

# **Unionville High School**

## COURSE SELECTION GUIDE

### 2020-2021



*Empower each student to succeed in life and contribute to society.*

Unionville High School  
750 Unionville Rd  
Kennett Square, PA 19348

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Mr. James Conley, High School Principal

# Unionville-Chadds Ford School District

## **Board of School Directors**

Rashi Akki  
Elise Anderson  
Victoria Baratta  
Jen Brown  
Thomas Day

Jeff Hellrung  
John Murphy  
Steven Simonson  
Erin Talbert

Student Representative: Winter Elvin, Class of 2020

## **School District Central Administration**

Superintendent..... Dr. John Sanville  
Assistant to the Superintendent..... John Nolen  
Director of Curriculum and Instruction..... Tim Hoffman  
Director of Business and Operations..... Robert Cochran  
Director of Special Education and Pupil Services..... Dr. Leah Reider  
Supervisor of Special Education..... Shannon Brown  
504 Coordinator..... Sabrina Ellwood

## **Unionville High School Administration**

Principal..... James Conley  
Assistant Principal..... Amy Jenkins  
Assistant Principal..... Steve Silva  
Athletic Director..... Pat Crater

## **Charles F. Patton Middle School Administration**

Principal..... Steve Dissinger  
Assistant Principal..... Jessica Knier  
8th Grade School Counselor..... Rachel Saletta

## **Unionville High School Faculty List**

### **STUDENT SERVICES**

Allison Newbrough      School Nurse  
Linda Brodeur-Cangi    Social Worker  
Sarah Graden            Social Worker  
Jess Bogusch            IST Coordinator  
Wendy Farina            School Psychologist  
Sabrina Ellwood        School Psych/504  
Ashley Murphy          Learning-to-Learn

### **SCHOOL COUNSELOR CASELOADS**

<b>2019-2020 Counselor</b>	<b>9th Grade Class of 2023</b>	<b>10th Grade Class of 2022</b>	<b>11th Grade Class of 2021</b>	<b>12th Grade Class of 2020</b>
Miller	A-C	A-C	A-Ch	A- Dao
Findora	D-Har	D-H	Ci-G	Dap-Har
Piccoli	Has-L	I-Mic	H-L	Has-Le
Lyles*	M-N	Mid-O	M-Mc	Lf- Meg
Elfreth	O-Sm	P-SI	Md-Sha	Meh-Sha
Spiegel	Sn-Z	Sm-Z	Shb-Z	Shb-Z

**ACADEMICALLY TALENTED**

Maggie Hunt

**ART**Faith Dilworth\*  
Noelle Porco  
Louis Stamis**BUSINESS APPLICATIONS**Gwen Hicks  
Joe Kilpatrick\*  
John Starkey**DEAN OF STUDENTS**

Patrick Clark

**DRIVER'S EDUCATION**

G. "Buddy" Meredith

**ENGLISH**Amy Ahart\*  
Joseph Ahart  
Ashley Burslem  
Katie DelDotto  
Andy Dippell  
Jessie Findora  
Jennifer Haak  
Keeley Lannon  
Daniel Lipowitz  
Betsy Hickman  
Janet Holguin  
Tim Patton  
Kate Sager**ENGLISH LANGUAGE****LEARNER**

Trish DiFilippo

**FAMILY & CONSUMER****SCIENCE**

Robin Daly\*

**HEALTH & PHYSICAL****EDUCATION**Joe Herman\*  
G. "Buddy" Meredith  
Andrew Moister  
Mandi Quinn**LIBRARY & MEDIA CENTER**

Diane Mustin – Librarian

**MATHEMATICS**Christie Clark  
Loreen Dietz  
Erin DiTeodoro  
Jessica Gigliotti  
Alison Holmes  
Sherri Hwang  
Patrick Kehan  
Kevin Long\*  
Adam Mobley  
Dori Ray  
Jennifer Sarno  
Erika Tessitore  
Julie Toy  
Trevor Tredway**MUSIC**Edward Otto  
Jason Throne\*  
Leo Zumpetta**SCIENCE**Patrisha Burt  
Jeremy Dickson  
Heather Haitz  
Matt Hurray  
Meghan Kanski  
Mark Laciaanca  
Jennifer Liegeot  
Sandy Litvin  
Charles Manning  
Kari Oakes  
Diane Schaffer  
Stephanie Smith  
Diana Tucker  
Doug Vallette\***SOCIAL STUDIES**Darlene Brigance  
Matthew Borger  
Andrew Cordrey  
Christopher Cowles  
John Cranston  
Nick DelDottoAndrew Husband  
Lindsay Iezzi  
Mike Mangan\*  
Natalie Miller  
Tim Murphy  
Cody Stafford  
Paul Wolf**SPECIAL EDUCATION**Laura Berkeihiser  
Rob Brown  
Stephanie Brown\*  
Kevin Brode  
Bethany Clemson  
Erin Curtis  
Kim Edwards  
Nick Eppinger  
Megan Hilbolt\*  
Jennifer Houck  
Sue Matz**TECHNOLOGY &  
ENGINEERING**Mike Berkeihiser\*  
Neil Linkmeyer  
Steve Ortega**WORLD LANGUAGE**Bonnie Bergen-Borda  
Julie Hawkes\*  
Joanna Johnson  
Veronique Liska  
Ryan Mark  
Geoffrey Mills  
Alison Quigley  
Barbara Parris  
Cindy Pisauro  
Heather Weigner

\*Department Chair or Co-Chair



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## PURPOSE

The information provided in the UHS Course Selection Guide is essential for students and parents to understand the academic options and framework used at UHS, and to fully understand your role in the Course Selection process. This guide is designed to support students --together with teachers, counselors, and administration-- develop the best possible program in accordance with the students' interests, needs, and career goals. Please read each section carefully as it represents important information and updates to the course selection process. Selecting courses of study is a serious undertaking and the courses students request has a direct impact on the courses offered the following school year, and ultimately the master schedule.

## GRADUATION REQUIREMENTS

Each student must earn a minimum of 22 credits in grades 9 through 12 and demonstrate proficiency on the Algebra I Keystone Exam, Biology Keystone Exam, and Literature Keystone Exam. All courses have been aligned to the Pennsylvania Academic Standards.

Units of Credits Required per Department:

4	English	0.50	Health
4	Social Studies	0.75	Physical Education
3	Mathematics	0.50	Business Applications
3	Science	6.25	Elective

## CREDIT CALCULATIONS

Credit is determined by the number of days a course meets per 6-day cycle and duration of the course.

With few exceptions, UHS offers:

- 1.0 credit for a course that meets 6/6 days a cycle
- .50 credit for a course that meets 6/6 days a cycle for a semester
- .50 credit for a course that meets 3/6 days a cycle for the entire school year
- .25 credit for a course that meets 3/6 days a cycle for a semester

## GRADE SCALE & GPA CALCULATIONS

A+ = 97 – 100	B+ = 87 – 89	C+ = 77 - 79	D+ = 67 – 69	F = Below 60
A- = 90 – 92	B = 83 – 86	C = 73 – 76	D = 63 – 66	
A = 93 – 96	B- = 80 – 82	C - = 70 – 72	D- = 60 – 62	

Grade Point Average (GPA) calculation only includes credit from courses taken in grade levels 9-12. Any credit earned prior to 9th grade is not calculated in the cumulative GPA. GPA is based on a weighted system. AP and Honors level courses are weighted by adding quality points to the final grade. One quality point is added for AP Courses and .50 quality point is added for honors courses. To calculate a GPA, determine the quality points earned by multiplying the grade value for each course, by the number of credits for that course. Add the quality points, and then divide the total quality points by the total number of credits. See the "UHS Student Handbook" for additional information regarding grading and GPA calculations.

Academic	Honors	AP
A+= 4.3	A+= 4.8	A+= 5.3
A = 4.0	A = 4.5	A = 5.0
A- = 3.7	A- = 4.2	A - = 4.7
B+= 3.3	B+= 3.8	B+= 4.3
B = 3.0	B = 3.5	B = 4.0
B- = 2.7	B- = 3.2	B- = 3.7
C+ = 2.3	C+= 2.8	C+= 3.3
C = 2.0	C= 2.5	C = 3.0
C- = 1.7	C-= 2.2	C- = 2.7
D+= 1.3	D+= 1.8	D+= 2.3
D = 1.0	D = 1.5	D= 2.0
D- = .7	D- = 1.2	D- = 1.7
F = 0	F = 0	F = 0

## IMPORTANT UPDATES FOR 2020-2021

### Curricular Updates and Changes:

UHS is now offering courses in a blended learning format that combines traditional and online instruction to develop personalized learning. With three days in the classroom and three days online, blended learning uniquely provides flexibility in the place, pace, and path of instruction. The course is matched with a traditional course in level of rigor and investment of time. Skills in organization of materials, use of technology, and management of time are essential. The courses being offered in a blended format include:

Accounting 1  
AP Spanish  
AP Statistics  
Biology Honors  
English 11 Honors

Geometry Honors  
Intro to Engineering Design Honors  
Personal Finance  
World History Academic

### New Course Offerings:

Business Department: Accounting II

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## COURSE SELECTION CONSIDERATIONS

Careful course planning is essential when trying to develop the best possible program for each student. Students are expected to read through the content of the course selection guide, including the course descriptions and prerequisites prior to submitting course requests. Selecting a course of study is a serious undertaking and students are more successful when they carefully review the course offerings, communicate with parents, teachers and school counselors with any questions, and consider priorities and extracurricular commitments which impact their daily lives. Additional considerations for students may include:

- Particular academic strengths, weaknesses, interests.
- Past academic performance.
- Demonstrated work ethic and future education and vocational goals.
- Realistic evaluation of time demands from commitments and extracurricular activities.

During the course selection process, students have an opportunity to discuss teacher recommendations with teachers in various departments. Teacher recommendations have been made for courses that are sequential and have prerequisites. Teacher recommendations are based upon student classroom performance to date and are meant to serve as a guide for students when making course requests for the 2020-2021 school year. A teacher recommends placement in a particular course when the student's current performance indicates that the student has the highest chance to be successful. Teachers give serious consideration to these recommendations and criteria include, but are not limited to:

- The students' performance in previous courses.
- The student's attitude toward the work necessary.
- The required skills for the course.
- The student's performance in other "predictors" of success.
- The prerequisites for final placement in the proposed courses.

Teacher recommendations provide valuable feedback and students are strongly encouraged to speak with the teacher if the course recommendation or level differs from the student's intended course request. Final course placements are based on course prerequisites and student's final grades. Please note that all course offerings are subject to cancellation or closing of sections due to staffing, facilities, and enrollment. Students have the option to select alternative electives during the course selection process. When requested electives cannot be scheduled due to a conflict or cancellation of a course, students will be enrolled in alternative elective choices.

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## COURSE SELECTION CONSIDERATIONS FOR RISING 9TH GRADERS

- Students are required to take Health/PE in 9th grade.
- High school credit will be granted only for courses passed while the student is enrolled in classes taken at the high school.

- Courses taken at the middle school may not be repeated at UHS for credit unless the prerequisite to advance was not met.
- Classes should be scheduled according to each student's abilities. Selection of honors level courses should be made with teacher and counselor advice. Course prerequisites must be met for entrance into courses.
- If a student has received reading help in 6th, 7th, or 8th grade, consider taking English First Level and postpone starting a world language.
- Contact your counselor at the Middle School (610-347-2000) with course selection questions.

## COURSE SELECTION CONSIDERATIONS FOR ALL STUDENTS

Many students elect to have a study hall during the day and it serves a different purpose for each student. Study halls provide an opportunity during the day that is different from the traditional time spent on learning in the classroom. Students can work on homework, seek help from teachers, or use the time to destress. Students are strongly encouraged to use the Weekly Time Commitment Chart to evaluate and properly plan for a schedule that realistically accounts for their academic, extracurricular, and personal needs and goals.

Students should plan accordingly during the course request process if they want a study hall in their schedule. Requesting a study hall during course selection ensures it will be accounted for while the master schedule and individual schedules are being created. Every student must request between 5.5 and 7 credits when submitting course requests. Study halls **do not earn credit**, but the time being requested must be included when calculating the total credits being requested. For example, a student who requests Study Hall Fall 6/6 days a cycle and Study Hall Spring 6/6 days a cycle should only request 6 credits.

Period	Time
1	8:00 - 8:49
2	8:53 - 9:38
3	9:42 - 10:27
(%) Lunch & Learn	10:27 - 11:27
6	11:31 - 12:16
7	12:20 - 1:05
8	1:09 - 1:54
9	1:58 - 2:43

## COURSE SELECTION TIMELINE & PROCESS

### **February 13 Course Selection Night for Rising 9th Grade Students and Parents**

Representatives from all UHS departments, TCHS, and Octorara Homeland Security will be there to answer questions for current students.

### **February 14-February 28 Students Complete Online Course Requests in Powerschool**

Students should use this time to evaluate and discuss course selection options and considerations with teachers.

### **March 27-April 3 ADD/DROP Course Requests & Submit Grade Prerequisite Waiver Agreements**

Students can edit request directly in Powerschool- select "Class Registration" and the Pencil icon for the course you want to edit. After **April 3**, course requests can be viewed by selecting **Class Registration- View Future Course Requests**. Students should review course requests and prerequisites in comparison to current academic performance. All edits to course selection must be completed in Powerschool by **April 3 at 3pm**. This is the last opportunity for students to add or drop a course from their course requests, with the exception of course level changes. Examples of edits students can make between **March 27-April 3**:

- drop Photography - add Foods I to course request
- add Engineering I Survey to course request
- change from English 9 Academic to English 9 Honors and submit waiver

Grade Prerequisite Waiver Agreements will be available for submission via a link on the UHS website for students who are requesting a course for which they do not meet the prerequisite. Submitting a Grade Prerequisite Waiver Agreement is a commitment to the course for the duration of the course. Students are encouraged to use the time built into the scheduling process to carefully consider the conditions of waiving into a course and determine if it is in their overall best interest as a student and person. The schedule is built on student requests, therefore, once you are certain of your course requests, you should submit a waiver if necessary.

### **June 1-June 29: Request Course Level Changes and/or Submit Grade Prerequisite Waiver Agreement**

Course requests are tentative and students **MUST** meet the grade prerequisites at the end of this school year to be eligible for certain courses. Students are responsible for checking final grades and course prerequisites for their current course requests. Students who do not meet the prerequisites will be placed into the appropriate course unless a Grade Prerequisite Waiver Agreement is submitted by **June 29**.

Example of course level changes include:

- English 9 Honors to English 9 Academic
- Algebra II Honors to Algebra II Accelerated
- English 9 Academic to English 9 Honors

Submit a [Request for Course Level Change](#) if you want to change the level of a course and meet the prerequisite for this course. Submit a [Grade Prerequisite Waiver Agreement](#) if you want to request a course for which the prerequisite was not met.

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## **GRADE PREREQUISITE WAIVER AGREEMENTS**

Extreme caution should be used if students consider waiving into a higher level course. Waivers are reviewed after the **June 29** deadline and will only be considered if course sections have open seats. Students are committed to the courses requested by **June 29**. Placement in a course, as a result of a waiver, is for the duration of the course. Only students who complete the 1st marking period with a 65% or lower may seek an Administrative Waiver Review for level change consideration.

Administrative Waiver Review Process: Students who finish marking period one with a 65% or lower can request an administrative waiver review. Students are expected to uphold the conditions and expectations of the Grade Prerequisite Waiver Agreement by being actively engaged in the class, completing homework and additional practice as necessary, and seeking additional support through extra help or tutoring. Placement in a course is contingent upon course availability and there is no guarantee that the course level being requested through the Administrative Review Process will be available. If approved for a level transfer, students will be offered a course based on availability, which may differ from the level or option requested. Any change to a course can result in additional and unforeseen schedule changes. Grades earned in the course marking period one will transfer to the new course and be used in calculation of the final grade for the new course.

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## **COURSE CHANGE OR WITHDRAW REQUESTS**

Students are committed to course requests as of **June 29**. Any course request change after **June 29** must be made directly to an administrator. Schedule changes are restricted to improper academic placements or previous course failures.

- Student is a senior not scheduled in a course needed for graduation.
- Student has already earned credit for a course in which he/she is currently scheduled.
- Student does not have the prerequisite(s) for a class listed on his/her schedule.
- Student does not have a full schedule.
- The class listed was not requested by the student.

Failure to complete summer work is not a reason to change a student's schedule. Students are expected to complete assigned summer work for courses selected and it will contribute to a student's course grades. Summer assignments are listed on the UHS website. Any approval to withdraw from a course after the 20th day of the course will be recorded on the official transcript as a WP (withdraw pass) or WF (withdraw fail), contingent upon the percentage grade when the student is withdrawn from the course



## CHESTER COUNTY TECHNICAL COLLEGE HIGH SCHOOL

The Chester County Technical College High School is a joint venture of the Chester County Intermediate Unit and Delaware County Community College. The Chester County Technical College High School offers career and technical programs for high school students; and Delaware County Community College offers associate degree programs to college students. Students spend a half day at Unionville High School and a half day at the Technical College High School. The Technical College High School is located in Penn Township and serves high school students residing in Avon Grove, Kennett-Consolidated, Oxford and Unionville-Chadds Ford School Districts. As a public high school, the Technical College High School is free to high school students residing in these public school districts. Upon high school graduation, students are able to attend 2-year and 4-year colleges.

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### INDEPENDENT STUDY

Independent Study is designed to meet the educational needs of students who are interested in pursuing a course of study beyond the requirements of high school graduation and UHS course offerings. At the high school level, Independent Study is reserved for students who have demonstrated exceptional competence within a given discipline. Students who are interested in undertaking Independent Study must complete an application available from the Counseling Center.

- Independent Study courses are designed as semester courses. Only one Independent Study may be taken for credit by a student each semester, and the maximum value for each Independent Study is .50 credit. A student may earn up to 1 total credit through Independent Study in a school year.
  - No more than two credits may be earned toward **graduation requirements** by any one student through Independent Study during grades 9-12.
  - Independent Study courses cannot be substituted for required courses.
  - The Independent Study Mentor must be a certified teacher approved by the Principal. The teacher's certification must be in the content area that relates to the topic of the Independent Study.
  - The course will appear on the schedule and transcript as Independent Study- Course Department.
  - If the course is not completed by the completion date, an INC will be issued. The grade will change to a letter grade of "F" two weeks after the completion date noted unless your teacher grants an extension due to extenuating circumstances.
  - Independent Study applications must be approved before work on the contract may commence. The start date of the course is determined by the enrollment date. Any withdraw from the course after the 20th day from enrollment will be marked as a WP/WF. See your school counselor for more information.
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### NCAA ELIGIBILITY REQUIREMENTS

In recognition of its responsibility to ensure that student-athletes have every chance to get an education, the National Collegiate Athletic Association (NCAA) has implemented a series of increasingly strict academic standards. A student who wants to compete in either Division I or II sports must complete 16 core academic courses (ten of which must be completed by the end of junior year) and achieve a core-course grade point average and SAT or ACT scores which meet a qualifier index standard as established by the NCAA. The NCAA Eligibility Center will evaluate your academic and athletic experiences based on information you provide through your [eligibilitycenter.org](http://eligibilitycenter.org) account.

#### How and when to register with the NCAA Eligibility Center?

Students who want to be an athlete at either a Division I or II sports must register with the NCAA Eligibility Center. Students can register online at [eligibilitycenter.org](http://eligibilitycenter.org). Students should complete the registration process by the end of junior year in high school. The UHS Counseling Center will submit transcripts to the NCAA Eligibility Center for juniors who are registered with the NCAA as of the last day of that school year. Juniors who have not registered with the NCAA Eligibility Center as of the last day of school must make a request to the UHS Counseling Center directly.

The current list of UHS courses that have been approved by the NCAA can be found on the [eligibilitycenter.org](http://eligibilitycenter.org) website. Click on the Help? link and select "Resources" from the options. Use the CEEB Code 394955 to view the current list. The NCAA Eligibility Center also offers a profile page for students planning to compete at Division III, or students who don't yet know where they want to compete. Your [eligibilitycenter.org](http://eligibilitycenter.org) account or profile page contains all the information you need to begin your NCAA experience. If you have any questions or need more

information, visit the NCAA website for the [Guide for the College-Bound Student-Athlete](#) or see your School Counselor

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## CAREER AND COLLEGE READINESS PORTFOLIO

To help ensure that all students in Pennsylvania are on track for meaningful postsecondary engagement and success, the PA Dept. of Ed has included a measure of students' career exploration, preparation, and readiness. UHS has identified a wide variety of curricular and extracurricular opportunities that students can complete throughout grades 9-11 and incorporate into the Career and College Readiness Portfolio. Students will use Naviance to store individual artifacts. The Career and College Readiness Portfolio- Artifact Checklist is available for viewing on the UHS website, in Naviance, and in the Counseling Center.

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## COURSE LEVEL DESCRIPTIONS

**Advanced Placement** courses provide students with the opportunity to challenge themselves at the highest level. AP courses follow a carefully constructed syllabus that is prescribed by the College Board. Students who complete this course work can opt to take a national exam or complete national portfolio requirements and potentially earn college credits. The curriculum and assessment are based on the level of thinking and the depth of knowledge that is expected from equivalent college courses. All AP science courses include a double lab period and require 8 periods out of a 6-day cycle. **Homework expectations:** In general, an appropriately placed student who meets the prerequisites for an AP course can expect four to five hours of homework a week per class. Students must carefully consider the increase in workload and level of independence required of an AP student, and realistically account for the time needed to manage the homework and preparation.

### Characteristics of AP student:

- Exceptional level of motivation and desire to learn and be challenged by the content material
- Willingness to delve deeply into content, research in a scholarly fashion, and learn in a college-like inquiry based manner
- Prepared to undertake a very demanding workload that involves extensive independent reading, writing, problem solving, and critical thinking
- Motivated to contribute intellectually and creatively
- Demonstrate independence on a consistent basis and learn to think conceptually

### Expectations of a student in an AP course:

- Develops higher-order thinking skills while using an accelerated pace and enriched content
- Contributes intellectually and creatively
- Exhibits a willingness to accept the rigorous and time consuming expectations of the curriculum, including intensive AP summer work requirements (a change of schedule will not be granted due to a student's failure to complete summer work) and completes work at a college level of effort for the duration of the course
- Prepares for the increase in workload and level of independence required of an AP student by realistically accounting for the time commitment necessary to manage all aspects of the course

**Honors level** courses are highly rigorous and provide a high level of difficulty. Selection of an honors level course(s) must be made with great care due to high level of rigorous and time consuming expectations. A considerable amount of outside work is expected. Students must exhibit a willingness to accept the challenge of a rigorous academic curriculum. **Homework expectations:** In general, an appropriately placed student who meets the prerequisites for an Honors level course can expect three to four hours of homework a week per class.

### Characteristics and expectations of an honors level student:

- Demonstrates independence and will learn to think conceptually
- Demonstrates a high level of intellectual curiosity and is motivated and able to work independently
- Committed to completing outside research, nightly assignments, and to developing and discussing material in the class with depth and understanding
- Desires to develop cognitive thought and expression and a deeper examination of concepts with an emphasis on analysis, synthesis, and evaluation will take place

**Accelerated level** courses (previously referred to as Traditional in Math) are academic, college-preparatory classes that follow a demanding curriculum with an emphasis on serious academic studies to help students progress toward meeting the challenges of competitive college work. Accelerated courses move at an extremely

quick pace and students must be motivated and able to work independently. **Homework expectations:** In general, an appropriately placed student who meets the prerequisites for an Accelerated level course can expect two to three of homework a week per class.

**Academic level** courses are college-preparatory courses designed for a student who plans to continue his/her formal education beyond high school. Students must exhibit a willingness to accept the challenge of a rigorous academic curriculum. Students will engage in a variety of activities to improve critical thinking skills. Outside research, homework assignments, and independent projects are frequent requirements in Academic courses.

**Homework expectations:** In general, an appropriately placed student who meets the prerequisites in an Academic level course can expect two to three of homework a week per class.

**First Level** courses follow a challenging curriculum to prepare students for college and/or the workplace. Students enrolled in First Level courses learn through guided instruction that involves reading, writing, problem solving, and development of critical thinking skills. First level courses include strong thinking and study skill components, are aligned to the Pennsylvania Academic Standards and are appropriate for those students who need more intense assistance in particular courses. The pace of instruction is adjusted to meet the needs of the students. Critical thinking skills are emphasized as is the application of skills and strategies. **Homework expectations:** In general, an appropriately placed student who meets the prerequisites in a First Level course should expect approximately one to two hours of homework a week.

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## TERMINOLOGY

**Alternative Electives** are chosen if a student's first choice of electives are not available due to enrollment and/or scheduling conflicts and will be looked at by school counselors and administration as a secondary option to place into a student's schedule.

**Course Prerequisites** are based on historical data and they are intended to guide students when selecting course levels. Please note the prerequisite(s) are the minimum requirement a student needs to register for a course; therefore, students narrowly meeting the prerequisite may find the course challenging.

**Credits** are earned upon successful completion (passing grade) of a course and applied towards the 22 credit minimum needed to graduate. A full-year course earns 1.0 credit (meets 6/6 days all year), a half-year course earns .5 credit (meets 3/6 days all year OR 6/6 days half of the year) and a course meeting 3/6 days half of the year earns .25 credits.

**Electives:** Students are required to earn 22 total credits to graduate, 5.25 of which must be elective credits. Once students fulfill their core requirements in a given department, any additional courses taken within that department count as an elective credit. Additionally, any course in a language, art, technology, computer, music, family and consumer science, etc. are automatically defined as elective courses.

**GPA Scale:** UHS Grade Point Average (GPA) calculations are based on a 4.0 weighted system. AP and Honors Level courses are weighted by adding quality points based on the final grade. One quality point is added for AP courses and .50 quality point is added for Honors courses. See UHS Student Handbook for Grade Scale distribution.

**Blended** is a blended learning experience that combines traditional and online instruction to develop personalized learning. With three days in the classroom and three days online, blended learning uniquely provides flexibility in the place, pace, and path of instruction. The course is matched with a traditional course in level of rigor and investment of time. Skills in organization of materials, use of technology, and management of time are essential. Students taking a blended course will not be permitted to overlap courses. The three day online learning days allow the student and teacher an important opportunity to work collaboratively.

**Lab Fees:** Several courses have lab fees, which are noted in the course description. Any student concerned about the cost of lab fees should see their school counselor.

**Survey** is a scheduling term used to distinguish the duration of a course. Survey courses are typically a semester and provide students with compacted versions of the full year course. For example, Art 3D Design I is a full-year course and Art 3D Survey is a semester course. The intent of survey courses is to cover selected topics from a broader field of knowledge as an introduction to the area of study. Students seeking an in-depth exploration of the subject matter should consider year-long courses.

### WEEKLY TIME COMMITMENT CHART

Use this tool to plan a manageable schedule that accounts for the time required to meet your academic and personal goals.

Students should review the course level descriptions and note the anticipated homework time for each course. These estimates will vary by student and course, and are meant as a guide for appropriately placed students. Students who narrowly meet the prerequisite for a course or waive into a course should expect to spend more time than indicated for the course level. Students are most successful when they plan a realistic schedule that allows for a sufficient challenge while maintaining balance. Students who choose courses for which they do not have the time to devote are under considerable amount of stress, and their academic performance and personal well-being can be compromised. Make informed decisions now as to whether or not you realistically have the time to dedicate to the courses which you have selected.

#### Daily Homework & Study Time Needed for Proposed Classes

Courses Desired	Daily Homework/Study Time	Hours /week

#### Total hours needed for Homework & Study Time

Extra-Curricular Activities: List the time spent in athletics, performing arts, volunteer work, and any clubs or organizations, include travel time to/from all activities.	Hours/ week

#### Total hours for Extra-Curricular Activities

Personal Time: Include work, watching TV, computer/TV time, sleep, socializing, family time, etc.)	Hours/ week
Sleep	8.25hr/day 60
In School	7hr/day 35
<b>Add all shaded boxes together</b>	<b>Total of Committed Hours</b>
<b>Total number of hours in a week</b>	
168	
<b>minus (-) Total number of Committed Hours</b>	
<b>minus (-)</b>	

	<b>Available Time =</b>
<b>March 27-April 3 <u>ADD/DROP Course Requests and SUBMIT Grade Prerequisite Waiver Agreements</u></b>	
<b>June 1-June 29 <u>Request Course Level Changes and/or SUBMIT Grade Prerequisite Waiver Agreement</u></b>	

## ENGLISH DEPARTMENT

**Department Chair: Amy Ahart**

Students must consult the UCFSO website for information regarding summer reading requirements.

*\* NCAA approved*

Courses	Course Descriptions	Prerequisite
<b>English 9 First Level</b> ENG1001 1 credit 6/6 days a cycle Year	English 9 First Level includes the study of specific novels, short stories, poetry, grammar, and vocabulary. While analyzing thematic and literal meanings, as well as literary devices, students will concentrate on attaining the skills needed to reach proficiency on the Keystone Literature exam in 10th grade. The course focuses on the effective use of language for communication, scaffolding skills appropriately for students.	60% in 8th grade English
<b>English 9 Academic</b> ENG1002* 1 credit 6/6 days a cycle Year	English 9 Academic focuses on a variety of literary genres, while analyzing thematic and literal meanings as well as literary devices. This course emphasizes instruction and practice in oral and written composition and also improvement of language skills. Students are challenged to demonstrate skills in a variety of written responses: informational, persuasive, and creative assignments. Basic grammar skills taught in eighth grade are the expected knowledge base. Additional skills will be taught and reinforced. Students are responsible for retaining skills, completing assignments, participating in class, and learning to use MLA format.	60% in 8th grade English
<b>English 9 Honors</b> ENG1003* 1 credit 6/6 days a cycle Year	English 9 Honors is a reading, writing, and grammar intensive course designed for the motivated freshman who has demonstrated a firm working knowledge of the grammar skills taught in 8th grade. Areas of study include extensive investigation of literary devices as well as author motivation and historical context. Students are expected to research, to analyze and to interpret each piece of literature, and to come to class ready to participate in classroom discussions. Students will continue to learn MLA format. Writing expository/informational and persuasive essays is the main focus; students are expected to include literary and research-based evidence in their essays.	80% in 8th grade Honors English or Honors Creative Writing or 90% in 8th grade Core English
<b>English 10 First Level</b> ENG2001 1 credit 6/6 days a cycle Year	English 10 First Level builds on the language arts skills learned in 9th grade. Instruction is designed to reinforce critical thinking skills and improve students ability to organize, learn, and recall information. The curriculum includes various genres of World Literature including poetry, short stories and novels. Students will study grammatical concepts and vocabulary, developing writing skills that can be applied to post-graduate endeavors. The PA state standards will be delivered through the examination of various types of literature from around the world. Students will take the Keystone Literature Exam at the conclusion of this course.	60% in English 9
<b>English 10 Academic</b> ENG2002* 1 credit 6/6 days a cycle Year	English 10 Academic builds on the foundation established in the 9 <sup>th</sup> grade curriculum, which will explore common themes across various genres of World Literature. The curriculum continues to focus on reading, writing and word study in a variety of structured situations. A working knowledge of grammar skills is required and will be formally reinforced. Students are expected to show increasing ability to think independently and to express themselves in oral presentation and written essays. Reading comprehension and analysis are assessed throughout the school year. PA state standards will be reinforced, and students will take the Keystone Literature exam at the conclusion of this course.	60% in English 9 Academic or 90% in English 9 First Level

<p><b>English 10 Honors</b> ENG2003* 1 credit 6/6 days a cycle Year</p>	<p>English 10 Honors builds on the language arts experience of English 9 Honors, with greater breadth and depth. The course focuses on the connection between literature and culture. This course is for the motivated student who reads critically, has a firm working knowledge of grammar skills, demonstrates willingness toward independent thinking and creative expression, understands and makes use of the writing process, and demonstrates competent use of research skills, which will be expanded. PA state standards will be reinforced, and students will take the Keystone Literature exam at the conclusion of this course.</p>	<p>80% in English 9 Honors or 90% in English 9 Academic</p>
<p><b>English 11 First Level</b> ENG3001 1 credit 6/6 days a cycle Year</p>	<p>The English 11 First Level course, based on American Literature, builds on the learning and skills developed in ninth and tenth grades. In the study of various forms of literature, students experience the people, places, ideas, and language of America, and practice grammatical concepts, vocabulary, and writing skills. Those studies will be done through an instructional emphasis on the Core Standards, and students' goal is to become proficient on the Keystone test if not yet mastered.</p>	<p>60% in English 10</p>
<p><b>American Literature 11 Academic</b> ENG3062* 1 credit 6/6 days a cycle Year</p>	<p>American Voices: Study of Literature will be founded on literary analysis skills and influential literature from a variety of American voices, such as African, Asian, Female, Hispanic and Native authors. Rhetorical modes of writing will supplement the course and will be taught through various pieces of the American canon. The grammar component will be geared toward transfer of style and conventions into both written and standardized assessments. Students who want a traditional English course with a balance of reading, writing, and speaking skills should feel comfortable enrolling this course.</p>	<p>60% in English 10 Academic or 90% in English 10 First-Level</p>
<p><b>American Composition 11 Academic</b> ENG3072* 1 credit 6/6 days a cycle Year</p>	<p>American Voices: Study of Composition will be organized by rhetorical modes of writing, such as argumentation, exemplification, narration and research. These types of writing will drive the course and will be taught through various pieces of the American canon. The grammar component will be geared toward transfer of style and conventions into both written and standardized assessments. Both students who already enjoy writing and those looking to improve their writing skills should feel comfortable enrolling in this course.</p>	<p>60% in English 10 Academic or 90% in English 10 First Level</p>
<p><b>English 11 Honors</b> ENG3003* 1 credit 6/6 days a cycle Year</p>	<p>Honors English 11 is a reading and writing intensive course for the highly motivated student willing to assume a rigorous and challenging study of American Literature and culture. The literature is arranged and explored in order of historical events. Appropriately placed students demonstrate independent thinking skills, a solid application of grammar usage, and strong reading comprehension. Creative expression is greatly encouraged. Evaluations are based on lecture, small and large group activities and presentations, individual assignments, readings, quizzes, essays, and tests.</p>	<p>80% in English 10 Honors or 90% English 10 Academic</p>
<p><b>English 11 Honors Blended</b> ENG3003B* 1 credit 6/6 days a cycle Year</p>	<p>Honors English 11 Blended is a reading and writing intensive course for the highly motivated student willing to assume a rigorous and challenging study of American Literature and culture. The literature is arranged and explored in order of historical events. Appropriately placed students demonstrate independent thinking skills, a solid application of grammar usage, and strong reading comprehension. Creative expression is greatly encouraged. Evaluations are based on lecture, small and large group activities and presentations, individual assignments, readings, quizzes, essays, and tests.</p> <p>Blended learning combines traditional and online instruction to develop personalized learning. With three days in the classroom and three days online, blended learning uniquely provides flexibility in the place, pace, and path of instruction. The course is matched with a traditional course in level of rigor and investment of time. Skills in organization of materials, use of technology, and management of time are essential.</p>	<p>80% in English 10 Honors or 90% English 10 Academic</p>

<p><b>AP English Language &amp; Composition</b> ENG3004* 1 credit 6/6 days a cycle Year</p>	<p>AP English Language and Composition is a college-level course that facilitates higher-level reading and writing skills. Students work in a variety of disciplines and rhetorical contexts, studying prescriptive grammar concepts, writing in the four rhetorical modes of discourse, analyzing professional writing models, and producing essays informed by these models. Students practice stylistic techniques that are the result of careful syntactical choices and precise diction. The aim of the course is to develop college-level reading and writing skills adaptable to a variety of occasions and needs. Students are expected to take the AP Examination in May.</p>	<p>85% in English 10 Honors or 93% in English 10 Academic</p>
<p><b>English 12 First Level</b> ENG4001 1 credit 6/6 days a cycle Year</p>	<p>English 12 First Level provides a comprehensive reading and writing study, along with effective cover letter and resume writing instruction. Students will work with approximately one novel per marking period to improve critical reading skills, writing analytical essays and a research paper. Integrated into this course are projects requiring group work, independent work, and practical application. Thinking skills for this level are also incorporated to ensure greater success and skill development for the students. The course is designed to prepare both students planning to immediately join the workforce and those intending to go to college.</p>	<p>60% in English 11</p>
<p><b>Comparative Lit 12 Academic</b> ENG4022* 1 credit 6/6 days a cycle Year</p>	<p>Comparative Literature 12 Academic will examine the storytelling forms both visual and written by finding parallels between classic British literature and modern film. Students will utilize practice and implement various storytelling forms through writing and technology while utilizing mentor texts and films. Students will develop research and analytical skills by examining these texts and films, making connections between written and visual form, and evaluating the effects artists decisions have on storytelling, theme, and meaning. Students who want to analyze both written texts and film should feel comfortable enrolling in this course.</p>	<p>60% in English 11 Academic or 90% in English 11 First-Level</p>
<p><b>Conflict Literature 12 Academic</b> ENG4032* 1 credit 6/6 days a cycle Year</p>	<p>Conflict Literature 12 Academic explores how literature is an agent of social change and the fundamental voice of society that expresses the human condition. It reflects the world, and in doing so, affects its development. However, most importantly, literature gives power to the individuals within the masses and a voice to be heard. Students will examine and analyze multiple fiction and nonfiction texts, including classic British literature and modern writing, to understand the basic dynamics of literature, society, and power. In addition, students will integrate research and public speaking skills, along with rhetorical devices, in projects and presentations that demonstrate personal, social, and civic awareness for the purpose of persuading an audience. Students who want a traditional English course with a balance of reading, writing, and speaking skills should feel comfortable enrolling in this course.</p>	<p>60% in English 11 Academic or American Literature or 90% in English 11 First-Level</p>
<p><b>English 12 Honors</b> ENG4003* 1 credit 6/6 days a cycle Year</p>	<p>English 12 Honors is a reading and writing intensive course designed for the highly motivated senior willing to assume a rigorous and challenging study of American, British, and World literature. This course will examine works of the imagination--epic poems, novels, short stories, plays, and nonfiction essays. In this course students will, through extensive research and close literary analysis, explore ideas and formulate assertions. Each semester, students will complete essays and creative works. In addition, students will give oral presentations and write research papers. Honors English 12 gives students a deeper understanding of complex aspects of literature and the English language and its relevance to contemporary issues.</p>	<p>70% in AP English Lang &amp; Comp or 80% in Eng 11 Honors or 90% in English 11 Academic</p>
<p><b>AP English Literature &amp; Composition</b> ENG4004* 1 credit 6/6 days a cycle Year</p>	<p>AP English Literature and Composition provides an intensive and rigorous study of works of literary merit across various genres and time periods. Through this course, students will learn the skills of literary analysis and critical writing, extending their awareness and appreciation of language and structure. Harkness discussion, Socratic seminar, analytical writing, oral presentations, and deep reading are at the core of the course. Students will also complete the requisite senior research paper during the year. Students gain a working knowledge of literary terminology, scholarly criticism, advanced vocabulary, and mature writing skills. The course is open to students who are willing to engage in the scholarship, reading, conversing, and writing the class entails. Students are expected to take the AP English Literature Examination in May.</p>	<p>80% in AP Lang. &amp; Comp or 85% English 11 Honors or 93% in English 11 Academic</p>

<b>Creative Writing</b> ENG2012* .5 credit 6/6 days a cycle Semester 10th,11th,12th	This standard-based writing course is designed to improve the student's writing ability. Through a variety of writing assignments including short stories, poetry, and/or creative nonfiction, students will learn to express their ideas with greater clarity. Writing is shared with the class and peer editing is emphasized. Class discussion is geared to sharpen listening skills and critical thinking. Writing includes journals, narratives, editorials, short stories, and a children's story.	
<b>Public Speaking</b> ENG2022* .5 credit 6/6 days a cycle Semester 10th,11th,12th	Public Speaking focuses on delivery methods such as eye contact, voice, and body language in order to deliver a variety of speeches. When preparing for informative, persuasive, and entertaining speeches, students will practice the skills of organizing, developing, introducing, and concluding ideas. Practice will be focused on public speaking skills that are specific and necessary for a variety of different settings.	

## SOCIAL STUDIES DEPARTMENT

**Department Chair: Mike Mangan**

*\*NCAA approved*

Courses	Course Descriptions	Prerequisite
<b>Western Civilization First Level</b> SS1001 1 credit 6/6 days a cycle Year	Western Civilization focuses on the development of traditions, values and cultures associated with major historical topics. This "Survey of History" course covers Greece, Rome, Middle Ages, Renaissance and Reformation, Absolutism, Enlightenment, French Revolution, Industrial Revolution, Nationalism, Imperialism, and WWI. Each unit utilizes a variety of activities that require thinking skills ranging from recognition, recall, comprehension, and organization of facts and ideas. The pace of this course is specifically designed to meet students' needs.	60% in 8th grade Social Studies
<b>Western Civilization Academic</b> SS1002* 1 credit 6/6 days a cycle Year	Western Civilization Academic focuses on the development of traditions, values and cultures associated with major historical topics. This "Survey of History" course covers Greece, Rome, Middle Ages, Renaissance and Reformation, Absolutism, Enlightenment, French Revolution, Industrial Revolution, Nationalism, Imperialism, and WWI. Each unit utilizes a variety of activities that require thinking skills ranging from recognition, recall, comprehension, and organization of facts and ideas.	60% in 8th grade Social Studies
<b>Western Civilization Honors</b> SS1003* 1 credit 6/6 days a cycle Year	Western Civilization Honors focuses on the development of Western Civilization including the traditions, values and cultures associated with major historical topics. This Survey of History covers: Greece, Rome, Middle Ages, Renaissance and Reformation, Absolutism, Enlightenment, French Revolution, Industrial Revolution, Nationalism, Imperialism, and WWI. Students will be challenged in a variety of ways and will be required to use higher level, critical thinking skills and strategies including, problem solving, synthesis, and evaluation. Superior reading comprehension and strong writing skills are necessary for students' success in this course.	90% in Honors Social Studies or 93% in Core Social Studies or 90% in Geography
<b>World History First Level</b> SS2001 1 credit 6/6 days a cycle Year	World History's primary emphasis is on the development of non-western cultural regions, and focuses on both chronological periods and broad themes. The course helps students see relationships between the regions of the world during various time periods and understand commonalities in their development over time. The pace of this course is specifically designed to meet students' needs.	60% in 9th grade Social Studies
<b>World History Academic</b> SS2002* 1 credit 6/6 days a cycle Year	World History's primary emphasis is on the development of non-western cultural regions, and focuses on both chronological periods and broad themes. The course helps students see relationships between the regions of the world during various time periods and understand commonalities in their development over time.	60% in 9th grade Social Studies
<b>World History Academic Blended</b> SS2002B* 1 credit 6/6 days a cycle Year	World History's primary emphasis is on the development of non-western cultural regions, and focuses on both chronological periods and broad themes. The course helps students see relationships between the regions of the world during various time periods and understand commonalities in their development over time.  Blended learning combines traditional and online instruction to develop personalized learning. With three days in the classroom and three days online, blended learning uniquely provides flexibility in the place, pace, and path of instruction. The course is	60% in 9th grade Social Studies



	matched with a traditional course in level of rigor and investment of time. Skills in organization of materials, use of technology, and management of time are essential.	
<b>World History Honors</b> SS2003* 1 credit 6/6 days a cycle Year	World History's primary emphasis is on the development of non-western cultural regions, and focuses on both chronological periods and broad themes. The course helps students see relationships between the regions of the world during various time periods and understand commonalities in their development over time. Students choosing this course level should have strong reading comprehension skills and an interest in social studies.	80% in Western Civilization Honors or 90% in Western Civilization Academic
<b>AP World History</b> SS2004* 1 credit 6/6 days a cycle Year	The AP World History course is offered for 10th graders with the exceptional ability, motivation, and willingness to accept the challenge of a college-level social studies course. Superior reading comprehension and analytic skills are essential prerequisite skills required for students considering this level. The purpose of the AP World History course is to develop greater understanding of the evolution of global processes and contacts, in interaction with different types of human societies. This understanding is advanced through a combination of selective factual knowledge and appropriate analytical skills. The course highlights the nature of changes in international frameworks and their causes and consequences, as well as comparisons among major societies. The course emphasizes relevant factual knowledge deployed in conjunction with leading interpretive issues and types of historical evidence. The course builds on an understanding of cultural, institutional, and technological precedents that, along with geography, set the human stage. Periodization, explicitly discussed, forms an organizing principle for dealing with change and continuity throughout the course. Specific themes provide further organization to the course, along with the consistent attention to contacts among societies that form the core of world history as a field of study. The course is designed to prepare students for the AP World History Exam in May. There is a summer assignment requirement for this course.	85% in Western Civilization Honors and English 9 Honors or 93% in Western Civilization Academic and English 9 Academic
<b>U.S. History &amp; Cultures First Level</b> SS3001 1 credit 6/6 days a cycle Year	U.S. History & Cultures First Level surveys U.S. historical and cultural developments beginning with an overview of early American political and cultural conditions from 1607-1919. Emphasis is placed on the role of government, foreign policy, and current connections. In-depth units of study include: The 1920s, the Great Depression, World War II, the Aftermath of World War II, Social Responsibility (1961-69), Civil Rights, the Vietnam War Era, the Era of Social Action (1961-73), the Age of Limits, Modern Issues, and the recent presidencies. The pace of this course is specifically designed to meet students' needs.	60% in 10th grade Social Studies
<b>U.S. History &amp; Cultures Academic</b> SS3002* 1 credit 6/6 days a cycle Year	U.S. History & Cultures Academic surveys U.S. historical and cultural developments beginning with an overview of early American political and cultural conditions from 1607-1919. Emphasis is placed on the role of government, foreign policy, and current connections. In-depth units of study include: The 1920s, the Great Depression, World War II, the Aftermath of World War II, Social Responsibility (1961-69), Civil Rights, the Vietnam War Era, the Era of Social Action (1961-73), the Age of Limits, Modern Issues, and the recent presidencies.	60% in 10th grade Social Studies
<b>U.S. History &amp; Cultures Honors</b> SS3003* 1 credit 6/6 days a cycle Year	U.S. History & Cultures Honors surveys historical and cultural developments beginning with an overview of early American political and cultural conditions from 1607-1919. Emphasis is placed on the role of government, foreign policy, and current connections. In-depth units of study include: The 1920s, the Great Depression, World War II, the Aftermath of World War II, Social Responsibility (1961-69), Civil Rights, the Vietnam War Era, the Era of Social Action (1961-73), the Age of Limits, Modern Issues, and the recent presidencies. Students will use a variety of thinking skills in their examinations. Students choosing this higher level should have an interest in social studies and be prepared to challenge themselves in higher level thinking.	75% AP World History or 80% in World History Honors or 90% in World History Academic

<p><b>AP US History</b> SS3004* 1 credit 6/6 days a cycle Year</p>	<p>The AP United States History course provides the opportunity for highly motivated students with a learning experience equivalent to that obtained in most college introductory United States History courses. AP US History is a concepts course based on the seven course themes of geography and the environment, migration and settlement, work, exchange and technology, culture and society, American and national identity, politics and power, and America in the world. Historical thinking skills stressed throughout the course are argumentation, use of relevant evidence, causation, continuity and change over time, periodization, compare and contrast, contextualization, interpretation, and synthesis. Students are expected to use research skills daily, to read and comprehend a college level text daily, and write above grade level essays for each of nine units of content. Extensive amounts of higher level reading are required during this course. The goal of AP United States History is to help students organize and comprehend factual materials and then be able to establish the context, importance, and significance of specialized interpretive problems. This course emphasizes college level reading and writing, therefore it is strongly advised that students prepare for this course by taking 10th grade Honors English and 10th grade Honors Cultural Studies, or AP World History. Students who take the AP United States History course are expected to take the Advanced Placement examination in May.</p>	<p>80% in AP World History or 85% in World History Honors and English 10 Honors or 93% in World History Academic and English 10 Academic</p>
<p><b>Civics &amp; Econ: 21st Century First Level</b> SS4001 1 credit 6/6 days a cycle Year</p>	<p>Citizenship in the 21st Century First Level is a course designed to provide students with the knowledge, skills, and values they need to be more engaged citizens in the local, state and national communities. The course is tailored to engage seniors and show how government and economics is applicable to their lives, including good decision-making. The course includes a final project will allow students to demonstrate their role in the community, both political and economic, applying the principles and ideas from the course. Students will be engaging with their local communities in order to work toward these goals. The pace of this course is specifically designed to meet students' needs.</p>	<p>60% in 10th or 11th Grade Social Studies</p>
<p><b>Civics &amp; Econ: 21st Century Academic</b> SS4002* 1 credit 6/6 days a cycle Year</p>	<p>Citizenship in the 21st Century Academic is a course designed to provide students with the knowledge, skills, and values they need to be more engaged citizens in the local, state and national communities. The course is tailored to engage seniors and show how government and economics is applicable to their lives, including good decision-making. The course includes a final project will allow students to demonstrate their role in the community, both political and economic, applying the principles and ideas from the course. Students will be engaging with their local communities in order to work toward these goals.</p>	<p>60% in 11th grade Social Studies</p>
<p><b>AP Comparative Government &amp; Politics</b> SS4004* 1 credit 6/6 days a cycle Year</p>	<p>AP Comparative Government &amp; Politics is the equivalent of an introductory level college course in political science and is conducted as a seminar involving student presentations, lectures, discussions, and debates. A variety of readings supplement the text and analytical writing skills, applicable to any college-level history or social science courses will be emphasized. During the first marking period, the focus is on United States government and the intellectual framework of comparative politics, including vocabulary, theoretical models and concepts of political organization, processes and policies. The remaining part of the course concentrates on comparisons of concrete systems of government, including Great Britain, Russia-USSR, China, Mexico, Iran, Nigeria, and the European Union. Controversial domestic and foreign economic and political policies will be discussed and debated. Students enrolled in this course are encouraged to take the AP Comparative Government &amp; Politics examination administered in May.</p>	<p>80% in AP United States History or 85% in US History and Culture Honors or 93% in US History and Culture Academic</p>
<p><b>AP Economics</b> SS4014* 1 credit 6/6 days a cycle Year</p>	<p>AP Economics is the equivalent of an entry level college course in microeconomics and macroeconomics. One semester is devoted to an introduction to basic economic concepts and reasoning and microeconomic topics, which include the structure and function of markets, the theory of the firm, product market models, the factor market, the role of government in the economy, and international trade. The other semester focuses on macroeconomics, the study of economic systems, including measuring economic performance, aggregate supply and aggregate demand, monetary policy, monetary and fiscal stabilization policies, schools of macroeconomic thought, and a reexamination of international trade. Emphasis is placed on the graphing and the application of economic principles and theories to analyze international, national, and</p>	<p>80% in AP United States History or 85% in US History and Culture Honors or 93% in US History and Culture Academic</p>

	local events and trends. Students can expect a course that is rigorous, including extensive reading and independent analytical thinking. Students have frequent opportunities to generate solutions to real and hypothetical economic problems, and to employ written and oral discourse supported by graphs to illustrate the logic of their conclusions. A summer assignment is required for all students who enroll in this class and due the first day of class. Students enrolled in this course are encouraged to take the Advanced Placement Micro and Macro examinations administered in May.	
<b>AP US Government</b> SS4024* 1 credit 6/6 days a cycle Year	AP US Government is the equivalent of an entry level college course in political science. It is designed to encourage students to develop critical perspectives on American politics and government. Students will develop knowledge of the structure of American government and institutions interest in public issues, and understand the groups, beliefs, and ideas that influence public policy decision making. It involves the study of general concepts used to interpret American politics and the analysis of specific case studies. Emphasis is placed on discussion and a critical review of a myriad of issues. Students are expected to have strong reading comprehension skills and organizational skills. Students are expected to read college-level texts and supplemental research, and apply these findings to current governmental policies. Areas of study include the structure of American government, public opinion and political participation, the influence of interest groups on policy, political parties and campaigns, presidential elections, and the structure and powers of the three branches of government. Students are also expected to fulfill political activism hours as well. Students enrolled in this course are encouraged to take the Advanced Placement U.S. Government examination administered in May. A summer assignment will require you to watch political shows and read news articles to review current events. An informational handout detailing specific instructions will be presented at a meeting in June prior to the summer break.	80% in AP United States History or 85% in US History and Culture Honors or 93% in US History and Culture Academic
<b>AP Psychology</b> SS2014* 1 credit 6/6 days a cycle Year 10th,11th,12th	AP Psychology offers qualified students an elective course that is equivalent to an introductory college course in psychology. The course is designed to introduce students to the systematic and scientific study of human behavior and mental processes. Students are exposed to psychological facts, principles, and phenomena associated with each of the major subfields within psychology, including the ethics and methods psychologists use in the practice of their science. It is highly recommended that a student completes advanced coursework in another social studies class (Honors or AP) prior to taking this course. This would provide the student with the necessary experience in rigor, motivation, and discipline needed to complete course assignments and increase their likelihood for success in the course. An interest in the discipline is necessary for thoughtful examination and class discussion.	80% in last year's AP Social Studies or 85% in last year's Honors Social Studies or 93% in last year's Academic Social Studies

## SCIENCE DEPARTMENT

Department Chair: Doug Vallette

\*NCAA approved

Courses	Course Descriptions	Prerequisite
<b>Global Science First Level</b> SC1001* 1 credit 6/6 days a cycle Year	Global Science First Level teaches principles of matter and energy, as well as a basic understanding of ecology and the environment. This course will help build the skills necessary for a seamless transition into Biology First Level in 10th grade. This course will complement an Algebra IA/B First Level course or Algebra I Academic course, providing appropriate reinforcement of these concepts as needed. There is not an end of year Keystone exam in this course. Students who take this class will take the required Keystone exam after completing biology in 10th grade. Students can expect 1-2 hours of homework per week.	We recommend that students enrolled in Algebra IA First Level or Algebra IB First Level enroll in Global Science.

<p><b>Biology I Academic</b> SC1002* 1 credit 6/6 days a cycle Year</p>	<p>Biology I Academic is a laboratory-oriented course designed for students who are continuing their education beyond high school. Class activities are based on laboratory experiences, inquiry, and analytical thinking. Integration of previous coursework in science and math is expected, and effective written communication is emphasized in the form of formal lab reports. The textbook integrates on-line activities into every unit. These enhance the overall learning experience. An appropriately placed student should expect 2-5 hours of homework over the period of a week, depending on the topic. [Note: Students enrolling in Algebra IA or IB First Level should request Global Science First Level.]</p>	<p>Concurrent enrollment in Algebra I Academic or higher and 70% in 8th grade science or 80% in Global Science (waiver not allowed if coming from Global Science)</p>
<p><b>Biology I Honors</b> SC1003* 1 credit 6/6 days a cycle Year</p>	<p>Biology I Honors is designed to be an interactive experiential treatment of basic biological principles and concepts. The course relies heavily on an inquiry- based foundation in its instruction. Students should expect to be challenged mentally on a regular basis. Assessment includes the application of knowledge to new situations. This course is intended to prepare highly motivated students for their future coursework in science, including a second year of biology and/or other advanced level science courses. The course employs a molecular approach to exploring the various prevailing themes of life science. Emphasis is placed on higher level thinking skills, laboratory investigations and student enrichment activities. Open-ended assignments and written communication are emphasized through formal laboratory reports. Students are expected to take an active part in classroom and lab discussions and regularly contribute to the enhancement of the course. An appropriately placed student should expect 3-6 hours of homework/independent study over the period of a week, depending on current topic.</p>	<p>93% in 8th grade Core Science or 85% in 8th grade Honors Core Science</p>
<p><b>Biology I Honors Blended</b> SC1003B* 1 credit 6/6 days a cycle Year</p>	<p>Biology I Honors is designed to be an interactive experiential treatment of basic biological principles and concepts. The course relies heavily on an inquiry- based foundation in its instruction. Students should expect to be challenged mentally on a regular basis. Assessment includes the application of knowledge to new situations. This course is intended to prepare highly motivated students for their future coursework in science, including a second year of biology and/or other advanced level science courses. The course employs a molecular approach to exploring the various prevailing themes of life science. Emphasis is placed on higher level thinking skills, laboratory investigations and student enrichment activities. Open-ended assignments and written communication are emphasized through formal laboratory reports. Students are expected to take an active part in classroom and lab discussions and regularly contribute to the enhancement of the course. An appropriately placed student should expect 3-6 hours of homework/independent study over the period of a week, depending on current topic.</p> <p>Blended learning combines traditional and online instruction to develop personalized learning. With three days in the classroom and three days online, blended learning uniquely provides flexibility in the place, pace, and path of instruction. The course is matched with a traditional course in level of rigor and investment of time. Skills in organization of materials, use of technology, and management of time are essential.</p>	<p>93% in 8th grade Core Science or 85% in 8th grade Honors Core Science</p>
<p><b>Biology I First Level</b> SC2001 1 credit 6/6 days a cycle Year</p>	<p>Biology I First Level presents biological concepts in an easy-to-read text and lab book. Topics and labs are applicable to everyday situations. Student activities are designed to enhance motivation and reinforce concepts. An appropriately-placed student should expect 1 - 2 hours of homework over the period of a week.</p>	<p>60% in Global Science</p>

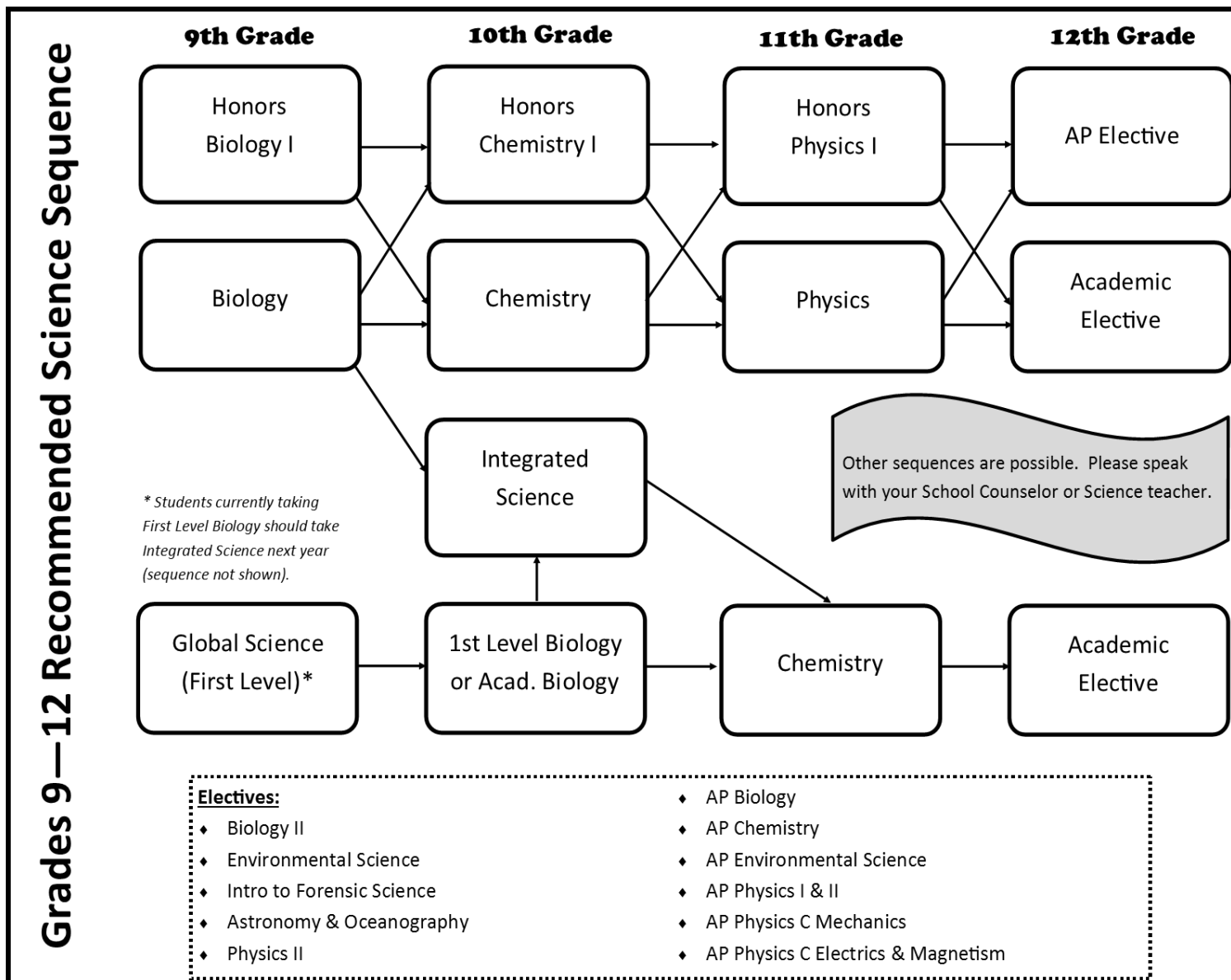
<p><b>Chemistry I Academic</b> SC2002* 1 credit 6/6 days a cycle Year</p>	<p>Chemistry I Academic is a laboratory course is designed for students who are continuing their education beyond high school. The fundamental concepts of chemistry are presented through demonstrations, laboratory experiments, classroom discussions, and cooperative learning activities. Emphasis is placed on the descriptive study of matter and its changes. Units include, matter, periodic table, nomenclature, chemical reactions, the mole, stoichiometry, energy, bonding, gases, and solutions. Students will learn to integrate their algebra understanding and their scientific thinking in this course. An appropriately placed student should expect an average of three hours of homework per week in the form of projects, test preparation, laboratory reports, and concept practice.</p>	<p>Math Prereq: 90% in Algebra I B First Level (cannot be waived) or 80% in Algebra I Academic or 70% in Algebra I Accelerated AND Science Prereq: 80% in either Biology First Level or Integrated Science or 70% in Biology I Academic or 60% in Biology I Honors</p>
<p><b>Chemistry I Honors</b> SC2003* 1 credit 6/6 days a cycle Year</p>	<p>Chemistry I Honors is designed as an inquiry approach to chemistry. Fundamental concepts are discovered through the use of problem solving and open-ended questioning in the laboratory, and in class discussion. Emphasis is placed on quantitative relationships and the careful collection, recording and interpretation of data. This course is recommended to students interested in taking AP Chemistry. Disciplined work habits are a necessity to succeed in this accelerated math-based chemistry course. An appropriately placed student should expect an average of four hours of work per week in the form of projects, test preparation, lab reports, and homework.</p>	<p>Math Prereq:: 90% in Algebra I Accelerated or 85% in Algebra 1 Honors AND Science Prereq: 90% in Biology I Academic or 80% in Biology I Honors</p>
<p><b>Integrated Science First Level*</b> SC3001 1 credit 6/6 days a cycle Year</p>	<p>Integrated Science is designed as an introductory course in the principles of physics and chemistry. It is a laboratory based course that uses real-world examples to lay a foundation for the understanding of other science courses in high school. An appropriately-placed student should expect 1-2 hours of homework over the period of a week.</p>	<p>60% in Biology First Level or Biology I Academic but not yet completed Algebra I Academic</p>
<p><b>Physics I Academic</b> SC3002* 1 credit 6/6 days a cycle Year</p>	<p>Physics I Academic is a laboratory course designed for students who are continuing their education beyond high school. Due to the nature of this course, students who will be concurrently enrolled in Trigonometry &amp; Analysis or beyond will be more appropriately placed in Honors Physics rather than Academic Physics. An appropriately-placed student should expect 2 hours of homework over the period of a week.</p>	<p>Math Prereq: 70% in Algebra I Academic or 60% in Algebra I Accelerated or Honors AND Science Prereq: 70% in Chemistry Academic or 60% in Chemistry I Honors</p>
<p><b>Physics I Honors</b> SC3003* 1 credit 6/6 days a cycle Year</p>	<p>Physics I Honors serves to develop skills in quantitative problem solving and laboratory methods. The course concentrates on mechanics, but also explores waves, thermodynamics, optics and sound, electricity, magnetism, and modern physics. Trigonometry and algebra skills are integrated together with scientific thinking, giving the student a stronger basis in both science and mathematics. An appropriately-placed student should expect 3 hours of homework over the period of a week.</p>	<p>Math Prereq: Current enrollment or completion of either Trigonometry and Analysis Accelerated or Honors Advanced Math AND Science Prereq: 90% in Chemistry or 80% in Honors Chemistry</p>

<p><b>AP Physics C: Mechanics</b> SC3004* 1 credit 6/6 days a cycle Plus 2/6 days a cycle for labs Year</p>	<p>AP Physics C: Mechanics is designed for the highly-motivated student considering a major in physics, engineering or other physical science and who wishes to possibly receive a college credit for work completed in high school. This first-year course in physics includes the content of the AP Physics C-Mechanics exam. Topics include the study of motion and force, work and energy, rotational dynamics, gravity, and oscillations. Students should be able to apply the concepts they are learning in calculus to the new topics they are learning in this course. This course does not cover all topics assessed on the SAT-II Physics Subject test. An appropriately placed student can expect 2-4 hours of work per week.</p>	<p>Math Prereq: Current enrollment or completion of Calculus Accelerated or AP Calculus AND Science Prereq: 83% in Honors Chemistry or Honors Physics</p>
<p><b>AP Physics C: Electricity &amp; Magnetism</b> SC4004* 1 credit 6/6 days a cycle Plus 2/6 days a cycle for labs Year</p>	<p>AP Physics C: Electricity &amp; Magnetism is a second year course in physics, designed for the highly motivated student considering engineering, physics, or other physical sciences. The content of this course builds on concepts of honors physics or AP Physics C Mechanics. Topics include electrostatic forces and fields, magnetism and electromagnetic induction, the theory behind electrical components, analysis of DC and AC circuits, and electromagnetic waves as a model for light. This course does not cover all topics assessed on the SAT-II Physics Subject test. An appropriately placed student can expect 2 to 4 hours of homework a week, including work on the online Webassign platform.</p>	<p>Math Prereq: Current enrollment in Calculus Accelerated or AP Calculus AND Science Prereq: 90% in Physics I Honors or 70% in AP Physics I</p>
<p><b>Physics II Academic</b> SC4002* 1 credit 6/6 days a cycle Year</p>	<p>Physics II Academic is for the student who has taken Academic or Honors Physics and would like to learn more Physics content at the academic level. The course will cover topics that were not addressed in Academic Physics. Topics include forces involved in flight, properties of light including refraction and lenses, wave behavior, sound, electricity and magnetism, energy and the environment, and topics from modern physics.</p>	<p>70% in Physics I Academic or 60% in Physics I Honors</p>
<p><b>Biology II Academic</b> SC3012* 1 credit 6/6 days a cycle Year</p>	<p>Biology II Academic is an elective course is designed for students interested in continuing their study of biological sciences. Topics for study include: experimental design, microbiology, anatomy, physiology and biochemistry. Time in class is spent conducting lab activities (including student-designed experiments), recitation and lecture.</p>	<p>70% in Biology I Academic or Honors AND 75% in Chemistry Academic or 70% in Chemistry I Honors</p>
<p><b>AP Biology</b> SC3014* 1 credit 6/6 days a cycle Plus 2/6 days a cycle for labs Year</p>	<p>AP Biology is designed for students who wish to prepare for the Advanced Placement (AP) test in Biology. Course content is consistent with the syllabus for AP Biology prepared by the College Board. The background for the course is provided by the text, Biology (Campbell and Reece, c. 2011, ed. 9). Approximately 28 chapters are covered during the school year, and students are expected to read approximately six chapters during the preceding summer. Time in class is devoted to experimental work (including the 13 required laboratory experiences described in the College Board AP syllabus), recitation, and lecture. Students are expected to: exhibit a high degree of self-motivation; be capable of integrating coursework in math, chemistry and physics; and demonstrate effective oral and written communication skills. Students electing this course are expected to take the AP Biology test, and typically spend between .5 and .75 hr/night preparing for class.</p>	<p>90% in Biology I Academic or 80% in Biology I Honors AND 85% in Chemistry Academic or 80% in Chemistry I Honors</p>
<p><b>Environmental Science Academic</b> SC3022* 1 credit 6/6 days a cycle Year 11th, 12th</p>	<p>Environmental Science Academic is based on the premise that man is a steward of his environment. This elective course allows students of all academic levels to recognize man's waste and exploitation of his natural surroundings. It also stimulates discussion leading to possible answers remedying these conditions. The topics of study are: hydrology, nuclear energy, air pollution, thermal pollution, noise pollution, division of natural resources, wildlife management, hunting as a conservation tool, edible plants, climates (past, present and future). Projects and presentations are common and allow students to plan out their homework on timelines.</p>	
<p><b>AP Environmental Science</b> SC3024* 1 credit 6/6 days a cycle Plus 2/6 days a cycle for labs Year</p>	<p>The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. As a college-level preparatory course, intensive reading and preparation outside of class is expected. Students who take this course are expected</p>	<p>Math Prereq: 70% in Algebra II (Accelerated or Honors) or 80% in Algebra II Academic OR 90% Honors Geometry or</p>

11th, 12th	to take the AP exam. An appropriately placed student can expect approximately 4 hours of homework/week.	93% in Geometry Accelerated (Waiver not permitted for Geometry requirement) AND Science Prereq: 80% Chemistry I Honors or 90% in Chemistry Academic
<b>AP Chemistry II</b> SC3034* 1 credit 6/6 days a cycle Plus 2/6 days a cycle for labs Year	AP Chemistry II is a second year chemistry course which will build on Chemistry I Honors, and study electrochemistry, bonding, thermodynamics, kinetics, equilibrium, acid and base chemistry. Students will be asked to review Chemistry I Honors with a summer assignment in order to prepare for a test at the beginning of the school year. Major exams are given every two to three weeks. Labs are more complex than in Chemistry I Honors and take a significant amount of time to write up. Disciplined work habits are a necessity to succeed in this college level chemistry course. An appropriately placed student should expect an average of five hours of work per week in the form of projects, test preparation, lab reports, and homework. All students are encouraged to take the Advanced Placement Exam in May.	85% in Chemistry I Honors
<b>Forensic Science Academic</b> SC3042* 1 credit 6/6 days a cycle Year 11th, 12th	Forensic Science Academic offers students an opportunity to see real-world applications of the theoretical principles developed in their more traditional science courses. This course integrates traditionally segregated disciplines (biology, chemistry, physics, math, language arts, social studies) in order to solve crimes based on evidence. Topics covered include: branches of forensic science, the law, types of evidence, how to process a crime scene, fingerprint collection, serology/blood evidence, DNA analysis, trace evidence, questioned documents, ballistics, toxicology, anthropology, and pathology/cause of death. Students enrolled in this course can expect frequent laboratory based assignments as well as extensive case studies in forensic science. An appropriately placed student can expect 1-4 hours of homework per week in the form of project completion, case study analysis, laboratory completion, conceptual practice and test preparation.	60% in Chemistry or 80% in Integrated Science
<b>Astronomy &amp; Oceanography Academic</b> SC3032* 1 credit 6/6 days a cycle Year 11th. 12th	Astronomy & Oceanography Academic will consist of a semester review of each topic. The questions that you have had about space and the oceans will be answered during this class. In Astronomy your understanding of your place in the Universe will be realized. A tour of topics that will unravel the mysteries of this fascinating science are brought to light in this first semester. You will look to the heavens and begin to connect the stars with a new foundation of understanding, no need to use an app! After that we will delve into the ocean realm. The physical properties and characteristics of the ocean will be explored and the diversity of marine life will be revealed in an understandable manner. This class is a lab science and many labs will be incorporated to increase the enjoyment and retention of new information. Each semester will include a student presentation.	60% in Algebra IB First Level or higher

## Science Department Flowchart

Most science courses also have math prerequisites. Please review all the prerequisites carefully.





## MATH DEPARTMENT

### Department Chair: Kevin Long

\*NCAA approved

All students must complete three credits of mathematics for graduation. Most students complete one credit of math each year for four years. Students begin with Algebra I (the foundation for all other courses) and progress through geometry and Algebra II. At that point students make course choices depending on their future goals. In order to meet the needs of all students, the math department offers courses that vary in pace and depth of content. There are two academic levels, accelerated and academic, to allow students to be successful through pre-calculus topics. First level courses ensure that students are prepared for state assessments. Course descriptions include prerequisites for each course. These prerequisites help to ensure success in future courses. It is possible to change levels if students meet minimum requirements. A mapping of possible course sequences is provided at the end of the course descriptions for mathematics.

**Note: Since Algebra I is the foundation necessary for success in all other math courses, middle school students who earn less than an 83% in Algebra I may repeat the course for credit since they did not already earn high school credit. Current high school students who repeat the course, do not earn credit again, nor will the new grade be factored into the GPA. No other math course may be repeated for credit. Students may repeat another math course but credit will not be received.**

Courses	Course Descriptions	Prerequisite
<b>Algebra I A First Level</b> MA1001 1 credit 6/6 days a cycle Year	Algebra I A First Level is for students who would benefit from a year of skill development while studying pre-algebra and algebra topics. Students will review pre-algebra topics such as basic operations of whole numbers, decimals and fractions, ratios and proportions, and the coordinate plane. Algebra I topics include simplifying expressions, solving equations and inequalities, and graphing and writing equations of lines. An appropriately placed student should expect at least two hours of homework over the period of a week.	Students with point total less than 110 (IOWA score + pre-algebra final grade percent = Point Total) Students who do not qualify for Algebra I Academic
<b>Algebra I Academic</b> MA1002* 1 credit 6/6 days a cycle Year	Algebra I Academic is a college preparatory course that offers an introduction to higher mathematics. Topics include: number systems, algebraic expressions, equations, polynomials, rational expressions, factoring, and quadratics. An appropriately placed student should expect two to three hours of homework over the period of a week.	Point total of 110-129 (IOWA score + pre-algebra final grade percent) = Point Total
<b>Algebra I Accelerated</b> MA1012* 1 credit 6/6 days a cycle Year	Algebra I Accelerated is a college preparatory course that offers an introduction to higher mathematics. Topics include: number systems, algebraic expressions, equations, polynomials, rational expressions, factoring, and quadratics. An appropriately placed student can manage a faster pace at the academic level and expect three to four hours of homework over the period of a week.	Minimum point total of 130 (IOWA score + pre-algebra final grade percent = Point Total)
<b>Algebra I B First Level</b> MA2001 1 credit 6/6 days a cycle Year	Algebra I B First Level offers students the opportunity to spend a full year continuing the study of algebra after Algebra IA First Level. While less rigorous than other algebra courses, this course will allow the student to work toward meeting the standards set by the state. An appropriately placed student should expect at least two hours of homework over the period of a week.	60% in Algebra IA First Level
<b>Geometry Academic</b> MA2002* 1 credit 6/6 days a cycle Year	Geometry Academic topics include but are not limited to logic, proofs, properties of triangles, polygons, congruence, similarity, right triangles, parallel and perpendicular lines, circles, area and volumes. An appropriately placed student should expect at least two and a half hours of homework over the period of a week.	60% in Algebra I Academic, Accelerated, or Honors. 93% in Algebra IB First Level

<p><b>Geometry Accelerated</b> MA2012* 1 credit 6/6 days a cycle Year</p>	<p>Geometry Accelerated topics include but are not limited to logic, proofs, properties of triangles, polygons, congruence, similarity, right triangles, parallel and perpendicular lines, circles, area and volumes. The rigor of the material covered and the pace of the course increases at the accelerated level. An appropriately placed student should expect at least three hours of homework over the period of a week.</p>	<p>73% in Algebra I Accelerated or Honors or 93% in Algebra I Academic</p>
<p><b>Geometry Honors</b> MA2003* 1 credit 6/6 days a cycle Year</p>	<p>Geometry Honors includes but is not limited to logic, proofs, properties of triangles, polygons, congruence, similarity, right triangles, parallel and perpendicular lines, circles, area and volumes. This course is taught at the most rigorous level and fastest pace. An appropriately placed student should expect at least four hours of homework per week.</p>	<p>93% in Algebra I Accelerated and minimum scores on both Orleans Hanna Geometry Prognosis Test (70) and End of Year Algebra Test or 90% in Algebra I Honors and minimum score on Orleans Hanna Geometry Prognosis Test (70).</p>
<p><b>Geometry Honors Blended</b> MA2003B* 1 credit 6/6 days a cycle Year</p>	<p>Geometry Honors Blended includes but is not limited to logic, proofs, properties of triangles, polygons, congruence, similarity, right triangles, parallel and perpendicular lines, circles, area and volumes. This course is taught at the most rigorous level and fastest pace. An appropriately placed student should expect at least four hours of homework per week.</p> <p>Blended learning combines traditional and online instruction to develop personalized learning. With three days in the classroom and three days online, blended learning uniquely provides flexibility in the place, pace, and path of instruction. The course is matched with a traditional course in level of rigor and investment of time. Skills in organization of materials, use of technology, and management of time are essential.</p>	<p>93% in Algebra I Accelerated and minimum scores on both Orleans Hanna Geometry Prognosis Test and End of Year Algebra Test or 90% in Algebra I Honors and minimum score on Orleans Hanna Geometry Prognosis Test.</p>
<p><b>Geometry First Level</b> MA3001 1 credit 6/6 days a cycle Year</p>	<p>Geometry First Level offers students the opportunity to spend the majority of the year studying Geometry concepts including reasoning, parallel and perpendicular lines, triangles, polygons, perimeter, area, volume, similarities, circles, coordinate geometry and probability. There will be time set aside in this course for students to prepare for the state-wide assessment tests given during the junior year. This course, while less rigorous than the other Geometry courses, will allow the student to work towards meeting the standards set by the state. An appropriately placed student should expect at least two hours of homework per week.</p>	<p>60% in Algebra IB First Level</p>
<p><b>Algebra II Academic</b> MA3002* 1 credit 6/6 days a cycle Year</p>	<p>Algebra II Academic is a course for students who are going to continue in college preparatory mathematics. The course alone does not count as a prerequisite for Advanced Math Honors (see prerequisite for Advanced Math Honors if considering it). The content will include algebraic equations, inequalities, functions, systems of equations, rational expressions, complex numbers, and conic sections. An appropriately placed student should expect two hours of homework over the period of a week.</p>	<p>60% in Algebra I Academic, Accelerated or Honors or 93% in Algebra IB First Level and 60% in Geometry Academic, Accelerated</p>

<p><b>Algebra II Honors</b> MA3003* 1 credit 6/6 days a cycle Year</p>	<p>This is an honors level course that moves at a rapid pace and with great depth in preparation for Honors Advanced Math and eventually AP Calculus. An appropriately placed student is motivated, can process high level mathematical concepts quickly without the need for additional repetition and explanation, can work independently and is committed to completing additional practice when necessary to fully understand the concepts. Course content will include linear, quadratic, rational, irrational, exponential, logarithmic, and trigonometric functions along with quadratic relations. A scientific calculator is needed for this course. Graphing calculators are not permitted on most tests. A classroom set of graphing calculators is available for certain topics during the year. An appropriately placed student should expect about four hours of homework per week.</p>	<p>93% in Algebra I Accelerated or 90% in Algebra I Honors and 83% in Geometry Accelerated or Honors</p>
<p><b>Algebra II Accelerated</b> MA3012* 1 credit 6/6 days a cycle Year</p>	<p>Algebra II Accelerated is designed to revisit the linear and quadratic families of functions introduced in Algebra I. We will then investigate more complicated families or functions such as linear, quadratic, exponential, logarithmic, radical, and rational functions. Heavy emphasis is placed on connecting algebraic equations to their graphs in the coordinate plane and students will learn to represent them in multiple ways such as verbal descriptions, equations, tables and graphs. Students will also use these functions to model real-world behavior and to make predictions based on limited information. While a graphing calculator is recommended, a scientific calculator will suffice for class work and evaluations. An appropriately placed student should expect four hours of homework over the period of a week.</p>	<p>73% in Algebra I Accelerated or Honors AND 73% in Geometry Accelerated or 60% in Geometry Honors</p>
<p><b>Algebra III &amp; Trigonometry Academic</b> MA4002* 1 credit 6/6 days a cycle Year</p>	<p>Algebra III &amp; Trigonometry Academic provides a fourth year of study in college preparatory mathematics while reinforcing Algebra and Geometry skills throughout the year. The first semester topics are: solving and graphing equations of degree two or higher, coordinate geometry, permutations and combinations, probability and conic shapes and their equations. Trigonometry is studied in the second semester focusing on its application rather than its theory. Students will solve problems involving triangles, work with equations and expressions that include trigonometric ratios, apply trig concepts to the X-Y coordinate plane and graph trigonometric functions. An appropriately placed student should expect two hours of homework over the period of a week.</p>	<p>73% in Algebra II Academic or 60% in Algebra Accelerated</p>
<p><b>Trigonometry &amp; Analysis Accelerated</b> MA4012* 1 credit 6/6 days a cycle Year</p>	<p>Trigonometry &amp; Analysis Accelerated is designed to prepare students for a course in Calculus. We build the concept of measuring angles in radians so that we can introduce the trigonometric ratios on a unit circle. Then we progress to the six trig functions, trigonometric equations, right triangle trig and common trig identities. During the second semester, we work with exponents, logarithms and linear, quadratic and polynomial functions. A graphing calculator is strongly recommended for this course. An appropriately placed student should expect between three and five hours of homework over the period of a week. The amount of time required may vary depending on individual students readiness to integrate concepts.</p>	<p>83% in Algebra II Accelerated or 60% in Algebra II Honors</p>
<p><b>Statistics Academic</b> MA4022* 1 credit 6/6 days a cycle Year</p>	<p>Statistics Academic is an introductory course in data analysis. The course is recommended for juniors or seniors who are interested in learning the background content in statistics prior to taking a college level course, or the student who wants to gain analytical skills that can be used directly in the workplace. The course will focus on gathering, displaying, and interpreting data with a focus on the application. A graphing calculator is required for this course. An appropriately placed student should expect one to two hours of homework each week.</p>	<p>60% or better in Geometry First Level or 60% or better in Algebra 2 Academic, Accelerated, Honors</p>
<p><b>Statistics Accelerated</b> MA4032* 1 credit 6/6 days a cycle Year</p>	<p>Statistics Accelerated is designed to provide the students with an introduction to the concepts of statistics. Descriptive and inferential statistics involving the mean of normal distributions are examined in detail. Analysis of variance, regression, and correlation will be studied. This course will stress the practical application of probability and statistics to various disciplines. This course is recommended to seniors who will be taking an introductory course in statistics in engineering, science, business, pre-med, journalism, political science or liberal arts in college. A graphing calculator is required for this course. An appropriately placed student should expect three to four hours of homework over the period of a week.</p>	<p>93% in Algebra II Academic or 73% in Algebra II Accelerated or 60% in Algebra II Honors</p>

<p><b>Advanced Math Honors</b> MA4023* 1 credit 6/6 days a cycle Year</p>	<p>Advanced Math Honors moves at a rapid pace and with great depth in preparation for AP Calculus. An appropriately placed student is motivated, can process high level mathematical concepts quickly without the need for additional repetition and explanation, can work independently and is committed to completing additional practice when necessary to fully understand the concepts. Students are expected to fully understand the concepts taught in Algebra II Honors, including but not limited to exponential, logarithmic and trigonometric functions. The content is challenging and will include polynomial, rational, exponential, logarithmic, and trigonometric functions, parametric and polar equations, systems, matrices, sequences, and analytical geometry. Each student is required to provide a TI-83/TI-84 (TI-82, TI-85 or TI-86 are other acceptable options but instruction will be based on the TI-83/TI-84). An appropriately placed student should expect around four hours of homework over the period of a week. Continued on next page <b>PREREQUISITE:</b> Students from Algebra II Accelerated are required to complete a self-study of trigonometry concepts and take an end-of-review exam by August 20, 2019. All students requesting this course who previously took Algebra II Accelerated must take the review exam and to seek approval by the department. A grade prerequisite waiver is not permitted to override department approval prerequisite. Students who meet the grade prerequisite AND receive departmental approval will be enrolled in HAM contingent upon course availability. Students should see their current math teacher for an outline of topics for the self-study. Students must make arrangements to take the exam during the summer through the main office.</p>	<p>83% in Algebra II Honors or 93% in both Algebra II Accelerated and Geometry Accelerated and receive departmental approval, which includes a review exam.* See course description for more information.</p>
<p><b>Topics in Calc &amp; Statistics Accelerated</b> MA5002* 1 credit 6/6 days a cycle Year</p>	<p>Topics in Calc &amp; Statistics Accelerated is an alternative to a full year of calculus or statistics. Students will learn the fundamentals of probability and statistics. In addition, students will learn the introductory topics of calculus, which include but are not limited to limits and derivatives. Further, if time allows, students will also investigate series and sequences. An appropriately placed student should expect at least four hours of homework over the period of a week.</p>	<p>73% in Trigonometry &amp; Analysis or 60% in Advanced Math Honors</p>
<p><b>Calculus Accelerated</b> MA5012* 1 credit 6/6 days a cycle Year</p>	<p>Calculus Accelerated will explore analytic geometry, limits, differential calculus, integration, application of the derivatives and the application of the definite integral. Concepts are developed from three perspectives: numerical approximations, graphing and algebra. There is a continued emphasis on correct notation so that students can transition smoothly into a college calculus program. There will be a heavy emphasis on how graphs can inform understanding of a functions behavior. Students will be expected to generate graphs and draw conclusions with and without the aid of a graphing calculator. A graphing calculator is strongly recommended in this course. An appropriately placed student should expect between four and six hours of homework over the period of a week. The amount of time required will vary depending on the individual students readiness to integrate concepts.</p>	<p>83% in Trigonometry &amp; Analysis or 73% in Advanced Math Honors</p>
<p><b>AP Calculus AB</b> MA5004* 1 credit 6/6 days a cycle Year</p>	<p>AP Calculus AB covers both differential and integral calculus. This is equivalent to a college level course. Students need to have the ability to work independently and must meet daily class requirements. Students who enroll in this course are expected to take the AP test. An appropriately placed student should expect between five and seven hours of homework over the period of a week.</p>	<p>93% in Trigonometry &amp; Analysis or 83% in Advanced Math Honors</p>
<p><b>AP Calculus BC</b> MA6004* 1 credit 6/6 days a cycle Year</p>	<p>AP Calculus BC begins with a review of the topics in AP Calculus AB. It then moves on to BC level topics as outlined in the AP course outline. Students are expected to take the AP test, BC level. An appropriately placed student should expect at least five hours of homework over the period of a week.</p>	<p>83% in AP Calculus AB</p>
<p><b>AP Statistics</b> MA5014* 1 credit 6/6 days a cycle Year 10th, 11th, 12th</p>	<p>AP Statistics is equivalent to an introductory college level Statistics Course. Topics are divided into four major themes: exploratory analysis, planning and conducting a study with data, probability, and statistical inference. A TI-83/TI-84 graphing calculator is needed for this course. An appropriately placed student should expect three to five hours of homework over the period of a week.</p>	<p>93% in Algebra II Accelerated or 83% in Algebra II Honors</p>

<b>AP Statistics Blended</b> MA5014B* 1 credit 6/6 days a cycle Year 10th,11th,12th	AP Statistics Blended is equivalent to an introductory college level Statistics Course. Topics are divided into four major themes: exploratory analysis, planning and conducting a study with data, probability, and statistical inference. A TI-83/TI-84 graphing calculator is needed for this course. An appropriately placed student should expect three to five hours of homework over the period of a week.  Blended learning combines traditional and online instruction to develop personalized learning. With three days in the classroom and three days online, blended learning uniquely provides flexibility in the place, pace, and path of instruction. The course is matched with a traditional course in level of rigor and investment of time. Skills in organization of materials, use of technology, and management of time are essential.	93% in Algebra II Accelerated or 83% in Algebra II Honors
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### Math Department Flowchart

Students must earn three math credits for graduation.

Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
<b>Geometry Honors</b>	Algebra II Honors	Advanced Math Honors	AP Calculus AB	<ul style="list-style-type: none"> <li>● AP Calculus BC</li> <li>● AP Statistics</li> </ul>
<i>Students may move up or down a level depending on achievement level in a course. Prerequisites are listed next to the course descriptions.</i>				
<b>Geometry</b>	Algebra II Accelerated	Trigonometry & Analysis Accelerated	<ul style="list-style-type: none"> <li>● AP Statistics</li> <li>● Calculus Accelerated</li> <li>● Statistics Accelerated</li> <li>● Topics in Calculus &amp; Statistics Accelerated</li> </ul>	<ul style="list-style-type: none"> <li>● AP Statistics</li> <li>● Calculus Accelerated</li> <li>● Statistics Accelerated</li> <li>● Topics in Calculus &amp; Statistics Accelerated</li> </ul>
<i>Students may move up or down a level depending on achievement level in a course. Prerequisites are listed next to the course descriptions.</i>				
<b>Honors Algebra I or Algebra I Traditional</b>	Geometry Honors	Algebra II Honors	Advanced Math Honors	<ul style="list-style-type: none"> <li>● AP Calculus AB</li> <li>● AP Statistics</li> <li>● Calculus Accelerated</li> </ul>
	Geometry Accelerated	Algebra II Accelerated	Trigonometry & Analysis Accelerated	<ul style="list-style-type: none"> <li>● AP Statistics</li> <li>● Calculus Accelerated</li> <li>● Statistics Accelerated</li> <li>● Topics in Calculus &amp; Statistics Accelerated</li> </ul>
<i>Students may move up or down a level depending on achievement level in a course. Prerequisites are listed next to the course descriptions.</i>				
<b>Pre-Algebra</b>	Algebra I Accelerated	Geometry Accelerated	Algebra II Accelerated	<ul style="list-style-type: none"> <li>● AP Statistics</li> <li>● Trigonometry &amp; Analysis Accelerated</li> <li>● Statistics Accelerated</li> </ul>

	Algebra I Academic	Geometry Academic	Algebra II Academic	<ul style="list-style-type: none"> <li>Algebra III &amp; Trigonometry Academic</li> <li>Statistics Academic</li> </ul>
	Algebra I A First Level	Algebra I B First Level	Geometry First Level	<ul style="list-style-type: none"> <li>Statistics Academic</li> </ul>

## HEALTH & PE DEPARTMENT

Department Chair: Joe Herman

Courses	Course Descriptions	Prerequisite
<b>Wellness I</b> HPE1002 .25 credit 3/6 days a cycle Semester	This course explores the concept of health as it relates to the topics of wellness, mental health, mindfulness, substance abuse, relationships and human sexuality. Special emphasis is placed on self-assessment of wellness and application of knowledge toward personal goal setting and decision-making. Evaluation includes homework, quizzes, projects, and unit tests.	
<b>Team Building &amp; Leadership 9</b> HPE1012 .25 credit 3/6 days a cycle Semester	This course is designed to promote a sense of community while giving students the opportunity to work and accomplish objectives as a team. Students will be encouraged to work together to complete cooperative and problem-solving initiatives. Students will be given the opportunity to assume various leadership roles throughout the course to help develop the skills necessary to succeed in group settings. The Health and Skill related Components of Fitness will be reinforced through various physical activities. Students will be instructed on the proper use of all equipment and appropriate etiquette in the UHS Fitness Center. Students will also have the opportunity to learn climbing, spotting and belaying techniques while utilizing different climbing elements. In addition, students will participate in a variety of games and activities that will promote personal fitness. Daily class participation is mandatory and a significant percentage of the overall grade. Evaluations may also include written assignments, online assignments, quizzes and/or projects.	
<b>Lifelong Fitness 10</b> HPE2022 .25 credit 3/6 days a cycle Semester	Personal fitness is the focus of this course based on a design that promotes a healthy lifestyle through physical activity. Students will be instructed on the fundamentals of resistance training as well as ways in which to improve and or maintain cardio-respiratory fitness. In addition, students will participate in a variety of individual and team games and activities in order to demonstrate the correlation between the health and skill related components of fitness, and the game or activity. A students grade will be based on daily preparedness and participation, research assignments, in-class activities and written tests/quizzes. Personal fitness is the focus of this course based on a design that promotes a healthy lifestyle through physical activity. Students will be instructed on the fundamentals of resistance training as well as ways in which to improve and or maintain cardio-respiratory fitness. In addition, students will participate in a variety of individual and team games and activities in order to demonstrate the correlation between the health and skill related components of fitness, and the game or activity. A students grade will be based on daily preparedness and participation, research assignments, in-class activities and written tests/quizzes.	

<b>Wellness II</b> HPE2002 .25 credit 3/6 days a cycle Semester	This course focuses on overall personal wellness. Topics of discussion focus on contemporary issues in nutrition, exercise, stress management, lifetime diseases, theories of addiction and mindfulness. Also, students will learn and apply the concepts of First Aid, CPR, and AED. Upon completion, students have an opportunity to receive their HeartSaver certification through the American Heart Association.	Wellness I
<b>Sports Science</b> HPE2012 .5 credit 6/6 days a cycle Semester	Sport Science is the study of how the human body works during exercise and how sport and physical activity can promote health from the cellular level to the whole body perspectives. This is a great course for students interested studying human anatomy and physiology. In this course, the students will use a kinesthetic (hands-on) approach to learn the anatomical structures, physiological concepts, application of S.T.E.M. principles, and to cultivate an interest in the various fields of medicine and fitness. Evaluation includes homework, quizzes, projects, and unit tests.	Wellness I
<b>Adventure Based Education</b> HPE3012 .25 credit 3/6 days a cycle Semester	This course is designed to expose students to a variety of cooperative and problem-solving activities in order to develop a better understanding of skills associated with teamwork (i.e. communication, trust and leadership). Activities may include, but are not limited to low challenge elements, indoor rock climbing, rope climbs and outdoor challenges. In addition, this course will encourage ownership of failures and promotes transfer of learning beyond the lesson and toward real life situations. Daily class participation is mandatory and a significant percentage of the overall grade. Evaluations may also include written assignments, online assignments, quizzes and/or projects.	
<b>Introduction to Yoga</b> HPE3022 .25 credit 3/6 days a cycle Semester	The focus of the course will be for students to learn the basics of Hatha yoga so they may create a fitness and wellness routine tailored specifically to their individual needs (physically, mentally, and emotionally). Students will complete assessments (Fitness and Perceived Mental Stress) in the beginning and end of course. The muscular and skeletal systems will be reviewed throughout the course to help students with alignment during the physical practice of poses. Students will also learn how and when to modify their practice based on individual needs (injury, illness, etc.). Beginning breathwork and meditation practices will be covered throughout the semester. Daily class participation is mandatory and a significant percentage of the overall grade. Evaluations may also include written assignments, online assignments, quizzes and/or projects.	
<b>Personal Fitness</b> HPE3032 .25 credit 3/6 days a cycle Semester	The course is designed for students who prefer an individualized approach to fitness. It is perfect for motivated students who would like to make improvements in cardiorespiratory fitness, overall strength and flexibility. This course will start with a review of the health and skill related components of fitness before moving on to a personal health and fitness assessment. Upon completion of the individualized assessment, students will create a personal fitness and wellness plan that will be implemented throughout the remainder of the course. Students will be given the opportunity to choose to work as an individual or as part of a group. Daily class participation is mandatory and a significant percentage of the overall grade. Evaluations may also include written assignments, online assignments, quizzes and/or projects.	
<b>Team Games</b> HPE3042 .25 credit 3/6 days a cycle Semester	The course promotes the lifelong participation in physical activities through use of various sports and games. The course will be divided into the three main categories of invasion/strategy games, non-traditional games and recreational/traditional games. Students should be prepared to participate in full class, group activities as well as smaller team games. If you love coming to the gym to play and being active with a group of people, this class is for you. Daily class participation is mandatory and a significant percentage of the overall grade. Evaluations may also include written assignments, online assignments, quizzes and/or projects.	
<b>Drivers Education Classroom</b> Fall HPE1022 Spring HPE1032 3/6 days a cycle Semester	*During the School Day Option* This is an elective course typically offered in the Fall and Spring during the school day. There is no cost for this 30 hour drivers education classroom instruction course. This course is designed to provide students with relevant, up to date information regarding driving laws and the driving experience. The curriculum will follow the Pennsylvania Department of Education Enhanced Drivers Education Guide. Students will also have the opportunity to utilize driving simulators during this course. There will be four main units covered in this course with two units being covered per marking period. Upon completion of each unit, students will be required to complete a written assessment. DO NOT sign up for the after school program using this course code.	

<b>Drivers Education Behind the Wheel</b>	The program contains two phases - classroom instruction and behind-the-wheel. The classroom portion of the program is offered in the evenings during the Fall and Spring school term and in the Summer. The behind-the-wheel phase of instruction will be offered to those students who have successfully completed the classroom phase of instruction and have obtained a Pennsylvania Permit or Driver's License. A fee of \$300 is charged for the program (fee subject to change). Information as to the sign up for these classes is available in the high school office. Students do not sign up for this course during the course selection process, nor is it a credit course.	
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## WORLD LANGUAGE DEPARTMENT

Department Chair: Julie Hawkes

\*NCAA approved

Courses	Course Descriptions	Prerequisite
<b>French I Academic</b> WLF1002* 1 credit 6/6 days a cycle Year	French I Academic is designed for true beginners and/or students who have not yet gained novice level proficiency expected of a Level I student. Students entering the High School who received a 70% or higher in French IB are expected to enroll in the appropriate Level II course. Level I is an introduction to the four basic language skills of reading, writing, speaking, and listening across the three communicative modes: interpretive, interpersonal, and presentational. Students should actively and consistently review previously learned concepts independently in order to improve fluency.	No prior French I class
<b>French II Academic</b> WLF2002* 1 credit 6/6 days a cycle Year	French II Academic continues to expand on the fundamental skills of listening, speaking, reading and writing across the three communicative modes: (interpretive, interpersonal, and presentational) acquired in Level I. By the end of Level II, students will attain intermediate-low proficiency as defined by ACTFL. Students should actively and consistently review previously learned concepts independently in order to improve fluency.	70% in French I
<b>French II Honors</b> WLF2003* 1 credit 6/6 days a cycle Year	French II Honors continues to expand on the fundamental skills of listening, speaking, reading and writing across the three communicative modes: (interpretive, interpersonal, and presentational) acquired in Level I. By the end of Level II, students will be approaching intermediate-mid proficiency as defined by ACTFL. Students should actively and consistently review previously learned concepts independently in order to improve fluency.	90% in French I
<b>French III Academic</b> WLF3002* 1 credit 6/6 days a cycle Year	French III Academic continues to expand on the fundamental skills of listening, speaking, reading and writing across the three communicative modes: (interpretive, interpersonal, and presentational) acquired in Level II. By the end of Level III, students will attain intermediate-mid proficiency as defined by ACTFL. Students should actively and consistently review previously learned concepts independently in order to improve fluency.	70% in French II
<b>French III Honors</b> WLF3003* 1 credit 6/6 days a cycle Year	French III Honors continues to expand on the fundamental skills of listening, speaking, reading and writing across the three communicative modes: (interpretive, interpersonal, and presentational) acquired in Level II. By the end of Level III, students will be approaching intermediate-high proficiency as defined by ACTFL. Students should actively and consistently review previously learned concepts independently in order to improve fluency.	80% in French II Honors or 92% in French II Academic
<b>French IV Academic</b> WLF4002* 1 credit 6/6 days a cycle Year	French IV Academic continues to expand on the fundamental skills of listening, speaking, reading and writing across the three communicative modes: (interpretive, interpersonal, and presentational) acquired in Level III. By the end of Level IV, students will attain intermediate-high proficiency as defined by ACTFL. Students should actively and consistently review previously learned concepts independently in order to improve fluency.	70% in French III Academic
<b>French IV Honors</b> WLF4003* 1 credit 6/6 days a cycle Year	French IV Honors continues to expand on the fundamental skills of listening, speaking, reading and writing across the three communicative modes: (interpretive, interpersonal, and presentational) acquired in Level III. French IV Honors is a pre-AP course designed to prepare students to be successful on the AP French exam. By the end of Level IV, students will be approaching advanced-low proficiency as defined by ACTFL. Students should actively and consistently review previously learned concepts independently in order to improve fluency.	80% in French III Honors or 95% in French III Academic



<b>French V Academic</b> WLF5002* 1 credit 6/6 days a cycle Year	French V Academic continues to expand on the fundamental skills of listening, speaking, reading and writing across the three communicative modes: (interpretive, interpersonal, and presentational) acquired in Level IV. By the end of Level V, students will demonstrate advanced-low proficiency as defined by ACTFL. Students should actively and consistently review previously learned concepts independently in order to improve fluency.	70% in French IV Academic or Honors
<b>AP French</b> WLF5004* 1 credit 6/6 days a cycle	AP French Language provides the opportunity for qualified students to take a 300 college level course, and it offers possible college credit and possible advanced placement in cooperating colleges for those who pass the standardized test. Emphasizing the use of language for active communication, this course seeks to develop language skills (reading, writing, listening and speaking) across the three modes of communication: interpretive, interpersonal, and presentational. Students will perform in the advanced proficiency range.	83% in French IV Honors or 95% in French IV Academic
<b>German I Academic</b> WLG1002* 1 credit 6/6 days a cycle Year	German I Academic is designed for true beginners and/or students who have not yet gained beginner level proficiency expected of a Level I student. Students entering the High School who received an A, B, or C in German IB are expected to enroll in the appropriate Level II course. Level I is an introduction to the four basic language skills of reading, writing, speaking, and listening. Vocabulary is presented thematically; grammar patterns are practiced in functional situations related to unit themes. Students will begin to discover similarities and differences between the culture of the target language and their own. Homework: Students should expect to spend 15 to 20 minutes on homework. When written practice is not assigned, students should review previously learned concepts in order to improve fluency.	No prior German I class or earned a 69%
<b>German II Academic</b> WLG2002* 1 credit 6/6 days a cycle Year	German II Academic continues and expands the fundamental skills of listening, speaking, reading and writing acquired in Level I. Emphasis is given to the development of conversational abilities, mastery of new grammar structures, and acquisition of new vocabulary. Increased attention is given to reading and writing. Homework: Students should expect to spend 15 to 20 minutes on homework. When written practice is not assigned, students should review previously learned concepts in order to improve fluency.	70% in German I
<b>German II Honors</b> WLG2003* 1 credit 6/6 days a cycle Year	German II Honors continues to expand on the fundamental skills of listening, speaking, reading and writing across the three communicative modes: (interpretive, interpersonal, and presentational) acquired in Level I. By the end of Level II, students will be approaching intermediate-mid proficiency as defined by ACTFL. Students should actively and consistently review previously learned concepts independently in order to improve fluency.	90% in German I
<b>German III Academic</b> WLG3002* 1 credit 6/6 days a cycle Year	German III Academic continues to expand on the fundamental skills of listening, speaking, reading and writing across the three communicative modes: (interpretive, interpersonal, and presentational) acquired in Level II. By the end of Level III, students will attain intermediate-mid proficiency as defined by ACTFL. Students should actively and consistently review previously learned concepts independently in order to improve fluency.	70% in German II Academic
<b>German III Honors</b> WLG3003* 1 credit 6/6 days a cycle Year	German III Honors continues to expand on the fundamental skills of listening, speaking, reading and writing across the three communicative modes: (interpretive, interpersonal, and presentational) acquired in Level II. By the end of Level III, students will be approaching intermediate-high proficiency as defined by ACTFL. Students should actively and consistently review previously learned concepts independently in order to improve fluency.	80% in German II Honors or 92% in German II Academic
<b>German IV Academic</b> WLG4002* 1 credit 6/6 days a cycle Year	German IV Academic continues to expand on the fundamental skills of listening, speaking, reading and writing across the three communicative modes: (interpretive, interpersonal, and presentational) acquired in Level III. By the end of Level IV, students will attain intermediate-high proficiency as defined by ACTFL. Students should actively and consistently review previously learned concepts independently in order to improve fluency.	70% in German III Academic

<b>German IV Honors</b> WLG4003* 1 credit 6/6 days a cycle Year	German IV Honors continues to expand on the fundamental skills of listening, speaking, reading and writing across the three communicative modes: (interpretive, interpersonal, and presentational) acquired in Level III. French IV Honors is a pre-AP course designed to prepare students to be successful on the AP French exam. By the end of Level IV, students will be approaching advanced-low proficiency as defined by ACTFL. Students should actively and consistently review previously learned concepts independently in order to improve fluency.	80% in German III Honors or 95% in German III Academic
<b>German V Academic</b> WLG5002* 1 credit 6/6 days a cycle Year	German V Academic continues to expand on the fundamental skills of listening, speaking, reading and writing across the three communicative modes: (interpretive, interpersonal, and presentational) acquired in Level IV. By the end of Level V, students will demonstrate advanced-low proficiency as defined by ACTFL. Students should actively and consistently review previously learned concepts independently in order to improve fluency.	70% in German IV Academic or Honors
<b>AP German</b> WLG5004* 1 credit 6/6 days a cycle Year	AP German Language provides the opportunity for qualified students to take a 300 college level course, and it offers possible college credit and possible advanced placement in cooperating colleges for those who pass the standardized test. Emphasizing the use of language for active communication, this course seeks to develop language skills (reading, writing, listening and speaking) across the three modes of communication: interpretive, interpersonal, and presentational. Students will perform in the advanced proficiency range.	83% in German IV Honors or 95% in German IV Academic
<b>Spanish I Academic</b> WLS1002* 1 credit 6/6 days a cycle Year	Spanish I Academic is designed for true beginners and/or students who have not yet gained novice level proficiency expected of a Level I student. Students entering the High School who received a 70% or higher in Spanish IB are expected to enroll in the appropriate Level II course. Level I is an introduction to the four basic language skills of reading, writing, speaking, and listening across the three communicative modes: interpretive, interpersonal, and presentational. Students should actively and consistently review previously learned concepts independently in order to improve fluency.	No prior Spanish I class
<b>Spanish II Academic</b> WLS2002* 1 credit 6/6 days a cycle Year	Spanish II Academic continues to expand on the fundamental skills of listening, speaking, reading and writing across the three communicative modes: (interpretive, interpersonal, and presentational) acquired in Level I. By the end of Level II, students will attain intermediate-low proficiency as defined by ACTFL. Students should actively and consistently review previously learned concepts independently in order to improve fluency.	70% in Spanish I Academic
<b>Spanish II Honors</b> WLS2003* 1 credit 6/6 days a cycle Year	Spanish II Honors continues to expand on the fundamental skills of listening, speaking, reading and writing across the three communicative modes: (interpretive, interpersonal, and presentational) acquired in Level I. By the end of Level II, students will be approaching intermediate-mid proficiency as defined by ACTFL. Students should actively and consistently review previously learned concepts independently in order to improve fluency.	90% in Spanish I
<b>Spanish III Academic</b> WLS3002* 1 credit 6/6 days a cycle Year	Spanish III Academic continues to expand on the fundamental skills of listening, speaking, reading and writing across the three communicative modes: (interpretive, interpersonal, and presentational) acquired in Level II. By the end of Level III, students will attain intermediate-mid proficiency as defined by ACTFL. Students should actively and consistently review previously learned concepts independently in order to improve fluency.	70% in Spanish II Academic
<b>Spanish III Honors</b> WLS3003* 1 credit 6/6 days a cycle Year	Spanish III Honors continues to expand on the fundamental skills of listening, speaking, reading and writing across the three communicative modes: (interpretive, interpersonal, and presentational) acquired in Level II. By the end of Level III, students will be approaching intermediate-high proficiency as defined by ACTFL. Students should actively and consistently review previously learned concepts independently in order to improve fluency.	80% in Spanish II Honors or 92% in Spanish II Academic
<b>Spanish IV Academic</b> WLS4002* 1 credit 6/6 days a cycle Year	Spanish IV Academic continues to expand on the fundamental skills of listening, speaking, reading and writing across the three communicative modes: (interpretive, interpersonal, and presentational) acquired in Level III. By the end of Level IV, students will attain intermediate-high proficiency as defined by ACTFL. Students should actively and consistently review previously learned concepts independently in order to improve fluency.	70% in Spanish III Academic

<b>Spanish IV Honors</b> WLS4003* 1 credit 6/6 days a cycle Year	Spanish IV Honors continues to expand on the fundamental skills of listening, speaking, reading and writing across the three communicative modes: (interpretive, interpersonal, and presentational) acquired in Level III. French IV Honors is a pre-AP course designed to prepare students to be successful on the AP French exam. By the end of Level IV, students will be approaching advanced-low proficiency as defined by ACTFL. Students should actively and consistently review previously learned concepts independently in order to improve fluency.	80% in Spanish III Honors or 95% in Spanish III Academic
<b>Spanish V Academic</b> WLS5002* 1 credit 6/6 days a cycle Year	Spanish V Academic continues to expand on the fundamental skills of listening, speaking, reading and writing across the three communicative modes: (interpretive, interpersonal, and presentational) acquired in Level IV. By the end of Level V, students will demonstrate advanced-low proficiency as defined by ACTFL. Students should actively and consistently review previously learned concepts independently in order to improve fluency.	70% in Spanish IV Academic or Honors
<b>AP Spanish</b> WLS5004* 1 credit 6/6 days a cycle Year	AP Spanish Language provides the opportunity for qualified students to take a 300 college level course, and it offers possible college credit and possible advanced placement in cooperating colleges for those who pass the standardized test. Emphasizing the use of language for active communication, this course seeks to develop language skills (reading, writing, listening and speaking) across the three modes of communication: interpretive, interpersonal, and presentational. Students will perform in the advanced proficiency range.	83% in Spanish IV Honors or 95% in Spanish IV Academic
<b>AP Spanish Blended</b> WLS5004B 1 credit 6/6 days a cycle Year	<p>This course will have face to face meetings with the instructor three days out of the six-day cycle. AP Spanish Language provides the opportunity for qualified students to take a 300 college level course, and it offers possible college credit and possible advanced placement in cooperating colleges for those who pass the standardized test. Emphasizing the use of language for active communication, this course seeks to develop language skills (reading, writing, listening and speaking) across the three modes of communication: interpretive, interpersonal, and presentational. Students will perform in the advanced proficiency range.</p> <p>Blended learning combines traditional and online instruction to develop personalized learning. With three days in the classroom and three days online, blended learning uniquely provides flexibility in the place, pace, and path of instruction. The course is matched with a traditional course in level of rigor and investment of time. Skills in organization of materials, use of technology, and management of time are essential.</p>	83% in Spanish IV Honors or 95% in Spanish IV Academic

## ART DEPARTMENT

Department Chair: Faith Dilworth

Courses	Course Descriptions	Prerequisite
<b>Art I: Introduction to Drawing</b> ART1002 1 credit 6/6 days a cycle Year	Introductory prerequisite class for Art II teaching the fundamentals of volumetric shading, composition, and 2-D design. Emphasis on drawing from sight. Class focus on drawing natural, architectural and portrait subjects. A variety of 2-D materials will be explored including graphite, charcoal, and mixed media. Projects are to be completed on a regular basis. Students will receive a letter grade each marking period. (Lab Fee)	
<b>Art II: Introduction to Color</b> ART2002 1 credit 6/6 days a cycle Year	Two-dimensional skills class emphasizing the technical mastery of a variety of color media. Elements of design and composition will continue to be incorporated into the visual program at this level. A variety of materials will be explored including dry pastels, colored pencil, gouache paint and watercolor among others. Students will refer to personally-selected subject matter without sacrificing aesthetic and creative considerations. Sight drawing and perspective lessons may be included. Students will work with guided independence during art production. Students will receive a letter grade each marking period. Sketchbook work will be required. Minimal of two works completed each quarter. (Lab Fee)	Art I

<b>Art III: Advanced Methods</b> ART3002 1 credit 6/6 days a cycle Year	Media exploration in this advanced class will encourage personal discovery and a more individualized development of personal style and subject choices. Art I and II skills will culminate in more complex artworks in scale, color, depth and technical expertise. Media will include pastels, both oil and dry, prismacolors, and oil paints. The consideration of art as statement, personal expression, or as illustration and graphic marketing will be taught. Digital portfolio analysis will be incorporated. Class critiques required in order to advance understanding of problem-solving choices. Outside of class sketchbook work will be required. Student work with guided independence during production. Students will receive a letter grade each quarter. (Lab Fee)	Art II
<b>Art IV: Portfolio</b> ART4002 1 credit 6/6 days a cycle Year	This course will offer art students an individualized apprenticeship for cumulative portfolio refinement. Continued emphasis will be placed upon personal development and assessment. Competence will be evaluated after periodic student-teacher conference while exploring mixed media techniques, advanced oil painting and other mono- and polychromatic media. Class critique required in order to advance understanding of problem-solving choices. Outside-of-class work will be necessary. Portfolio preparation may be options to include into course work. Personal goals will be identified and developed. Students will receive a letter grade each marking period. (Sketchbook and lab fee are required.)	Art III
<b>Art 3-D Design I</b> ART1012 1 credit 6/6 days a cycle Year	In this year long credit course, students will experience important 3-D sculpture areas which may include but are not limited to: papermaking, stone carving, handbuilt and wheel-thrown clay, metals and jewelry, and fibers. Ceramic design and pottery production will be highlighted in this class. After workshop style introductory lessons, students work with guided independence within each art area. Planning and design will be emphasized. The course requires a completed project in each workshop area. Students will receive a letter grade each marking period. (Lab Fee)	
<b>Art 3-D Design II</b> ART2012 1 credit 6/6 days a cycle Year	This year long course builds aesthetically and developmentally upon techniques and processes learned in 3-D Design I. Workshop style introductory lessons will be presented, and students will demonstrate and research techniques and processes to expand into higher level applications, more individualized designs and larger, more permanent works. Elements of design and themes of 3-D art will continue to be incorporated into the class at a more advanced level. Emphasis will be placed on personal expression through the presentation of the sculptural mediums, which include but are not limited to clay, metals, and fibers. The course requires a completed project in each workshop. Students will receive a letter grade each marking period. (Lab Fee)	3-D Design I
<b>Art 3-D III Sculpture &amp; Design</b> ART3012 1 credit 6/6 days a cycle Year	This year long course builds aesthetically and developmentally upon techniques and processes learned in 3-D Design II. Workshop-style introductory lessons will be presented and students will demonstrate and research techniques and processes to expand into high level applications, more design and larger, more permanent works. Elements of design and themes of 3-D art will continue to be incorporated into the class at a more advanced level. Students will develop personal statements and identify elements of their own personal aesthetic. Emphasis will be placed on personal expression through the presentation of advanced sculptural mediums, which include but are not limited to, advanced clay applications and glazing, precious metals, art glass, alabaster stone and fibers. More in depth inquiry into each media area will be required, as compared to previous courses. The course requires a completed project in each workshop. Students will receive a letter grade each marking period. Course Materials: In this class, we will be working with a variety of sculpture materials which may include, but are not limited to, aluminum, sterling silver, copper, brass, precious metal, clay, paper, rigid board, wire, foam, paper mache, plaster, hand-built and wheel-thrown clay, stone, and found objects. (Lab Fee)	3-D Design II
<b>AP Art History</b> ART2004 1 credit 6/6 days a cycle Year 10th,11th,12th	The AP Art History course serves multiple purposes. It satisfies an elective requirement, it provides an opportunity for highly motivated students to take a college level course, and it offers the possibility of college credit at cooperating colleges and universities. As in all AP courses, students are expected to take the AP exam in May. AP Art History follows the national course outline which emphasizes the historical and cultural contexts of human development from the prehistoric times through modern times as seen through art, architecture, photography, and artifacts. This course is interdisciplinary in nature. The skills required are analytical writing, visual & critical observation, and chronological organization of information. Formal aspects to be achieved include: Analyzing formal	93% in last year's Academic English or 83% in last year's English Honors AND 83% in last year's Social Studies Academic or

	elements of art, becoming familiar with art vocabulary, acquiring knowledge of media materials and techniques of art production, recognizing and identifying period styles, developing a visual memory of a body of artworks, writing analytical and comparative essays. The AP Art History program's goal is to develop the understanding of culture through a working knowledge of history and philosophies through the world's work of art. NO ART ABILITY IS NECESSARY. NO ART WILL BE PRODUCED IN CLASS. (Lab Fee)	80% in last year's Social Studies Honors
<b>Art 2-D Survey</b> ART1022 .5 credit 6/6 days a cycle Semester	This semester long course provides students of all levels experience with the elements of two-dimensional artwork and the use of popular 2-D art media. Materials to be utilized may include but are not limited to: paper, printmaking, collage, illustration and pen & ink. After introductory lessons, students work individually in the specified area. Projects are required and evaluated on a regular basis. Students will receive a letter grade each marking period. (Lab Fee)	
<b>Art 3-D Survey</b> ART1032 .5 credit 6/6 days a cycle Semester	This semester long course provides students of all levels experience with the elements of three-dimensional artwork and the use of popular 3-D art media. Materials to be utilized may include but are not limited to hand-built clay, paper relief, plaster, wire, foam, and mixed media sculpture. After introductory lessons, students work individually in the specific area. Projects are required and evaluated on a regular basis. Students will receive a letter grade each marking period. (Lab Fee).	

## BUSINESS APPLICATIONS

Department Chair: Joe Kilpatrick

Courses	Course Descriptions	Prerequisite
<b>College &amp; Career Readiness</b> BUS1212 .5 credit 6/6 days a cycle Semester	This course is a .5 semester elective and is the semester, school based option. This course will introduce students to a Windows environment that will enable students to work with and manage computer files and software applications. Technology topics include: Microsoft Word, Microsoft Excel and Google Apps. Career Readiness topics will also be introduced. Career Readiness topics include Resumes, Cover Letters, Job Application Forms, Interviews and follow-up letters. An appropriately-placed student should expect a minimal amount (less than one hour per week) of assigned homework. Software: Microsoft Office 2016 and Google Applications.	
<b>College &amp; Career Readiness Online</b> BUS1222 .5 credit Online Semester	This course is a .5 semester elective and is the semester, online option. This course will introduce students to a Windows environment that will enable students to work with and manage computer files and software applications. Technology topics include: Microsoft Word, Microsoft Excel and Google Apps. Career Readiness topics will also be introduced. Career Readiness topics include Resumes, Cover Letters, Job Application Forms, Interviews and follow-up letters. An appropriately-placed student should expect a minimal amount (less than one hour per week) of assigned homework. Software: Microsoft Office 2016 and Google Applications.	
<b>College &amp; Career Readiness Survey</b> BUS1232 .25 credit 3/6 days a cycle Semester	This course is a .5 semester elective and is the semester, online option. This course will introduce students to a Windows environment that will enable students to work with and manage computer files and software applications. Technology topics include: Microsoft Word, Microsoft Excel and Google Apps. Career Readiness topics will also be introduced. Career Readiness topics include Resumes, Cover Letters, Job Application Forms, Interviews and follow-up letters. An appropriately-placed student should expect a minimal amount (less than one hour per week) of assigned homework. Software: Microsoft Office 2016 and Google Applications.	Class is available to identified Academically Talented students whether or not student has a GIEP
<b>Apps for Digital Devices</b> BUS1042 .5 credit 6/6 days a cycle	This project-based semester course utilizes a website developed by MIT which enables students to create apps through the use of App Inventor. App Inventor is a visual blocks-based programming language for digital devices. Its powerful blocks enable even novice programmers to create apps and utilize features such as GPS, texting, time, and sensors. Students learn computer science by building socially useful mobile apps. In	

Semester	addition to programming and computer science principles, this course emphasizes writing, communication, collaboration, creativity and logical thinking; all these skills are needed in every walk of life. Computer apps will be transferred to digital devices via a QR code scanner and can also be shown on the students monitor by means of a phone emulator. A portfolio of student work will be created which students can show to their college admission director and prospective employers. Students will create a final project at the end of the course in lieu of a final exam. Minimal homework will be assigned.	
<b>Entrepreneurship</b> BUS1052 .5 credit 6/6 days a cycle Semester	In this course students will develop a business plan for a small business and work in groups to develop or market a product or service. Through class discussions, group activities, textbook-workbook activities and case studies the course will explore small business and related marketing concepts. An appropriately placed student should expect minimal amount (less than one hour per week) of assigned work. A final project is included in this course.	
<b>Personal Finance</b> BUS1112 .5 credit 6/6 days a cycle Semester	This is an introductory course offered as a semester long elective to the 9 <sup>th</sup> -12 <sup>th</sup> grades. Introduction to Personal Finance will introduce to the students effective ways of handling their finances. Topics will include: Gross Pay, Deductions, and Net Pay, Budgeting and Record Keeping, Checking Accounts and other Banking Services, Saving for Your Future, Investing in Your Future, Credit in America, and Insurance. EverFi Financial Literacy will be used a supplemental learning tool in this course. An appropriately placed student should expect minimal amount (less than one hour per week) of assigned work.	
<b>Personal Finance Blended</b> BUS1112B .5 credit 6/6 days a cycle Semester	This is an introductory course offered as a semester long elective to the 9 <sup>th</sup> -12 <sup>th</sup> grades. Introduction to Personal Finance will introduce to the students effective ways of handling their finances. Topics will include: Gross Pay, Deductions, and Net Pay, Budgeting and Record Keeping, Checking Accounts and other Banking Services, Saving for Your Future, Investing in Your Future, Credit in America, and Insurance. EverFi Financial Literacy will be used a supplemental learning tool in this course. An appropriately placed student should expect minimal amount (less than one hour per week) of assigned work.  Blended learning combines traditional and online instruction to develop personalized learning. With three days in the classroom and three days online, blended learning uniquely provides flexibility in the place, pace, and path of instruction. The course is matched with a traditional course in level of rigor and investment of time. Skills in organization of materials, use of technology, and management of time are essential.	
<b>Multimedia Productions</b> BUS1072 .5 credit 6/6 days a cycle Semester	The basics of creating and editing digital movies using the iLife software package (iMovie, iTunes, iPhoto, Garageband, and iDVD) will be introduced. Students will use the Green Screen and Final Cut Express HD with iMovie to create exciting movies and a two-minute commercial. Students will learn how to use Garageband to create and export a song of their own which will be used in the projects created in the course. Movies and commercials will be burned on DVDs. Movie trailers will be created as well as using Animoto. All advanced Microsoft Office PowerPoint techniques will be presented in this course, which will enable students to create powerful PowerPoint presentations to use in their future years at Unionville High School as well as in college and the workforce. Adobe Photoshop basics will be introduced to students in this class. Students will be able to create a t-shirt design that they will iron on to a t-shirt. Students will also create their own business card using the advanced features of Microsoft Word. No homework assigned. Software: iLife 11 iMovie, iDVD, iTunes, GarageBand, iPhoto, Photo Booth, Final Cut, Cut Express HD, Microsoft Office (Advanced PowerPoint)	
<b>Adobe Photoshop</b> BUS1082 .5 credit 6/6 days a cycle Semester	Photoshop is the professional/standard software used for image manipulation and editing. In this semester course, students will learn how to use and apply the numerous tools to create powerful images. Students will have an opportunity to learn how to work with layers, use masks, and create unique images to give them an artistic look, as well as to distort and create unusual effects. Students will learn how to create dazzling text, apply text to photos, and add special effects to images to create dramatic results. Students will learn how to touch up old photos, and convert color photos to black and white. Recommended for students who want to pursue a career in Graphic Design, Art, Web Development or work at home! No homework assigned. Software: Adobe Photoshop and Photo Booth	

<p><b>Web Development Using HTML</b> BUS1092 .5 credit 6/6 days a cycle Semester</p>	<p>The first marking period of this semester course is devoted to learning HTML, HyperText Markup Language, a very basic language that will be used to design and create a personal web page project. The projects will be posted on the Unionville High School web page. In addition, students will take a series of digital photos while attending a field trip to Longwood Gardens and then use software to create a 360-degree panoramic view for their web page project. The second marking period of this semester course is dedicated to using Adobe InDesign, a desktop publishing software package, which will enable students to create graphic designs, brochures, and flyers. Students will also use Alice Software to create animated graphics for their web pages. No homework assigned. Software: Text Wrangler, VRWorx, and Alice</p>	
<p><b>Programming Principles with Python</b> BUS1102 .5 credit 6/6 days a cycle Semester</p>	<p>Using Python as a primary tool, this course aims to develop computational thinking, generate excitement about career paths that utilize computing, and introduce professional tools that foster creativity and collaboration. This course can be a student's first course in computer science, although we encourage students without prior computing experience to start with either Introduction to Programming C++ or Apps for Digital Devices. These current computer science course offerings, while valuable introductory courses in programming, have not always prepared students for the rigorous environment of AP Java. Aiming to bridge the gap, this course can give students the next step into deeper computer science concepts rather than jumping straight into AP Java. The goal of the course will be to deepen core computer science concepts while looking through the lens of Python programming language. Python is a relatively recent addition to the universe of programming languages and continues growing in popularity. It is recommended that students without prior computer experience are encouraged to start with Apps for Digital Devices or Intro to Computer Programming C++.</p>	<p>Concurrent enrollment or Completion of Algebra I Academic, Accelerated, or Honors</p>
<p><b>Accounting I</b> BUS2002 .5 credit 6/6 days a cycle Semester.</p>	<p>This semester course will enable students to learn Accounting concepts that are focused on Sole-Proprietorship and service-oriented businesses. This course will teach students the eight-step accounting cycle and how it can be applied to everyday life. Topics will include but are not limited to the accounting equation, T-accounts, posting to a general ledger, cash control systems, worksheets, balance sheets, and income statements. An appropriately placed student should expect minimal amount (less than one hour per week) of assigned homework.</p>	
<p><b>Accounting I Blended</b> BUS2002B .5 credit 6/6 days a cycle Semester.</p>	<p>This semester course will enable students to learn Accounting concepts that are focused on Sole-Proprietorship and service-oriented businesses. This course will teach students the eight-step accounting cycle and how it can be applied to everyday life. Topics will include but are not limited to the accounting equation, T-accounts, posting to a general ledger, cash control systems, worksheets, balance sheets, and income statements. An appropriately placed student should expect minimal amount (less than one hour per week) of assigned homework.</p> <p>Blended learning combines traditional and online instruction to develop personalized learning. With three days in the classroom and three days online, blended learning uniquely provides flexibility in the place, pace, and path of instruction. The course is matched with a traditional course in level of rigor and investment of time. Skills in organization of materials, use of technology, and management of time are essential.</p>	
<p><b>Accounting II</b> BUS3012 .5 credit 6/6 days a cycle Semester</p>	<p>The Accounting II Course presents a complete accounting cycle for merchandising business organized as a corporation. The primary differences between merchandising business and a service business are that a merchandising business purchases merchandise for resale, charges sales tax on sales of merchandise, and includes a cost of merchandise sold section of the income statement. An appropriately placed student should expect minimal amount (less than one hour per week) of assigned homework.</p>	<p>Accounting I</p>
<p><b>Business Personal Law</b> BUS2012 .5 credit 6/6 days a cycle Semester</p>	<p>This course will focus on both the substance and the process of our legal system and reflect many social and ethical issues. Practical contemporary legal issues such as sexual harassment, date rape, age discrimination, and employment contracts and protections will be addressed. In addition, the course has great practical value, providing background for professional exploration and illuminating the problems of private life, such as marriage, property rental and consumer protection. The Internet will also be used as a supplement</p>	

	to the course. An appropriately placed student should expect minimal amount (less than one hour per week) of assigned work.	
<b>Criminal Justice</b> BUS2022 .5 credit 6/6 days a cycle Semester	This course introduces students to legal terminology and practices, ethical and criminal issues, how and why laws are passed, juvenile justice, forensics, trials, sentencing, our penal system, the death penalty, and law enforcement. Classroom instruction will be reinforced through the use of case studies, current events, field trip experience, guest speakers, current periodicals, the Internet, and in-house projects. An appropriately placed student should expect minimal amount (less than one hour per week) of assigned work.	
<b>Intro to Computer Programming Using C++</b> BUS2032 .5 credit 6/6 days a cycle Semester	This course will provide a foundation for further studies in computer science by introducing the high-level programming language C++ as a problem-solving tool. Program design, coding, debugging, testing, documentation, and proper programming style is the focus of the course. Topics include an introduction to control structures, looping, text files, and functions. A disciplined approach to problem solving methods and algorithm development will also be emphasized. Classroom instruction will be reinforced through case studies, periodicals, and in-house projects. An appropriately placed student should expect a minimal amount (less than one hour per week) of assigned homework. Software: Microsoft Visual C++. Recommended course sequence: AP Computer Science Principles, Intro to Programming Using C++, AP Computer Science A (Java).	Concurrent enrollment or Completion of Algebra I Academic, Accelerated, or Honors
<b>Sports &amp; Entertainment Marketing</b> BUS2042 .5 credit 6/6 days a cycle Semester	Sports and Entertainment Marketing is a unique and innovative course designed for students with an interest in learning the foundations for the numerous careers in the sports and entertainment industry. Instructional areas will include: an orientation to sports and entertainment industry, economics, event execution, career opportunities, decision making, event marketing, advertising and promotion and legal aspects/contracts. Classroom instruction will be reinforced through the use of case studies, field trip experience, current periodicals, the Internet, software, and in-house projects. An appropriately placed student should expect minimal amount (less than one hour per week) of assigned work. Wikis and blogs will be used as a supplement to the course.	
<b>AP Computer Science Principles</b> BUS2014 1 credit 6/6 days a cycle Year 10th, 11th, 12th	AP Computer Science Principles offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, Cybersecurity, and computing impacts. AP Computer Science Principles will give students the opportunity to use technology to address real-world problems and build relevant solutions. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science. Recommended course sequence: AP Computer Science Principles, Intro to Programming Using C++, AP Computer Science A (Java).	10th-12th grade and 85% or higher in Algebra I Honors, Algebra I Accelerated or Algebra I Academic
<b>AP Computer Science A</b> BUS2004 1 credit 6/6 days a cycle Year 10th, 11th, 12th	This year long course will provide a foundation for further studies in computer science by introducing the high-level JAVA programming language. This course is based on the premise that students will be able to pass the AP Java Exam given at the end of the year. Topics covered include: object-oriented programming, iteratives, conditionals, strings, arrays, searching, sorting, and data manipulation. Students will be able to produce original programs that will perform calculations, manipulate data, and display graphics. An appropriately placed student should expect approximately 3 hours a week of assigned homework. Software: Java Development Kit, J Grasp. Karel J Robot, Java Methods student disk (all free downloads). Recommended course sequence: AP Computer Science Principles, Intro to Programming Using C++, AP Computer Science A (Java).	83% in Algebra II Honors or 93% Algebra II Accelerated

## FAMILY CONSUMER SCIENCE

**Department Chair: Robin Daly**

Courses	Course Descriptions	Prerequisite
<b>Foods I</b> FCS1002 .5 credit 6/6 days a cycle Semester	Have you ever wanted to make your own pasta? A cake out of instant mashed potatoes? Well for the students who want to learn how to cook successfully, have the ability to look at your pantry and NOT say "there's nothing to eat" and more importantly; EAT, then this course is for you. Foods I combines a classroom setting and a REAL kitchen experience. You will learn the basics of kitchen safety, measuring techniques, how to select the perfect recipe, Mise en Place, knife skills, the presentation of food; because WE ALL eat with our eyes, and the nutritional value of the food we make. But emphasis will be put on	



	learning how to prepare many different kinds of food from scratch, in UNIQUE ways, and on a budget. This course will not only help you learn to cook but give you the skills you need and get you thinking outside of the box (or pantry)... don't be surprised when you're challenged with an Iron Chef Mystery Basket! (Lab Fee)	
<b>Foods II</b> FCS1012 .5 credit 6/6 days a cycle Semester	What do Iron Chef and Cupcake Wars have in common when we talk about Foods II???? It's just some of the ways you'll be challenged in this class!! Do you love to get creative in the kitchen? Do you think you can rise to the occasion and get a complete meal done in 30 minutes that is not only tasty BUT looks appealing and with the energy of Rachael Ray? Do you think you can do this all on a college student budget? This class will not only elevate your culinary skills but your palate and wallet, as well, in a fun, high energy environment. (Lab Fee)	
<b>Child Development</b> FCS1022 .5 credit 6/6 days a cycle Semester	Do you like being around children? Are you thinking of coaching or teaching one day? Are you thinking about a career that involves working with children? If you answered Yes to any of these questions, then this course is for you. The semester course will identify the skills necessary for effective and rewarding relationships with children. You will understand the benefits from learning about children and gain knowledge in child growth and the interrelationship of all areas of development. Students will study the growth of a child from conception to school age, emphasizing the needs of the child and responsibilities of the caregiver. Students will also explore the following topics: parenthood as a choice, responsibilities of parenting, prenatal care, prenatal development, labor and birth, financial aspects of parenting, child care options, building positive parent/child relationships, theories of child development, variations in family styles and structures, and crisis situations in families (abuse, alcohol, divorce). Guest speakers, field trips, group work, projects, observations, and a student created play day are all a part of this course. (Lab Fee)	
<b>Housing &amp; Interior Design</b> FCS1032 .5 credit 6/6 days a cycle Semester	This course will include a study of interior design, decorating, architecture, and garment construction. Students will plan and design living spaces and consider furnishings and decorating appropriate for the space, budget and lifestyle. Students will plan living areas using the principles and elements of design. Individual projects will include a variety of hands on experiences. Students will showcase their semester work in a portfolio including scale drawings, floor covering, window treatment, furniture arrangement and accessories for a starter home and future Dream home. (Lab Fee)	
<b>Regional &amp; Global Cuisine</b> FCS2002 .5 credit 6/6 days a cycle Semester	Do you want to broaden your horizons and challenge your culinary skills? What do scones, enchiladas, eclairs and egg rolls have in common? They're all popular foods that originated in countries outside the U.S. This class is your passport to exploring the foods and cultures of countries around the world. Food custom, traditions, special cooking techniques and meal patterns of foreign countries, ethnic groups, and regions of the United States will be covered. You will discover the origins of many foods as we prepare recipes representing regional American and International cuisines. It will broaden a person's knowledge and understanding of nutrition, along with basic meal planning and food preparation skills Be prepared to taste new foods that you may not have even heard but may become your new favorites. (Lab Fee)	

**MUSIC DEPARTMENT**  
**Department Chair: Jason Throne**

<b>Courses</b>	<b>Course Descriptions</b>	<b>Prerequisite</b>
<b>Concert Band</b> MU1002 .50 credit 3/6 days a cycle Year	The band program at Unionville has a high level of expectation regarding the preparation, rehearsal, home practice and performances. It is expected that members will be prepared for class as well as the performance. This course also requires attendance at performances outside of the school day. The expectation is that all members will attend the concerts and be prepared for those events. Any woodwind, brass or percussion player may sign up for this class.	
<b>Orchestra</b> MU1012 .50 credit 3/6 days a cycle Year	The orchestra performs classical selections ranging from works for string ensemble to large scale symphonic works. In addition, students will be placed in small chamber groups and perform in a chamber concert. Students are expected to practice their music outside of school so our class time is spent exploring the context and history of the music we are studying as well as improving technique, tone and over all musicality. We will not only prepare for our winter and spring performances, but student will be given opportunities to	

	play in small ensembles, perform in the community, study etudes and solo repertoire, learn a bit of music history and theory and engage in musical discussions with their peers. After school performances are a part of the course.	
<b>Symphonic Band</b> MU1022 .50 credit 3/6 days a cycle Year	The band program at Unionville has a high level of expectation regarding the preparation, rehearsal, home practice and performances. It is expected that members will be prepared for class as well as the performance. This course also required attendance at performances outside of the school day. The expectation is that all members will attend the concerts and be prepared for those events. Any woodwind, brass or percussion player may audition for this upper level ensemble. Placement in this class is by audition and teacher recommendation only.	Audition/Teacher rec required
<b>Jazz Band</b> MU1032 .50 credit 3/6 days a cycle Year	The Jazz program at Unionville has a high level of expectation regarding the preparation, rehearsal, home practice and performances. It is expected that members will be prepared for class as well as the performance. Members will explore big band jazz literature, improvisation and jazz history. This course also requires attendance at performances outside of the school day. In addition to our regular concerts, we will attend multiple jazz festivals as well as host our own festival, Jazz Along the Brandywine. The expectation is that all members will attend the festivals and concerts and be prepared for those events. Placement in this class is by audition and teacher recommendation only.	Audition/Teacher rec required
<b>Concert Choir</b> MU1042 .50 credit 3/6 days a cycle Year	In this ensemble, major emphasis is on vocal development, music reading skills, ear training, and the study of varied choral literature. Students will perform in concerts, solo and ensemble activities, musicals, and other special events. Concert Choir is open to students in all grades.	
<b>Chorale</b> MU1052 .50 credit 3/6 days a cycle Year	In the chorale, major emphasis is placed on continued vocal development, continuation of music reading skills, ear training and the study of more complex choral literature. Students participate in frequent appearances and concerts both on campus and off campus. Students will perform in concerts, music festivals, assemblies, musicals, and other special events. Solo and small ensemble activities are encouraged in this advanced choir. Placement in this class is by audition and teacher recommendation only.	Audition/Teacher rec required
<b>Combined Instrument &amp; Vocal</b> MU1102 1 credit 6/6 days per cycle	Jazz, Symph, Chorale, Concert Choir	Audition/Teacher rec required
<b>Combined Symphonic, Band &amp; Concert Choir</b> MU1112 .50 credit 3/6 days per cycle	Symphonic Band	Audition/Teacher rec required
<b>Combined Orchestra &amp; Concert</b> MU1122 .50 Credit 3/6 days per cycle		Audition/Teacher rec required
<b>Fundamentals of Music</b> MU1062 .25 credit 3/6 days a cycle Semester	Basic elements of music theory and composition are studied, using computers and MIDI keyboard equipment. Up-to-date software programs are used to study, write, and arrange music. Other activities may include ear training, pitch recognition, and current trends and events in the music world. Experience on a music instrument is desirable. This course will be helpful to students planning careers or avocations in the music field or related industries. Students will learn how to play piano in a class environment utilizing the HS music technology lab. They will learn scales, chords as well as songs from a song book which will need to be purchased by the student. A Cost of the book is approximately \$10. Students will also spend class time pursuing their own musical interests. Whether it is on an instrument, voice, composition or other musical interests students will have the choice	

	of where they would like to focus their musical talents. Students will work individually to achieve their musical goals which will be set by the student and instructor.	
<b>Guitar I</b> MU1072 .25 credit 3/6 days a cycle Semester	This course provides students with the skills to analyze and compose music. Guitar 1 students will learn to play the classical (nylon stringed) guitar, to read music notation and guitar tablature, and to obtain a rudimentary to advanced understanding of various guitar-playing styles. Those styles include blues, rock, folk and classical. Students will be expected to play scales, chords, and notes with correct rhythms while playing alone (solo playing) or with others (ensemble playing). The course is designed to be appropriate for the beginning player with little to no background in music and/or guitar or the advanced player who can assist with the class and will benefit from the review the course will give. Electric guitars will also be used implemented during this class.	
<b>Guitar II</b> MU2072 .25 credit 3/6 days a cycle Semester	Classes continue the process of creating a functional guitarist by introducing more complex concepts such as triplets, sixteenth note rhythms and different major/minor scales and their accompanying chords. We start developing the ability to play in position which takes us up the neck to the high register of the guitar. By the end of the second semester, students will have the ability to figure out most music they will be asked to play. Classes will study the guitar as a solo instrument in addition to advanced technique to include movable scale and chord fingerings as well as jazz harmony. In this course, they will be combining all of the concepts of the previous guitar class to complete their training. Classical technique (right hand finger-picking) will be studied so that multi-voiced pieces involving complex counterpoint may be played allowing for more interesting solo guitar work.	60% in Guitar I
<b>Music Technology I</b> MU1092 .25 credit 3/6 days a cycle Semester	This course will allow students to explore music technology applications and techniques, utilizing MIDI workstations, synthesizers, and computer interfaces. Students will learn in a hands-on environment, developing skills with sequencing, notation, and other music software. A major music lab project will be required.	
<b>Music Technology II</b> MU2092 .25 credit 3/6 days a cycle Semester	This course will allow students to explore music technology applications and techniques, utilizing MIDI workstations, synthesizers, and computer interfaces. Students will learn in a hands-on environment, developing skills with sequencing, notation, and other music software. A major music lab project will be required. This is a second level course that will utilize advanced techniques and concepts to add on to the skills learned in the first level of this course.	Music Technology I
<b>Music Theory I</b> MU1082 .25 credit 3/6 days a cycle Semester	This course provides students with the skills to analyze and compose music. The main focus of this class will be to advance our music students abilities in note reading, scale construction, interval study, chord building, melody writing, ear training, creative composition writing, and sight reading. This class is intended for students who can read music and want to enhance their own musicality and is the prerequisite for Music Theory II.	Ability to read music
<b>Music Theory II</b> MU2082 .25 credit 3/6 days a cycle Semester	This course is designed for students with a serious interest in music and is especially recommended for those considering a career in music. Topics to be studied include scales, intervals, key signatures, chords, rhythmic notation, counterpoint, four-voice realization of figured bass symbols, sight-singing, and melodic dictation. There will be periodic quizzes, part-writing assignments, and listening assignments. Students who have completed this course will have a thorough understanding of the elements of music, as well as improved listening skills. Music Theory I must be successfully completed in order to take this course. This course is a prerequisite for a future AP Music Theory course.	Music Theory I
<b>AP Music Theory</b> MU3004 1 credit 6/6 days a cycle Year 10th,11th,12th	This course is designed for students who wish to prepare for the Advanced Placement (AP) test in Music Theory. Course content is consistent with the syllabus for AP Music Theory prepared by the College Board. It is designed to develop musical skills that will lead to a thorough understanding of music composition and music theory. Students planning to major in music in college may be able to enroll in an advanced music theory course, depending on individual colleges' AP policies. This rigorous course expands on the skills learned in the Music Theory I and II courses. Musical composition, sequencing and use of MIDI digital formats are some of the many applications employed to further student understanding of music theory. Students must have completed the Music Theory	Completion of Music Theory I and II

1 & 2 courses. Advanced students may make arrangements with the teacher to test out of the Theory 1 & 2 course and earn a score of a 90% or above to qualify for this course.

## TECHNOLOGY & ENGINEERING DEPARTMENT

**Department Chair: Mike Berkeihiser**

Courses	Course Descriptions	Prerequisite
<b>Air &amp; Water Transportation</b> TE1082 .5 credit 6/6 days a cycle Semester	In this hands-on, action oriented course, you will gain a more in-depth understanding of the construction and operation of airplanes and boats. Students will build and launch model rockets and airplanes. Students will design, construct and race boat hulls. Students will learn to safely use tools, machinery, and lab equipment. (Lab Fee)	
<b>Construction &amp; Home Renovation</b> TE1092 .5 credit 6/6 days a cycle Semester	In this hands-on action-oriented course, you will learn and practice the basics of building construction. You will learn how to frame walls, shingle roofs, hang drywall, wire switches and receptacles, install windows, lay numerous types of flooring, operate a variety of tools and equipment safely, read drawings and blueprints, and much more. This course will provide any student with skills and knowledge that will pay off forever, regardless of career choice. (Lab Fee).	
<b>Land Transportation</b> TE1112 .5 credit 6/6 days a cycle Semester	In this hands-on, action oriented course, you will gain a more in-depth understanding of mechanical systems, engine repair, and aerodynamics. Areas of lab work will include: disassembly and assembly of an internal combustion engine; designing, building and racing a CO2 powered dragster car; constructing and riding a hovercraft; and metal fabrication and welding. (Lab Fee)	
<b>Robotics</b> TE1122 .5 credit 6/6 days a cycle Semester	In this exciting and challenging hands-on class, students will learn to build and program Lego Mindstorm EV3 robots accompanied by the large metal Tetrax frameworks, servos, and motors. Students will learn the basics of programming robots. The course is structured around groups of students designing and building robots to solve increasingly complex and exciting challenges.	
<b>Architectural/CAD Drafting I</b> TE1002 .5 credit 6/6 days a cycle Semester	This course will provide you with the opportunity to design, draw, and model the home of your dreams. You will use the same 2D and 3D software used in Universities and major companies. If you plan to major in architecture in college, you can use this class to build your portfolio. You will understand appearance, building techniques, economics, furnishings, traffic flow, use of space, balance, rhythm, and other design considerations necessary for quality design. (Lab fee).	
<b>Architectural/CAD Drafting II</b> TE2002 .5 credit 6/6 days a cycle Semester	In this hands-on computer-based course, you will gain a much more in-depth understanding of architectural design. If you plan to major in architecture in college, you can use this class to build your portfolio. You will use a number of different software packages to create 2- dimensional and 3- dimensional architectural drawings on the computer. You will use the same software and techniques used in colleges, universities, and professional design firms. (Lab fee).	Architectural / CAD Design and Drafting I
<b>Electronics I</b> TE1012 .5 credit 6/6 days a cycle Semester	This action-oriented student centered course is designed for students interested in electronics and engineering. You will have the opportunity to solder and build a variety of projects can be taken home, and learn about circuits and their components through experimentation. You will also have an introductory experience with robotics and computer numerically controlled equipment. (Lab Fee)	
<b>Electronics II</b> TE2012 .5 credit 6/6 days a cycle Semester	This lab oriented course is the advanced study of electronics. You will build more involved projects and experiment with more complicated circuitry, providing a more in depth understanding of current practices and techniques in the electronics field. (Lab Fee)	Electronics I
<b>Engineering I Survey</b> TE1032 .5 credit 6/6 days a cycle Semester	STEM (science, technology, ENGINEERING, and math) careers are among the fastest growing in the world today. They provide qualified graduates with countless opportunities. Take some time while you are in high school to discover the engineering field and prepare yourself for college classes. You have an opportunity at UHS that many schools cannot offer. Engineering I Survey is the study and application of Electrical, Aerospace, Robotic, Manufacturing, and Design Engineering. You will use the engineering design process to	

	<p>solve engineering problems. You will communicate your solutions using state-of-the-art 2D and 3D CAD software, the same software packages used in colleges and in business. You will also learn to model your designs using multiple 3D printers, a laser cutter, and a huge computer numerically controlled (CNC) router. These models can be tested and evaluated using our computer-driven wind tunnel. This is very much a hands-on student driven class where students have freedom to create and build their own designs. (Lab fee).</p>	
<p><b>Engineering II Survey</b> TE2032 .5 credit 6/6 days a cycle Semester</p>	<p>This course is an extension of Engineering I Survey. The content in the second course is deeper and students have much more freedom to choose the direction they would like to go. They can choose the engineering discipline they would like to focus on. Students will learn to build and program VEX Robots. The capstone activity is the design, manufacture, and sale of a product. Students will break into teams of design, marketing, finance, sales, production, safety, and quality. Student teams function like a business to design a product, take on shareholders, conduct market research, safely produce their high quality products using state of the art manufacturing techniques, sell their products, and pay stockholders. (Lab fee).</p>	<p>60% in Engineering Survey I</p>
<p><b>Engineering/CAD Drafting I</b> TE1022 .5 credit 6/6 days a cycle Semester</p>	<p>This action-oriented student-centered course will provide you with an introduction to engineering drafting techniques, computer-aided drafting (CAD), 2D and 3D on-screen computer modeling, technological design and problem solving, and computer numerically controlled (CNC) machining. Students will learn to use our 3D printers, laser cutter, and huge CNC router for class projects. We call it a student centered course because you will spend the bulk of your time working on drawings, models, CAD drawings, and CNC projects. While this course would be beneficial to anyone, it is extremely valuable for anyone planning a career in engineering or other technical fields. This class will also provide you with the opportunity to complete a graduation project. (Lab fee).</p>	
<p><b>Engineering/CAD Drafting II</b> TE2022 .5 credit 6/6 days a cycle Semester</p>	<p>This is a computer-based advanced drafting course where you will create CAD drawings, 2D and 3D computer models, and 3-D solid models. You will also have the opportunity to bring your computer models to life through the use of 3D printers, a laser cutter, and a huge CNC router for class projects. Students will also solve complex engineering problems. They will draw their solutions and model them using CNC equipment. (Lab fee).</p>	<p>Engineering / CAD Design and Drafting I</p>
<p><b>Graphic Communications I</b> TE1042 .5 credit 6/6 days a cycle Semester</p>	<p>This course will provide an examination of graphic design, photography, and visual communications methods. A variety of graphic and media processes will be examined. Areas of study will include but not be limited to: desktop publishing, package and graphic design, screen process printing, multi-color and process color printing, digital photography, image conversion and manipulation. Students will be expected to produce a variety of items using software and hardware applications. You will use industry-related software (Adobe Creative Suite) to gain creative experience in creating designs such as logos, poster, packaging, publications, decals, and screen printed designs. The design process will be used extensively and students will be evaluated upon their ability to apply their knowledge to produce quality products. (Lab Fee)</p>	
<p><b>Graphic Communications II</b> TE2042 .5 credit 6/6 days a cycle Semester</p>	<p>In this course, you will build upon your knowledge of design and fine-tune your ability to use typography, layout, and color theory to create eye-catching designs. You will use industry-related software (Adobe Creative Suite) to gain creative experience in creating designs such as logos, poster, packaging, publications, decals, and screen printed designs. Students will also work with outside clients to produce visual products. These projects will be advanced in both scope and design. Advanced techniques using Adobe Creative Suite will be explored in order to meet the needs of these clients. (Lab Fee)</p>	<p>Graphic Communications I</p>
<p><b>Photography I</b> TE1052 .5 credit 6/6 days a cycle Semester.</p>	<p>This is an activity-oriented course designed for all students who are interested in exploring photography as a hobby or possible career choice. You will learn about digital photography through hands-on activities and projects. They will have an opportunity to explore different types of camera and photography equipment, including professional drones. Basic photographic principles including composition, exposure, processing, printing and presentation methods will be explored. You will have an introduction to the use of industry-related software (Adobe Creative Suite) to manipulate photographs that you create. (Lab Fee)</p>	
<p><b>Photography II</b> TE2052</p>	<p>This activity-oriented course offers the student who has completed Photography I the opportunity to further refine skills in photography. You will have opportunities to improve</p>	<p>Photography I</p>

.5 credit 6/6 days a cycle Semester	camera handling, build intermediate photography skills, and photo presentation skills. Projects will include the portrait, architectural, nature, and other types of photographs and preparing photographs for display. Students will also have to opportunity to utilize drones explore aerial photography, The use of industry-related software (Adobe Creative Suite) to manipulate images will be emphasized. (Lab Fee)	
<b>Photography III</b> TE3052 .5 credit 6/6 days a cycle Semester	This activity-oriented course offers the student who has completed Photography II the opportunity to further refine skills in photography. You will have opportunities to explore more advanced photographic skill and become more comfortable with professional level equipment. The students will have the opportunity to explore event and location photography as well as the opportunity to further utilize drones for aerial photography, The use of industry-related software (Adobe Creative Suite) to manipulate images will be emphasized. (Lab Fee)	Photography II
<b>Photography IV</b> TE4052 .5 credit 6/6 days a cycle Semester	These semester courses will challenge students to use all of their previous course knowledge to further develop their skills and understanding of photography. Students will be required to develop an independent contract exploring an aspect of photography that they would like to further explore. Work outside of class will be required to complete (Lab Fee)	Photography III
<b>TV/Video Production I</b> TE1062 .5 credit 6/6 days a cycle Semester	In this hands-on course, students will make their own video productions. Students will have the opportunity to learn how to operate video cameras, sound equipment and various editing and other tools to produce a variety of video assignments based on personal, school, and community interests. There will be both group and individual projects. This class utilizes a fully equipped TV Studio and editing facility. No previous experience is necessary. (Lab Fee)	
<b>TV/Video Production II</b> TE2062 .5 credit 6/6 days a cycle Semester	In this course students will continue to study the subject of video production. Much of the course will be spent learning how to utilize non-linear editing systems and additional camera techniques including lighting and special effects. Students will use different audio equipment, specifically external microphones, and study their importance in video productions. Students will work in teams using digital video equipment to complete a variety of video production assignments. Each student will be expected to produce several professional level edited projects for a student video portfolio.	TV / Video Production I
<b>TV/Video Production III</b> TE3062 .5 credit 6/6 days a cycle Semester	These semester courses will challenge students to use all of their previous course knowledge to produce video packages. Students will operate the audio and video mixers and other equipment used in the studio broadcast and control rooms. The class will be expected to work as part of a team to write and produce packages that will be featured on our school morning show and on the school TV network. Some time will also be spent on chroma key work, lighting techniques and creation of computer animated graphics. Students will be encouraged to produce segments for entry in various contests and scholarship opportunities.	TV / Video Production II
<b>TV/Video Production IV</b> TE4062 .5 credit 6/6 days a cycle Semester	These semester courses will challenge students to use all of their previous course knowledge to produce video packages. Students will operate the audio and video mixers and other equipment used in the studio broadcast and control rooms. The class will be expected to work as part of a team to write and produce packages that will be featured on our school morning show and on the school TV network. Some time will also be spent on chroma key work, lighting techniques and creation of computer animated graphics. Students will be encouraged to produce segments for entry in various contests and scholarship opportunities.	TV / Video Production III
<b>Wood &amp; Metal Technology I</b> TE1072 .5 credit 6/6 days a cycle Semester	In this hands-on student-centered class, students will build numerous take-home furniture pieces out of wood, metal, and plastics. These projects may include a hanging wall cabinet, mantle clocks, and a variety of other woodworking and metalworking projects. Students will use all of the equipment in our fully outfitted woodworking lab (shop). This is a great opportunity for all students, regardless of their future career aspirations. Students will develop skills in this class that will be useful throughout life in their careers and as future homeowners. (Lab Fee)	

<b>Wood &amp; Metal Technology II</b> TE2072 .5 credit 6/6 days a cycle Semester	This is a course in advanced level woodworking where students will have the opportunity to build a wide variety of furniture pieces and other items. Students will build upon what they learned in the previous course class and apply their knowledge to more advanced projects. (Lab Fee)	Wood and Metal Technology I
<b>Wood &amp; Metal Technology III</b> TE3072 .5 credit 6/6 days a cycle Semester	Advanced courses designed to utilize current and innovative manufacturing techniques. Students will work independently to design and make a custom piece of furniture. Students will incorporate the use of CNC machinery in the design. (Lab fee).	Wood and Metal Technology II
<b>Wood &amp; Metal Technology IV</b> TE4072 .5 credit 6/6 days a cycle Semester	Advanced courses designed to utilize current and innovative manufacturing techniques. Students will work independently to design and make a custom piece of furniture. Students will incorporate the use of CNC machinery in the design. (Lab fee).	Wood and Metal Technology III
<b>Intro to Engineering Design Honors</b> TE1003 1 credit 6/6 days a cycle Year	This honors level year long course utilizes Autodesk Inventor 3D solid modeling design software to help students design solutions to proposed problems. Students will learn how to document their work and communicate solutions to peers and members of the professional community. The major focus of the IED course is to expose students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards, and technical documentation. Students will learn to create animated 3D assembly models in Inventor and print them on our 3D printers. Students can earn 3 college credits for taking this class through the Project Lead The Way program. (Lab fee).	Concurrent enrollment or Completion of Algebra I Academic, Accelerated, or Honors
<b>Intro to Engineering Design Honors Blended</b> TE1003B 1 credit 6/6 days a cycle Year	This honors level year long course utilizes Autodesk Inventor 3D solid modeling design software to help students design solutions to proposed problems. Students will learn how to document their work and communicate solutions to peers and members of the professional community. The major focus of the IED course is to expose students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards, and technical documentation. Students will learn to create animated 3D assembly models in Inventor and print them on our 3D printers. Students can earn 3 college credits for taking this class through the Project Lead The Way program. (Lab fee).  Blended learning combines traditional and online instruction to develop personalized learning. With three days in the classroom and three days online, blended learning uniquely provides flexibility in the place, pace, and path of instruction. The course is matched with a traditional course in level of rigor and investment of time. Skills in organization of materials, use of technology, and management of time are essential	Concurrent enrollment or Completion of Algebra I Academic, Accelerated, or Honors
<b>Principles of Engineering Honors</b> TE2003 1 credit 6/6 days a cycle Year	Through design problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, energy sources, machine control, fluid power, the strength of structures and materials, and automation. Students program robots in Robot C to solve engineering design problems. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation. Students can earn 3 college credits for taking this class through the Project Lead The Way program. (Lab fee).	73% in Introduction to Engineering Design Honors
<b>Computer Integrated Manufacturing Honors</b> TE3003 1 credit 6/6 days a cycle	CIM is the study of manufacturing planning, integration, and implementation of automation. CIM explores manufacturing history, processes, systems, and careers. In addition to technical concepts, the course incorporates finance, ethics, and engineering design. This reflects an integrated approach that manufacturers have adopted to improve safety, quality, and efficiency. Students will analyze, design, and build manufacturing systems. While implementing these designs, students will continually hone their interpersonal skills, creative abilities, and understanding of the design process. Students	73% or better in Principles of Engineering Honors

Year	apply knowledge gained throughout the course in a final open-ended problem to build a factory system. The course applies and concurrently develops secondary-level knowledge and skills in mathematics, science, and technology. Students can earn 3 college credits for taking this class through the Project Lead The Way program. (Lab fee).	
<b>Civil Engineering and Architecture Honors</b> TE3013 1 Credit 6/6 days a cycle Year	Civil Engineering and Architecture is the study of the design and construction of residential and commercial building projects. The course includes an introduction to many of the varied factors involved in building design and construction including building components and systems, structural design, stormwater management, site design, utilities and services, cost estimation, energy efficiency, and careers in the design and construction industry. The major focus of the CEA course is to expose students to the design and construction of residential and commercial building projects, design teams and teamwork, communication methods, engineering standards, and technical documentation. Students can earn 3 college credits for taking this class through the Project Lead The Way program. (Lab fee)	73% or better in Principles of Engineering Honors
<b>Engineering Design &amp; Development Honors</b> TE4003 1 credit 6/6 days a cycle Year	Engineering Design and Development (EDD) is the capstone course in the PLTW high school engineering program. It is an open-ended engineering research course in which students work in teams to design and develop an original solution to a well-defined and justified open-ended problem by applying an engineering design process. Students will perform research to select, define, and justify a problem. After carefully defining the design requirements and creating multiple solution approaches, teams of students select an approach, create, and test their solution prototype. Student teams will present and defend their original solution to an outside panel. While progressing through the engineering design process, students will work closely with experts and will continually hone their organizational, communication and interpersonal skills, their creative and problem solving abilities, and their understanding of the design process.	73% or better in Computer Integrated Manufacturing Honors or Computer Integrated Manufacturing Honors

## ACADEMICALLY TALENTED

**Department Chair: Maggie Hunt**

Courses	Course Descriptions	Prerequisite
<b>Higher Order Thinking Skills</b> AT1002 .25 credit 3/6 per cycle Semester	The HOTS seminar is an experiential class that uses small and large group discussion to teach communication, cooperation, and critical thinking skills. Students are exposed to topics designed to help them discover their strengths and weaknesses as thinkers and as gifted learners. The seminar is graded on a Pass/Fail basis. Limited homework is required to successfully complete the course.	Class is available to identified Academically Talented students whether or not student has a GIEP
<b>College &amp; Career Readiness Survey</b> BUS1232 .25 credit 3/6 days a cycle Semester	This course is a .5 semester elective and is the semester, online option. This course will introduce students to a Windows environment that will enable students to work with and manage computer files and software applications. Technology topics include: Microsoft Word, Microsoft Excel and Google Apps. Career Readiness topics will also be introduced. Career Readiness topics include Resumes, Cover Letters, Job Application Forms, Interviews and follow-up letters. An appropriately-placed student should expect a minimal amount (less than one hour per week) of assigned homework. Software: Microsoft Office 2016 and Google Applications.	Class is available to identified Academically Talented students whether or not student has a GIEP

## SPECIAL EDUCATION

**Department Chairs: Stephanie Brown & Megan Hilbolt**

Courses	Course Descriptions	Prerequisite
<b>Pathways Support</b>	This program is designed to provide support to students who have emotional needs, identified through an assessment and evaluation process, who require additional support to be successful in the school environment. Services are maintained to meet the individual needs of these students. Students may receive support in the Pathways classroom or in the general education classes. Ongoing parent contact, diagnostic evaluations, and skill development through the delivery of curriculum are an integral part of the program.	
<b>Learning Support</b>	This course is designed to provide specific support based on a student's individualized needs, identified through an assessment and evaluation process. Students may receive strategy instruction or opportunities for guided practice related to a student's IEP goals.	



Support may also be provided in general education classes where the special education teacher or paraprofessional is a consultant, co-planner or co-teacher alongside the general education teacher.

## COUNSELING CENTER

Department Chair: Maribeth Lyles

Courses	Course Descriptions	Prerequisite
<b>College Admissions Seminar 11</b> CC0011 1/6 per cycle Semester	During this six-session workshop that meets one day per cycle, participants will review important steps in the college admissions process. Topics will include: how to search for colleges, college visit tips and strategies, letters of recommendations, activities resume, testing requirements, personal statements/essays, and other important college application components. Students will be expected to complete work using the Naviance program and/or college websites between sessions. This seminar will be helpful to students who would like additional support with the college exploration and application process.	
<b>College Admissions Seminar 12</b> CC0012 1/6 per cycle Semester	During this six-sessions workshop that meets one day per cycle, participants will review important steps in the college application process. Topics will include: how to search for colleges, college visit tips and strategies, essay review and edits, how to send test scores, interview skills, and other important information about completing college applications and sending supplemental materials. Students will be expected to complete work using the Naviance program and/or college websites between sessions. This seminar will be helpful to students who would like additional support as they work on completing college application requirements.	

## DUAL ENROLLMENT

[https://www.wcupa.edu/\\_admin/dualEnrollment/](https://www.wcupa.edu/_admin/dualEnrollment/)

Dual enrollment courses are offered to UHS seniors only. Minimum of 3.0 GPA to apply for dual enrollment. Students must provide their own transportation. Students would leave UHS after period 4. Please see your school counselor by **April 3, 2020** if interested.

Courses	Course Descriptions	Prerequisite
<b>ANT 102 Introduction to Cultural Anthropology</b> \$600 3 credits	This course is an introduction to the fundamental concepts, methods, and theories of cultural anthropology. Through a variety of case studies from around the world, we will focus on the connections between culture, power, and representation. Emphasis will be placed on analyzing the process and outcomes of ethnographic fieldwork.	Class meets at WCU Graduate Center M-W-F at 1:15pm
<b>BLA 201 Legal Environment of Business</b> \$600 3 credits	Examines the framework of the American legal system and its impact on the environment in which business operates. Sources of law, including constitutional, statutory, administrative, and common law principles, that define the relationships between government and business; buyers and sellers of goods and services; and employers and employees are discussed.	Class meets at WCU Graduate Center M-W-F at 1:15pm
<b>JPN 101 Elementary Japanese</b> \$600 3 credits	The course will provide initial training toward proficiency in Japanese, which features listening, speaking, reading, and writing with emphasis on developing basic skills in Japanese communication. This includes words, the sound system, the structure and situations they are used in, and more.	Class meets at WCU Graduate Center M-W-F at 1:15pm
<b>MAT 261 Calculus III</b> \$800 4 credits	The calculus of several variables. Topics include polar coordinates, vectors and three-dimensional analytic geometry, differentiation of functions of several variables, multiple integrals, and line and surface integrals.	Class meets at WCU Graduate Center M-W-F at 1:15pm

## CAREER & TECHNICAL EDUCATION

Courses	Course Descriptions	Prerequisite
<b>Homeland Security Octorara</b> 891 Year 10th, 11th, 12th	The Octorara Homeland Security and Protective Services Academy (OHSPSA) is an approved PA Department of Education Career and Technical Education Program of Study available to students in grades 10, 11, and 12 for every Chester County schools. The Academy is a part-time school of choice specializing in careers for pre-hospital emergency medical care, emergency medical technician	By application only.

(EMT), firefighting, emergency management, law enforcement, corrections, and military services. This program of study prepares individuals to apply technical knowledge and skills required to perform entry level duties as a firefighter, emergency medical and first aid responder, security, corrections, as well as various other occupations which encompass the broad spectrum of public safety. The program stresses techniques, methods, and procedures associated with emergency responses. Upon completion, students have the ability to earn up to 50 college credits, 64 state and national job-related certifications which are required for entry level positions. The Academy is a half day program located at the Chester County Emergency Services Training Center in Coatesville. For more information about OHSPSA, go to [www.ohspara.k12.pa.us](http://www.ohspara.k12.pa.us).

**Technical College High School: TCHS**

The Chester County Intermediate Unit operates career and technical education programs for high school students at the Chester County Technical College High School (TCHS) in three locations: Brandywine Campus, Pennock’s Bridge Campus and Pickering Campus. The Chester County Technical College High School (TCHS) is a part-time, public high school of choice specializing in career and technical education for students in grades 9-12. TCHS offers students an opportunity to prepare for their futures. Whether that means going on to higher education, securing a job after high school or some combination of the two, TCHS’ student-centered approach crafts an educational experience as unique as each of its students. For more information about Chester County Technical College High School programs or to apply online visit [www.technicalcollegehighschool.org](http://www.technicalcollegehighschool.org). The career and technical education (CTE) programs offered at TCHS are aligned to the Pennsylvania State Standards, focused on national industry standards and are tuition-free for students. CTE programs lead seamlessly to postsecondary education through the Pennsylvania Department of Education’s (PDE) SOAR Programs of Study. The mission of SOAR is to prepare **Students (who are) Occupationally and Academically Ready** for college and careers in an increasingly diverse, high- performing workforce. Graduates of approved SOAR programs who meet academic and technical criteria qualify for several **FREE** technical credits at over forty-three participating colleges across Pennsylvania. For more information about SOAR and the complete list of participating colleges and postsecondary program visit: [www.cciu.org/collegecredit](http://www.cciu.org/collegecredit).

**Allied Health  
Science  
Technology**  
TCHS  
T100A  
2 periods  
6/6 a cycle  
Year

The Allied Health program is a highly regarded option for those considering a career in the medical profession. Top seniors who enroll in this 7.5 hour per week college prep program split their time behind a desk in the classroom and on their feet in local health care facilities. Students have four pathways to choose from: **Hospital, EMT, Public Health, or Sports Medicine** track. The hospital track is for those students who are primarily interested in getting a comprehensive overview of the medical field in a hospital setting. Students will complete clinical rotations across a wide variety of hospital departments. The EMT track is for those students who are primarily interested in pursuing a career in the emergency medical field or building a foundation of knowledge for allied health professions. Students will complete hands-on clinical rotations in the field with Good Fellowship Ambulance and EMS Training Institute. The Public Health track is primarily for students who are interested in the relationship between community and health. The sports medicine track is for those students who are interested in pursuing a career in the physical medicine and rehabilitation field. Students may complete clinical rotations in high school athletic training rooms and community rehabilitation facilities. This program, being run through the Technical College High School (TCHS), offers students from Unionville a comprehensive, one-year program which combines classroom theory and hands-on experience. Students interested in becoming an athletic trainer, physical therapist, nutritionist/dietician or a sports medicine physician will benefit from instruction by a TCHS educator with industry experience. The program, based out of Unionville High School, offers students the ability to gain experience with student-athletes in the school’s training facilities, as well as patient experience in clinics in the surrounding community. Students may have the opportunity to earn professional certificates through the program. For more information, please schedule a time to speak with your school counselor.

By application only. Students must possess a driver’s license, reliable means of transportation and proper clearances.

<b>Animal Science</b> TCHS T101A Year	Animal Science prepares students to provide for the welfare of animals in the pet companion industry, veterinary science and biomedical fields. Graduates of the program are prepared for post- secondary education and entry-level employment. Upon graduation, interesting and rewarding career paths can be followed which combine a love for animals with an interest in the life sciences. Program concentrations include animal anatomy and physiology, animal cruelty issues, animal hygiene, genetics, husbandry, nutrition, preventative care and medicine, reproduction, and surgical assisting. Due to the emphasis on science and math, students considering this program should possess a strong academic foundation.	By application only
<b>Automotive Collision Technology TCHS</b> T102A Year	Automotive Collision Technology is for students who have a keen interest in motor vehicles and an eye for color, shape and creativity. Graduates of the program are prepared to pursue professional credentialing, entry- level employment, and post-secondary education. Automotive Collision technology instruction is provided in the following areas: detailing and estimating, glass and hardware repair and replacement, metal finishing and body fillings, non-structural damage repair, outer body panel repair, painting and refinishing, welding and cutting. Program learning activities parallel the industry-recognized I-CAR curriculum.	By application only
<b>Automotive Service Technology TCHS</b> T103P Year	The Automotive Service Technology program is certified by the National Automotive Technicians Education Foundation (NATEF) and prepares students for post-secondary education and entry-level employment in the rapidly changing automotive service industry. Students are introduced to the ever-changing advancements that occur in the automotive industry such as hybrid vehicle design and maintenance. Instruction is provided in the following areas: automotive electrical and electronics systems, brake repair and installation, drive train and engine performance, heating and cooling systems, suspension and steering systems. The program also emphasizes customer relations and instructs students in the use of proper etiquette in a service economy.	By application only.
<b>Carpentry TCHS</b> T105A Year	The Carpentry program develops students' skills for a career in the residential, commercial and home improvement construction industry. Students enrolled in the program learn safety practices, job estimating, and materials selection practices. They also learn the basics of rough carpentry, including the layout of walls, rafters, stairs and floors. Finish carpentry is also studied, including blueprint reading and drafting, cutting and joining construction materials, door, window and trim installation. Students have the opportunity to learn cabinet and furniture construction, including the use of laminates. A major focus is the construction of the joints required in fine cabinetry and furniture construction. Students study blueprint reading, construction methods and estimating, materials selection, and the safe use of hand and power tools. Students are responsible for the completion of hands- on carpentry and cabinetmaking projects from start to finish.	By application only.
<b>Computer Info Systems Programming TCHS</b> T107A Year	In the Computer Information Systems program, there is an emphasis on operating systems, applications programming languages, and networking equipment through hands-on training. After successful completion of the course, students are prepared for post-secondary education and entry-level positions in the computer support and operations, networking, and software development fields. There are four primary tracks addressed in the Computer Information Systems program, as follows: Networking Hardware, Networking Software, A+ Training, and Application/Web Development. In addition, all students are exposed to network security concepts. Our Security+ training course teaches the latest testing objectives and is designed to assist users in implementing and maintaining communication security, cryptography, access control, infrastructure security and authentication.	By application only.

<b>Cosmetology TCHS</b> T108A Year	The Cosmetology program prepares students for state licensing in the field of cosmetology. Students can qualify to become a licensed cosmetologist or to obtain a specialized license in other areas, such as: nail technician, esthetician or natural hair braider. Program theory and hands-on skill instruction is provided in the following areas: facials, hairstyling, cutting, coloring, permanent waving and relaxing, straightening, infection control, principles and practice, manicures and pedicures, and professional awareness.	By application only.
<b>Criminal Justice &amp; Police Sciences TCHS</b> T109A Year	The Criminal Justice and Police Sciences program prepares students for both post-secondary education and entry-level employment in the protective services field. Students in the program are graded based on mastery of traditional classroom theory and performance of hands-on skills, including: performing police and security tactics, investigating crime scenes, and investigation report writing. Students receive instruction in the following areas: basic fire science, crime scene investigation, criminal investigation, criminal law, civil law, and court procedures, electronic security systems, forensic science, investigative photography, police and security tactics, and self-defense.	By application only.
<b>Culinary Arts TCHS</b> T110A Year	The Culinary Arts program teaches students the necessary skills to be successful in the creative and rewarding food service industry. Graduates of the program may choose to continue their education with advanced standing in college and other post-secondary programs, or they may seek employment in entry-level culinary positions. The instructional program includes classroom theory and hands-on skill development in the following areas: baking, catering, customer service, food preparation, food service management, short order and high-volume cooking. Graduates of the program are certified under of an American Culinary Federation approved program.	By application only.
<b>Early Childhood Care &amp; Education TCHS</b> T111A Year	The Early Childhood Care and Education program aligns its curriculum with the Pennsylvania Department of Education Bureau of Career & Technical Education Child Development Associate (CDA)-Ready curriculum. All components of our Early Childhood Care and Education program prepare students to earn the CDA national certification. To become CDA ready, students complete 120 hours of formal training through multiple modalities, such as: active accredited trainings, project-based learning, research and field observations, and web-based distance education. Students gain experience as they rotate through various in-house preschool programs. Students create portfolios and professional development records that document their training and 480 hours of experience working with children in a preschool environment. Agreements with various colleges can provide students with between six and 15 undergraduate credits in early childhood education after completing the program.	By application only.
<b>Engine Technology TCHS</b> T114A Year	The Engine Technology program prepares students with the skills to troubleshoot and repair residential, commercial, and recreational outdoor power equipment and small engine. The program is aligned with the industry-recognized Equipment Engine Training Council (EETC) certification program, and includes engine repair and rebuilding, performance upgrades and the repair of various systems. The systems covered in the program include fuel, electronic, lubrication, cooling and braking systems. Maintenance procedures are a key component of the program as they relate to welding, fabrication and machining. The use of computer technology in a customer service- and teamwork-based learning environment, is a major focus of the program. Career advancement in this field is largely dependent upon post-secondary education and successful work experience.	By application only.
<b>Engineering &amp; Robotics TCHS</b> T104A	The Robotics and Electronics program prepares students for positions in the electronics, computer hardware repair and robotics industries. In addition, it provides students with a strong academic foundation to continue their education in	By application only.

Year	<p>a post-secondary institution or college. Students in the traditional Robotics and Electronics program learn how to build and test electronic circuits and how to apply the electronic theories of audio systems, radio and wire communications, and analog/digital communications to real world situations. In addition, students are taught the basics of computer servicing/maintenance and networking. The robotics component prepares students for a variety of career opportunities in the area of robotics, industrial process and automation systems. Laboratory activities cover electronic circuits and devices, digital microprocessor systems, computers and networks, and programming software tools. Programmable logic controllers and vision and motion control are examined. Applied Engineering Technology (AET) is an innovative program within the traditional Electronics and Robotics program that permits high school juniors and seniors to earn up to 16 college credits at Delaware County Community College (DCCC).</p>	
<b>Health Career Pathways TCHS</b> T116A Year	<p>Students explore the many exciting career pathways available in the health and medical occupations fields. They study vital signs, adult and pediatric patient assessment, ambulatory devices, and direct patient care. Direct clinical observation experience in a health care setting may be arranged to prepare students for a variety of careers in the healthcare industry. The Health Career Pathways program combines instruction in anatomy and physiology, growth and development, health careers, medical abbreviations, medical ethics, medical terminology, and nutrition. An emphasis is placed on communication and leadership skills, computer literacy and medical math. Many graduates of this program choose to continue their education to pursue careers in nursing, sports medicine, physical therapy and radiology.</p>	By application only.
<b>HVAC &amp; Refrigeration Technology TCHS</b> T119A Year	<p>The HVAC/Refrigeration Technology program provides students with the opportunity to install, maintain, and troubleshoot a wide range of heating, ventilation, air-conditioning, and refrigeration systems. Students in the program develop the skills needed to assemble and install tubing and piping systems, motors, compressors, control devices, valves and thermostats. Blueprints and schematics for related equipment and systems are also studied. In addition, basic electrical and control circuit concepts are taught and applied. Classroom presentations are reinforced by hands-on projects that enhance the learning experience. Graduates of the program may choose to continue their education in a post-secondary technical program, pursue an apprenticeship, or gain entry-level employment in the HVAC/ refrigeration field.</p>	By application only.
<b>Teacher Leadership Academy TCHS</b> T122A and T122P Year	<p>The Teacher Leadership Academy is a program for high school seniors interested in pursuing a career in the field of education. In addition to earning 2 high school credits, students have the opportunity to enroll in a dual enrollment program with Delaware County Community College (DCCC), where they can earn 9 college credits. The college courses are EDU 110 - Introduction to Teaching, EDU 215 -Theory and Field Experience in Elementary Education, and ENG 100 - English Composition. The course consists of 7.5 hours/week divided between classroom instruction and internships with certified, tenured teachers at all grade levels, resulting in approximately 180 hours of instruction and 90 hours of internship experience. Student internships consist of Elementary, Secondary Education and Special Education placements.</p>	By application only. Students must possess a driver's license, reliable means of transportation and proper clearances.
<b>Veterinary Science TCHS</b> T800A Year	<p>The Veterinary Science program prepares students for successful employment in the field of veterinary medicine in entry-level positions at private veterinary practices, animal hospitals, biomedical research facilities, pharmaceutical companies, diagnostic laboratories and the military. Students interact with animals in and out of the classroom, job shadow and attend clinics with local veterinarians. The Veterinary Science program is designed to prepare students for</p>	By application only.

post-secondary education with an emphasis on the sciences. Students must possess a strong academic foundation and have at least a 3.0 GPA. Students in this program have the opportunity to pursue college credits while enrolled at TCHS.

Senior program only through TCHS and West Chester University. See your school counselor for more information.



## Geo-Spatial Information Systems & Data Science (GIS)



IN PARTNERSHIP WITH  
WEST CHESTER UNIVERSITY!

Geo-Spatial Information Systems (GIS) refers to information systems that allow for the integration, analysis, storage, editing and sharing of different types of data. This data is then brought together using sophisticated technology to present a more holistic picture of a particular geographic region. Students in this program will be exposed to cutting-edge data analytics practices through the use of industry-grade technology at West Chester University.

### Program Concentrations

- 3D Mapping
- Data Analysis
- Business Application
- Programming

### Career Options

GIS has application in a wide variety of industries which include, engineering, planning, management, transport/logistics, government, environmental conservation, military, insurance, telecommunications, business and many more.

The opportunities are endless with a background in GIS.  
Check out a few of the exciting ways in which GIS is being utilized!

- Disease Control
- Mars Rover Landing
- Archaeological Surveying
- Search and Rescue
- Global Shark Tracking
- Self-Driving Vehicles
- Augmented Reality
- Emergency Calls and Dispatch
- Military Mission Planning
- DNA Traits Mapping
- Building Virtual Environments for Video Games

## COURSE NUMBERS & COURSE NAMES BY DEPARTMENT

### ENGLISH

ENG1001	English 9 First Level
ENG1002*	English 9 Academic
ENG1003*	English 9 Honors
ENG2001	English 10 First Level
ENG2002*	English 10 Academic
ENG2003*	English 10 Honors
ENG2012*	Creative Writing
ENG2022*	Public Speaking
ENG3001	English 11 First Level
ENG3003*	English 11 Honors
ENG3003B	English 11 Honors Blended
ENG3004*	AP English Language & Composition
ENG3062*	American Literature 11 Academic
ENG3072*	American Composition 11 Academic
ENG4001	English 12 First Level
ENG4003*	English 12 Honors
ENG4004*	AP English Literature & Composition
ENG4022*	Comparative Lit 12 Academic
ENG4032*	Conflict Literature 12 Academic

### SOCIAL STUDIES

SS1001	Western Civilization First Level
SS1002*	Western Civilization Academic
SS1003*	Western Civilization Honors
SS2001	World History First Level
SS2002*	World History Academic
SS2002B	World History Academic Blended
SS2003*	World History Honors
SS2004*	AP World History
SS2014*	AP Psychology
SS3001	U.S. History & Cultures First Level
SS3002*	U.S. History & Cultures Academic
SS3003*	U.S. History & Cultures Honors
SS3004*	AP US History
SS4001	Civics & Econ: 21st Century First Level
SS4002*	Civics & Econ: 21st Century Academic
SS4004*	AP Comparative Government & Politics
SS4014*	AP Economics
SS4024*	AP US Government

### MATH

MA1001	Algebra I A First Level
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MA1002*	Algebra I Academic
MA1012*	Algebra I Accelerated
MA2001	Algebra I B First Level
MA2002*	Geometry Academic
MA2003*	Geometry Honors
MA2003B	Geometry Honors Blended
MA2012*	Geometry Accelerated
MA3001	Geometry First Level
MA3002*	Algebra II Academic
MA3003*	Algebra II Honors
MA3012*	Algebra II Accelerated
MA4002*	Algebra III and Trigonometry Academic
MA4012*	Trigonometry & Analysis Accelerated
MA4022*	Statistics Academic
MA4023*	Advanced Math Honors
MA4032*	Statistics Accelerated
MA5002*	Topics in Calc & Statistics Accelerated
MA5004*	AP Calculus AB
MA5012*	Calculus Accelerated
MA5014*	AP Statistics
MA5014B	AP Statistics Blended
MA6004*	AP Calculus BC

### SCIENCE

SC1001*	Global Science First Level
SC1002*	Biology I Academic
SC1003*	Biology I Honors
SC1003B	Biology I Honors Blended
SC2001	Biology I First Level
SC2002*	Chemistry I Academic
SC2003*	Chemistry I Honors
SC3001*	Integrated Science First Level
SC3002*	Physics I Academic
SC3003*	Physics I Honors
SC3004*	AP Physics C: Mechanics
SC3012*	Biology II Academic
SC3014*	AP Biology
SC3022*	Environmental Science Academic
SC3024*	AP Environmental Science
SC3032*	Astronomy & Oceanography Academic
SC3034*	AP Chemistry II
SC3042*	Forensic Science Academic
SC4002*	Physics II Academic

SC4004\* AP Physics C: Electricity & Magnetism

WLF3003\* French III Honors

WLF4002\* French IV Academic

WLF4003\* French IV Honors

WLF5002\* French V Academic

WLF5004\* AP French

WLG1002\* German I Academic

WLG2002\* German II Academic

WLG2003\* German II Honors

WLG3002\* German III Academic

WLG3003\* German III Honors

WLG4002\* German IV Academic

WLG4003\* German IV Honors

WLG5002\* German V Academic

WLG5004\* AP German

WLS1002\* Spanish I Academic

WLS2002\* Spanish II Academic

WLS2003\* Spanish II Honors

WLS3002\* Spanish III Academic

WLS3003\* Spanish III Honors

WLS4002\* Spanish IV Academic

WLS4003\* Spanish IV Honors

WLS5002\* Spanish V Academic

WLS5004\* AP Spanish

WLS5004B AP Spanish Blended

## HEALTH/PE

HPE1002 Wellness I

HPE1012 Team Building & Leadership 9

HPE1022 Drivers Education - Fall

HPE1032 Drivers Education - Spring

HPE1112 Adaptive PE

HPE1122 Full Year Adaptive PE

HPE2002 Wellness II

HPE2012 Sports Science

HPE2022 Lifelong Fitness 10

HPE3012 Adventure Based Education

HPE3022 Introduction to Yoga

HPE3032 Personal Fitness

HPE3042 Team Games

## BUSINESS APPLICATIONS

BUS1042 Apps for Digital Devices

BUS1052 Entrepreneurship

BUS1072 Multimedia Productions

BUS1082 Adobe Photoshop

BUS1092 Web Development Using HTML

BUS1102 Programming Principles with Python

BUS1112 Personal Finance

BUS1112B Personal Finance Blended

BUS1212 College and Career Readiness

BUS2002 Accounting I

BUS2002B Accounting I Blended

BUS2004 AP Computer Science A

BUS2012 Business Personal Law

BUS2014 AP Computer Science Principles

BUS2022 Criminal Justice

BUS2032 Intro to Computer Programming Using C++

BUS2042 Sports & Entertainment Marketing

BUS3012 Accounting II

## WORLD LANGUAGE

WLF1002\* French I Academic

WLF2002\* French II Academic

WLF2003\* French II Honors

WLF3002\* French III Academic

## FAMILY CONSUMER SCIENCES

FCS1002 Foods I

FCS1012 Foods II

FCS1022 Child Development

FCS1032 Housing & Interior Design

FCS2002 Regional & Global Cuisine

## SUPPORT

LS Learning Support

PS Pathways

AT1002 Higher Order Thinking Skills

## ART

ART1002 Art I: Introduction to Drawing

ART1012 Art 3-D Design I

ART1022 Art 2-D Survey

ART1032 Art 3-D Survey

ART2002 Art II: Introduction to Color

ART2004 AP Art History

ART2012 Art 3-D Design II

ART3002 Art III: Advanced Methods

ART3012 Art 3-D III Sculpture & Design

ART4002 Art IV: Portfolio



**MUSIC**

MU1002	Concert Band
MU1012	Orchestra
MU1022	Symphonic Band
MU1032	Jazz Band
MU1042	Concert Choir
MU1052	Chorale
MU1062	Fundamentals of Music
MU1072	Guitar I
MU1082	Music Theory I
MU1092	Music Technology I
MU1102	Combined Instrument & Vocal
MU1112	Combined Sym. Band & Concert Choir
MU1122	Combined Orchestra & Con. Band or Con. Choir
MU2072	Guitar II
MU2082	Music Theory II
MU2092	Music Technology II
MU3004	AP Music Theory

**TECHNOLOGY & ENGINEERING**

TE1002	Architectural/CAD Drafting I
TE1003	Intro to Engineering Design Honors
TE1003B	Intro to Engineering Design Honors Blended
TE1012	Electronics I
TE1022	Engineering/CAD Drafting I
TE1032	Engineering I Survey
TE1042	Graphic Communications I
TE1052	Photography I
TE1062	TV/Video Production I
TE1072	Wood & Metal Technology I
TE1082	Air & Water Transportation
TE1092	Construction & Home Renovation
TE1112	Land Transportation
TE1122	Robotics
TE2002	Architectural/CAD Drafting II
TE2003	Principles of Engineering Honors
TE2012	Electronics II
TE2022	Engineering/CAD Drafting II
TE2032	Engineering II Survey
TE2042	Graphic Communications II
TE2052	Photography II
TE2062	TV/Video Production II
TE2072	Wood & Metal Technology II
TE3003	Computer Integrated Manufacturing Honors
TE3013	Civil Engineering & Architecture Honors
TE3052	Photography III

TE3062	TV/Video Production III
TE3072	Wood & Metal Technology III
TE4003	Engineering Design & Dev Honors
TE4052	Photography IV
TE4062	TV/Video Production IV
TE4072	Wood & Metal Technology IV

**TCHS**

T0891	Homeland Security Octorara
T100A	Allied Health Science Technology TCHS
T101A	Animal Science TCHS
T102A	Automotive Collision Technology TCHS
T103P	Automotive Service Technology TCHS
T104A	Engineering & Robotics TCHS
T105A	Carpentry TCHS
T107A	Computer Info Systems Programming TCHS
T108A	Cosmetology TCHS
T109A	Criminal Justice & Police Sciences TCHS
T110A	Culinary Arts TCHS
T111A	Early Childhood Care & Education TCHS
T114A	Engine Technology TCHS
T116A	Health Career Pathways TCHS
T119A	HVAC & Refrigeration Technology TCHS
T122A	Teacher Leadership Academy TCHS
T122P	Teacher Leadership Academy TCHS
T800A	Veterinary Science TCHS

*\*NCAA Approved*