade Students.

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

COURSE DESCRIPTION: This class will refine and expand upon your skills as a presenter while also allowing you to use technology to deliver a variety of addresses. By learning how to create a presentation using PowerPoint and Google Slides, you will develop informative, career-focused, and group-based speeches, using industry-standard software. Although the development of your technology skills is essential, we will also be working toward enhancing your abilities as a public speaker and have designed a variety of projects to assist you in bettering your public speaking. When you have completed this course, you will have grown as a speaker and you will be in a position to continue to pursue your MOS certification.

05026 - ADVANCED MICROSOFT OFFICE SPECIALIST

Prerequisite: Successful completion of Presentation Applications and Data Management with Excel with an 80%

Semester – Fiver Periods Per Week - .5 Credit (Grades 10-12)

This semester long course is an advanced course in Microsoft PowerPoint and Excel which expand on the skills learned in Presentation Applications and Microsoft Excel. The course is designed for students to further their knowledge in the workings of Excel and PowerPoint in an effort to master the objectives listed below to prepare for the Microsoft Office Specialist (MOS) certification exams.

In Microsoft PowerPoint, students will build on what was learned in the Presentation Applications course and master the following objectives: managing presentations, managing slides, inserting and formatting text, shapes and images, order and grouping objects on slides, inserting and modifying tables, charts, SmartArt, 3D models, and media, and applying transitions and animations. In Microsoft Excel, students will expand on information learned in their Microsoft Excel course to master the following objectives: creating and managing workbooks and worksheets, managing cells and ranges, managing tables, applying formulas and functions, and creating charts and objects.

The Microsoft Office Specialist (MOS) certification has been designed to validate knowledge of and ability to use PowerPoint and Excel. It provides industry-leading assessments of skills and knowledge through a new project-based testing, giving students real-world exercises to appraise their understanding of Microsoft PowerPoint and Excel. This guarantees that every certified user has demonstrated the ability to command the full features and functionality of Microsoft PowerPoint and Excel, preparing them for future academic or workforce opportunities. Students will be offered both exams, for a fee, but are not required to take the exam.

05030 - PERSONAL FINANCE AND INVESTING

Prerequisite: None Semester – Five Periods Per Week - .5 Credit (Grades 10-12)

COURSE DESCRIPTION: Financial Literacy is essential in meeting the financial challenges of the 21st Century. This course focuses on managing personal finances, including budgeting income to cover expenses and save for the future, financial responsibility, decision making, spending, credit, saving, and investing. Students will apply knowledge taught through project-based learning and other assigned tasks that focus on real-world scenarios and actively engage in problem-solving in making informed decisions related to personal finance. Based on this course's hands-on skills and knowledge, students will develop financial goals and create realistic and measurable objectives to be financially independent.

COMPUTER SCIENCE

583 - PROGRAMMING WITH JAVA I

Prerequisite: None Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

COURSE DESCRIPTION: Java programming will provide the opportunity for students to learn an objectoriented 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)

*It is recommended that a student in the AP Computer Science Principles course should have successfully completed a firstyear 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

If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

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 If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

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

Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

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.

<u>783 – PYTHON II</u>

Prerequisite: Successful completion of Introduction to Python Programming Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

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.

<u>1010 – HONORS ADVANCED PYTHON III</u>

Prerequisite: Successful completion of Introduction to Python Programming and Python II If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. Semester – Five Periods Per Week - .5 Credit (Grades 10-12)

COURSE DESCRIPTION: Honors Advanced 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.

05029 - CMU 15-112: HIGH SCHOOL HONORS PYTHON

Prerequisites: Student course qualification and one of the following options: Option 1 – Successful completion of Python I, Python II, Honors Advanced Python III Option 2 – Successful completion of Java, APCS A, Honors Advanced Python III If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. Full Year – Five Periods Per Week – 1.0 Credit (Grades 11 & 12)

COURSE DESCRIPTION: A full-year honors-level course in programming and computer science prepares students for college studies in computer science and related disciplines. This course re-examines earlier topics (functions, conditionals, loops, strings, lists, and more) in greater detail and increased rigor. The course also covers intermediate data structures (sets, dictionaries), recursion, object-oriented programming, exceptions, monte carlo methods, cloud computing, efficiency, limits of computation, style, and top-down design, among other topics. The course culminates in a significant creative project.

782 – DATA SCIENCE

Prerequisite: None Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

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.

1009 - DESIGNING & INVENTING WITH COMPUTER SCIENCE AND ENGINEERING

Prerequisite: None Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

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.

05034 - CYBERSECURITY IB

Prerequisite: Successful completion of Cybersecurity Semester – Five Periods Per Week - .5 Credit (Grades 10-12)

COURSE DESCRIPTION: Cybersecurity IB is only open to students in grades 10-12 who have taken the cybersecurity course offered in high school in previous years. Topics covered in Cybersecurity IB include Linux, System Administration, Cybersecurity Threats, Risk Identification, and much more. Students can expect a highly engaging learning environment involving simulations, real-world applications, as well as competitions throughout the semester.

05035 – CYBERSECURITY I – CHS

Prerequisite: None Year – Five Periods Per Week – 1.0 Credit (Grades 9-12)

COURSE DESCRIPTION: Cybersecurity I is a college in high school course that will be aligned with Robert Morris University's, "CYBS 2000: Introduction to Cybersecurity." This course will be the introductory course in South Fayette's Cyber Program. Students do not need previous experience in cybersecurity or computer science. In this course, students will learn about topics including, but not limited to: Cyber Ethics, Fundamentals of Computing, Networking, Cryptology, Linux, System Administration, Cybersecurity Threats, Risk Identification. Students can expect an engaging curriculum and an environment with hands-on learning, real life simulations, and authentic cyber security applications during class. Students will be expected to participate in cybersecurity competitions throughout the year.

Table 11 - English Courses			
COURSE #	ENGLISH COURSES		
030	English 9 WI		
032	Honors English 9 WI		
040	English 10 WI		
042	Honors English 10 WI		
050	English 11 WI		
052	Honors English 11 WI		
057	AP English 11: Language and Composition WI		
060	English 12 WI		
062	Honors English 12 WI		
065	AP English 12: Literature and Composition - CHS		
	WI		
1007	Honors Argument - CHS		
017	English Language Learners ("ELL")		
067	Screenwriting (Elective)		
072	Writing & Public Speaking WI		
075	English Mythology Across Cultures (Elective)		
076	The Poetic Imagination: From Homer to Hip-Hop		
	(Elective)		
202	Print Journalism (Elective)		
203	Broadcast Journalism (Elective)		
593	ACT Prep (Elective)		
590	SAT Prep (Elective)		
01028	Digital Storytelling - CHS (Elective)		
575	Yearbook Publication (Elective)		
850	Theatre Arts I (Elective)		
851	Theatre Arts II (Elective)		
862	Stage Production (Elective)		
01026	Introduction to Film – CHS (Elective)		
01027	Children's Literature – CHS (Elective)		

ENGLISH DEPARTMENT

*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 both 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. Each unit will afford students opportunities to apply critical thinking skills, analyze thematic subjects, draw connections to real world experiences, and creatively demonstrate their mastery of the literature's essential questions. Students will be exposed to diverse voices and examine the ways in which literature serves as both a window into other perspectives and a mirror that reflects their own experiences. Students will learn to read closely and communicate effectively in both speech and writing. Following the most modern MLA guidelines, students will also learn the process of researching: finding credible sources, evaluating sources, and citing sources.

032 - HONORS ENGLISH 9 (WI)

Prerequisite: In accordance with Prerequisites for Honors and Advanced Course (Page 4) and student course qualification.

If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. Full Year - Five Periods Per Week - 1.0 Credit

COURSE DESCRIPTION: Honors English 9 is a course designed to examine the writing process, short stories, non-fiction, fiction, drama, and poetry. Students will be exposed to diverse voices and examine the ways in which literature serves as both a window into other perspectives and a mirror that reflects their own experiences. Each unit will afford students opportunities to apply critical thinking skills, analyze thematic subjects, draw connections to real world experiences, and creatively demonstrate their mastery of the literature's essential questions. Following the most modern MLA guidelines, students will also learn the process of research. Other written assessments include creative, analytics, and reflective pieces. Students enrolled in Honors English 9 will be required to participate regularly and thoughtfully in academic conversations through graded full class discussions, to conduct research and effectively integrate and cite sources, and to successfully utilize close reading skills for literary analysis through a variety of assessments.

Students choosing Honors level and Advanced Placement courses should be aware of required summer readings and/or written activities in preparation for each course. All Honors level and Advanced Placement courses will require summer preparation prior to the first day of school. Failure to complete required preparation will significantly affect the student's first nine week's 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 (WI)

Prerequisite: In accordance with Prerequisites for Honors and Advanced Course (Page 4) and student course qualification.

If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. 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 <u>required summer</u> <u>readings and preparation</u> 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 including The Crucible and The Great Gatsby. Integrated with literature is practice in thinking skills, vocabulary, composition, and grammar skills.

052 - HONORS ENGLISH 11 (WI)

Prerequisite: In accordance with Prerequisites for Honors and Advanced Course (Page 4) and student course qualification.

If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. 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 (WI)

Prerequisite: In accordance with Prerequisites for Honors and Advanced Course (Page 4) and student course qualification.

If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. 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 (WI)

Prerequisite: In accordance with Prerequisites for Honors and Advanced Course (Page 4) If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. 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 <u>required summer</u> <u>readings and preparation</u> 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 - CHS (WI)

*Students choosing AP courses should be aware of <u>required summer readings and preparation</u> 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 Prerequisites for Honors and Advanced Course (Page 4) 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, Frankenstein, Hamlet, A Midsummer Night's Dream, The Metamorphosis, The Scarlet Letter, Heart of Darkness,* and a significant body of selected poetical works.

<u>1007 – HONORS ARGUMENT – CHS</u>

Prerequisite: In accordance with Prerequisites for Honors and Advanced Course (Page 4) If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. Full Year – Five Periods Per Week – 1.0 Credit (Grade 11)

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.

017 - 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 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 & PUBLIC SPEAKING (WI)

*This is a <u>required</u> graduation course for all 9th Grade Students. 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 – ENGLISH MYTHOLOGY ACROSS CULTURES

Prerequisite: None Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

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 Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

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.

202 - PRINT JOURNALISM

Prerequisite: None Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

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 Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

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.

593 - ACT PREP (ELECTIVE)

Prerequisite: None Semester – Five Periods Per Week - .5 Credit (*9 weeks of English and 9 weeks of Math) (Grades 10-12)

COURSE DESCRIPTION: ACT Prep is a semester course designed for the college-bound 10th, 11th, and 12th grade student who desires to increase his or her level of preparedness for taking the ACT (American College 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 questions that are found on the ACT math sections.

590 - SAT PREP (ELECTIVE)

Prerequisite: None Semester – Five Periods Per Week - .5 Credit (Grades 10-12)

COURSE DESCRIPTION: SAT Prep is a semester course designed for the college bound 10th, 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.

01028 - DIGITAL STORYTELLING - CHS

Prerequisite: None Semester – Five Periods Per Week – .50 Credit (Grades 10-12)

COURSE DESCRIPTION: Bigger than Hollywood and the music industry combined, modern gaming is immersive, interactive, and intensely narrative. In games, like in stories, players can travel to all corners of the universe, adventure throughout time, and inhabit virtual bodies radically different from their own. This course is an introduction to the critical and interdisciplinary study of games and gaming as texts through an examination of their cultural, educational, and social functions in contemporary settings. Students will focus on the analysis and playing of digital games but also have opportunities to examine board games, literary games, and role-playing games. At all times, students will be encouraged to expand their understanding of games as narrative constructs designed to tell powerful stories and will be expected to analyze narrative, time, tropes, and simulations in games through a variety of associated readings and writings.

575 - YEARBOOK PUBLICATION

Prerequisite: Excellent writing and organizational skills as evidenced by student course qualification. Year - Five Periods Per Week - 1.0 Credit (Grades 9-12)

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.

850 - THEATRE ARTS I

Prerequisite: None Semester - Five Periods Per Week - .5 Credit (Grades 9-12)

COURSE DESCRIPTION: Students will begin the class learning theatre terminology and the parts of the stage. Throughout the course, they will learn 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 also have experiences with pantomimes, monologues, and short scene work. Lastly, students will get exposure to playwriting.

<u> 851 – THEATRE ARTS II</u>

Prerequisite: Theatre Arts I Semester - Five Periods Per Week - .5 Credit (Grades 9-12)

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 Semester - Five Periods Per Week - .5 Credit (Grades 9-12)

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.

01026 - INTRODUCTION TO FILM - CHS

Prerequisite: None Semester- Five Periods Per Week - .5 Credit (Grades 10-12)

Introduction to Film is a course on the visual arts that offers students a broad introduction to the medium of film while inviting conversations about new media, television, and film's connection to other arts, including photography, painting, theater, and web video. The course teaches students with no background in media studies how to analyze media in terms of art, industry, and culture. The class will consider such issues as the process of contemporary film production and distribution; the nature of basic film forms; selected approaches to film criticism; comparisons between film and other media; genre; auteurism; marketing; and diversity of representation.

01027 - CHILDREN'S LITERATURE - CHS

Prerequisite: None Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

COURSE DESCRIPTION: CHS through Robert Morris: This is a survey course designed to introduce students to a variety of children's literature titles including classic texts, Caldecott and Newbery winners, and new publications. Students will evaluate children's literature, integrate children's literature into learning, and explore motivating children to read.

FINE ARTS AND EARLY CHILDHOOD DEVELOPMENT DEPARTMENT

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COURSE #	EARLY CHILDHOOD COURSE
761	Early Childhood Development

Table 12 – Early Childhood Courses

Table 13 – Instrumental Music Courses

COURSE #	INSTRUMENTAL MUSIC COURSES	
817	Concert Band	
197	String Orchestra	
06102	String Orchestra A/B Day	
818	Wind Ensemble	

Table 14 – Vocal Music Courses

COURSE #	VOCAL MUSIC COURSES	
945	Concert Choir (Mixed Ensemble)	
891	Select Choir	
764	Digital Piano and Musicianship I	
765	Digital Piano and Musicianship II	
766	AP Music Theory	

Table 15 - Art Courses

COURSE #	ART COURSES
06000	Introduction to Art
06001	Advanced Art
06002	AP Art Studio
06003	Ceramics I
06008	Ceramics II
06004	Graphic Design
06005	Sculpture
06006	Art Survey
06007	Partners in Art

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

761 - EARLY CHILDHOOD DEVELOPMENT

Prerequisite: Successful completion of Developmental Child Psychology or are taking it first semester. Year – Five Days Per Week – 1.0 Credit (Grades 11 & 12)

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. Students will also assist with the concluding graduation ceremony and field trip.

INSTRUMENTAL MUSIC

817 - CONCERT BAND

Prerequisite: Student course qualification <u>or</u> successful completion of "Little Green Machine" Marching Band audition.

Year - Five Periods Per Week - 1.0 Credit (Grades 9-12)

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.

197 - STRING ORCHESTRA

Prerequisite: Completion of Middle School Orchestra Program or private instruction for > 3 years. Year - Five Periods Per Week - 1.0 Credit (Grades 9-12)

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.

06102 – STRING ORCHESTRA A/B DAY

Prerequisite: Completion of Middle School Orchestra Program or private instruction for > 3 years. *This course will run concurrently with the 1.0 credit course to allow students who do not have room in their schedule for the 1.0 credit course to continue their participation in String Orchestra. Year – A/B Day Rotation - .5 Credit (Grades 9-12)

COURSE DESCRIPTION: String Orchestra is a performing ensemble for students in grades 9-12. 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 at least two performances annually. All students are required to participate in scheduled rehearsals and performances.

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)

Year - Five Periods Per Week – 1.0 Credit (Grades 10-12)

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.

VOCAL MUSIC

945 - CONCERT CHOIR (Mixed Ensemble)

Prerequisite: None Year - Five Periods Per Week - 1.0 Credit (Grades 9-12)

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.

891 - SELECT CHOIR

Prerequisite: By audition and/or student course qualification. Year - Five Periods Per Week - 1.0 Credit (Grades 10-12)

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.

764 – DIGITAL PIANO AND MUSICIANSHIP I

Prerequisite: None Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

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.

765 - DIGITAL PIANO AND MUSICIANSHIP II

Prerequisite: Successful Completion of Digital Piano and Musicianship I. This course runs concurrently with Digital Piano and Musicianship I. Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

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 1. 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.

If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled.

Year – Five Days Per Week – 1.0 Credit (Grades 11 & 12)

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.

<u>ART</u>

06000 - INTRODUCTION TO ART

Prerequisite: None Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

COURSE DESCRIPTION: This is a beginning level course. This course will be an exploration of developing creativity through the practice of two-dimensional activities. Projects will include drawing, shading, perspective, portraiture and colored pencil. It is designed to provide a foundation for the upper level visual art courses. Students will look at artists and artistic trends of the past and present.

06001 - ADVANCED ART

Prerequisite: Successful completion of any introduction level visual art course such as Introduction to Art, Introduction to Painting, Ceramics, or Sculpture. Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

COURSE DESCRIPTION: This course is designed for the serious art student who is interested in acquiring new skills and further developing their talents and/or who is considering studying art after high school. Students will increase technical skills, develop a more sophisticated approach to the process and subject matter, and create a portfolio of individual work. Projects include observational and imaginative drawing, mixed media, and a variety of self-chosen media. A visit to a local gallery and/or museum will provide inspiration.

<u>06002 – AP ART STUDIO</u>

Prerequisite: Successful completion of Introduction to Art, Advanced Art or Introduction to Painting with an 85% or above and student course qualifiction. If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. Year – Five Periods Per Week – 1.0 Credit (Grades 10-12)

COURSE DESCRIPTION: This course is designed for students who are interested in the practical experience of art and will submit a portfolio at the end of the year for evaluation. Students must show foundational art skills as a prerequisite. Instructional goals: Encourage creative and systematic investigation of formal and conceptual issues; Emphasize making art as an on-going process that involves the student in informed and critical decision making; Help students develop technical skills and familiarize them with the functions of the visual elements; Encourage students to become independent thinkers who will contribute inventively and critically to their culture through artmaking.

<u>06003 – CERAMICS I</u>

Prerequisite: None Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

COURSE DESCRIPTION: This course provides a comprehensive study in methods of sculpture, hand-built clay construction, basic wheel throwing and glazing techniques. Students explore three-dimensional design while developing both useful and sculptural forms. Creativity and quality craftsmanship are emphasized. Non-toxic clay and glazes are used and kiln fired.

<u>06008 – CERAMICS II</u>

Prerequisite: Successful completion of Ceramics with a 75% or better. Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

COURSE DESCRIPTION: An in-depth practice of ceramics, students gain knowledge and skill at a higher level, using hand building and the potter's wheel. They are actively involved in the individual design of each proposed project. In depth glazing methods, and kiln firing.

06004 - GRAPHIC DESIGN

Prerequisite: None Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

COURSE DESCRIPTION: Students will explore visual communication through understanding of the elements and principles of design; as well as the design process, from idea development through the final execution of a product. Students will build a portfolio of finished projects as well as building skills in creativity, problem solving, presentation, and art critiques. Student projects will include color theory, log design, typography, digital art, layout design and product design. Materials will include paints, markers, colored pencils, Photoshop, and Corel Draw.

<u>06005 – SCULPTURE</u>

Prerequisite: None Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

COURSE DESCRIPTION: This course will be an exploration of new materials and techniques with an appreciation of sculptural 3D forms. Historical and contemporary concepts ranging from representational figures to abstract forms are investigated. Some of the materials used may include clay, wood, metal, wire, cutting tools, cloth, paper, found objects, and plaster. Students will be required to keep a sketchbook; hand drawing is required.

<u>06006 – ART SURVEY</u>

Prerequisite: None Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

COURSE DESCRIPTION: Art Survey is the foundation for students considering further art electives. It is a basic foundation course focusing on the elements and principles of design, problem solving, developing observation and technical skills in drawing, painting, printmaking, sculpture, and

ceramics. The course offers a study of the basic design fundamentals necessary for any further experience in visual arts.

06007 – PARTNERS IN ART

Prerequisites: Interested students will require a referral from a member of the visual art staff and school counselor. *Class size will be determined by the number of Life Skills students at a ratio of 1 or 2 partner(s) to a single art student.

Semester – Five Periods Per Week - .5 Credit (Grades 11 & 12)

COURSE DESCRIPTION: This specially designed course is for students with disabilities or medical restrictions who are not able to fully participate in the unrestricted art education program. These students are joined by students without disabilities or restrictions. Together all students help each other achieve art education and art therapy goals. The varied activities included in the art program contribute to the creative, mental and social wellbeing of all students involved. This course will focus on individual art student needs and the meaningful choice-based activities of the partner.

Table 16 – World Language Courses		
COURSE #	WORLD LANGUAGE COURSES	
420	German I	
421	German II	
422	German III	
802	Honors German IV – CHS	
10015	Honors German V - CHS	
430	Spanish I	
431	Spanish II	
432	Spanish III	
838	Honors Spanish IV – CHS	
10008	AP Spanish Language and Culture - CHS	
440	French I	
441	French II	
442	French III	
785	Honors French IV – CHS	
1008	AP French - CHS	
10014	Francophone Conversation and Culture	
	*CHS – College in High School course	

WORLD LANGUAGE DEPARTMENT

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.

* Credit Recovery/Summer School: If a student completes a credit recovery (summer school) course for a World Language course after receiving a failing grade in the South Fayette course and has the desire to continue to the next level of that language at South Fayette High School, the student must complete a South Fayette placement exam. This exam must be completed prior to or at the start of the school year in order to ensure sufficient language proficiency and appropriate placement.

<u>420 - GERMAN I</u>

Prerequisite: None Year - Five Periods Per Week - 1.0 Credit (Grades 9-12)

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.

<u>421 - GERMAN II</u>

Prerequisite: Successful completion of German I with a grade of 75% or higher. Year - Five Periods Per Week - 1.0 Credit (Grades 9-12)

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. Year - Five Periods Per Week - 1.0 Credit (Grades 10-12)

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 (WI) - CHS

*University of Pittsburgh – College in High School Program Option Prerequisite: In accordance with Prerequisites for Honors and Advanced Course (Page 4) and successful completion of German III with a grade of 85% or higher and student qualification If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. Year – Five Periods Per Week – 1.0 Credit (Grades 11 & 12)

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).

<u>10015 – HONORS GERMAN V – CHS</u>

*University of Pittsburgh – College in High School Program Option Prerequisite: In accordance with Prerequisites for Honors and Advanced Course (Page 4) and successful completion of German IV - CHS with a grade of 85% or higher and student qualification If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. Year – Five Periods Per Week – 1.0 Credit (Grade 12)

COURSE DESCRIPTION: This course is the equivalent to Intermediate German 2 (GER 202) at the University of Pittsburgh. High school students will take this course as their fifth-year German course, after successfully completing German IV - CHS (GER 201). In this course, students continue to develop their German language skills and learn about a variety of vocabulary, students grow their reading, speaking, writing, and listening skills. The course emphasizes meaningful communication and comprehension, and it is held in German. In order to succeed in this course, active participation in the classroom will be necessary.

<u>430 - SPANISH I</u>

Prerequisite: None Year - Five Periods Per Week - 1.0 Credit (Grades 9-12)

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, although reading and writing will also be included. Students will learn to communicate about topics ranging from personal and family descriptions to school experiences and eating at restaurants. Hispanic culture is also weaved into the content of this course.

<u>431 - SPANISH II</u>

Prerequisite: Successful completion of Spanish I with a grade of 75% or higher. Year - Five Periods Per Week -1.0 Credit (Grades 9-12)

COURSE DESCRIPTION: This course will use the information learned in Spanish I as a building block in attaining new grammatical and vocabulary skills. The main goal in this course is for students to effectively produce and understand descriptions, needs, opinions, and inquiries in the target language. Students will be asked to demonstrate their proficiency through interpretive (reading/listening), interpersonal (speaking/writing/ reading), and presentational (speaking/writing) activities that would be seen in the real world. To reach this goal, students must participate regularly in class and at home. Topics include travel, vacations, and leisure activities and include cultural information on a variety of Spanish-speaking countries.

432 - SPANISH III

Prerequisite: Successful completion of Spanish II with a grade of 75% or higher. Year - Five Periods Per Week - 1.0 Credit (Grades 10-12)

COURSE DESCRIPTION: This course will use the information learned in Spanish II as a building block in attaining new grammatical and vocabulary skills. The main goal in this course is for students to effectively produce and understand descriptions, needs, opinions, inquiries, and advice in the target language. Students will be asked to demonstrate their proficiency through interpretive (reading/listening), interpersonal (speaking/writing/reading), and presentational (speaking/writing) activities that would be seen in the real world. To reach this goal, students must participate regularly in class and at home. Topics include holidays, childhood experiences, fairy tales, travel, and future plans. A variety of cultural comparisons will be made within each unit of study to better understand customs of Spanish-speaking countries.

838 - HONORS SPANISH IV - CHS (WI)

*LaRoche University – College in High School Program Option Prerequisite: In accordance with Prerequisites for Honors and Advanced Course (Page 4) and successful completion of Spanish III, and teacher qualification. If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. Year – Five Periods Per Week – 1.0 Credit (Grades 11 & 12)

COURSE DESCRIPTION: Honors Spanish IV - CHS is equivalent to La Roche University's course MLSP2001: Intermediate Spanish I students can receive 3 credits. This course includes an advanced study of grammar and requires students to utilize the three modes of communication to explore topics including Hispanic cuisine, physical and mental health, relationships, rites of passage, Hispanic art, and daily errands. It emphasizes communicative activities to give students opportunities to create with the language and to participate actively in discussions about familiar topics. Classroom instruction is in Spanish and students are expected to remain in Spanish for at least 85% of the class.

10008 - AP SPANISH LANGUAGE AND CULTURE – CHS (WI)

*LaRoche University – College in High School Program Option Prerequisite: In accordance with Prerequisites for Honors and Advanced Course (Page 4) and successful completion of Honors Spanish IV - CHS and teacher qualification. If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. Year - Five Periods Per Week - 1.0 Credit (Grade 12)

COURSE DESCRIPTION: This 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 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 Spanish Language & Culture 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. Additionally, students that enroll for Scholar credit will receive three (3) credits for La Roche University's MLSP2002: Intermediate Spanish II upon successful completion.

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 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.

440 - FRENCH I

Prerequisite: None Year – Five Periods Per Week – 1.0 Credit (Grades 9-12)

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. Year - Five Periods Per Week - 1.0 Credit (Grades 9-12)

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. Year - Five Periods Per Week - 1.0 Credit (Grades 10-12)

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 – CHS

*University of Pittsburgh – College in High School Program Option Prerequisites: In accordance with Prerequisites for Honors and Advanced Course (Page 4) and successful completion of French III and student qualification If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. Year – Five Periods Per Week – 1.0 Credit (Grades 11 & 12)

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 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.

1008 - AP FRENCH - CHS

Prerequisite: In Accordance with the Prerequisites for Advanced Courses, Successful Completion of French IV and student course qualification.

If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. Year - Five Periods Per Week - 1.0 Credit (Grade 12)

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.

10014 – FRANCOPHONE CONVERSATION AND CULTURE

Prerequisite: Successful completion of French III Semester - .5 Credit (Grades 11 & 12)

COURSE DESCRIPTION: This semester course is for students who have successfully completed French III. The course will be conducted in both English and French, and will be largely conversational and project-based. We0 will study, discuss, and analyze a wide variety of cultural topics, including stereotypes, sports, film, short stories, tourism, cuisine, as well as the impact and importance of francophone countries and cultures on the world. This course is aimed towards two groups of students: those who may not feel comfortable taking Honors French IV - CHS or AP French - CHS, as well as those with a love of French who want to use their language and learn more about French-speaking cultures outside of a traditional language class. Students can take this course concurrently with French IV or AP French.

INDEPENDENT STUDY

959 - INDEPENDENT STUDY - YEAR

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

<u>958 – INDEPENDENT STUDY – SEMESTER</u>

Prerequisite: 11th and 12th Grade Students Semester – Five Periods Per Week - .5 Credit

957 – INDEPENDENT STUDY – A/B DAY

Prerequisite: 11th and 12th Grade Students Year – A or B Day - .5 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 school 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.

<u>976 – ONLINE PERSONAL FINANCE</u>

Prerequisite: This course may only be scheduled by students who are taking either AP Biology or AP Chemistry. This course fulfills the South Fayette High School College and Career Planning graduation requirement. Semester - .5 Credit (Grades 11 & 12)

ONLINE ELECTIVE COURSES

Prerequisite: 10th through 12th Grade Students, Parental Permission Students who wish to schedule an online elective course need to meet with their counselor to discuss this option.

.5 Credit/1.0 Credit – Course Dependent

COURSE DESCRIPTION: The on-line elective course offerings are designed for the highly motivated, selfdisciplined 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. *Students/Parents are responsible for any cost (registration, materials, etc.) associated with these courses with the exception of Online Personal Finance.* 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.

Table 17 – Math Courses			
<u>COURSE #</u>	MATH COURSES		
331	Algebra 1		
340	Geometry		
345	Honors Geometry		
350	Algebra II		
351	Honors Algebra II		
353	Algebra III with Trigonometry		
1016	Honors Linear Algebra - CHS		
355	Precalculus		
360	Honors Precalculus		
362	Calculus		
363	Differentiated Math		
02016	Honors Business Calculus - CHS		
211	Honors Calculus - CHS		
212	AP Calculus AB - CHS		
213	AP Calculus BC - CHS		
369	Statistics and Probability		
214	Honors Statistics and Probability - CHS		
02017	Applications of Mathematics		
590	SAT Prep (Elective)		
593	ACT Prep (Elective)		
	CHS College in High School course		

MATHEMATICS DEPARTMENT

CHS – College in High School course

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

SEQUENCING OF MATHEMATICS COURSES

If student is currently taking	Then the next course in the sequence is	
Algebra I	Geometry or Honors Geometry*	
Geometry	Algebra II or Honors Algebra II*	
Honors Geometry	Algebra II or Honors Algebra II*	
Algebra II	Algebra III with Trigonometry or Precalculus or Applications of Mathematics	
Honors Algebra II	Algebra III with Trigonometry, Precalculus or Honors Precalculus*	
Algebra III with Trigonometry	Precalculus, Honors Precalculus*, Honors Statistics and Probability* or Statistics and Probability	
Precalculus	Calculus, Honors Calculus*, Honors Statistics and Probability* or Statistics and Probability	
Honors Precalculus	Calculus, Honors Calculus*, AP Calculus AB*, Honors Statistics and Probability* or Statistics	
Honors Calculus	AP Calculus BC*, Honors Statistics and Probability*, Statistics and Probability or Honors Linear Algebra	
AP Calculus AB AP Calculus BC*, Honors Statistics and Probability*, Statistics and Pro Honors Linear Algebra		

Table 18 – Table of Sequencing of Mathematics Courses

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

<u>Typical Sequence</u> :	Honors Sequence:	<u>AP Sequence</u> :
Grade 9 – Geometry	Grade 9 – Honors Geometry	Grade 9 – Honors Algebra II
Grade 10 – Algebra II	Grade 10 – Honors Algebra II	Grade 10 – Honors Precalculus
Grade 11 – Algebra III with Trigonometry	Grade 11 – Honors Precalculus	Grade 11 – AP Calculus AB
Grade 12 – Precalculus or Honors	Grade 12 – Honors or AP Calculus	Grade 12 – AP Calculus BC or
Precalculus		Honors Linear Algebra

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

<u>NOTE</u>: ELECTIVE MATH CREDITS DO NOT COUNT TOWARD MATHEMATICS GRADUATION CREDITS.

<u> 331 – ALGEBRA I</u>

*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.

<u> 340 – GEOMETRY</u>

*The students are required to have a scientific calculator.

Prerequisite: Successful Completion of Algebra I and teacher recommendation. 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.

<u>345 – HONORS GEOMETRY</u>

*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 student course qualification. If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled.

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 <u>required summer</u> <u>readings and preparation</u> 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.*

<u> 350 – ALGEBRA II</u>

***The students are required to have a graphics calculator. (TI-83 or TI-84 Recommended)** Prerequisite: Successful Completion of both Algebra I and Geometry and teacher recommendation. Full Year – Five Periods Per Week – 1.0 Credit

COURSE DESCRIPTION: This course includes the study of systems of linear equations, inequalities, polynomials, rationals, irrationals 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.

<u>351 – HONORS ALGEBRA II</u>

***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 student course qualification.

If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled.

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 <u>required summer</u> <u>readings and preparation</u> 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.*

353 – 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 and teacher recommendation. 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.

1016 - HONORS LINEAR ALGEBRA – CHS

Prerequisite: Students must have completed Calculus AB or Honors Calculus with an 85% or better. If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. 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 student course qualification 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

*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 student course qualification. 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.

If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. 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 <u>required summer</u> <u>readings and preparation</u> 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 and teacher recommendation. 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.*

<u>363 – DIFFERENTIATED MATH</u>

Prerequisite: Student course qualification 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.

02016 - HONORS BUSINESS CALCULUS - CHS

Prerequisite: Successful completion of Precalculus or Honors Precalculus and teacher recommendation. If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. Full Year - Five Periods Per Week - 1.0 Credit (Grades 11 & 12)

Business Calculus is a rigorous, college level, calculus course offered through a partnership with The University of Pittsburgh. This course is designed for students interested in business, economics, and other social science fields, and not intended for students who plan on majoring in science, engineering, or mathematics. Topics include functions, limits and continuity, differentiation, applications of differentiation, integration, exponential and logarithmic functions, and an introduction to multivariable calculus. Students will gain a strong understanding of the real-world applications of mathematics in business situations. Though not required, students have the opportunity to earn 4 college math credits while still in high school for a fee.

211 - HONORS CALCULUS - 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 student course qualification.*

If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled.

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 <u>required summer</u> <u>readings and preparation</u> 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 - 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 student course qualification.

If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. 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 <u>required summer</u> <u>readings and preparation</u> 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) - 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 student course qualification. If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled.

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 <u>required summer</u> <u>readings and preparation</u> 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 and teacher recommendation. 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 - 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 student course qualification.

If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled.

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 <u>required summer</u> <u>readings and preparation</u> 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.*

02017 – APPLICATIONS OF MATHEMATICS

Prerequisite: Successful completion of Algebra II Full Year – Five Periods Per Week - 1.0 Credit (Grades 10-12)

COURSE DESCRIPTION: For students who are looking to apply mathematical skills through real-world applications. This pathway focuses on applying mathematics to everyday life which includes finance, engineering, AI, carpentry, and many other areas of student interest.

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 Semester – Five Periods Per Week - .5 Credit (Grades 10-12)

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.

593 - ACT PREP (ELECTIVE)

Prerequisite: None One Semester – Five Periods Per Week - .5 Credit (*9 weeks of English and 9 weeks of Math) (Grades 10-12)

COURSE DESCRIPTION: ACT Prep is a semester course designed for the college-bound 10th, 11th, and 12th grade student who desires to increase his or her level of preparedness for taking the ACT (American College 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 questions that are found on the ACT math sections.

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

*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

..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 I-Car MIG Welding certifications. They are also eligible to earn I-CAR Points.

AUTOMOTIVE TECHNOLOGY

..is certified by the National Automotive Technology Education Foundation (NATEF) and affiliated with all 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 electrical systems. Special emphasis is placed on troubleshooting an 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 apprentices working under mentor master technicians. Students can earn certifications from AYES, the National Institute for Automotive Service Excellence (ASE) and the Coordinating Committee for Automotive Repair (CCAR).

COSMETOLOGY

...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. This program helps students develop into well rounded professionals who practice real-world services in Parkway's salon, which is open to the public two days a week. Utilizing an integrated approach to teaching and learning, students learn about interpersonal relations, professional attitude, and career fundamentals along with technical knowledge and skills. Techniques and abilities are practiced and tested on mannequins, classmates and the general public. Students who are able to attend this program for three to four years will have the opportunity to earn 1,250 hours of state-regulated course requirements to take the state licensing exam to be a licensed cosmetologist, which encompasses providing services to the public for hair, skin and nails. Students who are able to take one or two years of instruction in this program, may choose from the following specialized licensed fields: Nail Technician License: This license requires 200 hours of instruction and can be completed within one year. An individual holding a nail technician license is qualified to perform nail technology services only. Cosmetology Teacher License: Prerequisite for this course is having successfully passed at least one of the above licensures. This license requires 500 hours of required studies and can be complete within one year. An individual holding a teacher's license is gualified to perform the functions of a teacher in whichever specialized area the individual has obtained licensure. CULINARY ARTS ...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. Students also provide goods and services for the Parkway West Food Store, where pastries and select meats are sold. Students learn to design cakes and prepare many different types of cuisine. Senior students who have completed at least two years of Culinary Arts will have the opportunity to earn both the National Restaurant Associations, ServSafe certification and the American Culinary Federation certification. Other certifications that can be earned from the Culinary Arts program include: OSHA 10 Culinary, SP2, Heart Saver CPR, and Heart Saver First Aid.

CONSTRUCTION TECHNOLOGY CLUSTER

** Construction Cluster students will spend 9 weeks in each of the programs below. Students will then choose a program concentration after his/her first year. The construction cluster programs include: Carpentry, Electrical Systems Technology, HVAC/R, and Welding Technology. The four programs are addressed below:

**CARPENTRY...A student in the Carpentry program will apply technical knowledge and skills to layout, fabricate, erect, install and repair structures and fixtures using hand and power tools, scaffolding and specialty tools used in the construction trade. This program includes instruction in common systems of framing, construction materials, estimating, blueprint reading and finish carpentry techniques. Students will be given the opportunity to earn a 10-hour Occupational Safety and Health Administration (OSHA) Construction card. Students have the potential to earn 17 certifications through NCCER.

**ELECTRICAL SYSTEMS TECHNOLOGY...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. Students have the opportunity to earn 20 certifications through NCCER.

**HVAC/R...Heating, Ventilation, Air-Conditioning, and Refrigeration, 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 10-hour Occupational Safety and Health Administration (OSHA) Construction Card. Students can earn the NCCER certifications Core, Type 1 and Type 2. They can also earn EPA Section 608 Refrigeration and Gas Tight Certification for CSST pipe.

**WELDING TECHNOLOGY...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. They will also learn how to prepare materials lists for cost estimates. Students have the opportunity to earn several American Welding Society (AWS) certifications. Students can earn: NCCER Core, Welding Level 1 and OSHA 10.

CYBER SECURITY & NETWORK TECHNOLOGY

...prepares students who are interested in networking and computer diagnostics. It begins with Cisco IT Essentials, PC Hardware and software, and networking operating systems. Students initially prepare for CompTIA A+ and Comp TIA Server + certifications and then, through 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.

DIESEL TECHNOLOGY

...Diesel Technology is part of every aspect of today's transportation, construction, and manufacturing industries. In Diesel Technology, students will learn about the operation, maintenance, and overhaul of diesel-powered equipment. Diesel engines are found in military vehicles, trucks, trains, buses, construction and agricultural equipment. As the diesel equipment industry expands, the demand for mechanics and technicians to repair and maintain diesel equipment will continue to grow. Students will learn the fundamentals of hydraulics and have the opportunity to earn an Air Conditioning Recovery Certification. Students can earn certifications from the National Institute for Automotive Service Excellence (ASE), Refrigeration 609, Class I & III State Inspection, Forklift Operations.

GRAPHIC ARTS & PRODUCTION TECHNOLOGY

...Graphic Arts & Production Technology is an instructional program that prepares individuals to apply technical knowledge and skills to plan, prepare and execute commercial and industrial visual image 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 graphic arts 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.

HEALTHCARE OCCUPATIONS TECHNOLOGY

..students have 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 Health Care industry: Pennsylvania State Nurse Aid 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, 12th grade course, students will assist the pharmacist in a variety of tasks. Module and lab work include: 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 12th grade students. Module and lab work include: anatomy and physiology, infection control, safety and compliance, patient preparation, collection techniques, and processing collected samples. Students must demonstrate a minimum of 30 successful Venipunctures and 10 successful capillary punctures.

POWER MOTORSPORTS

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

PUBLIC SAFETY TECHNOLOGY

...focuses on careers relating to emergency medical services, fire-fighting, 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 situation/management, hazardous materials handling, pre-hospital medical care, map reading, fire-fighting, the judicial system, and emergency dispatching. Students have the opportunity to earn the following certifications: Emergency medical technician– Basic (EMT-B), PA Essentials of Firefighting, Hazardous Materials Awareness and Operations, Basic Rigging for Rope Rescue, and Tactical Handcuffing.

SPORTS MEDICINE & 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, assessment, prognosis, and rehabilitation of injuries and other health conditions. Students will learn the principles of developing a plan of care, including: evaluation, interventions, assessment, goal setting and discharge. Students will also learn how to develop a diet for healthy individuals and for special populations through a comprehensive understanding of nutrition. Students will also be prepared to sit for the ACSM certified personal trainer exam and have the opportunity to earn the CPT credential.

VETERINARY ASSISTANT TECHNOLOGY

...students will learn to keep medical records, schedule appointments, offer client education, practice laboratory procedures, assist with nursing duties, prepare animals for surgeries, and assist during routine physical exams. Students will also gain a solid educational base on which to build a post-secondary degree. This program may lead to additional career pathways such as Animal Trainer, Veterinary Assistant, Kennel Assistant, Research Assistant, Groomers, Animal Control Workers, Veterinary Technician, Veterinary Technologist and Veterinarian. Students may earn the following certifications: NAVTA, OSHA 10 Agriculture, OSHA 10 Healthcare, Pet Tech First Aid and CPR.

PHYSICAL EDUCATION DEPARTMENT

COURSE #	PHYSICAL EDUCATION COURSES	
646	Adaptive Physical Education	
628	Lifetime Fitness	
616	Partners in Physical Education	
641	Health	
630	Physical Education	
08007	Wellness Through Movement	
08008	Advanced Physical Education	
08009	Fundamentals and Elements of Dance	
08010	Diving into Dance	
08011	Advanced Dance Choreography and Production	

Table 20 - Physical Education Courses

Special Note: Beginning with the 2023-2024 academic year, credit earned in all course offerings of the Physical Education Department will fulfill the South Fayette School District graduation requirement for Physical Education.

646 - ADAPTIVE PHYSICAL EDUCATION

Prerequisite: Medical Prescription from a Physician or IEP 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 from a physician in order to be admitted to this class.

628 - LIFETIME FITNESS

*This class may only be taken one semester per school year. Prerequisite: None Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

COURSE DESCRIPTION: This course will be a combination of an individual, non-competitive fitness regime and lifelong recreational activities that will occur in the gym, or occasionally outdoors on the school campus. 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 one 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. Activities may include but are not limited to recreational sports such as volleyball and basketball, cardiovascular activities such as jogging, treadmill walking/running, aerobic movements, and strength training with free weights, body weight (such as planks, core exercises, etc.) or resistance bands. This class will include some classroom instruction, and self-monitored assessments.

616 - PARTNERS IN PHYSICAL EDUCATION

Prerequisite: Interested students will require a referral from a member from the high school physical education staff and school 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 Semester - Students (Partners) – Five periods per week - .5 credit (Grades 11 & 12)

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.

<u>641 - HEALTH</u> Prerequisite: None Semester – A or B Day - .25 Credit (Grades 10-12)

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.

630 - PHYSICAL EDUCATION

Prerequisite: None Semester – A or B Day - .25 Credit (Grades 9-12)

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.

08007 – WELLNESS THROUGH MOVEMENT

Prerequisite: None Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

COURSE DESCRIPTION: This course provides an opportunity to explore fitness via introductory Yoga concepts. Physical wellness will be achieved through fitness workouts designed to strengthen, align, and balance one's body. This includes cardiorespiratory fitness, muscular strength/endurance, and flexibility workouts centered around Yoga. Students will improve their mental, emotional, and physical wellness to better manage every day and long-term stressors. Mental and emotional wellness will be achieved through mindfulness activities, stress prevention, and relief techniques. Students will leave this course with an understanding of the mindbody connection and its effects on one's holistic health.

08008 - ADVANCED PHYSICAL EDUCATION

Prerequisite: None Semester – Five Periods Per Week - .5 Credit (Grades 10-12)

COURSE DESCRIPTION: Advanced Physical Education will provide learning opportunities to further develop skills/knowledge related to fitness, physical competence, cognitive understanding, and positive attitudes that promote a healthy active lifestyle. Students can expect to be challenged on varying aspects of fitness. Students will advance their personal fitness by developing flexibility, muscular fitness, and cardio-respiratory endurance using advanced training methods. Coupled with the regular course content are the "living well topics" of social and emotional wellness, health-related fitness, nutrition, safety, and injury prevention, and the body and its responses to physical activity.

08009 - FUNDAMENTALS AND ELEMENTS OF DANCE A/B

Prerequisite: None Semester – "A"Day/"B" Day Rotation - .25 Credit (Grades 9-12)

COURSE DESCRIPTION: This semester-long course is an introduction to dance. This course, designed for the beginning-level dancer, introduces basic techniques and elements of dance in several dance genres. Students will learn basic choreography and choreographed movements to a variety of music. This is a fun, challenging active course emphasizing all aspects of the art of dance as well as a fitness activity. This course will also emphasize the development of movement skills and movement knowledge, boost self-confidence and creativity, and increase social skills.

08010 - DIVING INTO DANCE

Prerequisites: Successful completion of Fundamentals and Elements of Dance or previous dance experience. (Questionnaire will be given for acceptance and approved by the teacher.) Semester – Fiver Periods Per Week - .5 Credit (Grades 9-12)

COURSE DESCRIPTION: This semester-long course will build on Dance Fundamentals and is designed to develop beginner-intermediate techniques through a variety of dance genres. This course will look at differences and commonalities in dance forms across the globe and explore why people dance, who dances, where, when, and how they dance. This course will also dive deeper into dance with the use of improvisation, elements of dance, technique, choreography, props, and dance history. Daily participation in exercises that improve flexibility, muscle strength, dance technique, and cardiovascular endurance will emphasize the benefits of lifetime health and fitness.

08011 – ADVANCED DANCE CHOREOGRAPHY AND PRODUCTION

Prerequisites: Successful completion of both Fundamentals and Elements of Dance and Diving into Dance or previous extensive dance experience. (*Questionnaire will be given for acceptance and approved by the teacher.*)

Year – Five Periods Per Week – 1.0 Credit (Grades 9-12)

COURSE DESCRIPTION: This year-long course is designed for highly motivated dance students and those interested in exploring the many aspects of a collaborative dance ensemble. Through this course, students will gain a working vocabulary of movement that will help them progress further with their improvisational skills, choreography, and advanced dance techniques in many dance genres. This course will include student choreography, preparation for dance production, and opportunities for student performance. Daily participation in exercises that improve flexibility, muscle strength, dance technique, and cardiovascular endurance will emphasize the benefits of lifetime health and fitness. Wellness for dancers, postsecondary dance career and school opportunities will also be explored throughout the duration of this course.

SCIENCE AND TECHNOLOGY DEPARTMENT

COURSE #	SCIENCE COURSES
240	Biology
245	Honors Biology (WI)
248	AP Biology w/Lab (WI)
241	Honors Human Anatomy and Physiology (WI)
255	Chemistry
250	Honors Chemistry (WI)
256	Chemistry II
03016	Honors Organic Chemistry
258	AP Chemistry w/Lab (WI)
266	Physics
260	Honors Physics (WI)
267	AP Physics 1: Algebra-Based (WI)
290	Forensic Science
03017	Honors Healthcare Concepts and Medical Terminology –
	CHS (WI)
1011	Astronomy
1014	Meteorology
1013	Introduction to Ecology and Environmental Science

Table 21 - Science Courses

COURSE #	TECHNOLOGY EDUCATION COURSES	
206	Architectural Drafting I	
207	Explore Laser Manufacturing & Design	
03112	Engineering Graphics	
03113	Materials Processing I	
03114	Materials Processing II	
03115	Makerlab	
03116	Robotics	
05036	Introduction to Engineering	
05033	Engineering Capstone	
784	Problem Solving By Design	
721	Advanced Manufacturing & Engineering	

*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 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.

245 - HONORS BIOLOGY (WI)

Prerequisite: In accordance with Prerequisites for Advanced Courses. If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. 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 <u>required summer</u> <u>readings and preparation</u> 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 W/LAB (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.

If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. 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 <u>required summer</u> <u>readings and preparation</u> 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.

241 - HONORS HUMAN ANATOMY & PHYSIOLOGY (WI)

Prerequisite: In accordance with prerequisites for Advanced Courses; Successful completion of Biology or Honors Biology and Chemistry or Honors Chemistry.

If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. Year - Five Periods Per Week - 1.0 Credit

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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 <u>required summer</u> <u>readings and preparation</u> 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.

255 - CHEMISTRY

Prerequisite: Successful completion of Biology 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.

250 - HONORS CHEMISTRY (WI)

Prerequisite: In accordance with Prerequisites for Advanced Courses; Successful Completion of Algebra I, Biology and Geometry If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. 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 <u>required summer</u> <u>readings and preparation</u> 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.

256 - CHEMISTRY II

Prerequisite: Successful completion of Chemistry or Honors Chemistry with a 75% or better 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.

03016 - HONORS ORGANIC CHEMISTRY

Prerequisites: In accordance with prerequisites for Advanced Courses. Successful completion of Biology/Honors Biology and Chemistry/Honors Chemistry. If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. Semester – Five Periods Per Week - .5 Credit (Grades 11 & 12)

COURSE DESCRIPTION: Organic chemistry is the study of the structure, properties, composition, and reactions of carbon-containing compounds. This course is designed to provide a fundamental overview of organic chemistry to students interested in pursuing a career in the sciences (such as chemistry, biological sciences, nursing, medicine, dentistry, pharmacy, medical technology, or engineering). Upon successful completion of this class, students will understand the relationship between structure and function of organic molecules and some major classes of reactions involving carbon-containing compounds. Topics of study include periodic trends, chemical bonding and molecular structure, acid-base chemistry, nomenclature of organic compounds, conformations and configurations, chemical reactivity and mechanisms, and the reactions involving a diversity of organic molecules. This course will also focus on laboratory experience and application of these 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.

258 - AP CHEMISTRY W/LAB (WI)

Prerequisites: In accordance with Prerequisites for Advanced Courses; Successful Completion of Algebra II and Honors Chemistry or Chemistry with highest departmental recommendation.

If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled.

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 <u>required summer</u> <u>readings and preparation</u> 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 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:

- 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.

260 - HONORS PHYSICS (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

If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. 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 <u>required summer</u> <u>readings and preparation</u> 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.

267 - AP PHYSICS I: ALGEBRA-BASED (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.

If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. 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 <u>required summer</u> <u>readings and preparation</u> 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.

290 - FORENSIC SCIENCE

Prerequisite: Successful completion of both Biology and Chemistry Year – Five Periods Per Week – 1.0 Credit (Grades 11, 12)

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.

03017 - HONORS HEALTHCARE CONCEPTS AND MEDICAL TERMINOLOGY - CHS

Prerequisites: In accordance with prerequisites for Advanced Courses; Successful completion of Biology or Honors Biology and Chemistry or Honors Chemistry and Honors Human Anatomy & Physiology. If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. Year – Five Days Per Week – 1.0 Credit (Grade 12)

COURSE DESCRIPTION: Honors Healthcare Concepts and Medical Terminology teaches the language of healthcare while also introducing the student to conceptual learning within the healthcare area. The medical terminology component includes symbols, abbreviations, and acronyms common in a variety of healthcare settings. Students will learn prefixes, suffixes, and root words to help the student build a medical vocabulary. This course also explores professional healthcare roles and responsibilities, communication in healthcare, evidence-based practice, quality and safety, interprofessional collaboration and teamwork, social determinants

Students may elect to earn transferable college credit from Robert Morris University for a fee.

of health and other concepts relevant to those interested in pursuing a career in the health sciences.

<u>1011 – ASTRONOMY</u>

Prerequisite: Biology/Honors Biology, Chemistry/Honors Chemistry, and Algebra II (Concurrent) Semester – 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.

<u> 1014 – METEOROLOGY</u>

Prerequisite: Biology/Honors Biology, Chemistry/Honors Chemistry, and Algebra II (Concurrent) Semester – 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 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.

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.

Year 1	Year 2	Year 3	Year 4
Engineering Graphics	Materials Processing I and II	Advanced Manufacturing (PBL)	Work Release / Internships
			Advanced Robotics (Bots IQ)
Engineering Graphics	Materials Processing I and II	Robotics (Bots IQ)	Work Release / Internships
			Advanced Manufacturing (PBL)

Suggested Manufacturing Pathways

Prerequisites and concurrent requirements for the Manufacturing Pathway:

Course	Academic Year 23-24	Academic Year 24-25	Academic Year 25-56
Engineering Graphics	none	none	none
Materials Processing I and II	Concurrent Engineering Graphics	Completed or Concurrent Engineering Graphics	Engineering Graphics
Robotics (BotsIQ) or Advanced Manufacturing (PBL)	Concurrent Engineering Graphics	Completed or Concurrent Engineering Graphics Or	Completed Engineering Graphics
	Or	Completed or Concurrent Materials Processing I and II	and
	Concurrent Materials Processing I and II		Completed Materials Processing I and II

Suggested Engineering Pathway

The Engineering Pathway provides interested students a path to get accepted to, and succeed in, a college level engineering program. Some courses may be taken concurrently and the pathway can be completed in only two years.

Year 1	Year 2	Year 3	Year 4
Engineering	Introduction to	Engineering	Work Release /
Graphics	Engineering	Capstone	Internships

Prerequisites and concurrent requirements for the Engineering Pathway:

Course	Academic Year 23-24	Academic Year 24-25	Academic Year 25-56
Engineering Graphics	none	none	none
Intro to Engineering	Concurrent Engineering Graphics	Completed or Concurrent Engineering Graphics	Completed or Concurrent Engineering Graphics
Engineering Capstone	Concurrent or completed Physics (any) Or AP Chemistry. And	Concurrent or completed Physics (any) Or AP Chemistry. And	Concurrent or completed Physics (any) Or AP Chemistry. And
	Concurrent Engineering Graphics	Concurrent or completed Introduction to Engineering	Prerequisite: Introduction to Engineering

206 – ARCHITECTURAL DRAFTING I

Prerequisite: None Year - Five Periods Per Week - 1.0 Credit (Grades 9-12)

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 & DESIGN

Prerequisite: None Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

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.

<u>03112 – ENGINEERING GRAPHICS</u> (Replaces CADD 2D, CADD 3Dm, and Additive Manufacturing) *Prerequisite: None Year – Five Periods Per Week – 1.0 Credit (Grades 9-12)*

COURSE DESCRIPTION: This course is focused on introducing students to the many programs engineers use in the field. Skills covered include: CAD applications, computer aided two- and three-dimensional drawing, 3D modeling, and post processing for various manufacturing machines. Students will also be exposed to additive and subtractive manufacturing methods. By the end of class, the student will have a large portfolio of computer aided drawing/models and physical projects.

<u>03113 – MATERIALS PROCESSING I</u> (Replaces Tech. Design and Systems and Physical Technologies) Prerequisite: See Chart Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

COURSE DESCRIPTION: Interested in working in a fablab environment? If that is your interest, then this course is for you. This course focuses on using all the fablab equipment to process various materials. All the power tools will be used to build various projects. Materials to be processed include: wood, plastics, acrylic and metal. Students will also be able to work with available technology to take their project to the next level. This course is a prerequisite to Materials Processing II where we will dive deeper into metalworking and welding as well as other materials.

<u>03114 – MATERIALS PROCESSING II</u> (Replaces Tech. Design and Systems and Physical Technologies) Prerequisite: See Chart Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

COURSE DESCRIPTION: Building on what students learned in Materials Processing I, students dive deeper into more advanced processes. Skills covered include: various forms of welding (MIG, TIG, stick and more), metalworking and cnc processes. Students will also have the opportunity to test to earn industry qualifications in welding. This is a hands-on course with a focus on using all the technology and machinery present in the fablab.

<u>03115 – MAKERLAB</u>

Prerequisite: None Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

COURSE DESCRIPTION: Students interested in getting started with fabrication equipment and programs would benefit from taking Makerlab. In this class students will be exposed to all the technology and equipment that is present in our fablab. Core concepts of this class include: design with various computer programs, prototyping with additive and subtractive machinery, and constructing with all the fablab equipment. This course is a hands-on course which has the student taking home a lot of projects.

<u>03116 – ROBOTICS</u>

Prerequisite: See Chart Year – Five Periods Per Week – 1.0 Credit (Grades 9-12)

COURSE DESCRIPTION: This course is designed to get students involved in designing, creating and competing with a robot in the BotsIQ competition. BotsIQ is a fighting robotic competition in which students will go up against other schools in the state for a chance to win the championship. Students will be using advanced manufacturing techniques including: various cnc machines, 3D printers and other shop equipment. Students will also learn how to use programs to create 3D models and then take those to 3D printers and cnc machines. A course to consider taking along with this is Engineering Graphics.

05036 - INTRODUCTION TO ENGINEERING

Prerequisite: See Chart Year – Five Periods Per Week – 1.0 Credit (Grades 10-12)

COURSE DESCRIPTION: This course provides the student with an overview of the role and functions of the practicing engineer and the tools & technology they use through a combination of lecture and laboratory sessions. Students will be introduced to the history of engineering and the engineering disciplines/subdisciplines. Topics on problem solving, engineering design, technical communication, teamwork, and engineering ethics will be discussed in detail. Wherever applicable, students' theoretical understanding of engineering subject matter will be strengthened through hands-on exercises. Miscellaneous topics will educate students on what four years of engineering education involves.

<u>05033 – ENGINEERING CAPSTONE</u> (Replaces Engineering Design I and Engineering Design II) Prerequisite: See Chart Semester – Five Periods Per Week - .5 Credit (Grades 11 & 12)

COURSE DESCRIPTION: This one semester class provides students the opportunity to learn new content and skills and apply those to a real-world engineering project. Topics of new content and skills will vary based on the project assigned. Students will work in project teams on problems presented by business partners. Working directly with business professionals, the students will research the nature of the problem, design and test solutions, and present their results to the business partners.

784 – PROBLEM SOLVING BY DESIGN

Prerequisite: None 1st Semester Only – Five Periods per Week - .5 Credit (Grades 10-12)

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.

721 - ADVANCED MANUFACTURING & ENGINEERING

Prerequisite: See Chart Year - Five Periods Per Week - 1 Credit (Grades 10-12)

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

COURSE #	SOCIAL STUDIES COURSES
130	Civics 9
132	Honors Civics 9 (WI)
140	World Cultures 10
142	Honors World Cultures 10 (WI)
150	American Cultures 11
216	Honors American Cultures 11 - CHS (WI)
154	AP U.S. History 11 (WI)
160	Econ./Political Science 12
162	Honors Econ./Political Science 12 (WI)
164	AP Economics - CHS (WI)
	(Both AP Macroeconomics & AP Microeconomics)
215	AP/CHS U.S. and AP Comparative Gov. & Politics
219	AP European History - CHS
170	Psychology
04003	AP Psychology
171	Sociology
185	Developmental Child Psychology
190	Leadership Studies I
217	Leadership Studies II - CHS
198	Philosophy
1005	Modern History Through Pop Culture
1006	Applied Positive Psychology

Table 22 - Social Studies Courses

*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 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 (WI)

Prerequisite: In accordance with Prerequisites for Advanced Courses If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. 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 <u>required summer</u> <u>readings and preparation</u> 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 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 overriding 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 (WI)

Prerequisite: In accordance with Prerequisites for Advanced Courses If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. 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 <u>required summer</u> <u>readings and preparation</u> 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 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.

216 - HONORS AMERICAN CULTURES 11 (WI) - CHS

*University of Pittsburgh - College in High School Program Option Prerequisite: In accordance with Prerequisites for Advanced Courses If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. 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 go over 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 <u>required summer</u> <u>readings and preparation</u> 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 U.S. HISTORY 11 (WI)

Prerequisite: In accordance with Prerequisites for Advanced Courses If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. 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 <u>required summer</u> <u>readings and preparation</u> 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.

<u>160 – ECON./POLITICAL SCIENCE 12</u>

Prerequisite: 12th Grade Students 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 ECON./POLITICAL SCIENCE 12 (WI)

Prerequisite: In accordance with Prerequisites for Advanced Courses If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. 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 <u>required summer</u> <u>readings and preparation</u> 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 - CHS (MACROECONOMICS AND MICROECONOMICS) (WI)

Prerequisite: In accordance with prerequisites for advanced course If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. 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.

<u>Microeconomics</u>: 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.

Students may elect, for a fee, to receive transferable college credit from Robert Morris University. (Added to the end of the course description.)

215 - AP U.S. COMPARATIVE AND AP GOVERNMENT & POLITICS - CHS (WI)

*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. If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. 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 <u>required summer</u> <u>readings and preparation</u> 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 - CHS (WI)

*University of Pittsburgh - College in High School Program Option If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. Prerequisite: In accordance with prerequisites for Advanced Courses Year - Five Periods per Week – 1.0 Credit (Grades 11 & 12)

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 <u>required summer</u> <u>readings and preparation</u> 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 Semester - Five Periods Per Week - .5 Credit (Grades 9-12)

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.

04003 – AP PSYCHOLOGY

Prerequisite: In accordance with prerequisites for Advanced Courses If assigned summer work is not fully completed and is not submitted on time, a parent/guardian meeting to discuss the continuation in the course may be scheduled. Year - Five Periods Per Week – 1.0 Credit (Grades 11 & 12)

COURSE DESCRIPTION: The AP Psychology course introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena associated with stitch topics as the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatments of psychological disorders, and social psychology. Throughout the course, students employ psychological research methods, including ethical considerations, as they use the scientific method to evaluate claims and evidence.

171 - SOCIOLOGY

Prerequisite: None

Semester - Five Periods Per Week - .5 Credit (Grades 9-12)

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 Semester - Five Periods Per Week - .5 Credit (Grades 9-12)

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

Prerequisites: No formal prerequisites, however, students should be aware of the independent learning nature of the class, as described below. This course is geared primarily towards those who want to be leaders, or those who aspire to be better leaders.

Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

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.

217 - LEADERSHIP STUDIES II - CHS

*University of Pittsburgh - College in High School Program Option Prerequisites: Completion of Leadership Studies I with an 80% or better. Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

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 selfdiscovery of leadership.

198 - PHILOSOPHY

Prerequisites: None Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

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 Semester – Five Periods Per Week - .5 Credit (Grades 10-12)

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 Semester – Five Periods Per Week - .5 Credit (Grades 9-12)

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.

SPECIAL EDUCATION DEPARTMENT

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- <u>Life Quests</u>: 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 - <u>Work Study</u>: 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.

017 - <u>English Language Learners (ELL)</u>: 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. 428.



South Fayette High School

3640 Old Oakdale Road • McDonald, PA 15057-2580 Phone (412) 221-4542 • Fax (724) 693-9843 • www.southfayette.org Dr. Miller, Ext. 413 Dr. Hartzell, Ext. 242 Mr. Butts, Ext. 265

> **Dr. Michelle M. Miller** Superintendent of Schools

mmmiller@southfayette.org

Dr. Laura M. Hartzell

High School Principal lmhartzell@southfayette.org

Mr. Robert L. Butts

High School Assistant Principal rlbutts@southfayette.org

South Fayette Township High School Course Waiver Form 2023-2024 School Year

This waiver is a contract between the student and parent(s)/guardian(s) and South Fayette Township High School. This waiver will provide for a course placement that supersedes the school's recommendation. Students that complete this waiver understand that this action contains both responsibility and accountability for one's grades and progress. Curricular changes, modifications, and accommodations will not be made for students who complete a waiver for course admission. A waiver does not apply to course prerequisites.

You must submit a separate waiver for each class that you are requesting a waiver for.

<u>Course Waiver Forms may be submitted beginning March 24, 2023, and must be submitted no</u> <u>later than June 2, 2023.</u>

Current Grade Level: (Please check one)

_____ 8 _____ 9 _____ 10 _____ 11

Approved Course Name (Original recommendation): _____

Student Requested Course Name (Name of the course you wish to waive into):

Student, please read and initial on the lines to acknowledge understanding and responsibility:

- _____ The student will exhibit active participation in the class. This includes completing homework, taking notes, and exhibiting efforts commensurate with ability.
- The student must seek help outside the normal classroom meeting time if difficulties or concerns arrive. Tutoring by staff members or peers must be considered.

Please see reverse side~

The student must consider the impact on his/her/their schedule and any grades that will transfer.
If a student request to withdraw from a course for which a waiver has been signed, the following will occur:
During the first week of the course (start of school year or start of semester 2), the course may be dropped without penalty.
After the first week of the course, a "W" symbolizing a withdrawal from the course will be placed on the student transcript.
Beyond the first two weeks of the course, a "WF" symbolizing a withdrawal-fail from the course will be placed on the student transcript.
I have read and understand the information contained in this waiver.
Student Name (Printed)
Student Signature
Date
Email Address
Parent/Guardian Name (Printed)
Parent/Guardian Signature
Date
Parent/Guardian Email Address
Phone number where the student and parent/guardian can both be reached
Office Use Only:
Date Received:
Schedule Change Made By:

School Counselor



<u>Míssíon Statement</u>

In partnership with the community, the mission of the South Fayette Township School District, a leader in innovation, is to elevate academic, artistic, and athletic excellence of the whole learner by inspiring the strength to be dynamic, ethical, and empathetic citizens who flourish in a global society.