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RADNOR HIGH SCHOOL

# Program of Studies

School Year 2018-2019



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Panayota Kevgas, Assistant Principal of Academic Affairs  
Keziah LaTorre, Assistant Principal of Student Services, Grades 9 and 11  
Brett Thomas, Assistant Principal of Student Services, Grades 10 and 12  
Michael Friel, Athletic Director

(Pending the publishing of annual statement by District's Compliance Officer)

**POLICY ON EQUAL RIGHTS OPPORTUNITY**

It is the policy of the Radnor Township School District not to discriminate on the basis of race, color, age, creed, religion, gender, gender identify, gender expression, sexual orientation, ancestry, national origin or handicap/disability in its educational and vocational programs or employment as required by Title IX, Section 504, and Title VI.

Assurance is given that service, activities, and facilities are accessible to and usable by handicapped persons. For information regarding civil rights and grievance procedure, contact the Radnor Township School District at 135 South Wayne Avenue, Wayne, PA 19087, (610) 688-8100.

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# **RADNOR TOWNSHIP SCHOOL DISTRICT**

## **Mission Statement**

The mission of the Radnor Township School District is to inspire in all students the love of learning and creating, and to empower them to discover and pursue their individual passions with knowledge, confidence, and caring to shape the future.

## **Strategic Vision**

Each student will demonstrate caring by enhancing community through ongoing choice and action.

Each student will consistently demonstrate excitement and persistence by constructing knowledge and developing novel solutions.

All students will demonstrate dedication to the pursuit of their passions.

## **Core Values**

- Respecting and valuing diversity is essential for communities to thrive.
- Lifelong learning is essential to creating a better life and world.
- Nurturing is critical for individual and community growth.
- Faith in one's potential fosters confidence which motivates effort and ultimately leads to accomplishment.
- All people have worth and the capacity to grow and learn.
- The most powerful learning results from meaningful active engagement.
- There is a direct connection between the pursuit of one's passion and the joy of learning.



# ***Inspiring and Empowering Learners***

## Radnor High School Program of Studies 2018-2019

### **CHOOSING YOUR COURSES**

One of the most important decisions you face each year as a student in high school is the selection of courses for the following year. Your decisions affect not only an entire year of high school life, but also your extended future as a student and worker. Please choose courses wisely, balancing your courses with your other commitments, and considering four crucial areas:

- Graduation requirements and the required courses for your grade level.
- The recommended and required courses for your post-high school career and educational plans.
- Prerequisites (courses you must have successfully completed before taking a specific course) and co-requisites (courses you must take at the same time as a specific course).
- The level of difficulty of the courses you select. The explanation of levels and their expectations appears on the following pages.

Pay careful attention to the sequencing of courses from grades 9 to 12. English, Social Studies, Science, Mathematics and World Language course descriptions have been enhanced with charts that assist in the construction of a coherent four-year plan.

Although you will receive help from parents, teachers, and counselors in selecting courses that best suit your needs and abilities, the responsibility for these choices is ultimately in your hands. Your parent/guardian may override the professional opinion of your teachers by completing an Override Form with your Guidance Counselor if you and your parent(s)/guardian(s) decide to choose a non-recommended course. Students, it is your life—take advantage of the power you have to shape your future and the opportunity to explore interests and develop talents.

***Note: All new courses are in red.***

## THE ANNUAL SCHEDULING CYCLE

### PREPARATION FOR SCHEDULING

Working cooperatively with the Board of School Directors, district-wide curriculum committees, administrators, and staff, updates and corrections to the *Program of Studies* are prepared. Once the *Program of Studies* is approved by the Board of School Directors, it, along with other materials necessary for the completion of course scheduling, is distributed to students and parents. The documents students receive represent the culmination of the efforts of all involved in the process.

The High School Administration and Guidance Department Chair will present an evening 8<sup>th</sup> grade parent meeting on January 18, 2018 at 6:30 pm to discuss the course selection process.

The Radnor High School Department Chairs hold an evening course selection meeting for all parents of current 8<sup>th</sup> grade students called "Winterfest" which will also take place on January 18, 2018 at 7 pm. Additional meetings and venues for parent and student questions are also held.

### COURSE SELECTION & REGISTRATION

The first task that students and parents actively engage in is the process of course selection. Generally, course selection involves the following steps:

1. Students have access to the Program of Studies on-line. Please refer to this link, <http://www.rtsd.org/curriculum>, to view the current syllabi for each course offering (*Course syllabi are subject to change*).
2. As part of the course selection process, teachers and counselors make suggestions and recommendations for courses that would be appropriate for students. These recommendations are made based on available data from test scores, student grades, and classroom performance.
3. Recommending teachers complete the on-line course recommendations for any course that carries a grade/course/teacher prerequisite.
4. Students electronically submit their on-line course selections via HAC for electives. Students who do not have access to the internet at home may seek assistance from guidance to complete their selections.
5. Counselors will meet and discuss course selections with each student prior to processing of requests for the new school year.
6. Parents are able to view course recommendations and student course selections via the student's HAC account beginning February 26, 2018. If there are any questions after viewing HAC, please contact your student's guidance counselor.

**Students must notify guidance staff about any needed change to requested courses before course selection deadline on Friday, May 25, 2018. After Friday, May 25, 2018 all selections are final.**

### CHANGING REQUESTS

After students finalize their course selections with their counselor, the requests can be verified by students and parents through the student's HAC account. **The final opportunity to change a course for the coming school year is Friday, May 25, 2018. A student must realize that changes may or may not take place based on the spaces available in the courses, especially when changing electives.** The reason for this deadline is because any change in the number of students requesting a course has a direct impact for both the high school and district budget. **After this date, the only changes that will be considered will be those that correct clerical errors, address a student's failure to meet a course prerequisite, or result from completion of a summer school course.**

**If parents or guardians decide to override a course recommendation, the override form must be completed and turned in before the course will be changed in HAC. The deadline for all override forms is also Friday, May 25, 2018.**

### SCHEDULE CONSTRUCTION & EVALUATION

*Driven by the data generated by the course selection process and budgetary constraints, the high school and central administration make decisions about the course offerings and the numbers of sections that will be offered in the coming school year. These decisions must necessarily take into account student requests; at the same time, they must conform to all constraints in building staff and space. It is at this point in the scheduling cycle that some courses may be canceled because of an insufficient number of requests. Students affected by cancellation of courses will be contacted by guidance counselors to make substitutions.*

Once the final number of sections is determined, the schedule is built by the high school administration and the information about the number and placement of sections is programmed into the computer system. The students' course requests are then loaded into the schedule and students are scheduled into classes. If the results of this process are not satisfactory, the high school administration makes the necessary changes to the schedule and the process is repeated. This is done repeatedly until a maximum number of students have schedules that reflect all of their course requests.

## RESOLVING INEVITABLE COURSE CONFLICTS

There is no perfect, conflict-free schedule. The master schedule for the school is created each year based on the needs and wishes of the student body at large and is constructed in such a way as to fulfill the requests of the maximum number of students. **While every effort is made to minimize course conflicts for all students, there is no guarantee, expressed or implied, that each and every student will be able to roster every combination of requests that he or she makes.**

Students with conflicts will be contacted by guidance counselors to discuss alternate requests in an effort to resolve all of the conflicts. This process necessarily involves compromise.

## NOTIFICATION OF SCHEDULING SUCCESS

Complete schedules with teachers' names and class meeting times will be posted to the student's HAC account in late summer. Schedules will also be distributed to students on the first day of school.

## SCHEDULE CHANGES

**There is no drop/add period. No changes to courses/requests will be honored after Friday, May 25, 2018.** The only new schedules developed will be for **students newly admitted to the school.**

The only changes to schedules after **Friday, May 25, 2018** are those considered to be scheduling errors, or those considered to be academic misplacements by the teacher, counselor and administration. These include, but are not necessarily limited to failure to meet prerequisites or an improper level placement. Requests to change courses will be handled by the Guidance Department.

The following rules apply to all change requests:

- Preferential changes (one elective for another or moving a class from one period to another) are not permitted.
- Parallel changes (teacher preference) are not permitted under any circumstances.
- A high school administrator must approve all schedule changes. During this time, changes will be contingent upon space availability and the opportunity for the student to make up work missed in the new class.
- **A student may not apply for a withdrawal until after the first 15 class meetings and no withdrawals will be honored after the first marking period for first semester and after the first semester for year-long courses. Only teacher initiated withdrawals will be considered after the first marking period.**
- **Second semester courses will not be considered for withdrawal until after 15 class meetings and no withdrawal from a second semester course will be honored after the third marking period. Only teacher initiated withdrawals will be considered after the third marking period for second semester courses.**

The following steps must occur before a schedule change will be considered after the school year has begun:

- Parent/Teacher/Student conference must be held via phone or in person (e-mail communication is not acceptable).
- Student must document the dates he/she initiated extra help in course work. (If available, use of the writing center, math center, academic success center, or individual meeting with teacher.)
- Student/Counselor/Parent meeting via phone or in person.
- Review of attendance and homework completion per class.
- Administrative approval

## ON-LINE SYLLABI

Please click on this link to view the current syllabi for our course offerings: <http://www.rtsd.org/curriculum>  
(Course syllabi are subject to change from year to year.)

## COURSE AVAILABILITY

*All programs and course offerings proposed and/or presented in the RHS Program of Studies will run in the subsequent school year contingent upon adequate enrollment and annual budget considerations.*

## GRADUATION REQUIREMENTS

Students who graduate from Radnor High School must complete a minimum of 22.5 credits to qualify for a diploma from Radnor Township School District. All students are required to take the minimum of 6.5 credits each year. At this time, the Keystone Exams in Algebra I, Biology, and Literature **will be a graduation requirement for the class of 2020 and beyond**. *NOTE: These graduation requirements are governed by Radnor Township School Board Policy #217. These state requirements are currently under review. If the policy and requirements are changed, those changes and the effective date of those changes will be communicated to everyone.*

These credits are in the following areas:

### *Requirements by Department*

#### ENGLISH

Four Courses Minimum

9 <sup>th</sup> Grade English or Integrated The American Experiment*	1 credit
World Literature or Global Issues*	1 credit
American Literature, AP English Lang and Comp, or Viewpoints*	1 credit
British/Modern Literature, AP English Lit, or Senior Seminar*	1 credit

*\*Integrated The American Experiment, Global Issues, Viewpoints, and Senior Seminar each provide one Social Studies credit in addition to one English credit.*

#### SOCIAL STUDIES

Three Courses Minimum

Government and Economics or Integrated The American Experiment (grade 9)	1 credit
World Studies, AP World History, or Global Issues*(grade 10)	1 credit
American Studies, AP American History, or Viewpoints* (grade 11)	1 credit

*\*Integrated The American Experiment, Global Issues, Viewpoints, and Senior Seminar each provide one Social Studies credit in addition to one English credit.*

#### MATHEMATICS

Three Courses Minimum

Mathematics Courses	3 credits
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#### SCIENCE

Three Courses Minimum

Science Courses (Biology, Chemistry, Physics)	3 credits
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#### HEALTH AND PHYSICAL EDUCATION

Four Years/Courses Minimum

PE 9	0.5 credit
Health (9 <sup>th</sup> grade)	0.5 credit
PE 10	0.5 credit
Health (10 <sup>th</sup> grade)	0.5 credit
Physical Education Electives (11 <sup>th</sup> and 12 <sup>th</sup> grade)	1 credit

#### TECHNOLOGY/BUSINESS

One Course Minimum	0.5 credits
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#### ARTS & HUMANITIES ELECTIVES

Arts & Humanities Electives	2 credits total
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#### ADDITIONAL ELECTIVES

Electives	4 credits total
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*(.5 credits must be from one of the following departments Music, Art, Theatre, or FACS)*

**TOTAL MINIMUM CREDITS REQUIRED FOR GRADUATION .....22.5 credits**

**For the class of 2020 and beyond**, in each of the test areas, a proficient score or higher on each of the Keystone Exams, or successful completion of a Project Based Assessment (PBA) for tested areas where Proficiency was not achieved, meets the state requirement.

## **ANNUAL CREDIT REQUIREMENTS**

All students are required to be enrolled in a minimum of courses to total 6.5 credits annually. Course credit loads between 6.5 and 7.0 credits are quite common, especially for students wishing to continue study after high school at competitive colleges and universities.

Seniors must enroll in enough courses during the senior year to meet requirements to acquire the 22.5 credits (*see note on previous page regarding the discussion of graduation requirements*) necessary for graduation. Under unusual circumstances, with the approval of the Principal a student who has failed to meet graduation requirements may participate in graduation ceremonies. The diploma will be held until all credits are certified.

## **PROMOTION REQUIREMENTS**

In order to be promoted to the next grade, a student must meet the following requirements:

(*Note: As graduation requirements are reviewed, thresholds for promotion are also being reviewed*)

<u>Promotion From</u>	<u>Minimum Requirements</u>
9 <sup>th</sup> to 10 <sup>th</sup> Grade	5.5 credits
10 <sup>th</sup> to 11 <sup>th</sup> Grade	11.5 credits
11 <sup>th</sup> to 12 <sup>th</sup> Grade	17 credits

Students who have not earned enough credits to be promoted will be notified by a counselor over the summer. If students are able to successfully make up their credit deficiency through summer school or through work in the subsequent school year, they may rejoin their original class.

## **COURSE LEVELING & EXPECTATIONS**

### **Seminar/Integrated/Advanced Placement**

Seminar, Integrated, and Advanced Placement courses follow an extremely rigorous curriculum prescribed by each department and develop higher-order thinking skills using an accelerated pace and enriched content. These courses prepare students in their progress toward meeting the challenges of extremely competitive college work. Students enrolled in a Seminar, Integrated, or Advanced Placement course undertake a very demanding workload that involves extensive reading, writing, problem solving, and critical thinking; they must consistently demonstrate independence and learn to think conceptually. Students receive weighted grades in Seminar, Integrated, or Advanced Placement courses. The designation of Seminar, Integrated or Advanced Placement will be reflected in the course title.

### **Honors (H)**

Honors courses follow a rigorous curriculum prescribed by each department and develop higher-order thinking skills using a challenging pace and enriched content. These courses prepare students in their progress toward meeting the challenges of very competitive college work. Students enrolled in Honors courses undertake a demanding workload that involves extensive reading, writing, problem solving, and critical thinking; they must demonstrate independence and learn to think conceptually. Students receive weighted grades in Honors courses.

### **Advanced (A)**

An Advanced course follows a demanding curriculum prescribed by each department to help students progress toward meeting the challenges of competitive college work. Advanced courses aim to develop higher-order thinking skills, using accelerated pace and content. Students enrolled in an Advanced course undertake a challenging workload that involves reading, writing, problem solving, and critical thinking; they will continue to develop independence both inside and outside the classroom. Students receive an un-weighted grade in an Advanced course.

### **College Prep (CP or no designation)**

A College Prep course follows a challenging curriculum prescribed by each department. College Prep courses prepare students to be ready for college level work. Students enrolled in College Prep courses learn through guided instruction that involves reading, writing, problem solving, and development of critical thinking skills. Students receive un-weighted grades in College Prep courses.

## ADVANCED PLACEMENT (AP) TEST POLICY

An AP course follows the college-board goals, and challenges students with college-level work in both rigor and expectations, and prepares students to take the AP exam. Students enrolled in an AP course undertake a rigorous workload that involves extensive reading, writing, problem solving and critical thinking. Essential to success in these courses is the ability to learn independently outside the classroom. Students receive a weighted grade in Advanced Placement courses.

All students enrolled in an Advanced Placement (AP) course are required to take the AP exam for the course at the end of the school year. If a student chooses not to take the AP exam, the AP designation will be removed from the transcript/report card, and the course will be designated as Honors. (Example: AP World History will be listed as World History H.) If a student decides in May not to take the chosen AP Exams, then the AP designation will be removed from the final transcript.

For the 2019 AP exams, students at Radnor High School will be registering online. This registration will take a few minutes and can be completed from any computer with Internet access. Students requiring financial assistance should contact their guidance counselor.

Online exam registration will begin in early February and end in mid-March. In order to register, students should click on the link provided on the RHS guidance website or visit [www.TotalRegistration.net/AP/394133](http://www.TotalRegistration.net/AP/394133) to register. To complete registration, students must answer all of the required questions. Registration is not complete until students have printed the confirmation page that is provided at the end and submit payment to RHS. Students are eligible for partial refunds up until the end of April.

## FINAL EXAM OPT OUT FOR ADVANCED PLACEMENT (AP) COURSES

The goal of an Advanced Placement (AP) course is to prepare students to be successful on the AP exam in May. Throughout the course of a year, a significant amount of work is put forth by teachers and students to prepare for these exams. Students enrolled in AP courses are expected to take the exams in May. AP exams are essentially, cumulative course exams.

It is the responsibility of Radnor High School to put our students in a position to be successful on these "high stakes" tests. In order to reduce the burden of over testing, students will be eligible to opt out of the final exam for a particular AP course if they meet the following criteria:

1. Must earn a B+ or better for all 4 quarters for the course in question
2. Must sit for the AP exam in question
3. May not have an "M" for any of the quarter grades or midterm exam for the course
4. Must have all incompletes (I's) resolved for all courses by June 1, and may not use an "I" for the course in question for the 4th quarter.

During the weeks leading up to the AP and Keystone exams, all teachers are asked to be cognizant of the amount of work they are assigning. Effective preparation for the AP exams is crucial to a student's success. To ensure a student's workload is balanced, the two weeks prior to the AP exams will be designated for practice exams and review. Based on the College Board's order of exams, teachers have the ability to assign practice exams, projects, homework and other activities to assist their classes in preparing for the AP exams. If they choose to assign this type of graded review work, teachers must give their course specific practice exams or review assignments during their designated week.

The following courses require an AP Exam:

### Art

AP Art History  
AP Studio Art

### English

AP English Language and Composition  
AP English Literature and Composition  
Viewpoints on Modern America/AP English  
Language and Composition

### Math

AP Calculus AB  
AP Computer Science A

AP Statistics  
AP Calculus BC

### Science

AP Biology  
AP Chemistry  
AP Environmental Science  
AP Physics 1  
AP Physics 2  
AP Physics C: Electricity and Magnetism  
AP Physics C: Mechanics

### Social Studies

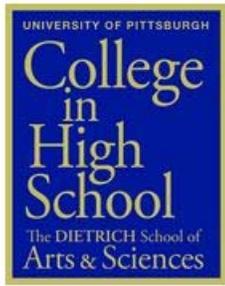
AP Macroeconomics  
AP European History  
AP U.S. Government and Politics  
AP Psychology  
AP U.S. History  
AP World History

### World Languages

AP French Language and Culture  
AP German Language and Culture  
AP Spanish Language and Culture  
AP Latin

2019 Advanced Placement exam dates can be found at the following website:

<https://professionals.collegeboard.com/testing/ap/about/dates/next-year>



## University of Pittsburgh Dual Enrollment

Radnor Township School District invests in excellence and that always begins with our students. Over the past three years the RHS administrative team, in collaboration with the curriculum office, has worked to establish a relationship with the University of Pittsburgh. Radnor High School and the University of Pittsburgh will partner again in the 2018-2019 school year to provide an opportunity for students enrolled in Linear Algebra to earn college credit.

College in High School (CHS) offers regional high school students the opportunity to earn both high school and University of Pittsburgh credit in courses taught right in their classrooms. College in High School is an academically rigorous program for motivated students seeking an intellectual challenge within a supportive high school environment.

For 35 years, College in High School's success has stemmed from close collaboration between the Kenneth P. Dietrich School of Arts and Sciences and regional high schools. CHS-certified high school teachers work closely with Pitt's world-class faculty to teach a high school course that is also a University of Pittsburgh course. Students use college-level textbooks, take college-level exams, and upon successful completion of the class, earn college credit that is recorded on an official University of Pittsburgh transcript.

### **General Information about Math 0280, *Introduction to Matrices and Linear Algebra*:**

It is **not a requirement** to be dual enrolled to take Linear Algebra at Radnor High School. As a pre-requisite to enroll in Linear Algebra (Math 0280, *Introduction to Matrices and Linear Algebra*) and earn credit from the University of Pittsburgh, students must have taken AP Calculus AB or BC with a score of 4 or higher on the AP exam. The cost of the course, which provides the opportunity to earn college credit, is \$245 per student. The class will be taught by an RHS certified mathematics teacher. The class will use the syllabus provided by University of Pittsburgh. The syllabus can be found at <http://calculus.math.pitt.edu/syllabi/0280syllabus.html>.



## AP + PLTW Pathway Program

### AP + PLTW: Partnering to Create More Opportunities for Students

To help prepare all students for the global workforce, the College Board and Project Lead The Way (PLTW) have partnered on a program to encourage student participation in science, technology, engineering, and math (STEM) courses and build their interest in STEM degrees and careers. The program leverages the success of the College Board’s Advanced Placement Program (AP) and Project Lead The Way’s applied learning programs.

### Get Students on the Path

The first element of the program is a set of college and career pathways in three fields — engineering, biomedical science, and computer science — that incorporate both AP and PLTW courses. Each pathway emphasizes applied learning and consists of three components:

- PLTW courses designed to introduce all students to the field
- AP courses and exams that provide an opportunity for advanced placement and/or college credit
- PLTW specialization courses that focus on knowledge and skills needed for rewarding careers

To earn this student recognition, you must complete three courses in a pathway - one AP course; one PLTW course, and a third course, either AP or PLTW - and earn a qualifying score of 3 or higher on the AP Exam(s) and a score of Proficient or higher on the PLTW End-of-Course (EoC) Assessment(s).

### \*Radnor High School courses offered in the AP+PLTW pathway

Level	Engineering	Biomedical Science	Computer Science
College AP courses	AP Biology AP Calculus BC AP Calculus AB AP Chemistry AP Environmental Science AP Physics I AP Physics II AP Physics C: Electricity and Magnetism AP Physics C: Mechanics AP Statistics	AP Biology AP Chemistry	AP Computer Science A
Career – PLTW courses	Introduction to Engineering Design Principles of Engineering Civil Engineering and Architecture Aerospace Engineering	Principles of Biomedical Science	Introduction to Computer Science Cybersecurity (anticipated Fall 2019)



### **PLTW curriculum goals:**

Project Lead The Way (PLTW) believes that all students beginning at a young age require access to real-world, applied learning experiences that empower them to gain the skills they need to thrive in college, career, and beyond. Through PLTW's programs, students develop in-demand, transportable skills such as problem solving, critical and creative thinking, collaboration, and communication. Students will use these skills both in school and for the rest of their lives. As PLTW students progress, they are empowered to explore career paths, engage in problem solving and process thinking, develop technical knowledge and skills, and build communication skills. PLTW prepares students to be the most innovative and productive leaders in Science, Technology, Engineering, and Mathematics (STEM) and to make meaningful, pioneering contributions to our world. Through an engaging, hands-on curriculum, PLTW encourages the development of problem-solving skills, critical thinking, creative and innovative reasoning, and a love of learning.

The PLTW middle and high school STEM education programs give students a brighter future by providing them with a foundation and proven path to college and career success in STEM-related fields. STEM education is at the heart of today's high-tech, high-skill global economy. For America to remain economically competitive, our next generation of leaders must develop the critical-reasoning and problem-solving skills that will help make them the most productive in the world. PLTW sparks the ingenuity, creativity, and innovation within all of our students.

Radnor High School currently offers the following PLTW courses:

1. Introduction to Engineering Design
2. Principles of Engineering
3. Civil Engineering and Architecture
4. Aerospace Engineering
5. Introduction to Computer Science

### **Earning college credit for PLTW courses:**

Students can earn college credit for PLTW course work, just like the Advanced Placement courses by:

1. Completion of one of the above listed courses
2. Earning a minimum of 80% in the class
3. Earning an 80% on the PLTW standardized final exam

If the above requirements are satisfied, students are eligible to apply for college credit at one of the Affiliate Universities. Different schools use PLTW credits in different ways. Some use them towards a 2-year degree while other use them towards a 4-year program.

Students can apply to receive college credit by visiting the university affiliates page at the PLTW site (<http://www.pltw.org/university-partners>). There students will find a list of the schools involved in the PLTW Pathway to Engineering Program. Students are encouraged to review the information provided as colleges and universities have different procedures for applying and using the credits. Make sure to only look into institutions that have the blue ENG icon. Some of the specialized courses like Aerospace Engineering are accepted by fewer schools. There are deadlines to apply for credit. Please look into each university's policy as deadlines and requirements vary from school to school. Students may see their PLTW teacher or Guidance Counselor if they have any questions.

More information about PLTW can be found at <https://www.pltw.org/>.

## GRADES AND GRADING

### PASS-FAIL GRADES

A student carrying more than 6.5 credits may choose to be graded on a Pass-Fail basis in one or more of the courses above the 6.5 credit minimum. The student declaring his/her intention to be graded on a Pass-Fail basis must designate the course(s) to be graded **prior to the end of the first marking period**. Requests to be graded on a Pass-Fail basis after this date are to be considered exceptions and require the approval of the Principal after consultation with the teacher. Should a course(s) be dropped, thereby reducing the pupil's load to 6.5 credits or fewer, the course(s) designated as Pass-Fail will then revert to the grading policy used by the teacher for students taking the same course for a more traditional grade. In those areas where specific academic levels of proficiency are required for continued study, the teacher required to grade on a Pass-Fail basis will provide a written statement regarding the pupil's ability to pursue a higher-level course. Pass-Fail grading is acceptable for summer enrichment course(s) (but not remedial courses) provided that the grading decision is announced before the summer course begins. Pass-Fail courses are not included in GPA. **Courses required for graduation may not be taken on a Pass-Fail basis.**

The teacher being asked to grade on a Pass-Fail basis will use the same grading scale that is used for students being graded in a more traditional manner. However, a teacher grade of A, B, C or D will be entered as a P (Pass). A grade of F using the traditional scale will be recorded as an F for students who have elected to be graded Pass-Fail. It is understood that a staff member who has concerns about a student's request to be graded on a Pass-Fail may ask for a conference with the student and his/her parents. This conference will be held prior to beginning Pass-Fail grading.

### GRADE POINT AVERAGE (GPA) AND GRADING SCALE

- 1) All full-year and half-year major subjects are used in computing GPA. GPA is cumulative, grades 9 to 12.
- 2) Only grades in Advanced Placement, Integrated, Seminar, and Honors courses are weighted.
- 3) Courses taken Pass-Fail are not included in the GPA.
- 4) Radnor has a dual GPA system. The transcript of every Radnor student indicates a weighted and an unweighted GPA.
- 5) Radnor high school does not compute class rank.
- 6) These grade points are assigned to grades:

<u>Grade</u>	<u>Numerical Range</u>	<u>Weighted GPA</u>	<u>Unweighted GPA</u>
A+	98.50% to 100%	4.6667	4.3333
A	92.50% to 98.49%	4.3333	4.0000
A-	89.50% to 92.49%	4.0000	3.6667
B+	86.50% to 89.49%	3.6667	3.3333
B	82.50% to 86.49%	3.3333	3.0000
B-	79.50% to 82.49%	3.0000	2.6667
C+	76.50% to 79.49%	2.6667	2.3333
C	72.50% to 76.49%	2.3333	2.0000
C-	69.50% to 72.49%	2.0000	1.6667
D+	66.50% to 69.49%	1.6667	1.3333
D	62.50% to 66.49%	1.3333	1.0000
D-	59.50% to 62.49%	1.0000	0.6667
F	0% to 59.49%	0.0000	0.0000

### ANNUAL CREDIT REQUIREMENTS

All full-time students are required to be enrolled in a minimum of 6.5 credits.

Seniors must enroll in enough courses during the senior year to meet requirements to acquire the 22.5 credits necessary for graduation.

# SPECIAL PROGRAMS AND SCHEDULING OPPORTUNITIES

## GIFTED EDUCATION

The purpose of gifted programming in Radnor Township School District is to support the academic and social-emotional needs of gifted and advanced students by providing learning opportunities which are more in-depth and may be presented at a faster pace. In keeping with the Pennsylvania Department of Education's Chapter 16 regulations, a Gifted Individual Education Plan (GIEP) will be developed annually for students who are identified mentally gifted. A student is identified mentally gifted if they have a full-scale IQ of 130 or above, or if multiple criteria strongly indicate gifted ability. Specifically Designed Instruction for students with a GIEP primarily takes place in regular education classrooms. Radnor High School's sequence of four double-period team-taught interdisciplinary courses and variety of rigorous science and mathematics courses are designed to provide an academic challenge and depth of learning appropriate for many gifted students.

## SPECIAL EDUCATION

**LEARNING SUPPORT PROGRAM** – The Learning Support Program offers support to students who have learning differences as documented in their Individualized Education Program (IEP). Enrollments in these specific courses are dependent upon recommendations made by the IEP team.

**EMOTIONAL SUPPORT** – Placement is determined by a student's IEP. Students in the Emotional Support Programs are typically assigned to at least one period in an emotional support class.

## COLLEGE COURSE WORK

Radnor High School students may enroll part-time in nearby colleges or institutions with the approval of the Principal. Exceptionally able students may leave Radnor prior to the senior year to attend approved colleges full-time at the discretion of the school district. A Radnor diploma will be awarded to these students upon successful completion of the freshman year of college (School Code: Sections 7-144, 7-145). The District will not incur the cost for such enrollment.

## INDEPENDENT STUDY

1. Independent Study is offered only to students in 11<sup>th</sup> and 12<sup>th</sup> grades and the student must be carrying 6.5 credits to be considered making the Independent Study an additional .5 or 1 credit.
2. A Faculty member who is certified in the discipline of the chosen Independent Study must sponsor a student. The Faculty Sponsor is responsible for all grading and monitoring of student progress.
3. An Independent Study proposal cannot include a currently offered Radnor High School course.
4. The proposal must include the following:
  - a. The objective of the Independent Study
  - b. Clearly outlined and detailed benchmarks as defined by the Faculty Sponsor to monitor progress of student. Two benchmarks are required for a semester Independent Study and four benchmarks are required for a full year Independent Study.
  - c. A final summative assessment which is to be graded by the Faculty Sponsor is to be submitted with the initial proposal.

*Independent Study will be awarded credit based on length. A semester Independent Study will be awarded .5 credit and a full-year Independent Study will be awarded 1.0 credit. The length of the Independent Study will be determined by Faculty Sponsor. The credit will not be placed on the transcript until the Independent Study is complete.*

## SUMMER SCHOOL

Credit for a course taken in summer school in order to make up for a course that was failed will be given if the course meets the requirement of 60 clock hours of class time. Credit for a course taken in summer school for original credit (where a student has not been exposed to the content) will be granted credit if and only if the course meets for 120 clock hours. It is a student's responsibility to get a report card or transcript to the guidance counselor upon completion of the course, if a summer course will require a schedule change. Students must meet with their counselor **before** enrolling in any summer program. An approved summer school list, including courses available at RHS and those accepted from outside institutions, is posted on the RHS Guidance website.

### **GRANTING CREDIT**

Any course completed at Radnor High School by a Radnor Middle School student may be granted graduation credit. The grade may appear on the transcript and may be included in the GPA. All grade reporting and withdrawal regulations will apply.

Any student taking a university course, for which he/she receives credit from that university, may also receive Radnor High School credit. The grade will not appear on the Radnor High School transcript, and will not be counted in the GPA. The official university transcript will be attached to the RHS transcript.

Any course taken outside Radnor High School at an accredited high school will be granted credit, however, the grade will not appear on transcript, and will not be counted in the GPA. The accredited High School transcript, if available, will be attached to the RHS transcript.

University summer school courses for which college credit is granted may be granted high school credit only through the prior approval of the course by the Principal.

Note: Credit requirements are in the process of being reviewed and are subject to change. As the requirements change, students will be notified of the changes that affect them. The District will not incur the cost for summer school or college courses.

### **EARLY GRADUATION**

Applicants for early graduation (i.e. those who wish to accelerate and complete graduation requirements in less than four years) should make requests in writing to the chairperson of the Guidance Department by the end of junior year or no later than 1<sup>st</sup> marking period of senior year. The student's individual Counselor and the Principal will consider the request and forward it to the Superintendent of Schools. Any student approved for early graduation may be placed in a senior homeroom, if he or she can complete all required credits for senior status by the end of his/her third year in high school.

### **REMEDIAL KEYSTONE COURSES**

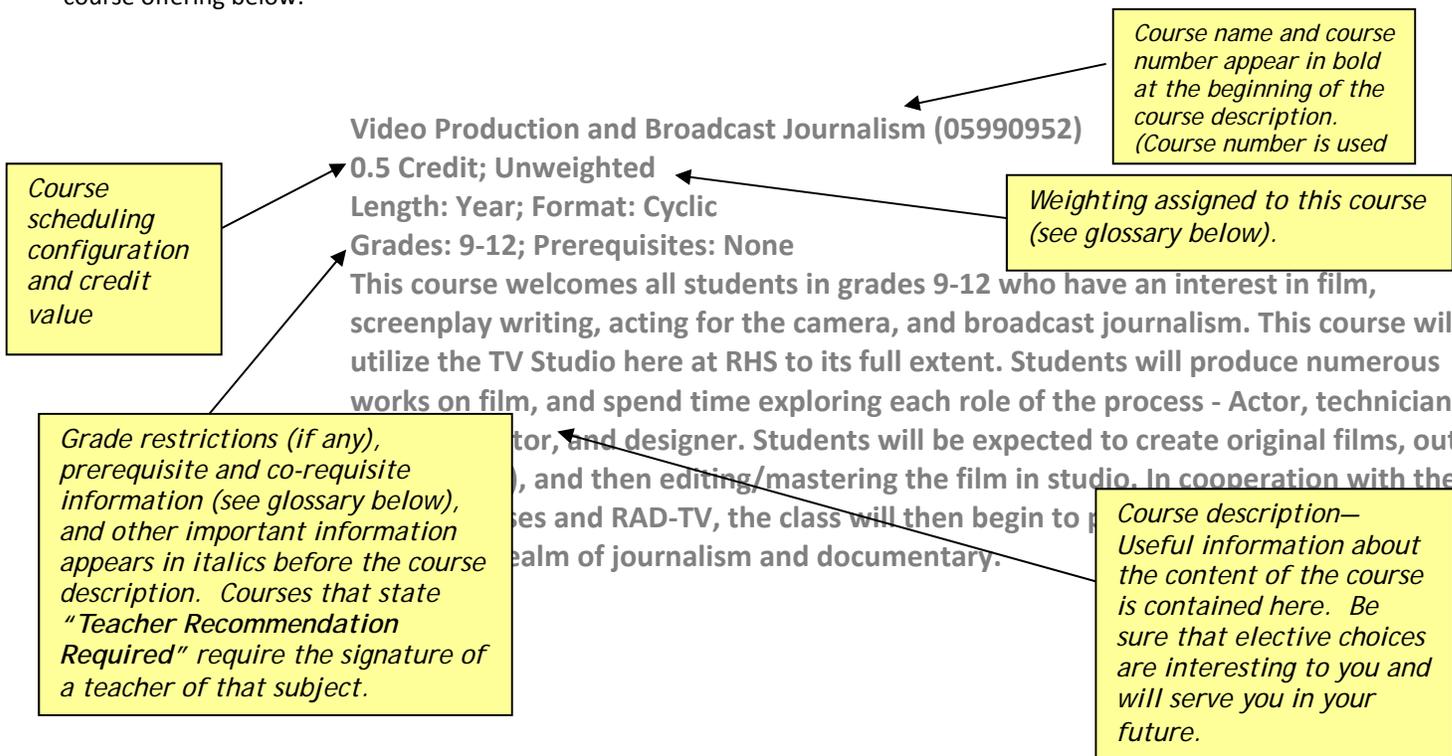
Any student in the class of 2019 and below, who does not score proficient on a Keystone Algebra I, Biology, and/or Literature exam, will be required to take a skill-building course for each exam they scored below proficient. These courses will meet on an alternate day schedule and will be a review of the material of the Keystone Exams. If a student is placed in one or more of the Keystone courses, this is mandatory placement and cannot be overridden. Wherever possible, free periods and study halls will be replaced with remedial courses. However, it may impact a student's ability to take electives or receive his/her first choice elective.

### **SUMMER WORK (S)**

Some of the more demanding courses require students to complete summer work. These courses are denoted with an **(S)** at the end of the course description. Note: Summer work does not include books on the summer reading list associated with all core English classes.

## HOW TO READ AND USE COURSE DESCRIPTIONS

Course descriptions in this guide are designed to provide students and parents with all of the information required to make informed decisions about course selection. The various parts of the course description and the information are illustrated with the example course offering below:



## GLOSSARY OF TERMS USED IN COURSE DESCRIPTIONS

- Credits** ----- Each course is worth a certain number of credits. Generally, courses that meet for a single class period for the entire school year are worth 1 credit. Courses that are scheduled differently may carry different numbers of credits. Most students schedule 6.5 or more credits per academic year.
- Length**----- Courses are either scheduled to meet for the full year or for a semester (½ of a school year).
- Format**----- Radnor High School’s schedule contains a 10-day cycle. Most courses are scheduled to meet every day of the 10-day cycle. Some courses meet on alternate cycle days only.
- Grade(s)** ----- These are the grade levels (9, 10, 11, and/or 12) that are permitted to take a given course. If there is no statement made about what grade levels can take a course, it is open to all students in the high school.
- Weighting** ----- For the purposes of calculating GPA, some courses are weighted because they are more demanding. Generally, these are Honors and Advanced Placement courses. More GPA information is on the previous pages and in the Student Handbook.
- Prerequisite** ----- A prerequisite is a course that a student must have COMPLETED before being eligible for another course.
- Co-requisite** ----- A co-requisite is a course that does not necessarily have to be completed before a student is eligible to enroll in a course, but must be scheduled in the same academic year, if not already completed.

# DEPARTMENTAL COURSE OFFERINGS

## ART DEPARTMENT

All courses in the Creative Art Center are elective and taught within a studio/workshop atmosphere. Art courses are not only for those planning a future in the arts, but also for those who have an interest in art and desire to increase their understanding and appreciation of art. Course offerings in the Art Department provide both group and individual experiences. The staff in the Art Department feels that initiative, creativity, and a desire to explore art are more important than prior knowledge, experience, and talent.

### **Art Studio I (05070721)**

*0.5 Credit; Unweighted*

*Length: Year; Format: Meets on cycle days*

*Grade(s): 9, 10, 11, 12*

Art Studio 1 is geared towards students of all ability and skill levels who enjoy art and prefer a variety of art activities. Projects are designed to teach the elements and principles of art in an open studio atmosphere. Students will produce a variety of 2D and 3D assignments; the RHS Art Center has an amazing array of art supplies, tools and equipment to facilitate student creativity. This course is a good introduction to taking any other courses in the art center.

### **Art Studio II (05070722)**

*1.0 Credit; Unweighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 10, 11, 12*

*Note(s): No previous Art courses required*

This course is designed for students who enjoy art or who are interested in going on to advanced art classes. Students will develop and refine a variety of art skills in the areas of drawing, color theory, painting, design, sculpture, computer graphics, pottery, metals, jewelry, printmaking, and many other types of art. Art skills, art theory, and art appreciation are taught through assigned projects while other projects will be based on student choice. Student will be required to keep a sketchbook as a homework component. This course will prepare students for future advanced classes.

### **Art Studio H (05070723)**

*1.0 Credit; Weighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 11, 12*

*Prerequisite(s): A- or better in Art Studio II*

*Teacher Recommendation required.*

Students interested in a more challenging, in-depth art experience enjoy Art Studio Honors. These students are interested in advancing their creativity and skill levels. All students in the class have a very high skill level and an enthusiastic interest in art. Students are required to work similarly to a professional artist. They thoughtfully frame their personal goals and objectives, mapping out the direction in which they want their work to progress. They then design projects that lead them to accomplish their goals. Homework is in the form of assigned projects.

### **Advanced Placement Studio Art: 2D Design (05070740A)**

### **Advanced Placement Studio Art: 3D Design (05070740B)**

### **Advanced Placement Studio Art: Drawing (05070740C)**

*1.0 Credit; Weighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 12*

*Prerequisite(s): A grade of "B+" or better in Art Studio H Teacher Recommendation Required*

The Advanced Placement Studio Art course is designed for students who are seriously interested in the practical experience of art at an Advanced Placement level. Students in this class prepare a portfolio that can be used to enhance their college application. The course follows the curriculum and instructional goals of the Advanced Placement Studio Art program as determined by the College Board. Emphasis is placed on further development of technical, creative, and critical thinking skills and the ability to think artistically at an independent level. All assigned work prepares students to take the Advanced Placement Studio Art exam that allows them to receive college credit/placement. **(S)**

### **Intro to Ceramics (05070713)**

*0.5 Credit; Unweighted (previously called Pottery)*

*Length: Semester or Cycle Day*

*Grade(s): 9, 10, 11, 12*

Students will experience the satisfaction of designing, building, and glazing their own clay work. Throughout the course, students will focus on developing hand-building techniques as they pinch, roll and flatten clay into creative and functional 3D works of art. Students will be mesmerized by the potter's wheel as they develop basic throwing skills necessary to create a variety of functional vessels. The creative fun begins when students combine their hand-building and throwing skills to create on of a kind works of art. All clay works are glazed; students will learn a variety of surface decorations and glazing techniques suitable to both decorative and functional pieces. Working with clay is physical; it's a perfect fit for students who are kinetic learners because creating clay requires students to move around the studio space as they work.

**Note: Commercial Art, Silkscreen Printmaking, Metals and Jewelry, Mixed Media and Adaptive Art Education will run in the 2018-2019 school year and then again in the 2020-2021 school year.**

### **Commercial Art (05070708)**

*0.5 Credit; Unweighted*

*Length: Semester or Cycle Day*

*Grade(s): 9, 10, 11, 12*

Commercial art plays a key role in the shaping of our popular culture today; if you love television, magazines, film and technology this course is for you! Students will be introduced to the varied fields of commercial art including illustration, advertising and graphic design with a variety of hands-on and technology based projects. Students will explore the connection between Commercial Art and Pop Art icons such as Andy Warhol, Roy Lichtenstein and Claus Oldenburg through traditional art projects such as silk-screens, Benday dots and monumental sculptures. Creativity

**Commercial Art (con't...)** and innovation with technology is shaping the future; it's an exciting time to learn a new app or explore the creative potential of one that is familiar. This class also presents a variety of creative challenges on the iPad. Design principles such as layout and editing will be taught through a variety of digital assignments; students will use a variety of apps such as iMovie, Explain Everything, Stop Motion and many more.

### **Silkscreen & Printmaking (05070709)**

*0.5 Credit; Unweighted*

*Length: Semester or Cycle Day*

*Grade(s): 9, 10, 11, 12*

Students will study a wide range of printmaking concepts and techniques, working hands-on with fundamental printmaking disciplines. Why take print making? It's trendy! Create your own wearable art; students will learn how to create and cut stencils for single and multi-colored silk-screen designs. It's traditional! If you love to sketch with graphite, the techniques of Intaglio will allow you to create high detailed and textured value compositions similar to graphite drawings. Mass production! All printmaking techniques create multiples, students will be able to keep and share their work with family and friends. Relief printing on linoleum or woodblocks challenges students to think creatively with positive and negative space; beautiful designs can be made into everyday items like stationary. Innovative thinking! Printmaking techniques, when combined with other artistic interests, offer students a highly creative, hands-on experience appropriate for any level of artistic ability.

### **Adaptive Art Education (05070712)**

*0.5 Credit; Unweighted*

*Length: Year; Format: Meets on Cycle Days*

*Grade(s): 9, 10, 11, 12*

*Prerequisite(s): Teacher Recommendation*

The adaptive art education program is designed to meet individual needs of students that focus on students' interests and abilities in a variety of art making activities designed to emphasize tactile and sensory input. Educators and students will work together to develop appropriate individual goals to strengthen and enhance motor skills in a creative setting. Socialization between peers is encouraged while supporting and modeling positive and age appropriate interactions. Students will increase independence toward art production and demonstrate care for and management of art supplies related to their art activities. Students will be recommended for this course based on specific needs.

### **Metals and Jewelry (05070710)**

*0.5 Credit; Unweighted*

*Length: Semester or Cycle Day*

*Grade(s): 9, 10, 11, 12*

This course is an introduction to the art of metals. Students learn to fabricate original metal designs using a variety of metalsmithing techniques such as forming, soldering, casting, enameling, and direct construction. Students can choose from copper, brass, or nickel-silver metals in their work. Some drawing is required on selected projects. This course is a great "hands-on" experience and appropriate for all levels of artistic ability.

### **Mixed Media (05070715)**

*0.5 Credit; Unweighted*

*Length: Year*

*Grade(s): 9, 10, 11, 12*

*Format: Semester or Cycle Day*

It's time to reinvent the rules! This course is designed for students who like to try new things and for those who thrive on finding creative solutions. Mix-media art is all about exploring the combination of possibilities of mixing different art materials and techniques. Students will discover that self-expression happens when they create with a variety of media/techniques and only when they lose the fear of doing something "wrong." Projects include creative art journals; book binding and paper making and weavings; creation of "yarn" from a variety of recycled materials including fabric and plastic. Let's change physical properties, what happens when glass and plastic is melted? Students will redefine the "rules" of media and production by sewing on paper, casting printing plates, water coloring plaster. It's time for students to get out of their comfort zone, apply what they know and reinvent the rules; "the worst mistake is not to make any" because, "mistakes are the greatest teachers."

### **Behind the Scenes Workshop (05070516)**

*0.5 Credit; Unweighted*

*Length: Year; Format: Meets on Cycle Days*

*Grade(s): 9, 10, 11, 12*

Behind The Scenes Workshop is a new course designed specifically for students who wish to showcase their unique artistic interests and talents in a big way. This course will allow you to leave your mark at RHS through direct involvement in the creative hands-on production of many school-wide projects and events. Shine a spot light on your talents as you help design, paint and construct sets and props for the LM pep rally, theatrical productions, and musicals. Work collaboratively with peers to paint murals around RHS, highlighting the many wonderful facets of our school community. Join a crew of dedicated artists, working "behind the scenes". This course is open to all students and ability levels.

### **Advanced Ceramics (05070714)**

*0.5 Credit; Unweighted (previously called Pottery)*

*Length: Semester or Cycle Day*

*Grade(s): 10, 11, 12*

*Prerequisite: Intro to Ceramics (Pottery 15-16 school year only)*

Advanced Ceramics is designed for students who want to continue their work in clay. It teaches production pottery techniques of mold making and mosaic design/setting to further students' knowledge and experience ceramic arts outside the classroom. Like every skill, the key to success for a ceramic artist is practice; this course will allow students the opportunity to practice clay techniques beyond a basic application. Students will work to find their "clay voice," defining who they are as a ceramic artist as they propose and create projects based on individual strengths and interests.

### **Advanced Placement Art History (05990730)**

*1.0 Credit; Weighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 10, 11, 12*

Art history is a humanities course which explores history, culture and civilization through art. It's a course for students who want to understand art and its historical context. Students will examine the major forms of visual art expression from early man to the present and from a variety of cultures. Students learn how society has influenced art, and how art has influenced our understanding of history. Psychology, religion, and economics are explored in relation to history and art. This is a good course for students who plan to travel in the future, as it provides an understanding of art and culture around the world. Students electing this course may receive college credit or placement in the humanities by taking the Advanced Placement Art History exam. There is no prerequisite for this course, but students should be prepared to read and write at a college level. This is an academic course, not a studio course and requires no artistic ability.

**Note: The following semester art courses are offered in a two-year rotation with those listed in the beginning of this section. These courses will not be offered in school year 2018-2019 but will be offered in 2019-2020.**

### **Sculpture (05070706)**

*0.5 Credit; Unweighted*

*Length: Semester; Format: Meets Daily*

*Grade(s): 9, 10, 11, 12*

Using wood, stone, foam, plaster, wire, metal, clay, and other media, students create their own free-standing, wall-hanging, mobile, and low-relief sculptures. Students learn how to address positive and negative spaces in their work as well as how to problem solve through their designs. A variety of tools will be used to produce an array of three-dimensional pieces in stone, plaster, wire and mixed-media. This course is a great "hands-on" experience and appropriate for all levels of artistic ability

### **Drawing (05070704)**

*0.5 Credit; Unweighted*

*Length: Semester; Format: Meets Daily*

*Grade(s): 9, 10, 11, 12*

All forms of art are based on an ability to first show an idea by drawing. Learning to draw and improving your drawing skills is a very satisfying experience. This course teaches the student how to see as an artist and more accurately record their observations via drawing. Techniques such as observational drawing, figure drawing, shading, design, and perspective are explored. Students will use a variety of materials such as markers, colored pencils, and pastels. Sketchbooks will be used for out-of-class assignments. This is a great class for students who would like to learn how to draw and for those who would like to draw even better.

### **Painting (05070703)**

*0.5 Credit; Unweighted*

*Length: Semester; Meets Daily*

*Grade(s): 9, 10, 11, 12*

The focus of this course is learning how to paint using various techniques and media. During the semester, specific techniques will be taught to create effects in student work as ideas are explored. Students will learn color theory and its importance to painting. A wonderful variety of painting materials are covered in this course including watercolor, acrylic, oil and some mixed-media. Different subject matter will be explored such as landscape, fantasy art, still-life, abstractions, etc. This is a great class for students who would like to paint and those who would like to paint better.

## **BUSINESS EDUCATION DEPARTMENT**

### **Business Administration (05081020)**

*1.0 Credit; Unweighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 10, 11, 12*

Business Administration is designed as an introductory course for students who intend to continue their education after high school. The course focuses on the business environment, forms of business organization, business planning, fundamental management techniques, marketing, risk management, promotion, personnel and finance. The course materials include outside readings, films, and case studies profiling various industry and business leaders of the twenty-first century. Field trips and guest speakers are used to supplement course material.

### **Personal Finance (05081030)**

*0.5 Credit; Unweighted*

*Length: Semester or Cycle Day*

*Grade(s): 10, 11, 12*

This course covers topics essential to being an informed and financially-literate member of society. This fast-paced course teaches aspects of financial management that are essential to sound financial decision making as an adult. Topics covered include savings and investment, money management and budgeting, taxation, real estate, credit, risk management and insurance. The course uses a student workbook and exercises as well as information from up-to-date sources.

### **Integrated College Accounting H (05081090)**

*1.0 Credit; Weighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 10, 11, 12*

College Accounting is a year-long course designed to introduce students to the field of accounting. The course covers the fundamental principles and vocabulary of accounting, highlighting balance sheet and income statement evaluation, preparation, and presentation. It covers the learning objectives of traditional college courses in financial and managerial accounting. The course presents accounting theory and practice in analysis of business transactions. The complete accounting cycle and the interpretation of financial data and ratios are stressed. Topics include accounting information systems, the accounting equation, financial statement analysis/preparation, financial ratio analysis, sales and receivables. It is an essential course for potential college business or accounting majors. It will also help students decide if a business or accounting major is a good fit for them.

### **Business Law and Marketing (05081080)**

*1.0 Credit; Unweighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 10, 11, and 12*

This class is designed to expose students to two broad areas of business study – Business Law and Marketing. The course will help students discover if they have an interest in either of these majors/fields. In the Business Law portion of the class, students will learn about the history of U.S. law, civil law, criminal law, the elements of contract law, as well as other legal regulations

### **Business Law and Marketing (con't)**

pertaining to businesses. Students will practice legal theories by analyzing real world cases and studying court decisions. The Marketing section of the class exposes students to a wide variety of marketing topics, beginning with the marketing concept of creating and sustaining productive customer relationships. Students will study product, pricing, promotion, and distribution theories and decisions using historical and current day product and company examples. Students will also study consumer buying behaviors and the techniques that marketers use to try to increase sales. Social responsibility is discussed in relation to sales and marketing techniques. The course is essential for any students who have made the decision to study or practice business after high school. It will also greatly assist any student in developing their business vocabulary and acumen, as well as help them narrow down an area of college study.

### **Independent Living (05991151)**

*0.5 Credit; Unweighted*

*Length: Semester or Cycle Day*

*Grade(s): 10, 11, 12*

This course targets skills that will help students transition to the demands of the “real world.” Writing resumés, interviewing successfully, budgeting money, opening a checking account, saving, investing, understanding the advantages and disadvantages of using credit, handling debt problems, understanding insurance and paying taxes will be covered. Aspects of daily living such as renting an apartment, basic cooking skills, and laundry will be taught. Goal setting, decision making, communication skills, and conflict resolution will be an integral part of the various discussions dealing with the challenges of living on your own. Students will learn financial responsibility through fun, experiential learning by participating in a classroom economy. This course can count as a Business or an additional elective credit.

### **Sports and Entertainment Management H (05081100)**

*1.0 Credit; Weighted*

*Prerequisite: Business Law & Marketing*

*Length: Year; Format: Meets Daily*

*Grade(s): 10, 11, 12*

The Sports and Entertainment Management course provides students with an opportunity to study the numerous products, services, processes, and strategies in these huge industries. The curriculum focuses on marketing content, specifically as to how marketing is planned and implemented in the sports and entertainment industries. Students will study customer needs and the economics of supply and demand in sports and entertainment. They will look at aspects of the product design, promotional and selling strategies, including the use of social media, and the design and management of distribution channels.

**CAREER & TECHNICAL EDUCATION**  
at  
**DELAWARE COUNTY TECHNICAL SCHOOLS**

Radnor Township School District participates in career and technical education at Delaware County Technical Schools. The Delaware County Technical Schools are *preparing today's students for tomorrow's opportunities* by meaningful career training and a foundation for lifelong learning with support from business, industry and the community. Each course is an extension of the high school program and elective credits towards high school graduation will be awarded. The courses are scheduled on a half-day basis. There are four clusters for students to choose from please click on <http://www.delcotech.org/> to find out more specifics about each cluster listed below and the course offerings.

**Vocational-Technical School** (05091601 morning session or 05091602 afternoon session)

3.0 Credits; Unweighted

Length: Year; Format: Meets daily for a half day

Grade(s): 10, 11, 12

Prerequisites: Vary by program

Students develop the technical knowledge, basic skills, work habits, and attitudes required for efficient performance in various fields of work. Students earn credits toward high school graduation and for college admissions. Three credits are awarded each year for the courses at The Technical School. Students attend all academic courses at Radnor High School for half a day. The other half of the day is at the Technical School. Listed below are the Vo-Tech clusters and courses offered in each cluster. Please refer to the website for specific program descriptions.

Applications for vocational programs are available at <http://www.delcotech.org/>. Please see your counselor if you are interested in applying or touring a DCTS campus. The application process must begin during course selection starting in February 2016.

*\*Medical Careers is a Technical School offering worth 2.0 credits and does require students to arrive at Radnor early morning in order to take a bus to the hospital location. This program is not a full-half day. Students in medical careers can carry more academic courses upon their return from the program which is why it is only a 2.0 credit course. **Medical Careers is only offered to seniors and is an Honors level course.** A competitive application and interview process is required for admission.*

**Please click on links below to find out more information about each School at DCTS.**

- [Construction Technology](#)
  - [Building Trades](#) [CIP 46.0401]
  - [Carpentry](#) [CIP 46.0201]
  - [Electrical Construction Technology](#) [CIP 46.0399]
  - [Heating, Ventilation, and Air Conditioning/Plumbing](#) [CIP 47.0201]
- [Health and Biosciences](#)
  - [STEM Biomedical Technology & Laboratory Sciences](#) [CIP 26.1201] **\*NEW**
  - [Dental Technology](#) [CIP 51.0601]
  - [Emergency and Protective Services](#) [CIP 43.9999]
  - [Exercise Therapy and Sports Science](#) [CIP 51.2604]
  - [Health Sciences](#) [CIP 51.9999]
  - [Medical Careers \(Honors\)](#) [CIP 51.9999]
- [Hospitality, Tourism and Human Services](#)
  - [Cosmetology](#) [CIP 12.0401]
  - [Culinary Arts & Food Service Management](#) [CIP 12.0508]
  - [Culinary Arts & Hospitality](#) [CIP 12.0508]
  - [Early Childhood Education](#) [CIP 19.0708]
- [Logistics, Distribution and Transportation](#)
  - [Automotive Technology](#) [CIP 47.0604]
  - [Collision Repair Technology](#) [CIP 47.0603]
  - [Logistics & Inventory Management](#) [CIP 52.0203]
- [Engineering and Computer Science](#)
  - [STEM Enhanced Programming: PLTW Engineering Modules \(Engineering & Robotics\)](#) **\*NEW**
  - [STEM Enhanced Programming: PLTW and AP Computer Science Principles \(Computer Science\)](#) **\*NEW**
  - [Advertising Design & Commercial Art](#) [CIP 50.0402]
  - [Apple System and Design](#) [CIP 15.1202]
  - [Computer Networking and Digital Forensics](#) [CIP 11.0901]
  - [Engineering Technologies](#) [CIP 15.9999]

## ENGLISH DEPARTMENT

The Radnor High School English curriculum consists of full-year grade-level courses for freshmen, sophomores, juniors, and seniors. (See below for specific requirements.) In addition to courses carrying “English” credit, the English department offers students opportunities to take courses carrying “Elective” or “Humanities” credit. (See “Graduation Requirements” at the beginning of this publication.) Essential elements and specific requirements of Radnor High School’s English program are listed below. Technology is integrated whenever possible. Students should examine individual course descriptions carefully for their prerequisites and grade-levels.

### RHS English Department Courses

	Grade 9	Grade 10	Grade 11	Grade 12
AP/Integrated	Integrated The American Experiment (05990010)	Integrated Global Issues (05990020)	AP English Lang and Comp (05010128) Integrated Viewpoints on Modern America/AP Language and Comp. (05990030)	AP English Lit and Comp (05010138) Integrated Senior Seminar (05990040)
Honors	English 9: Literature and Composition H (05010110)	World Literature H (05010120)	American Literature H (05010130)	British and Modern Literature H (05010140)
Advanced	English 9: Literature and Composition A (05010112)	World Literature A (05010122)	American Literature A (05010132)	British and Modern Literature A (05010142)
College Prep	English 9: Literature and Composition CP (05010114)	World Literature CP (05010124)	American Literature CP (05010134)	British and Modern Literature CP (05010144)

1. Requirements for all students:
  - a. Students must take one credit in English each year.
  - b. All students are required to take the appropriate grade-level course. Students who fail a grade-level course will be required to repeat that course in the following year.
  - c. English department members will assist students in choosing courses that match their abilities. With teacher recommendation, students can move from one level to another.
  - d. Students who are English Language Learners may take English for English Language Learners instead of one of the above courses for their English credit. They may also take ELL for credit in addition to one of the above courses.
2. Students of exceptional ability may be recommended for grade-level honors classes. Integrated Interdisciplinary Courses are designed to be suited to the needs of the gifted-identified learner; however, a student who is not identified as gifted may be enrolled in the class with a teacher recommendation. Please see your guidance counselor for more information.
3. In all English courses, students do a variety of writing assignments on a regular basis. The frequency, length, and specific nature of writing assignments vary from course to course in order to meet the needs of individual students and the aims of the course as outlined in course descriptions.
4. The following electives offered by the English department may be taken in addition to required English courses but do not count toward the required four credits in English.
  - Battle of the Books
  - Creative Writing
  - Film Analysis I and II
  - Journalism H (Semester 1: Reporting and Distribution, Semester 2: Voice-Driven)
  - Journalism: Radnor Publications H
  - Public Speaking, Speech & Video Performance
  - Topics in Philosophy & Writing

## NINTH GRADE OFFERINGS

### **Integrated The American Experiment (05990010) (formerly Int. Gov. & Econ.)**

*2.0 Credits; Weighted*

*Length: Year; Format: Double Period, Meets Daily  
Grade(s): 9*

*Prerequisite(s): Teacher Recommendation or Gifted Identification.*

This team-taught course, first in a sequence of four interdisciplinary courses, provides students with an opportunity to study the key concepts of government and economics accompanied by a fusion of legal thrillers, dystopian novels, and classical political treatises. Government topics include: the components of citizenship, the constitutional basis of American democracy, federalism, political beliefs and behaviors, political parties, elections, campaigns, the role of interest groups, the media, individual rights, and the structure of U.S. government (Congress, presidency, the courts, and bureaucracy). Economics topics include: economic theories; the global economy; macro-economic concepts such as monetary policy, fiscal policy, the Federal Reserve, money, and banking; and micro-economic concepts such as supply and demand, competition/monopolies, business organizations, entrepreneurship, and the stock market. Students are engaged in a number of activities designed to foster acquisition and understanding of social studies concepts: reading primary and secondary sources, Socratic discussion, frequent written expression, analysis of propaganda and other visual media, creative projects, and simulations. This two-period course requires students to be active and independent learners capable of making connections across themes and time. The Parallel Curriculum and Understanding by Design models allow for analysis of works of varying genres and media, including a challenging level of analytical writing. Higher-level thinking and writing skills are emphasized through the use of synthesis, analysis, and evaluation. **(S)**

### **Ninth Grade English: Literature and Composition H (05010110)**

*1.0 Credit; Weighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 9*

*Prerequisite(s): Teacher Recommendation*

This course focuses on various themes in literature, as well as on literary genres, and seeks to develop the ability to find meaning by asking and answering critical questions. Students are taught to demonstrate an awareness of the principles of literary analysis through individual and group activities and presentations. Opportunities for exploring creative expression and developing critical thinking skills are integral parts of students' study of literature. As students learn to write effectively, they focus on developing their vocabulary as well as on improving the structure of sentences, paragraphs, and essays. Projects also require the growth of library and research skills in addition to speaking and listening skills.

### **Ninth Grade English: Literature and Composition A (05010112)**

*1.0 Credit; Unweighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 9*

*Prerequisite(s): Teacher Recommendation*

This course, designed to be a transition between middle school reading and language arts and the more challenging English classes at Radnor High School, involves the study of literature, writing, vocabulary, and communication skills. Students establish effective study skills and appropriate learning behavior. Through the genre approach to literature, students read short stories, novels, drama, and poetry, emphasizing the distinct elements of each through the analysis of that type of literature. Additionally, this course helps students develop research, speaking, and listening skills.

### **Ninth Grade English: Literature and Composition CP (05010114)**

*1.0 Credit; Unweighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 9*

*Prerequisite(s): Teacher Recommendation*

This year-long course is for those ninth-grade students who are reading on or close to grade level but whose writing shows the need for intensive practice in organization and expression. The focus is on the writing process, effective sentence construction, punctuation, other conventions, and the concept of the thesis statement. In addition, students develop critical reading skills through the study of short stories, plays, novels, and poems. Vocabulary acquisition, effective speaking, and study skills are emphasized.

## TENTH GRADE OFFERINGS

### **Integrated Global Issues (05990020)**

*2.0 Credits; Weighted*

*Length: Year; Format: Double Period, Meets Daily*

*Grade(s): 10*

*Prerequisite(s): Teacher Recommendation or Gifted Identification.*

This team-taught seminar, second in a sequence of four interdisciplinary courses, uses a Parallel Curriculum Model to combine advanced work in international studies with intense analysis of literary works from non-Western cultures with some key additions from the English-speaking world. The focus is on the non-Western world, concentrating on area studies of the Middle East, Africa, Russia, South and Central Asia, and East Asia. Students analyze current issues by interpreting key historical events and exploring the cultural heritage of each region. Important global issues such as human rights compliance, arms proliferation, conflict resolution, and trade are also studied in depth. By combining a comprehensive social studies approach (geopolitical, environmental, economic, demographic, anthropological, and sociological) with integrated language arts (novels, short stories, poetry, art, film, and music), this course develops critical thinking about contemporary international issues and universal themes. Exercises in creative and analytical writing, public speaking, debate, and research are combined with extensive group and independent work, hands-on projects, and simulations to create an active learning experience. A research project requires that students develop an original thesis, evaluate and select resources, take notes, produce an outline, write an essay, and provide thorough documentation. At the conclusion of this project, students present their findings to the class. In the spring, students will take the Keystone Literature Exam. **(S)**

**World Literature H (05010120)**

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Grade(s): 10

Prerequisite(s): Teacher Recommendation

This course stresses two important areas for the well-rounded English student: extensive study of world literature, and intensive practice in a variety of writing forms and styles. Units of study, organized by region or by theme, focus on literature in a variety of genres to investigate the different treatment of universal themes across cultures and time periods. Students are expected to think and read independently, as well as analyze ideas and information in mature expository and creative essays. A controlled research paper focusing on the development of an original thesis, note-taking, outlining, and basic documentation skills is required. In the spring, students will take the Keystone Literature Exam.

**World Literature A (05010122)**

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Grade(s): 10

Prerequisite(s): Teacher Recommendation

This course continues students' sequential study of literature, composition, vocabulary, and oral communication skills. Critical reading, critical thinking, and literary analysis focus on expanding students' examination of various genres of world literature. Students produce a variety of written assignments, including a refined five-paragraph essay, as well as personal and creative expressions. A controlled research paper focusing on the development of an original thesis, note-taking, outlining, and basic documentation skills is required. In the spring, students will take the Keystone Literature Exam.

**World Literature CP (05010124)**

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Grade(s): 10

Prerequisite(s): Teacher Recommendation

This course is designed to hone comprehension, writing, and study skills through an exploration of literary pieces from around the world. A directed reading approach to literature drawn from a variety of cultures and genres is stressed. Similarly, the course provides carefully-structured experiences to improve skills in speaking, vocabulary, writing, and critical thinking. A major goal is the production of the five-paragraph essay. Library work helps students improve their ability to find, evaluate, and use appropriate resources. In producing the required controlled research paper, students focus on the development of a thesis, note-taking, outlining, and basic documentation. In the spring, students will take the Keystone Literature Exam.

**ELEVENTH GRADE OFFERINGS****Integrated Viewpoints on Modern America/AP English Language and Composition (05990030)**

2.0 Credits; Weighted

Length: Year; Format: Double Period, Meets Daily

Grade(s): 11

Prerequisite(s): Teacher Recommendation or Gifted Identification.

This course is a combination of American Literature Honors, Advanced Placement Language and Composition, and American Studies Honors.

This team-taught course, third in a sequence of four interdisciplinary courses, combines study of American history, politics, literature, and culture. The approach to curriculum, both chronological and thematic, reflects on essential questions about the American character. Readings include primary and secondary documents and extend into the related arts with particular attention to the genre of film. Methods used include active discussions, examinations of current political and social issues, lecture, group work, simulations, and presentations. Along the way, a variety of expository and creative writing assignments call on students to synthesize, argue, and analyze. The involvement of teachers in both delivery and assessment enriches the curriculum and increases students' awareness of varied points of view, new ideas, and core information about their national culture. The Parallel Curriculum approach encourages students to connect history and literature as well as extend their studies into individualized areas of practice and interest. Assessments are consistent with methods used on the Advanced Placement English Language and Composition exam, which is taken in the spring. **(S)**

**Advanced Placement English Language and Composition (05010128)**

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Grade(s): 11

Prerequisite(s): Teacher Recommendation

This college-level course is designed for students with talent and interest in composition. Requirements include a superior ability to understand and deconstruct non-fiction and fiction texts in terms of reason, structure, rhetoric, and argument. Reading high-quality, highly challenging works by American authors, along with other important historical and journalistic documents, students will closely consider how authors construct meaning through their syntactical choices and organizational decisions. Writing assignments include essays that call for synthesis, analysis, and argument on specific topics, as well as papers of broader scope and greater length. Assessments are consistent with methods used on the Advanced Placement exam, which is taken in the spring.

## TWELFTH GRADE OFFERINGS

### **American Literature H (05010130)**

*1.0 Credit; Weighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 11*

*Prerequisite(s): Teacher Recommendation*

This course stresses two important areas in the background of a well-rounded English student: extensive study of American literature and intensive practice in a variety of writing forms and styles. Examination of literature involves chronology, genre, and themes. Students are expected to think critically, to analyze and synthesize ideas and information logically, and to read independently. A major purpose of the course is to develop perceptive readers who enjoy significant literature and articulate writers who can control and structure language in order to express critical responses to their reading. This course helps students develop mature analytical, expository, argumentative, and narrative writing that moves beyond the five-paragraph essay. Library work culminates in a thoroughly-documented research paper in which students synthesize aspects of the American experience.

### **American Literature A (05010132)**

*1.0 Credit; Unweighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 11*

*Prerequisite(s): Teacher Recommendation*

This course continues the sequential study of literature, composition, vocabulary, speaking, and thinking skills begun in grades 9 and 10. A thematic and/or chronological approach to major American literature aims at increasing proficiency in critical reading and thinking, as well as increasing literary appreciation. An emphasis on both creative expression and effective exposition should help college-bound students move closer to the kinds of writing skills demanded by advanced study. A step-by-step approach to the research paper is included as part of the course's aim to increase proficiency in both critical thinking and composition. Oral communication assignments further enhance students' academic and interpersonal skills.

### **American Literature CP (05010134)**

*1.0 Credit; Unweighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 11*

*Prerequisite(s): Teacher Recommendation*

This course continues the sequential study of literature, composition, vocabulary, speaking, and thinking skills begun in grades 9 and 10. A thematic and/or chronological approach to major American literature aims at increasing proficiency in critical reading and thinking, as well as increasing literary appreciation. An emphasis on both creative expression and effective exposition should help college-bound students move closer to the kinds of writing skills demanded by advanced study. A step-by-step approach to the research paper is included as part of the course's aim to increase proficiency in both critical thinking and composition. Oral communication assignments further enhance students' academic and interpersonal skills. This course relies on a directed reading approach and differentiates through the use of graphic organizers and frequent checkpoints.

### **Integrated Senior Seminar (05990040)**

*2.0 Credits; Weighted*

*Length: Year; Format: Double Period, Meets Daily*

*Grade(s): 12*

*Prerequisite(s): Teacher Recommendation or Gifted Identification.*

This team-taught seminar, fourth in a sequence of interdisciplinary courses, uses a Parallel Curriculum Model to combine history, literature, philosophy, and science in their broadest senses. This course examines humankind's ideas about the universe, life, and consciousness, and the struggle between the individual and society. Students focus on the philosophical idea of leadership and how leaders have affected, and currently affect, society in various cultures, including: cultural self-conceptions, the nature of progress, and elements of power. The curriculum is organized both thematically and chronologically. The "student-as-worker" approach to high-level learning experiences includes simulations; focused writing assignments, both analytical and creative; close analysis of literary, historical, and visual sources; large and small group instruction; and problem-based learning.

### **Advanced Placement English Literature and Composition (05010138)**

*1.0 Credit; Weighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 12*

*Prerequisite(s): Teacher Recommendation*

This college-level course is designed for students with unusual academic talents and interest in literary analysis. Requirements include a superior ability to respond sensitively and intelligently to literature and solid skills in writing clear expository prose. Reading works suggested by the Advanced Placement Committee in English, students closely consider selections of world literature of all genres from various periods. Writing assignments include short papers on specific and limited topics, as well as papers of broader scope and greater length. Assessments are consistent with methods used on the Advanced Placement exam, which is taken in the spring.

### **British and Modern Literature H (05010140)**

*1.0 Credit; Weighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 12*

This course explores the development of British Literature from its Anglo-Saxon beginnings through the modern period. Students examine the changing image of the hero by reading poetry, dramas, short stories, and non-fiction. Concurrently, they investigate how literature from specific periods not only reflects the artistic, intellectual, and social developments of the times but also affects the development of the English language. Students will practice, in an intensive manner, a variety of writing forms and styles. Students are expected to think critically, to analyze and synthesize ideas and information logically, and to read independently. A major purpose of this course is to develop perceptive readers who enjoy significant literature and articulate writers who can control and structure language in order to express critical responses to their reading. This course helps students develop mature analytical, expository, argumentative, and narrative writing that moves beyond the five-paragraph essay. The second half of this course continues to pursue the goals and develops the skills set forth in the first semester through the study of modern literature.

### **British and Modern Literature A (05010142)**

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Grade(s): 12

Prerequisite(s): Teacher Recommendation

After an initial unit in which students write an essay to submit with their college applications, this course explores the development of British Literature from its Anglo-Saxon beginnings through the works of Shakespeare. Students examine the changing image of the hero through their reading of poetry, drama, and nonfiction. Concurrently, they investigate how literature from specific periods reflects the artistic, intellectual, and social developments of the times, and affects the development of the English language. Students become perceptive readers, articulate writers, proficient researchers, and culturally-aware learners, capable of meeting the demands of collegiate work in language and literature. The second half of this course continues to pursue the goals and develop the skills set forth in the first semester through the study of modern literature.

### **British and Modern Literature CP (05010144)**

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Grade(s): 12

Prerequisite(s): Teacher Recommendation

After an initial unit in which students write an essay to submit with their college applications, this course explores the development of British Literature from its Anglo-Saxon beginnings through the works of Shakespeare. Students who need to hone their reading skills use a directed approach to various genres; guided practice of basic writing skills increases written fluency. Students have ample opportunity to improve their ability to speak, listen, and build vocabulary. The second half of this course continues to pursue the goals and develop the skills set forth in the first semester through the study of modern literature.

## **ENGLISH DEPARTMENT ELECTIVES**

The following courses carry elective (or Humanities) credit but do not fulfill students' credit requirements in English.

### **Journalism H (05010180)**

**Semester 1: Reporting and Distribution, Semester 2: Voice Driven**

1.0 Credit; Weighted

Length: Year-Long

Grade(s): 9, 10, 11, 12

Note(s): This course may be repeated.

Available to all students, the first semester will approach journalism through the genres of creative non-fiction and comedic writing, grounding students in the fundamentals of the personal essay and the art of conveying social commentary through satire and parody. Students will generate memoir-inspired articles and expressions that feature a range of comedic technique, from pure goofs to the intriguing fusion of straight reporting with essay. The second semester will approach journalism through exploring how to use core reporting techniques to generate content and how the use of modern distribution formats affects the way readers interact with information. Using investigative and experiential journalism techniques—fact-finding through interview, document, review, cultivating of sources, and first person observation—students will report on current cultural phenomenon. Concurrently, students will consider how form affects function in formats like radio or Internet documentaries, podcasts, graphic journalism, and the art of the zine.

**Note: You do not have to be in the Radnorite club to take this course.**

### **Journalism: Radnor Publications H (05010185)**

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

or

0.5 Credit, Unweighted, non-Honors credit (05010182)

Length: Semester; Format: Meets Daily

Grade(s): 10, 11, 12

Notes: This course may be repeated.

Prerequisite: Approval from a publication's club sponsor (Radnorite, yearbook, Facets, TV studio)

This course is available to upperclassmen who have attained leadership and/or staff positions in one or more of the high school's publications: Radnorite, yearbook, Facets, TV studio. The structure of this course will allow the Radnorite to function as a modern online press by cross-fertilizing the content of the high school's various media outlets. Faculty members will mentor students as they produce works that create social opportunities through live events and interactions on digital platforms. In addition, students will be encouraged to communicate perspectives on local and youth culture relevant to the Radnor community.

### **Creative Writing (05010162)**

0.5 Credit; Unweighted

Length: Semester or Cycle Day

Grade(s): 10, 11, 12

Prerequisite: None

"The two most engaging powers of an author are to make new things familiar and familiar things new," wrote Samuel Johnson. Creative writing encourages students to develop their own unique style of writing as they express themselves and their ideas, creating poetry and prose in a workshop setting. This course is suited to all academic levels. Painting pictures with words ("show, don't tell"), utilizing rich sensory descriptions, and taking creative risks are all part of this fun and challenging elective course. In addition to focusing on the writing and appreciation of writing, this course emphasizes the notion of creativity – how unique thought is generated. Students will collectively meditate on and engage in the various stages of the creative process: generating ideas, draft writing, editing, final revision, workshopping (dynamic feedback), and defense of the artist's ideas. As a key aspect of the process, each student will be coached on how to record observations in a journal in order to understand the relationship between raw observation and artistic expression.

### **Topics in Philosophy & Writing (05010163)**

0.5 Credit; Unweighted

Length: Semester or Cycle Day

Grade(s): 9, 10, 11, 12

If you've ever won an argument—or lost one, for that matter—you may understand how important it is to be able to consider, reason, and argue effectively. This course aims to introduce students to the intellectual and moral issues that have challenged people since the dawn of society, equip them to consider those issues more carefully, and teach them how to express their opinions and arguments orally and in writing. The class will consider questions like, "Should we feed the starving?", "Is terrorism evil?", "What is Art?", and "Is there justice in the world?" Students will use writing to improve their ability to clarify, summarize, communicate, persuade, and read. The goal is to help students become better thinkers, communicators, and citizens.

**Film Analysis I (05010171)**

*0.5 Credit; Unweighted*

*Length: Semester; Format: Semester or Cycle Day*

*Grade(s): 10, 11, 12*

*Prerequisites: None*

Lights! Camera! Action! This course exposes students to the greatest movies, the most influential directors, and the most respected actors and actresses of the film era. It offers a behind-the-scenes look at classic films, old and new. Classic and modern directors (who may include Alfred Hitchcock, Christopher Nolan, Lee Butler, Orson Wells, Kathryn Bigelow, Mike Nichols, Mel Brooks, Steven Spielberg, Spike Lee, Ridley Scott, and M. Night Shyamalan) are studied, as are films representing a variety of genres and styles. The course also deals with such issues as censorship and discrimination in the movie industry. Classes involve lecture, viewing, discussion, projects, and written analysis of the films. This course is suited to all academic levels.

**Film Analysis II (05010176)**

*0.5 Credit; Unweighted*

*Length: Semester; Format: Semester or Cycle Day*

*Grade(s): 10, 11, 12*

*Prerequisite: Film Analysis I (0171)*

*Film Analysis II* provides an introduction to the concept of "film theory." This course will concentrate on understanding film theories and other philosophical theories that can be applied to and analyzed in film. Students will need to have mastered the film terminology offered in Film Analysis I and be able to understand and evaluate film theories. This course will explore the following topics: Auteur Theory, Genre Theory, Feminist Theory, Ethical Theory, and Social Theory. This course will analyze films as a "whole" and how theoretical discourse is applied to film.

**Battle of the Books (05010175)**

*0.5 Credit; Unweighted*

*Length: Semester or Cycle Day*

*Grade(s): 9, 10, 11, 12*

*Prerequisites: None*

This course will provide students with access to Young Adult literature and the opportunity to engage in collaborative discussion. Various reading levels will be addressed through a wide variety of Young Adult genres in a reciprocal teaching format designed to foster a passion for reading

**Public Speaking and Communications (05010945)**

*0.5 Credit; Unweighted*

*Length: Semester or Cycle Day*

*Grades: 9, 10, 11, 12*

*Prerequisites: None*

Welcoming all students, this course is perfect for the student who wishes to pursue a career that will, or might, involve public speaking. Those students who might be considering careers in government, politics, business, medicine, law, research, journalism, teaching, etc. should consider taking this course, especially if they have had little or no experience on stage. This course is especially welcoming to those students who might face stage fright. In this course, students will study the elements of a strong public presentation. Students will engage in mock professional interviews to help prepare them for college interviews, as well as workforce interviews. Through the study of speech and oratory, students will build on their vocal skills, as well as construct a compelling speech. Students will also engage in debates. Students will present video recorded journalistic newscasts, as well as audio recorded newscasts (radio).

## ENGLISH LANGUAGE DEVELOPMENT PROGRAM

**English for English Learners 1 (05011001) and English for English Learners 2 (05011002)**

*1.0 or 2.0 Credits; Unweighted*

*Length: Year; Format: Meets Daily*

*Teacher Recommendation Required*

English for English Learners (ELs) at Radnor High School is open to students whose primary language is not English and who meet specific screening criteria. It is a place to explore the language of the American high school as well as a place to improve fluency in English. Students from many different language groups meet each day to improve their listening, speaking, reading, and writing skills in English. Since students spend most of their day in content-area classes where only English is spoken, these classes also serve as a place of support in helping students acquire learning strategies that transfer to other academic disciplines and assist them in interacting socially. The students will be administered the state mandated ACCESS for ELs® test which measures students' progress in the course and serves as part of the criteria for exiting the EL program.

Our English Learner Program has multiple levels to address our students' needs. All EL students that enroll at Radnor High School are assessed to ensure that they receive the proper level of support with the goal to reach level 5. Students will progress through the various levels at a different pace. Levels may be skipped based on student progress and need. All decisions will be made in consultation with the EL case manager, guidance counselor, student, as well as the student's parent or guardian.

Level	Course	Number of credits and class periods
Level 1 Entering	English for English Learners 1 (05011001) and English for English Learners 2 (05011002)	3 credits, 3 class periods
Level 2 Beginning	English for English Learners 1 (05011001)	2 credits, 2 class periods
Level 3/4 Developing/Expanding	English for English Learners 2 (05011002)	1 credit, 1 class period
Level 5 Bridging	EL Monitoring and Essentials of Writing (05141512) or Essential Comprehension Strategies (05141451)	.5 credit, 1 class period on alternate cycle day
Level 6 Reaching	EL Monitoring	EL monitoring is not a credited class

\*Students exit EL at Level 5 and enroll in a regular class.

## FAMILY AND CONSUMER SCIENCES DEPARTMENT

Family and Consumer Sciences courses are designed to meet a blend of the National and Pennsylvania Academic Standards in the following areas: Financial and Resource Management, Balancing Family, Work, and Community Responsibility, Food Science and Nutrition, and Textile Arts. When appropriate, guest speakers are invited to speak with students about their field of expertise in order to enhance classroom discussion. Courses are open to all students.

### **Independent Living (05991151)**

*0.5 Credit; Unweighted*

*Length: Semester; Format: Meets Daily*

*Grade(s): 10, 11, 12*

This course targets skills that will help students transition to the demands of the “real world.” Writing resumés, interviewing successfully, budgeting money, opening a checking account, saving, investing, understanding the advantages and disadvantages of using credit, handling debt problems, understanding insurance and paying taxes will be covered. Aspects of daily living such as renting an apartment, basic cooking skills, and laundry will be taught. Goal setting, decision making, communication skills, and conflict resolution will be an integral part of the various discussions dealing with the challenges of living on your own. Students will learn financial responsibility through fun, experiential learning by participating in a classroom economy. This course can count as a Business or an additional elective credit.

### **Textile Arts 1 (05111131)**

*0.5 Credit; Unweighted*

*Length: Semester; Format: Meets Daily*

*Grade(s): 9, 10, 11, 12*

Textile Arts students will acquire basic skills in clothing construction, and hand and machine sewing. Additionally, students will gain knowledge about fabrics and principles of design. Students choose their own fabric and pattern and work on individual projects which are appropriate for their skill level. Textile Arts encourages creativity, and provides an opportunity for hands-on activities as you use your sense of design. It also provides the opportunity to develop lifelong skills and experience the rewards of successfully completed projects.

### **Advanced Textile Arts and Fashion Design (05111132)**

*1.0 Credit; Unweighted*

*Length: Year; Format: Meets Daily*

*Prerequisite(s): Textile Arts, with a minimum grade of a “C”*

*Grade(s): 10, 11, 12*

Advanced Textile Arts and Fashion Design offers an exciting opportunity for students interested in fashion design. Students will not only improve their sewing skills and increase their knowledge by completing challenging projects, but **students will also have the opportunity to design and create costumes for the fall play and spring musical.** Advanced Textile Arts and Fashion Design emphasizes creativity, individuality, and a sense of accomplishment as the degree of difficulty for each project increases. Not only does this course provide a lifelong skill and offer a hobby, but it also provides a chance to explore careers in the fashion industry.

### **Essentials of Cooking (05111101)**

*0.5 Credit; Unweighted*

*Length: Semester; Format: Meets Daily*

*Grade(s): 9, 10, 11, 12*

Essentials of Cooking prepares students to work confidently in the kitchen as they complete basic recipes. In class, students learn how to understand and work with recipes, as well as various kitchen appliances and equipment. Students cook often to put into practice what they are learning. This course covers a variety of basic food preparation techniques covering all the food groups. Students also study the relationship between diet and health. At the completion of this course, students will be able to plan, prepare, and serve a healthy and appetizing meal.

### **Creative Cooking (05111102)**

*0.5 Credit; Unweighted*

*Length: Semester; Format: Meets Daily*

*Prerequisite(s): Essentials of Cooking with a minimum grade of “C”*

*Grade(s): 10, 11, 12*

Creative Cooking carries your cooking experience to a more advanced level. Principles of baking, including the preparation of quick breads, yeast breads, and cakes are explored. A variety of more complex recipes are prepared, including those which study various methods of cooking protein. There is a focus on healthy cooking. You will be challenged with creating your own original recipes and competing against your classmates in classroom cooking competitions.

## HEALTH, PHYSICAL EDUCATION, AND AQUATICS DEPARTMENT

### Physical Education

As an integral part of the total education program, Physical Education promotes the growth, health and development of each individual physically, mentally and socially. In order to complete graduation requirements, all students must participate in and earn a minimum of 0.5 credits of Physical Education each year.

### Health

Health is an important part of the Wellness curriculum. Students will begin health in ninth grade (.5 credits) and finish the full health credit in tenth grade (.5 credits). These courses focus on strategies for academic and emotional well being and success.

### Aquatics

Radnor's natatorium allows us to offer a semester of swimming to our tenth grade and various aquatic selective courses for our eleventh and twelfth grades. Tenth grade swimming is integrated into the tenth grade PE course and is required for all tenth graders, while the selective offerings are only available for eleventh and twelfth grade students. Ninth grade students will take a swim test during their ninth grade year for swim level placement. If a student places at the advanced level, he/she will be allowed to choose from the following PE electives in lieu of Advanced Swimming: Personal Training and Physical Fitness, Lifeguarding and CPR, Swimming Selective and Fitness for Athletes. *Note: If any student does not pre-test into a swim level, he/she will be automatically placed in **Beginner Swimming** for safety purposes.*

### NINTH GRADE OFFERINGS

#### **Ninth Grade Health & Wellness (05050641)**

**(05050641 Health/05050642 Wellness)**

1.0 Credit (0.5 Health/0.5 PE); Unweighted

Length: Year; Format: Meets Daily

Grade(s): 9

The ninth grade course focuses on transitioning our students to the high school with an integrated Health and Wellness course. The health component includes units on Study Skills, Stress and Stress Management, Time Management, Goal-setting, Character Development, Learning Strategies specific to each student, and Mental Health. Mental Health topics include: Responsible-Decision Making, Peer Pressure, Resistance Skills, Emotions and Conflict Resolution. The Wellness component includes units that focus on team sports, cooperative play and an introduction to weight training. Students will participate in a swim test at the end of the year to determine their tenth grade placement for swimming. If a student places at the advanced level, they will be allowed to choose from the following PE electives in lieu of Advanced Swimming: Personal Training and Physical Fitness, Lifeguarding and CPR, Swimming Selective and Fitness for Athletes.

### TENTH GRADE OFFERINGS

#### **Tenth Grade Health/Swimming**

**(05050622 Health/05050645 Beginner Swimming, 05060646 Intermediate Swimming)**

1.0 Credit (0.5 Health/0.5 PE); Unweighted

Length: Year; Format: Meets Daily

Grade(s): 10

The tenth grade health component is a continuation of the ninth grade health class. It complements the Mental Health unit and enriches character development while focusing on other topics. Topics include: Nutrition, Chemical Choices, Sexuality and CPR/First Aid and Safety. One outcome of this course is for each student to be CPR certified by the American Red Cross. The tenth grade Physical Education requirement includes one semester in the pool and one semester in the gym. The swimming component is divided into two levels; beginner and intermediate. These levels will be assessed during their ninth grade year. If a student places at the advanced level, they will be allowed to choose from the following PE electives in lieu of Advanced Swimming: Personal Training and Physical Fitness, Lifeguarding and CPR, Swimming Selective and Fitness for Athletes. The semester of physical activity in the gym includes units based on team sports and life-time activities.

### ELEVENTH, TWELFTH GRADE AND ELECTIVE OFFERINGS

#### **PE 11/12**

0.5 Credit; Unweighted

Length: Year; Format: Meets on Cycle Days

Grade(s): 11, 12

A variety of individual, dual, fitness, and game activities are offered. The emphasis for eleventh and twelfth grade physical education is on improving fitness in a safe and enjoyable environment to promote a lifetime pursuit of physical activity and wellness.

**Team Sports Option (05060631):** This option will focus on the techniques, tactics, and dynamics of a variety of team sports. Cardiovascular fitness and positive group interactions will be developed through team activity. Students choosing this option should expect to participate in a safe and competitive environment to challenge them individually while working collectively with teammates towards a unified goal. Activities may include floor hockey, basketball, soccer, handball, speedball, rugby, flag football, flag games, softball, volleyball, ultimate Frisbee, and others.

**Individual and Dual Sports (05060632):** This option will focus on the techniques, tactics and dynamics of a variety of individual, dual and fitness activities. Cardiovascular fitness and positive group interactions will be developed through individual or partner activities. Students choosing this option should expect to focus on self challenge in a safe and encouraging environment. Activities may include tennis, badminton, golf, archery, bowling, self-defense, dance, rollerblading, cross-country skiing, biking, fitness/circuit training, weight training, power walking, Tai Chi, and yoga.

**Selective P.E. Weight Training (05060633):** The major emphasis of the course is placed on muscular strength, muscular endurance, flexibility and body composition. Students will be able to create their own workout programs tailored to their specific needs. Students will also be able to rehab current injuries, and create a more flexible schedule when in a current sports season.

## TENTH, ELEVENTH, AND TWELFTH GRADE ELECTIVE OFFERINGS

### **Personal Training and Physical Fitness (05060700)**

*0.5 Credit; Unweighted*

*Length: Year; Format: Meets on Cycle Days*

*Grade(s): 10, 11, 12*

*Prerequisite(s): Students must have a "B" average in PE and Teacher Recommendation; sophomores must also test at the advanced level on the swim test*

The course is aligned with content for a personal training certification through the American College of Sports Medicine (ACSM). This certification will allow the student to become a certified personal trainer. This will enable the student to plan and implement exercise programs for healthy individuals or those who have medical clearance to exercise. A Certified Personal Trainer (CPT) facilitates motivation and adherence as well as develops and administers programs designed to enhance muscular strength, endurance, flexibility, cardiorespiratory fitness, body composition, and/or any of the motor skills related components of physical fitness. Students are required to know and understand basic human anatomy and kinesiology. Assessments for this course include the development of a comprehensive fitness program and tests through ACSM certification. Several projects assess student understanding of presented materials. After completion of high school and CPR training, students may obtain their certification at the age of eighteen.

### **Lifeguarding & CPR (05060671)**

*0.5 Credit; Unweighted*

*Length: Year; Format: Meets on Cycle Days*

*Grade(s): 10, 11, 12*

*Prerequisite(s): Swim 12 laps without stopping. Retrieve a 10 lb. brick from deep end and swim 20 yards on return, sophomores must also test at the advanced level on the swim test*

This class offers a complete Lifeguard Training Course that includes First Aid and CPR/AED. Students must pass all practical and written requirements to receive their American Red Cross Lifeguard Training Certificate.

### **Swimming Selective (05060672)**

*0.5 Credit; Unweighted*

*Length: Year; Format: Meets on Cycle Days*

*Grade(s): 10, 11, 12*

*Prerequisite: Sophomores must test at the advanced level on the swim test*

Various activities including intra-class swim meet, triathlon competition, water polo, water games, synchronized swimming, and diving are covered in this class. Cardiovascular fitness is promoted throughout the course with a variety of relays and water games.

### **Fitness for Athletes (05060636)**

*0.5 Credit; Unweighted*

*Length: Year; Format: Meets on Cycle Days*

*Grade(s): 10, 11, 12*

*Prerequisite: Sophomores must test at the advanced level on the swim test*

Fitness for athletes is a course designed to meet a student-athlete's needs. It is for a highly motivated athlete who wants to succeed in his/her sport. The course will cover nutrition, goal setting, weight training, injury prevention and rehabilitation. The class will also cover sport psychology strategies such as visualization. Some units throughout the school year will be about sportsmanship, character development, and time management skills for academic success. The daily class activity will be predicated on the student's extra-curricular athletic commitments.

## OTHER OFFERINGS

### **Adaptive Physical Education (05060695)**

*0.5 Credit; Unweighted*

*Length: Year; Format: Meets on Cycle Days*

*Teacher Recommendation*

The Adaptive Physical Education program is designed to meet individual needs of the student and focuses on students' abilities in indoor, outdoor, and aquatic environments. Teachers and students work together to develop and set appropriate individual goals. Activities include adapted manipulative patterns, adapted locomotor movements, adapted perceptual-motor skills, and adapted physical fitness.

## MATHEMATICS DEPARTMENT

Radnor's mathematics curriculum has been developed to accommodate the various levels of a student's mathematical abilities and skills. Although traditional math skills will be taught in all courses, the goal of the mathematics curriculum will be to develop thinking skills through emphasis on mathematical concepts. Use of problems requiring critical thinking will be employed to better prepare the student for a world which is becoming more technologically dependent. **Students should follow teacher recommendations when deciding which sequence of courses to select.**

**Seminar level** courses are intended for the highly motivated math students and are designed to challenge the most mathematically capable students. The courses will involve rigorous pacing and workload with teacher expectations intended to challenge the student. The course will require more independent and self guided learning (with an emphasis on writing explanations) than all other courses.

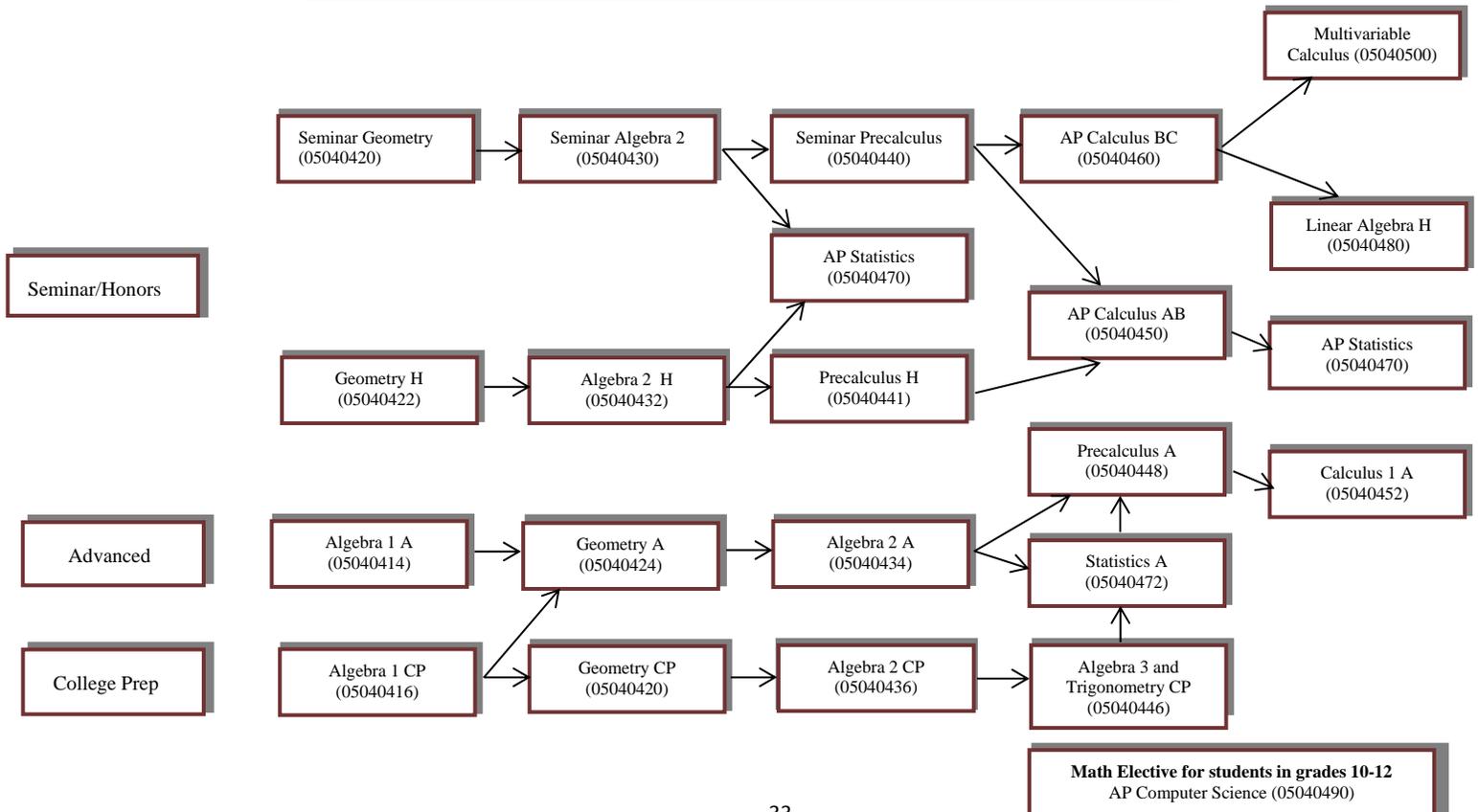
**Honors level** courses are intended for the motivated math student who is very good with mathematics but needs more teacher guidance to assist in the mastery of the material. The course will involve accelerated pacing and a demanding workload with some written explanations expected. Students on this level will be prepared to take AP Calculus AB.

**Advanced level** courses will feature a more challenging pacing and workload with teacher guidance to assist in the mastery of the material. Students enrolled on this level should be seeking to satisfy college requirements/expectations of mathematics course but not necessarily have an interest in pursuing math related college majors. *Any student who wishes to advance in math and to be eligible to take Calculus in High School can do so by taking Algebra II and Geometry concurrently, or by taking an approved Geometry summer school course at the expense of the parent(s)/guardians. The student must also take the RHS Geometry.*

**College Prep level** courses will feature a moderate pace and workload and a higher degree of teacher-guidance to assist in the mastery of the material. These courses will cover material necessary to prepare students for the Keystone Exams as well as prepare the student to take the SAT test if post secondary education is desired.

**Students interested in pursuing college majors in the science, engineering, medical, and mathematics fields should enroll in the Honors level courses.**

# RHS Mathematics Department Courses



The mathematics curriculum is intended to meet the needs of all students. To aid each student in determining his/her appropriate course of study in mathematics, the classroom teacher evaluates the progress of each individual at course selection time and recommends a specific course for the following year. This personal evaluation takes into account attitude, mathematical background, future plans, and current achievement. As a result, a student may be recommended to move from one level to another. Students should pay careful attention to these recommendations, as well as to the prerequisites, before electing a course.

The mathematics department believes that the very nature of the mathematics curriculum must be changed to meet the needs of our students as they prepare for their future. Mathematics problems and the methods used *to solve them* have changed with technological advances. The understanding and competent use of technological tools are important to all our students. The department requires that each student have his/her own calculator. A scientific calculator, such as the TI-34 is sufficient for courses up to and including Geometry. For all courses at the Algebra 2 Level and beyond, a graphing calculator such as the TI-84 PLUS is required. More sophisticated graphing calculators are optional for honors courses. Classroom instruction includes demonstrations *on* the TI-84 PLUS calculator. Since graphing calculators are allowed on the SATs, we encourage all students to be proficient in their use. The department realizes that graphing calculators are expensive. If financial considerations are a problem, please notify the teacher or the department chairperson.

### PRE-ALGEBRA COURSES

#### **Introduction to Algebra I (05040412)**

*1.0 Credit; Unweighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 9*

*Prerequisite(s): 8th grade Intensive Math or Teacher Recommendation*

This course is designed to be the first year of a two-year study of Algebra I and will provide students with a foundation in the algebraic strand of mathematics, which includes understanding patterns, relations, and functions, representing and analyzing mathematical situations and structures using algebraic symbols, using mathematical models to represent and understand quantitative relationships, and analyzing change in various contexts. Mathematics itself is looked at not just as calculation but also as a modeling language, as a process for logical thought, and as a field of study. This approach to Algebra I is organized around families of functions, with special emphasis on linear functions. Students will learn about each family of functions, how to represent them in multiple ways: as verbal descriptions, equations, tables, and graphs. They also will learn to model real-world situations using functions in order to solve problems arising from those situations. Course pacing and structure will allow for important skills to be honed through additional practice time. Students at this level complete Algebra I in two years and will take the Algebra I Keystone Exam upon completion of the second course.

### ALGEBRA 1 COURSES

#### **Algebra 1 A (05040414)**

*1.0 Credit; Unweighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 9, 10*

*Prerequisite(s): Teacher Recommendation*

The goal of this course is to develop algebraic skills and concepts and to enhance problem solving ability. Topics include: polynomial expressions and equations, quadratic functions, irrational numbers, coordinate graphing, graphing linear and quadratic functions, basic statistics, determining and analyzing the slope of lines, and factoring polynomial expressions. Algebra skills and concepts needed to solve equations, inequalities, and systems of equations/inequalities are developed. Algebraic problem solving techniques are employed to solve relevant applications.

#### **Algebra 1 CP (05040416)**

*1.0 Credit; Unweighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 9*

*Prerequisite(s): 8<sup>th</sup> grade intensive math or Teacher Recommendation*

Algebra concepts and skills and problem solving techniques will be developed at a moderate pace and an appropriate difficulty level. Topics will include the basic skills in working with integers, exploring patterns, and solving equations and inequalities with one or two variables. Applications of these skills will be used to enhance problem solving ability. Additional topics including functions, data analysis, graphing techniques, polynomials, factoring, quadratics, and systems of equations will be introduced. The course is designed to help students meet the Pennsylvania State Standards in mathematics.

### GEOMETRY COURSES

#### **Seminar Geometry H (05040420)**

*1.0 Credit; Weighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 9*

*Prerequisite(s): 8th grade Algebra with a Grade of "A" or Teacher Recommendation*

This course is a challenging, rigorous, proof-based approach to Geometry. Students in Seminar Geometry analyze geometric figures using deductive reasoning, make conjectures and formulate hypotheses, draw conclusions, make connections with other mathematical concepts, and model situations geometrically as a problem solving strategy. Algebraic and geometric skills and interactive computer software may be integrated throughout the curriculum.

## ALGEBRA 2 COURSES

### Geometry H (05040422)

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Grade(s): 9, 10

Prerequisite(s): 8<sup>th</sup> grade Algebra 1 with a "B" and Teacher Recommendation.

Note(s): Students with a grade of "C" or lower in Algebra 1 are strongly encouraged to enroll in Algebra 1 A (0414) or take Algebra 1 in a summer school program before taking the course.

This course uses a disciplined approach to traditional Geometry, integrating the concepts and skills previously developed in Algebra 1. Students in Geometry H apply geometric concepts to solve problems, use two-column proofs to establish relationships among triangles and parts of triangles, apply similarity theorems to geometric figures, relate knowledge of parallel and perpendicular lines to solve practical problems, combine algebraic and geometric skills to solve perimeter, area and volume problems, and apply skills involving trigonometry and transformational geometry. Interactive computer software may be integrated throughout the curriculum.

### Geometry A (05040424)

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Grade(s): 9, 10, 11

Prerequisite(s): Algebra 1 A or a "B" in 8<sup>th</sup> grade Algebra 1

Note(s): Students with a grade of a "C" or lower in Algebra 1 are strongly encouraged to enroll in Algebra 1 A (0414) or take Algebra 1 in a summer school program before taking this course.

This class is a concept-based approach to traditional Geometry designed to reinforce and extend previous algebra skills while integrating new geometric concepts. Students in Geometry derive and use formulas for perimeter, circumference, area, surface area, and volume of many types of figures, use the Pythagorean Theorem, use congruence and similarity in describing relationships between figures, and analyze geometric figures. Some computer lab work may be performed during the year. Throughout the course, algebra skills will be reviewed and reinforced through the application of geometry concepts.

### Geometry CP (05040426)

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Grade(s): 9, 10, 11

Prerequisite(s): Algebra 1 CP or Teacher Recommendation

The course will cover the basic concepts of geometry at a moderate pace and an appropriate difficulty level. Topics will include the definitions and properties of geometric shapes. The concepts of congruence and similarity will be applied to appropriate figures and problem solving situations. Perimeter, area and volume formulas will be used for various geometric shapes. Pythagorean Theorem and the right triangle trigonometric ratios will be introduced. Throughout the course, algebra skills will be reviewed and reinforced through applications of geometric concepts. The course is designed to help students meet the Pennsylvania State Standards in mathematics.

### Seminar Algebra 2 H (05040430)

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Grade(s): 10

Prerequisite(s): Seminar Geometry H with a grade of "B" or Teacher Recommendation

Seminar Algebra 2 H is an enriched and extended study of the topics of Algebra 2 H (0453). In addition, it includes an in-depth study of exponential and logarithmic functions, quadratic relations (conics), sequences and series, probability, matrix algebra and the graphs of rational functions. This course uses an exploration/discovery approach to develop course content. There is a heavy emphasis on real-world applications. Written explanations are a part of assessment. Students are required, on a regular basis, to make connections within and between mathematical concepts.

### Algebra 2 H (05040432)

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Grade(s): 10, 11

Prerequisite(s): 8<sup>th</sup> grade Algebra 1 with a "B" and Geometry H with a "B", Seminar Geometry with a "B"

This course reviews and extends the number system, formulas, equations and graphs. Subject matter includes quadratics, radicals, exponents, and complex numbers. An emphasis is placed on both the development of the concept of function and graphing functions using a transformational approach. Logarithms, exponential functions, theory of equations and sequences and series are introduced during the course. Students are challenged to apply skills to new problems and to connect skills and concepts. Students are expected to handle a demanding workload.

### Algebra 2 A (05040434)

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Grade(s): 11, 12

Prerequisite(s): Geometry A with a "C"

Note(s): This course cannot be used as a prerequisite for Precalculus H (0443). A graphing calculator is required.

This course reviews and extends an understanding of the number system, formulas, equations and graphs. Subject matter includes quadratics, radicals, exponents, complex numbers and the mathematical concept of function. Logarithms, exponential functions and theory of equations are introduced during the course. This course involves the use of a graphing calculator to develop and practice concepts, rather than the theoretical approach used in Algebra 2 H. Students are expected to handle an appropriate workload at a moderate pace.

### Algebra 2 CP (05040436)

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Grade(s): 11, 12

Prerequisite(s): Algebra 1 CP and Geometry CP

The course reinforces and extends the skills and concepts from previous algebra courses. Topics include, but are not limited to, solutions of linear equations and inequalities, solutions of quadratic equations, rules for exponents, radicals and rational expressions, and graphs of linear, absolute value, and quadratic functions. Where appropriate, applications using geometric concepts are included.

## ALGEBRA 3 COURSES

### Algebra 3 and Trigonometry CP (05040446)

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Grade(s): 11, 12

Prerequisite(s): Algebra 2 CP

Algebra 3 is intended to complete the topics of Algebra not developed in Algebra 2. In addition, the course will review, reinforce and strengthen the concepts and skills studied in Algebra 2 with emphasis on equation and inequality solving. The new topics will include but not be limited to complex numbers, exponential and logarithmic functions, and sequences and series. Trigonometry will be introduced through right triangles and extended to include the circular functions.

## ADVANCED MATHEMATICS & CALCULUS COURSES

### Seminar Precalculus H (05040440)

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Grade(s): 11

Prerequisite(s): Seminar Algebra 2 H with a Grade of "B" or Teacher Recommendation

Students who successfully complete this course are prepared for Advanced Placement Calculus AB or BC. Explorations and discovery methods are emphasized in developing course content. Students are expected to make connections and to explain understanding of mathematical concepts through written and oral presentations. Students apply knowledge to math modeling. Topics include: right triangle and circular trigonometry, graphing trigonometric functions using advanced techniques, inverse trigonometric functions, identities and equations, math induction, laws of sines and cosines, polar functions, polar conics, parametric functions, DeMoivre's Theorem, sequences and series, polynomial, rational, exponential and logarithmic functions, limits, operations of functions, and rates of change.

### Precalculus H (05040441)

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Grade(s): 11, 12

Prerequisite(s): Algebra 2 H with a Grade of "B" or Trigonometry/Discrete Math A with a "B" or Teacher Recommendation

This course prepares students to take a college level Calculus or Advanced Placement Calculus AB course. Emphasis is on making connections and in-depth explanations of mathematical processes that demonstrate an understanding of concepts. Real world applications are used to enhance mastery. Topics covered are linear, polynomial, rational, exponential, logarithmic, trigonometric, piecewise, quadratic, polar and inverse functions, sequences and series, math induction, laws of sines and cosines, trigonometric identities and equations.

### Precalculus A (05040448)

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Grade(s): 12

Prerequisite(s): Algebra 2 A

The goal of this course is to examine trigonometric concepts and application and explore appropriate discrete topics. Trigonometry is taught using both a right triangle and unit circle approach. Exponential and logarithmic functions, sequences and series, and as time allows, other topics in discrete math are introduced. Many of these topics have applications in engineering, management, and the social sciences. Algebra skills necessary for success in subsequent mathematics courses will be reviewed throughout the year.

### Advanced Placement Calculus BC (05040460)

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Grade(s): 12

Prerequisite(s): Recommended by Department

Note(s): This college-level course prepares students to successfully take the Calculus BC Advanced Placement Exam and receive 2 or 3 semesters of college credit and/or placement as a result.

In addition to the topics listed under Advanced Placement Calculus AB, students electing this course engage in a thorough study of: L'Hopital's Rule for evaluating some limits, use of derivatives to analyze polar, parametric, and vector functions, integration techniques and applications, numerical solutions to differential equations using Euler's Method, and sequences and series, including the use of tests for convergence and the development of Maclaurin and Taylor polynomials and their convergence. **This is a PLTW + AP Pathway course. For more information of the PLTW+AP pathway, please see page 12.**

### Advanced Placement Calculus AB (05040450)

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Grade(s): 12

Prerequisite(s): Precalculus H with a "B" or Teacher Recommendation

Note(s): This college-level course prepares students to successfully take the Calculus AB Advanced Placement Exam and receive 1 or 2 semesters of college credit and/or placement as a result.

Students electing this course engage in a thorough study of: limits and continuity, differentiation, integration, and differential equations as well as appropriate applications. The functions studied in previous mathematics courses will be used to develop these themes. **This is a PLTW + AP Pathway course. For more information of the PLTW+AP pathway, please see page 12.**

### Calculus 1 A (05040452)

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Grade(s): 12

Prerequisite(s): Precalculus H or Trigonometry/Discrete Math A with a "B" or Teacher Recommendation

Traditionally, calculus has been the mathematics course taken by college freshmen. There is currently a growing realization that students also need to be prepared in the areas of linear algebra, probability and statistics, logic, and other discrete mathematics topics. This need arises because of the ever-increasing role of computing in all disciplines and the importance of discrete mathematics in computing. The objective of this course is to provide an introduction to traditional first semester calculus and to introduce students to the many topics in discrete mathematics – both of which have important applications in engineering, management, and the social sciences.

### Linear Algebra H (05040480)

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Grade(s): 11, 12

Prerequisite(s): AP Calculus AB, AP Calculus BC, or teacher recommendation

This college level course is designed to prepare the student for eventual courses in multivariable calculus and modern algebra. Students will study systems of equations, vectors and vector spaces, linear transformations and matrix representations, determinants, eigenvectors and eigenvalues and a variety of applications. Linear algebra is used in abstract algebra, functional analysis and has extensive applications to both natural sciences and social sciences.

**This is dual enrollment course. Please see page 11 for more information.**

**Note: Multivariable Calculus will be offered on alternating years beginning in 2017-2018. Multivariable Calculus will not be offered again until 2019-2020.**

### Multivariable Calculus H (05040500)

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Grade(s): 11, 12

Prerequisite(s): AP Calculus BC with a B or better.

This college level course is designed to prepare the student for eventual courses in differential equations. Students electing to take this course will review polar and parametric curves as well as infinite series. They will study vectors and the geometry of space, vector functions, vector calculus, partial derivatives, multiple integrals, and second order differential equations.

## STATISTICS COURSES

### Advanced Placement Statistics (05040470)

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Grade(s): 11, 12

Prerequisite(s): Seminar Algebra 2 with a Grade of "C" or Algebra 2 H with a Grade of a "B" or Teacher Recommendation

AP Statistics introduces students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students are exposed to four broad concepts: exploring data for patterns and departures from patterns, sampling and experimentation in planning and conducting a study, anticipating patterns while exploring random phenomena using probability and simulation, and statistical inference during estimating population parameters and testing hypotheses. Students who successfully complete this course and the College Board AP Statistics examination may receive advanced credit for one semester of introductory college statistics.

### Statistics A (05040472)

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Grade(s): 11, 12

Prerequisite(s): Algebra 2 A or Algebra 2 CP

The four major themes of statistics of describing data through graphical means, sampling and experimentation, anticipating patterns, and statistical inference are explored along with the basic concepts of probability. Various computer and statistical projects are given to complement the course throughout the year.

## COMPUTER SCIENCE COURSES

### Advanced Placement Computer Science A (05040490)

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Grade(s): 10-12

Prerequisite(s): *Introduction to Computer Science or with a Teacher Recommendation (This prerequisite begins in the 2018-2019 school year)*

Students electing this course engage in a study computer science and will design and implement solutions to problems by writing, running and debugging computer programs. Use and implement commonly used algorithms and data structures. Develop and select appropriate algorithms and data structures to solve problems. Develop code fluently in an object-oriented paradigm using the programming language Java. Recognize the ethical and social implications of computer use. Read and understand a large program consisting of several classes and interacting objects. Read and understand a description of design and developmental process leading to such a program.

**This is a PLTW + AP Pathway course. For more information of the PLTW+AP pathway, please see page 12.**

## MUSIC DEPARTMENT

### INSTRUMENTAL MUSIC COURSES

#### **Band H (05120810)**

1.0 Credit; Weighted

Length: Year; Format: Meets Daily plus sectionals

Grade(s): 9, 10, 11, 12

Prerequisite(s): Middle school band ability and above or Teacher Recommendation

Note(s): It should be noted that rehearsals scheduled apart from the school day are a necessary aspect of this course. Attendance at these rehearsals, as well as all performances and concerts, is mandatory. Concerts are normally scheduled during the evenings on weekdays.

This course is open to all qualifying students who play a woodwind, brass or percussion instrument. Admission is obtained by audition or through recommendation by the Middle School or High School instrumental music directors. This course is designed to provide a marching, concert and parade band experience. **The marching aspect will start with a week-long camp starting Sunday, August 26<sup>th</sup> (1 week before school starts) and running through September. Students in Drum Line and Color Guard will have an additional week of practice in August (TBA).** Band Camp is an assessed part of the course. The band will perform at all football games. The parade aspect will be limited to special community events including the local Santa and memorial Day Parades. The concert band experience will be the main, yearlong focus of the curriculum where wind players and percussionists will be assigned to various ensembles. A weekly group lesson scheduled during the school day (during a study hall or free period) is a required part of the course as is attendance at all concerts. A schedule of all events will be published in the summer. The curriculum will focus on the development of pedagogical techniques idiomatic of the student's particular instrument which will be explored through the performance of contemporary band literature. **(S)**

#### **Full Orchestra H (05120830)**

1.0 Credit; Weighted

Length: Year; Format: Meets Daily plus sectionals

Grade(s): 9, 10, 11, 12

Prerequisite(s): Middle School string ability and above or Teacher Recommendation

Note(s): It should be noted that rehearsals scheduled apart from the school day are a necessary aspect of this course. Attendance at these rehearsals, as well as all performances and concerts, is mandatory. Concerts are normally scheduled during the evenings on weekdays.

This course provides both a string and full orchestra experience and is open to all qualifying students who play a string instrument. A weekly group sectional (lesson) is scheduled during the school day (study hall or free period) and is a required part of the course. Small ensembles created from the big group will perform for various school and community events in addition to the winter and spring concerts.

#### **Jazz Ensemble H (05120850)**

0.5 Credit; Weighted

Length: Year (includes lesson); Format: Meets on Cycle Days

or Length: Semester; Format: Meets Daily

Grade(s): 9, 10, 11, 12

Prerequisite(s): Enrollment in Band, Full Orchestra or String/Full Orchestra (except for guitar, bass and piano)

This course is open to all qualified students who are interested in jazz and popular Big Band music. Participation is open to students who are also enrolled in Band or Orchestra (except guitar, bass, voice, strings & piano). An emphasis is placed on advanced pedagogical techniques associated with jazz interpretation. Students also explore the world of improvisation as it relates to twentieth century harmonization. The ensemble performs at three concerts a year as well as various school and community events.

#### **Percussion H (05120811)**

0.5 Credit; Weighted

Length: Year; Format: Meets on Cycle Days

or Length: Semester; Format: Meets Daily

Grade(s): 9, 10, 11, 12

Prerequisite(s): Enrollment in Band, Chorus, Meistersingers or Orchestra or have the ability to read music.

This course is open to all qualified students who are interested in the various forms and styles of percussion. An emphasis is placed on advanced pedagogical techniques associated with drums, mallets and percussion accessories. Students explore the world of percussion as it relates to contemporary ensemble techniques. The ensemble performs for various school and/or community events.

### VOCAL MUSIC COURSES

#### **Chorus (05120826)**

0.5 Credit; Unweighted

Length: Year; Format: Meets on Cycle Days

or Length: Semester; Format: Meets Daily

Grade(s): 9, 10, 11, 12

Note(s): It should be noted that rehearsals scheduled apart from the school day are a necessary aspect of this course. Attendance at these rehearsals, as well as all performances and concerts, is mandatory. Concerts are normally scheduled during the evenings on weekdays.

The Full Chorus is open to all students who enjoy singing. It is a four-part (Soprano, Alto, Tenor, and Bass) chorus that performs a wide variety of music ranging from the early masters to the composers of today.

#### **Meistersingers H (05120820)**

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Grade(s): 10, 11, 12

Prerequisite(s): Teacher Recommendation

Note(s): It should be noted that rehearsals scheduled apart from the school day are a necessary aspect of this course. Attendance at these rehearsals, as well as all performances and concerts are mandatory. Concerts are normally scheduled during the evenings on weekdays.

Students in Meistersingers are selected from the full chorus by an audition process. This chorus performs challenging choral works as well as lighter numbers and is often invited to perform for local organizations throughout the year. Sectionals are a required part of this course.

## COMBINATION COURSES

*Note: Combination courses are for students who participate in more than one ensemble and are selected and scheduled as a single unit.*

### **Band and Orchestra H (05120891)**

*1.0 Credit; Weighted*

*Length: Year (Includes lesson)*

*Grade(s): 9, 10, 11, 12*

*Prerequisite(s): Instrument level of Band and/or string level of Orchestra*

This course accommodates those students who play a string and wind instrument as well as those who play a wind or percussion instrument in the band and wish to participate with the full orchestra. Students share class time with students scheduled in Band and Orchestra. Please refer to those courses for further explanation of the requirements and descriptions. **(S)**

### **Meistersingers and Band H (05120892)**

*1.0 Credit; Weighted*

*Length: Year (Includes Sectionals)*

*Grade(s): 10, 11, 12*

*Prerequisite(s): Teacher Recommendation*

This course accommodates those students who play a wind or percussion instrument as well as sing. Students share class time with students scheduled in Band and Meistersingers. Please refer to those courses for further explanation of the requirements and descriptions. **(S)**

### **Meistersingers and Orchestra H (05120893)**

*1.0 Credit; Weighted*

*Length: Year (Includes sectionals)*

*Grade(s): 10, 11, 12*

*Prerequisite(s): Teacher Recommendation*

This course accommodates those students who play a string instrument and wish to sing. Students share class time with students scheduled in Meistersingers and Orchestra. Please refer to those courses for further explanation of the requirements and descriptions. **(S)**

### **Meistersingers, Band, and Orchestra H (05120894)**

*1.0 Credit; Weighted*

*Length: Year (Includes sectionals)*

*Grade(s): 10, 11, 12*

*Prerequisite(s): Teacher Recommendation*

This course accommodates those students who, in addition to singing, wish to play an instrument in both the band and the full orchestra. Students share class time with students scheduled in Meistersingers, Band and Orchestra. Please refer to those courses for further explanation of the requirements and descriptions. Acceptance into this course is very limited, and must be approved by all three directors. Students are required to miss some lunch periods.

## MUSIC THEORY COURSES

### **Music Theory (05120841)**

*1.0 Credit; Unweighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 9, 10, 11, 12*

*Prerequisite(s): None*

*This course is offered in alternate school years.*

Music Theory is designed for students with little or no previous knowledge of musical concepts who are interested in gaining a practical knowledge of the elements of music composition and song writing. Students will learn basic theory, harmony, composition and ear training. Traditional concepts will be explored in non-traditional ways leading to the understanding of contemporary music applications. A keyboard approach will be utilized incorporating MIDI and computer technology.

### **Guitar Class (05120862)**

*0.5 credit; Unweighted*

*Length: Semester; Format: Meets Daily*

*Grade(s): 9, 10, 11, 12*

This course is designed for students wishing to play the guitar. It is for beginners and students with 1 year of experience. Students are taught in a class ensemble and given individual instruction at their own level ranging from beginner to intermediate. Students have many options to develop: learning to read notes, playing melodies and chords by sight or by ear, playing together as an ensemble, composing original music. Students will use a guitar to create music. Students should have access to a guitar at home; one will be provided at school. This course will provide a foundation for Music Theory and AP Music Theory.

### **Survey of Western Music (05120900)**

*0.5 Credit; Unweighted*

*Length: Year; Format: Meets on Cycle Days*

*or Length: Semester; Format: Meets Daily*

*Grade(s): 9, 10, 11, 12*

This course is designed to expose interested students to the history and cultural environment in which composers from all periods worked and lived. Students will listen to masterworks of the repertoire and will study form and style. Class work will consist of lectures, discussions and listening. Course Goals and/or Major Student Outcomes

1. Students will understand and will grow in their appreciation of classical music of Western Europe.
2. Students will be able to describe the various forms and styles of music, which were discussed and listened to in class.
3. Students will gain knowledge and insight into what makes great music great.
4. Students will be able to identify works by composers from various periods of music history.

Students will be able to write about music in a historical context.

**AP Music Theory will be offered in the 2019-2020 school year.**

**AP Music Theory (05120842)**

*1.0 Credit; Weighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 10, 11, 12*

*Prerequisite(s): Music Theory 1 or Teacher Recommendation.*

*This course is offered in alternate school years.*

**AP Music Theory** is designed for students planning to major in music or for the student seriously interested in music. It is an in-depth study of how music is put together. Students should already have a basic background in reading music and the knowledge of key centers. Students will learn 4 part harmony, composition, ear training and solfeggio. Emphasis will be placed on the study of eighteenth century music composition and analysis. Music writing assignments and exercises will be a regular part of the course including homework assignments. Ear training will be developed in preparation for advanced listening evaluations. A keyboard approach will be utilized with computer software support in listening and composition leading for preparedness for the Advanced Placement Music exam.

## SCIENCE DEPARTMENT

Radnor's science curriculum follows a long tradition of engaging students in active learning. The science program provides students with depth and breadth of scientific knowledge and skills through a well-defined sequence of studies. The sequence of classes in our science program is, in order, biology, chemistry, and physics. It is strongly recommended that the sequence below is followed in order. Each discipline has three levels of instruction, and each level has different expectations and requirements. Students are expected to select an appropriate level from biological and physical sciences as they progress through the core sequence of biology, chemistry, and physics. Students must complete the core sequence prior to taking Advanced Placement or higher level science courses. With teacher recommendation students can take AP courses concurrently with the appropriate core science course. The science electives, Bioethics, and Genetics, are offered to juniors and seniors.

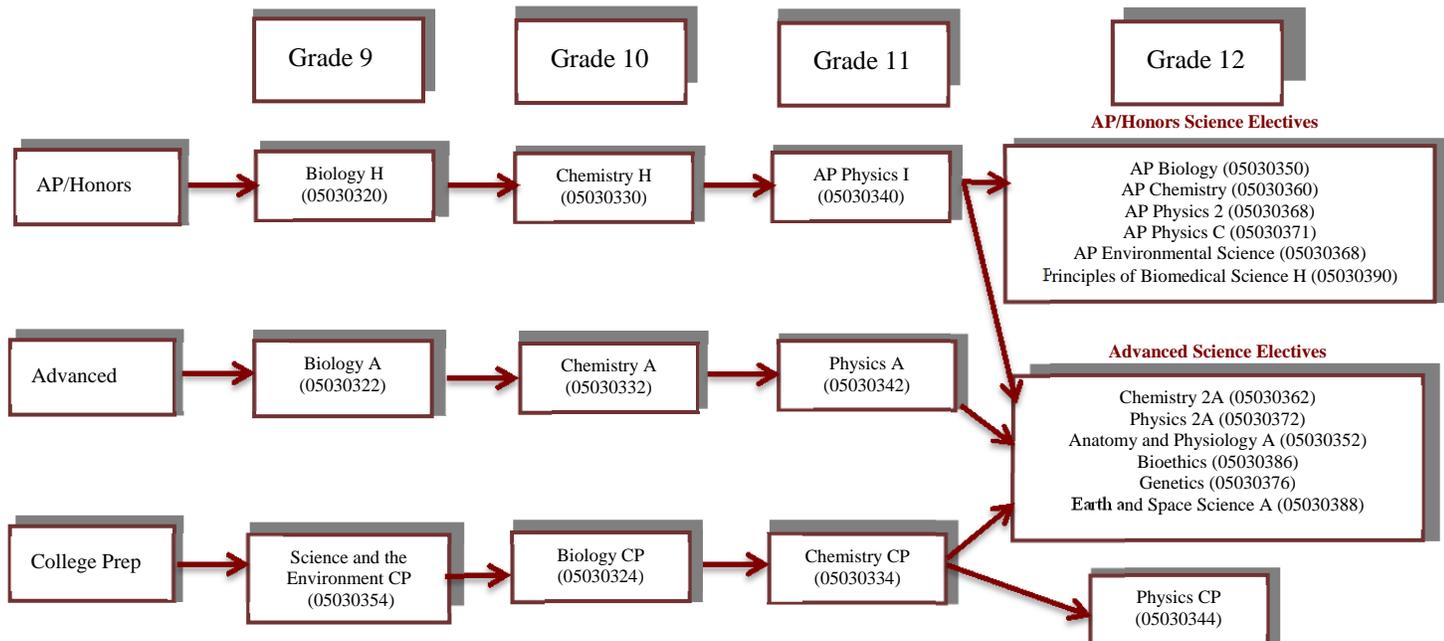
An **Honors level** class has the highest emphasis on rigor and mastery of the sciences. Students are highly motivated and hard-working learners capable of independent study at a rigorous pace. The average honors student will have 4-6 hours/week of out-of-class work including homework and written laboratory reports. The honors level assignments will engage students with higher critical thinking skills with the greatest conceptual understanding. These students are expected to study and read beyond what is done in the classroom. Higher critical thinking skills such as evaluation, synthesis, and analysis of data and concepts are emphasized. Students must be in either the advanced or more likely the honors level mathematics classes for success at this level.

An **Advanced level** class has a moderate pacing and workload. These advanced level classes are for students motivated in science and capable of some independent work. The average advanced student will have 3-4 hours/week of out-of-class work including homework and written laboratory reports. The assignments are more concrete and teacher-lead. Students are challenged to improve their critical thinking skills such as analysis, comparison and contrast concepts and also the ability to collect, organize, and interpret data. Students must be at the advanced math level to achieve maximum success.

A **College Preparatory level** class is paced appropriately for the students and emphasizes the fundamental concepts, vocabulary, and skills of each discipline. Hands-on activities and laboratory investigations are important in developing student understanding. The average academic student will have 2-3 hours/week of out-of-class work that includes homework and lab work that will reinforce concepts learned in the classroom. Assignments and tests emphasize comprehension, application, and analysis. They also stress more concrete concepts with greater hands-on applications. Students starting at this level will have the highest degree of teacher guidance, but will work toward greater self-reliance by the end of the course.

An **elective** class is one that is associated with one of the sciences. These courses count toward graduation credits but do not satisfy science requirements for graduation. In addition to AP Courses, students may select a fourth year of science at the College-Preparatory level.

### RHS Science Department Courses



## 9<sup>th</sup> GRADE OFFERINGS

### Science and the Environment CP (05030354)

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

*Science and the Environment* is a multidisciplinary science course that combines aspects of all branches of science. Students explore scientific concepts and are involved in scientific inquiry through hands-on activities. Critical thinking skills and problem solving are developed along with observation, interpretation and communication skills. Content of the course consists of a wide variety of selected topics based on the Pennsylvania Science Standards with emphasis on practical applications.

*Biology studies the living world in a multitude of ways. Students will explore this broad field through readings, lectures, research, and laboratory investigations. The topics covered in all levels of Biology will include, but not be exclusive to, Biochemistry, Taxonomy, Cytology, Microbiology, Genetics, Ecology, Comparative Anatomy, and Evolution. All biology courses will prepare students for the Biology Keystone Exams given in May. Those students not passing this exam must take the remediation course, Keystone Biology.*

### Biology H (05030320)

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Co-requisite(s): Enrollment in Algebra 1 A (0414) and the 8<sup>th</sup> grade team recommendation; Geometry H or higher

Biology H is a course where learning is focused on enriched content and offered at an accelerated pace. Students are expected to independently read the text. Honors Biology provides students with a rigorous and comprehensive study of biological themes. Laboratory investigations with accompanying detailed written reports form a framework for the development of critical thinking skills. Emphasis is placed on the ability of students to learn independently outside the classroom. Students who have successfully completed Biology H are able to cover all the material in Biology 322 in addition to being able to: explain how cells store and use information to guide their functions, understand the relationship among DNA, genes and chromosomes as well as different types of inheritance patterns, distinguish between different reproductive patterns in living things, and describe the factors affecting gene frequency in a population over time and the related consequences. Students taking Biology H are expected to remain on the honors track, taking Chemistry H and Physics H in the subsequent years.

### Biology A (05030322)

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Co-requisite(s): Algebra 1 A (0414) or Geometry A or higher

Biology A is a college-prep level course where learning is structured to enhance the development of higher level thinking skills using an appropriate pace and challenging content. Students are expected to work both in teams as well as independently in the writing of laboratory reports and in the preparation of projects. Students who have successfully completed this course are able to cover the topics listed for Biology 324 in addition to being able to apply their knowledge of

**Biology A (con't...)** Genetics to the understanding of the Human Genome Project and the ramifications of gene manipulation, genetic engineering and genetic technology as a whole.

## 10<sup>th</sup> GRADE OFFERINGS

### Biology CP (05030324)

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Co-requisite(s): Enrollment in Algebra 1 CP (0416) or higher

Biology CP is an academic course where learning is accomplished through guided instruction.

A moderate pace is used to develop thinking skills and to prepare students to meet the Pennsylvania graduation requirements. Students are involved in laboratory investigations where both individual and group work is assigned. At the close of the course, students are able to: understand the basic chemical and structural basis of living organisms, describe how genetic information is inherited and expressed, explain the mechanisms of the theory of evolution and the role of mutations and gene recombination in changing a population or organisms, and apply the concept of natural selection to illustrate and account for a species' survival or extinction.

*In chemistry courses students learn how current models of the submicroscopic world of atoms and molecules explain observable, real-world phenomena. The course emphasizes the organization of the periodic table and its use in predicting the properties of matter. In labs students make observations and draw conclusions based on the current models they are studying. Throughout the course, students are exposed to the language of chemistry.*

### Chemistry H (05030330)

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Prerequisite(s): Biology H or Biology A

Co-requisite(s): Algebra 2 H or higher

Chemistry H provides students with a rigorous study of fundamental chemical concepts including: the scientific method, handling of laboratory data, atomic structure, states of matter, stoichiometry, chemical reactions, gas laws, thermochemistry, light and electrons, periodicity, equilibrium, kinetics, and acids and bases. Students need to be highly motivated in science and math. The course stresses the development of problem solving and thinking skills that are used in Physics H and second year courses.

### Chemistry A (05030332)

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Prerequisite(s): Biology A

Co-requisite(s): Geometry A with teacher recommendation or Algebra 2 A or higher.

Chemistry A is a college-preparatory course that prepares students for further study in science at the college level. Advanced chemistry covers the traditional first year topics of chemistry including the structure of the atom, the formation of compounds, chemical reactions, the periodic table, stoichiometry, the gas laws, and periodic properties. Some level of independent work is required.

## 11<sup>th</sup> GRADE OFFERINGS - PHYSICS CURRICULUM

### Chemistry CP (05030334)

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Prerequisite(s): Biology or Teacher Recommendation

In Chemistry CP students study the basic structures and properties of matter. Although some algebra is used in the class, the heaviest emphasis is placed on a conceptual understanding. Lab work acquaints students with basic chemistry lab techniques and reinforces the concepts covered in class. Whenever possible, chemistry is related to students' everyday lives.

*Physics is the study of matter and energy and their interactions. The fields of physics covered in the core curriculum include mechanics (motion, forces, energy, and momentum), optics (lenses and mirrors) and electricity (current, voltage, resistance, and circuits). In physics, quantities are measured and mathematical relationships and laws are discovered to better understand the world. All levels of physics are lab-based courses emphasizing the discovery of these laws and relationships. All courses emphasize problem solving and real life applications.*

### AP Physics 1 (05030340)

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Prerequisite(s): Chemistry A or higher; Biology A and higher

Co-requisite(s): Pre-Calculus H or higher

AP Physics 1 is an algebra-based course that provides a rigorous and thorough examination of physics that is usually taken as a first semester college course. The topics for this course include Newtonian mechanics (including rotational motion), work, energy, power and waves. Later in the year, students will be introduced to electricity and magnetism. Students will develop a deep understanding of the content and focus their knowledge through inquiry labs. Extensive reading of the textbook and writing formal lab reports are expected of these self-directed students. Following AP Physics 1 students are able to take AP Physics 2 or AP Physics C. **This is a PLTW + AP Pathway course. For more information of the PLTW+AP pathway, please see page 12.**

### Physics A (05030342)

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Prerequisite(s): Chemistry A & Biology A

Co-requisite(s): Algebra II A with teacher recommendation or Algebra III/Trigonometry A or higher.

Physics A is an algebra-based college preparatory course which provides a challenging examination of the core curriculum as well as the topics of waves and magnetism. Reading of the textbook and writing many lab reports are expected of these students.

## 12<sup>th</sup> GRADE OFFERINGS - PHYSICS CURRICULUM

### Physics CP (05030344)

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Prerequisite(s): Biology CP & Chemistry CP

Co-requisite(s): Algebra 2 or higher

This course approaches core curriculum on a more conceptual level with less emphasis on mathematical relationships. However, some basic mathematical skills are needed for problem solving and laboratory work. The labs and activities help in the understanding of concepts, enhance basic science skills, and require students to organize and interpret data.

## SCIENCE DEPARTMENT ELECTIVES

### Chemistry 2 A (05030362)

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Grade(s): 12

Prerequisite(s): Chemistry A and Physics A for seniors; or Chemistry A and taking Physics A concurrently as a junior)

This course is an opportunity for students to continue studying chemistry in depth through a second year course. Topics will include a review from *Chemistry* with additional new content, such as, but not limited to: solutions, acids and bases, equilibrium, thermodynamics, redox, nuclear chemistry, biochemistry, organic chemistry, and environmental chemistry along with a laboratory component. Emphasis will be placed on real world applications in chemistry. Students interested in this course may consider majoring in biological or chemical sciences, medicine or nursing and would benefit from second year chemistry course.

### Physics 2 A (05030372)

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Grade(s): 12

Prerequisite: Physics A or higher

This course is an opportunity for students to continue studying physics in depth through a second year course. Topics will include content from *Physics* covered in greater depth and new topics such as, fluid dynamics, thermal physics, nuclear physics and some contemporary topics in physics. The course emphasizes concepts, problem solving, applications and projects in physics.

### Anatomy and Physiology A (05030352)

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Grade(s): 12

Prerequisite(s): Biology Adv or Higher; Physics or Higher

Anatomy and Physiology is the study of the body's structures and respective functions at the molecular/biochemical, cellular, tissue, organ, systemic, and organism levels. Students explore the body through laboratory investigations, models, diagrams, and comparative studies of the anatomy of the cat. The study of anatomy and physiology prepares students for a variety of career endeavors such as health care, sports medicine, and fitness careers, as well as for taking an active part in their own health and wellness.

### Genetics (05030376)

0.5 Credit; Unweighted

Length: Semester; Format: Meets Daily

Grade(s): 11, 12

Prerequisite(s): Biology CP & Chemistry CP with a grade of a "B"

This is a non-lab human genetics course. Genetics begins with a review of the fundamentals of genetics and works through the current information coming from current research as well as the Human Genome Project. Current topics in DNA technology, DNA evidence, cloning, genetic defects, and genetic counseling are discussed. The course also deals with the continuing discussion of "nature vs. nurture." Critical thinking skills, research, and analysis of ideas are emphasized in short investigations and projects.

### **Bioethics (05030386)**

*0.5 Credit; Unweighted*

*Length: Semester; Format: Meets Daily*

*Grade(s): 11, 12*

Bioethics challenges students to assess what is going on in the sciences that may be pushing the limits of ethics, personal morality, and the “natural order.” Students are encouraged to explore difficult issues through readings, research, and discussion. The course emphasizes critical thinking, research, debate and listening skills. Current technology and interviews are among the techniques used to research discussion topics. Among the topics covered are animal rights, organ transplants, genetic engineering, euthanasia, abortion rights, and embryonic engineering as well as other current and controversial topics

### **Principles of Biomedical Science H (05030390)**

*1.0 Credit; Weighted*

*Grade(s): 10, 11, 12*

*Prerequisite(s): Biology H, Chemistry and Physics;*

*Co-requisite(s): Chemistry H and Teacher Recommendation; or Physics H and Teacher Recommendation:*

The Principles of Biomedical Science (PBS) course provides an introduction to biomedical science through exciting hands-on projects and problems. Students investigate concepts of biology and medicine as they explore health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. The activities and projects in PBS introduce students to human physiology, basic biology, medicine, and research processes and allow students to design experiments to solve problems. Key biological concepts, including maintenance of homeostasis in the body, metabolism, inheritance of traits, and defense against disease are embedded in the curriculum. Students practice problem solving with structured activities and progress to open-ended projects and problems that require them to develop planning, documentation, communication, and other professional skills. **This is a PLTW + AP Pathway course. For more information of the PLTW+AP pathway, please see page 12.**

### **Earth and Space Science A (05030388)**

*1.0 Credit; Unweighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 11, 12*

*Prerequisite(s): Physics A for seniors; or taking Physics A concurrently as a junior*

The primary aim of the course will be to study the major spheres of Earth, including the lithosphere, hydrosphere, and atmosphere in terms of their structure, composition, and evolution. Throughout the coursework, an emphasis will be placed on how human activity has impacted these spheres and what the consequences of continued activity may be. In addition, the course will include an astronomy component that discusses Earth’s place in space and the evolution of the universe. Current, pressing issues in science, such as global warming, climate change, water scarcity, alternate energy sources, and nuclear waste disposal will be discussed in detail. New state-of-the-art technologies like photovoltaic cells and the detection of Earth-sized extra solar planets will be highlighted in the course as well.

## **ADVANCED PLACEMENT SCIENCE COURSES**

*These advanced courses are meant to be taken in addition to rather than in place of first year courses in biology, chemistry, and physics.*

### **Advanced Placement Biology (05030350)**

*1.0 Credit; Weighted*

*Length: Year; Format: Meets Daily*

*Prerequisite(s): Biology H, Chemistry and Physics;*

*Co-requisite(s): Chemistry H and Teacher Recommendation; or Physics H and Teacher Recommendation:*

*NOTE: AP Biology is generally a senior level course taken after the 3 core science courses; in some instances it can be taken concurrently with honors chemistry or honors physics, but only with teacher recommendation.*

*AP Biology* requires students to go beyond factual recall and demonstrate the skills required for analysis and reasoning. The course uses a curriculum framework that develops advanced inquiry and reasoning skills; including designing a plan for collecting data, analyzing data, applying mathematical routines, and connecting concepts in and across domains. *AP Biology* is equivalent to a two-semester college introductory biology course. The four big ideas that frame the course are: the process of evolution drives the diversity and unity of life; biological systems utilize free energy and utilize building block to grow to reproduce and to maintain dynamic homeostasis; living systems restore, receive, transmit and respond to information essential to life’s processes; and biological systems interact, and these systems and their interactions possess complex properties.

**(S) This is a PLTW + AP Pathway course. For more information of the PLTW+AP pathway, please see page 12.**

### **Advanced Placement Chemistry (05030360)**

*1.0 Credit; Weighted*

*Length: Year; Format: Meets Daily*

*Prerequisite(s): Chemistry H and Pre-Calculus H;*

*Co-requisite(s): Physics H and Teacher Recommendation:*

*NOTE: AP Chemistry is generally a senior level course taken after the 3 core science courses; in some instances it can be taken concurrently with AP Physics I, but only with teacher recommendation.*

*Advanced Placement Chemistry* is a challenging second year chemistry course that prepares students to take the Advanced Placement Chemistry exam by providing college-level chemistry instruction. Because of the rigor of the exam, success in *Advanced Placement Chemistry* requires a serious commitment to independent study and outside-of-class work. It is intended for those students with a strong math and science background who are interested in pursuing a career in science, medicine or engineering. **(S) This is a PLTW + AP Pathway course. For more information of the PLTW+AP pathway, please see page 12.**

**Advanced Placement Environmental Science (05030380)**

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Prerequisite(s): Teacher recommendation; and Chemistry H or Physics A.

NOTE: AP Environmental Science is generally a senior level course taken after the 3 core science courses; in some instances it can be taken concurrently with honors level courses, but only with teacher recommendation;

The AP Environmental Science course is designed to be the equivalent of a one-semester, introductory college course in environmental science. Environmental science is offered from a wide variety of disciplines, including geology, biology, environmental studies, environmental science, chemistry, and geography. It is a rigorous science course that stresses scientific principles and analysis and includes a significant laboratory component. AP Environmental Science will cover the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, identify and analyze environmental problems both natural and human-made, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them. Fieldwork, extensive reading of the textbook, and writing formal lab reports are expected of these self-directed students.

**This is a PLTW + AP Pathway course. For more information of the PLTW+AP pathway, please see page 12.**

**Advanced Placement Physics 2 (05030368)**

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Prerequisite(s): AP Physics 1

Co-requisite(s): Pre-Calc H

Advanced Placement Physics 2 is an algebra-based, college-level course that follows the prescribed curriculum of the College Board. This course prepares students for the AP Physics 2 Exam. The topics included in this course are fluid mechanics, thermal physics, waves, optics, modern physics, and electricity and magnetism. These students must have a serious commitment to independent study and outside-of-class work. This course is for motivated students who enjoy problem solving and performing inquiry based labs. It is intended for those students who are going to pursue a career in science, medicine, or engineering. **This is a PLTW + AP Pathway course. For more information on the PLTW+AP pathway, please see page 12.**

**Advanced Placement Physics C (05030371)**

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Prerequisite(s): AP Physics 1 or Teacher Recommendation

Co-requisite(s): Calc 1 H or higher

AP Physics C is a calculus based college-level course that follows the prescribed curriculum of College Board. The topics in this fast paced class include both Mechanics (Kinematics, Dynamics, Energy, Circular Motion and Oscillations) and Electricity and Magnetism (Electrostatics, Conductors, Electric Circuits, Magnetic Fields, and Electromagnetism). This full year course prepares students for the AP Physics C exams in both Mechanics and in Electricity and Magnetism. Students taking AP Physics C must have some of the best mathematic skills. This course is for extremely motivated students who enjoy problem solving and performing authentic labs. It is intended for those students who are going to pursue a career in science, medicine or engineering. **This is a PLTW + AP Pathway course. For more information of the PLTW+AP pathway, please see page 12.**

## SOCIAL STUDIES DEPARTMENT

The goal of the Social Studies department is to empower students with the knowledge, skills, and passion to actively participate as citizens in a democratic and global community. All Social Studies courses are aligned to the Pennsylvania Social Studies standards and benchmarks and therefore ensure that all students achieve mastery of the important themes and patterns that are particularly unique to the social studies.

In order to complete graduation requirements, all students must earn a total of three credits in Social Studies as follows:

1. One credit for ninth grade Government and Economics
2. One credit for tenth grade World Studies
3. One credit for eleventh grade American Studies

**Advanced Placement (AP):** The AP social studies curriculum provides students the opportunity to take courses that are traditionally taught in a university setting. These courses' syllabi have been audited and approved by the College Board. Strong reading and writing skills along with a willingness to devote considerable time to homework and independent study are necessary for success. Emphasis is placed on critical and evaluative thinking skills, essay writing and interpretation of original documents and cases. Assessments are aligned to those found on the AP exams and include, but are not limited to, multiple choice items, document-based, and free response essays. These courses are as rigorous as a college course in terms of subject matter and approach. Readings and documents are taken from college-level textbooks and students should expect daily reading and writing assignments and frequent exams. Students who perform well on AP Exams can earn college credit and/or advanced standing and stand out in the college admission process.

**Seminar/Interdisciplinary:** A rigorously paced interdisciplinary approach (combining SS and English) with above-grade and college level materials. Students are to be proactive as the norm, both in assignment completion and in the continued development of skills and intellectual inquiry. In-depth analysis of topics outside those presented in the classroom is also an expectation, as per the interdisciplinary model. Discussion and analysis will be drawn from a larger variety of topics and sources than in other levels. The goal is continued intellectual independence and mastery of a wide variety of topics and points of view to prepare students for the most challenging colleges.

**Honors Level:** A rigorously paced course with above-grade level materials. Content utilizes historical primary documents to current day publications. Instruction keys on expectations of student-driven inquiry and analysis of multiple sources and perspectives. Students are expected to advocate for themselves as thinkers and learners. Depth of content and speed of its delivery rely upon consistent levels of independent reading and writing by the student. Student skills will be reinforced through projects and research, as well as discussion and conversation generated by student inquiry. The goal is continued intellectual independence and mastery of a wide variety of topics and points of view to prepare students for the most challenging colleges.

**Advanced level:** A moderately paced course with a goal of developing independent learners and readers. Advanced courses are skill-driven, with an emphasis on content. Content is at or slightly above grade level, and based around primary documents and grade level texts. Students should expect a combination of teacher-guided and independent instruction. The level of student-driven analysis and synthesis will increase throughout the year. Student-centered projects and independent writing will foster development of the writing process, and stress the use of evidence to craft a detailed argument. All work is designed around the goal of eventual independence at college.

**College-preparatory level:** A deliberately-paced, intentional and consistent examination of challenging grade-level materials. Teacher-guided instruction with projects and assessments scaled to ability and content. Focus on development and maintenance of reading, writing, and comprehension skills. Key academic skills such as note-taking, text summary and review, organization, synthesis, and analysis will be taught and assessed. Content is delivered and reviewed in manageable units. Students should expect regular homework collection and weekly assignments directed toward content review and skill practice. All work is designed around the goal of eventual independence at post-secondary school institutions.

In addition, students are encouraged to take one or more electives during 11th and/or 12th grade.

# RHS Social Studies Department Courses

	Grade 9	Grade 10	Grade 11	Grade 12
AP/Integrated	Integrated The American Experiment (05990010)	Integrated Global Issues (05990020)	AP United States History (05020230) Integrated Viewpoints on Modern America/AP Language and Comp. (05990030)	Integrated Senior Seminar (05990040) AP European History (05020240) AP Psychology (05020250) AP Macroeconomics (05020260) AP Government & Politics (05020270) AP Art History (05990730)
Honors	Government and Economics H (05020211)	World Studies H (05020221)	American Studies H (05020231)	
Advanced	Government and Economics A (05020212)	World Studies A (05020222)	American Studies A (05020232)	Psychology A (05020252) Sociology A (05020292)
College Prep	Government and Economics CP (05020214)	World Studies CP (05020224)	American Studies CP (05020234)	

Note: With teacher recommendation, students may move between levels.

## NINTH GRADE OFFERINGS

### Integrated The American Experiment (05990010)

*(formerly Int. Gov. & Econ.)*

2.0 Credits; Weighted

Length: Year; Format: Double Period, Meets Daily

Grade(s): 9

Prerequisite(s): Teacher Recommendation or Gifted Identification.

This team-taught course, first in a sequence of four interdisciplinary courses, provides students with an opportunity to study the key concepts of government and economics accompanied by a fusion of legal thrillers, dystopian novels, and classical political treatises. Government topics include: the components of citizenship, the constitutional basis of American democracy, federalism, political beliefs and behaviors, political parties, elections, campaigns, the role of interest groups, the media, individual rights, the structure of U.S. government (Congress, presidency, the courts, and bureaucracy). Economics topics include: economic theories; the global economy; macro-economic concepts such as monetary policy, fiscal policy, the Federal Reserve, money, and banking; micro-economic concepts such as supply and demand, competition/monopolies, business organizations, entrepreneurship, and the stock market. Students are engaged in a number of activities designed to foster acquisition and understanding of social studies concepts: reading primary and secondary sources, Socratic discussion, frequent written expression, analysis of propaganda and other visual media, creative projects, and simulations. This two-period course requires students to be active and independent learners capable of making connections across themes and time. The Parallel Curriculum and Understanding by Design models allow for analysis of works of varying genres and media, including a challenging level of analytical writing. Higher-level thinking and writing skills are emphasized through the use of synthesis, analysis, and evaluation. **(5)**

### 9th Grade Government and Economics H (05020211)

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Grade(s): 9

Prerequisite(s): Teacher Recommendation

The Government and Economics course provides students with an opportunity to study the key concepts of government and economics and the interrelatedness of the two disciplines. Government topics include: the components of citizenship, the constitutional basis of American democracy, federalism, political beliefs and behaviors, political parties, elections, campaigns, the role of interest groups, the media, individual rights, the structure of U.S. government (Congress, presidency, the courts, and bureaucracy). Economics topics include: economic theories, the global economy, macro-economic concepts such as monetary policy, fiscal policy, the Federal Reserve, money and banking, micro-economic concepts such as supply and demand, competition/monopolies, business organizations, entrepreneurship and the stock market. Students are engaged in a number of activities designed to foster acquisition and understanding of social studies concepts: reading primary and secondary sources, Socratic discussion, frequent written expression, analysis of propaganda and other visual media, creative projects, and simulations. More traditional assessment methods (objective tests, expository essays, and research projects) are used to evaluate the progress of students. The honors curriculum is vigorous and uses advanced level texts. Higher-level thinking and writing skills are emphasized through the use of synthesis, analysis, and evaluation.

### **9th Grade Government and Economics A (05020212)**

*1.0 Credit; Unweighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 9*

*Prerequisite(s): Teacher Recommendation*

The Government and Economics course provides students with an opportunity to study the key concepts of government and economics and the interrelatedness of the two disciplines.

Government topics include: the components of citizenship, the constitutional basis of American democracy, federalism, political beliefs and behaviors, political parties, elections, campaigns, the role of interest groups, the media, individual rights, the structure of U.S. government (Congress, presidency, the courts, and bureaucracy). Economics topics include: economic theories, the global economy, macro-economic concepts such as monetary policy, fiscal policy, the Federal Reserve, money and banking, micro-economic concepts such as supply and demand, competition/monopolies, business organizations, entrepreneurship and the stock market.

Students are engaged in a number of activities designed to foster acquisition and understanding of social studies concepts: grade appropriate primary and secondary sources, imaginative questioning techniques, frequent written expression, analysis of propaganda and other visual media, creative projects, and simulations. More traditional assessment methods (objective tests, expository essays, and research projects) are used to evaluate the progress of students. Grade level texts are used.

### **9th Grade Government and Economics CP (05020214)**

*1.0 Credit; Unweighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 9*

The Government and Economics course provides students with an opportunity to study the key concepts of government and economics and the interrelatedness of the two disciplines at a more deliberate pace. Government topics may include: the components of citizenship, the constitutional basis of American democracy, federalism, political beliefs and behaviors, political parties, elections, campaigns, the role of interest groups, the media, individual rights, the structure of U.S. government (Congress, presidency, the courts, and bureaucracy). Economics topics may include: economic theories, the global economy, macro-economic concepts such as monetary policy, fiscal policy, the Federal Reserve, money and banking, micro-economic concepts such as supply and demand, competition/monopolies, business organizations, entrepreneurship and the stock market. Students are engaged in a number of activities designed to foster acquisition and understanding of social studies concepts: analysis of propaganda and other media, creative projects, role plays, and simulations. More traditional assessment methods (objective tests and expository essays) are used to evaluate the progress of students. Level-appropriate texts and materials are used.

## **TENTH GRADE OFFERINGS**

### **Integrated Global Issues H (05990020)**

*2.0 Credits; Weighted*

*Length: Year; Format: Double Period, Meets Daily*

*Grade(s): 10*

*Prerequisite(s): Teacher Recommendation or Gifted Identification.*

This team-taught seminar, second in a sequence of four interdisciplinary courses, uses a Parallel Curriculum Model to combine advanced work in international studies with intense analysis of literary works from both non-Western cultures and the English-speaking world. The focus is on the non-Western world, concentrating on area studies of the Middle East, Africa, Russia, South and Central Asia, and the East Asia. Current issues are analyzed by interpreting key historical events and exploring the cultural heritage of each region. Important global issues such as human rights compliance, arms proliferation, conflict resolution, and trade are also studied in depth. By combining a comprehensive social studies approach (geopolitical, environmental, economic, demographic, anthropological, and sociological) with integrated language arts (novels, short stories, poetry, art, film, and music), this course develops critical thinking about contemporary international issues and universal themes. Exercises in creative and analytical writing, public speaking, debate, and research are combined with extensive group and independent work, hands-on projects, and simulations, to create an active learning experience. A research project requires that students develop an original thesis, evaluate and select resources, take notes, produce an outline, write a large essay, and provide thorough documentation of sources. At the conclusion of this project, students present their findings to the class. **(S)**

### **Advanced Placement World History (05020220)**

*1.0 Credit; Weighted*

*Length Year; Meets Daily*

*Grade(s): 10*

*Prerequisite(s): Teacher Recommendation*

This develops an understanding of the evolution of global processes and contacts including interactions over time. This course highlights the nature of changes in international frameworks and their causes and consequences, as well as comparisons among major societies. The student will make connections by surveying the common threads of humanity—trade, religion, politics, society, and technology—and investigates how each have changed and continued over time. The course traces the human experience from the emergence of Neolithic cultures to the 21st Century, C.E., emphasizing the historical thinking skills, writing skills, and content knowledge characteristic of a college-level world history course. Students will devote considerable time to the critical evaluation of primary and secondary sources, as they write essays, engage in class discussions, and evaluate content knowledge and visual analyses. **(S)**

**World Studies H (05020221)**

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Grade(s): 10

Prerequisite(s): Teacher Recommendation

This course focuses on the historical development of current issues facing Russia, the Middle East, Europe, Africa, and Asia. Students study the relationship between traditional cultures in these areas and their present political, economic, and social positions in the world. Assessments include research papers, problem solving projects, independent study, simulations, and a current events portfolio. Questioning strategies aimed to test students' ability to conceptualize, analyze, synthesize, and evaluation are also used. Advanced level texts and many primary and secondary sources are used to interpret concepts. **(S)**

**World Studies A (05020222)**

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Grade(s): 10

Prerequisite(s): Teacher Recommendation

This course focuses on the historical development of current issues facing Russia, the Middle East, Europe, Africa, and Asia. Students study the relationship between traditional cultures in these areas and their present political, economic, and social position in the world. Assessments include research papers, projects, presentations, simulations and a current events portfolio. Grade level texts and primary/secondary sources are used.

**World Studies CP (05020224)**

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Grade(s): 10

Prerequisite(s): Teacher Recommendation

This course focuses on the historical development of current issues facing Russia, the Middle East, Europe, Africa, and Asia. Students study the relationship between traditional cultures in these areas and their present political, economic, and social positions in the world. Assessments include research papers, projects, presentations, simulations, and a current events portfolio. Level-appropriate texts and materials are used.

**ELEVENTH GRADE OFFERINGS****Integrated Viewpoints on Modern America/AP English Language and Composition (05990031)**

2.0 Credits; Weighted

Length: Year; Format: Double Period, Meets Daily

Grade(s): 11

Prerequisite(s): Teacher Recommendation or Gifted Identification.

This team-taught course, third in a sequence of four interdisciplinary courses, combines study of American history, politics, literature and culture, on a high honors level. The approach to curriculum is both chronological and thematic, and reflects essential questions about the American character. Readings include primary and secondary documents and extend into the related arts with particular attention to the genre of film. Methods used include active discussions, examinations of current political and social issues, lecture, group work, simulations, and presentations. Along the way, a variety of expository and creative writing assignments call on students to synthesize, argue, and

**Integrated Viewpoints on Modern America (con't...)** analyze.

The involvement of both teachers in delivery and assessment enriches the curriculum and increases students' awareness of varied points of view, new ideas, and core information about their national culture. The Parallel Curriculum approach allows students to connect history and literature as well as extend their studies into individualized areas of practice and interest. **(S)**

**Advanced Placement United States History (05020230)**

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Grade(s): 11

Prerequisite(s): Teacher Recommendation

This course is an opportunity for the motivated and talented social studies student to use the methods historians use to bring insight and analysis to events in our nation's past. Advanced Placement US History is a college-level course that focuses on historical concepts and developments in the history of the United States from the pre-colonial period to the present. Strong reading and writing skills, along with a willingness to devote considerable time to homework and study are necessary for success. Emphasis is placed on critical and evaluative thinking skills, essay writing, and interpretation of original documents. A college-level textbook is used. Several weeks are spent in intensive review to prepare students to take the College Board AP exam. **(S)**

**American Studies H (05020231)**

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Grade(s): 11

Prerequisite(s): Teacher Recommendation

This course focuses on historical developments in United States history from 1877-present. It exposes students to historic concepts and also to concepts related to politics, society, economics, art and the environment. Major topics of study include, but are not restricted to, manifest destiny, the progressive movement, industrialization, imperialism, World War I, the Great Depression, World War II, the cold war, the Korean War, the Vietnam War, civil rights, and American foreign policy. A vigorous curriculum incorporates advanced level texts and primary and secondary sources. Higher level thinking and writing skills are emphasized through the use of synthesis, analysis, and evaluation.

**American Studies A (05020232)**

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Grade(s): 11

This course focuses on historical developments in United States history from 1877-present. It exposes students to historic concepts and also to concepts related to politics, society, economics, art and the environment. Major topics of study include, but are not restricted to, Manifest Destiny, the Progressive Movement, Industrialization, Imperialism, World War I, the 1920's, the Great Depression, World War II, the Cold War, the Korean War, the Vietnam War, civil rights, and American foreign policy. A challenging curriculum incorporates grade-level texts and primary and secondary sources.

**American Studies CP (05020234)**

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Grade(s): 11

This course focuses on historical developments in United States history from 1877-present. It exposes students to historic concepts and also to concepts related to politics, society, economics, art and the environment. Major topics of study include, but are not restricted to, Manifest Destiny, the Progressive Movement, Industrialization, Imperialism, World War I, the 1920's, the Great Depression, World War II, the Cold War, the Korean War, the Vietnam War, civil rights, and American foreign policy. An appropriately paced curriculum incorporates grade-level texts and primary and secondary sources.

**SOCIAL STUDIES ELECTIVES****Integrated Senior Seminar (05020040)**

2.0 Credits; Weighted

Length: Year; Format: Double Period, Meets Daily

Grade(s): 12

*Prerequisite(s): Teacher Recommendation and Gifted Identification or after taking the Interdisciplinary diagnostic exam to provide feedback on current ability level*

This team-taught seminar, fourth in a sequence of interdisciplinary courses, uses a Parallel Curriculum Model to combine history, literature, philosophy, and science in their broadest senses. This course examines humankind's ideas about the universe, life, and consciousness, and the struggle between the individual and society. Students focus on the philosophical idea of leadership and how leaders have affected, and currently affect, society in various cultures, including: cultural self-conceptions, the nature of progress, and elements of power. The curriculum is organized both thematically and chronologically. The "student-as-worker" approach to high-level learning experiences includes simulations; focused writing assignments, both analytical and creative; close analysis of literary, historical, and visual sources; large and small group instruction; and problem-based learning.

**Advanced Placement European History (05020240)**

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Grade(s): 11, 12

The Advanced Placement course in European History reflects the most recent developments in history curricula at the undergraduate college level. In addition to providing an overview of important historical events and movements in modern European history from 1450 to the present, Advanced Placement European History help students acquire and develop an understanding of some of the principal themes in modern European history, an ability to analyze historical evidence, and an ability to express historical understanding in writing. The course is designed specifically to prepare students for the Advanced Placement (AP) examination. Assessments in this course are aligned to those found on the AP Exam and include, but are not limited to, multiple choice items and both document-based and thematic essays. This course is as rigorous as a college course in terms of subject matter and approach; readings and documents are taken from college-level textbooks, and students should expect daily reading and writing assignments. This course is open to all students; however, students who have a strong interest and proven track record in history are most likely to succeed. (5)

**Advanced Placement Psychology (05020250)**

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Grade(s): 10, 11, 12

The purpose of the Advanced Placement Psychology course is to introduce students to systematic and scientific study of the behavior and mental processes of human beings and animals. Students are exposed to the psychological facts, principles and phenomena associated with each of the major sub fields within psychology. The topics covered include development, biological basis for behavior, sensation and perception, cognition (learning, memory and intelligence), states of consciousness, personality, abnormal behavior, therapy, and emotion and motivation (sports psychology). Students also learn about the methods employed by psychologists studying behavior. This course is highly interactive and reliant on independent effort, initiative, and critical thinking. Experiments, surveys, opinion papers, simulations, and creative illustrations are examples of techniques used to facilitate learning. The class is taught on a college level with the opportunity to qualify for college credit by successfully completing Advanced Placement Psychology Examination.

**Psychology A (05020252)**

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Grade(s): 11, 12

The purpose of this course is to introduce students to systematic and scientific study of the behavior and mental processes of human beings and animals. Students are exposed to the psychological facts, principles and phenomena associated with each of the major sub fields within psychology. The topics covered include development, biological basis for behavior, sensation and perception, cognition (learning, memory and intelligence), states of consciousness, personality, abnormal behavior, therapy, and emotion and motivation (sports psychology). Students also learn about the methods employed by psychologists studying behavior. Experiments, surveys, opinion papers, simulations, and creative illustrations are examples of techniques to be used to facilitate learning.

**Advanced Placement United States Government and Politics (05020270)**

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Grade(s): 11, 12

This course is designed to give students an analytical perspective on government and politics in the United States. It includes the study of general concepts used to interpret U.S. politics and the analysis of specific examples. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute US politics (AP Central website). The topics covered include the constitutional underpinnings of American democracy, political beliefs and behaviors, political parties, elections and campaigns, interest groups, the mass media, the Congress, the presidency, the federal courts, civil rights and civil liberties, the bureaucracy, and public policy. The course will prepare students to take the AP Exam. Textbooks designed for college students are used.

**Advanced Placement Macroeconomics (05020260)**

*1.0 Credit; Weighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 11, 12*

*Advanced Placement Macroeconomics* replicates the introductory macroeconomics course taught in a university setting. As such, the course requires far more effort and commitment than the typical high school courses. The course goals are to: introduce students to the field of economics; to teach basic economic concepts and analytical skills; and to enable students to score well on the Advanced Placement Macroeconomics Examination.

Macroeconomics is a study of how economic decision makers affect the economy as a whole in terms of employment, price stability, and economic growth. After defining and analyzing tools and models that describe the conditions of our national economy, our fundamental purpose is to analyze how fiscal and monetary policy may be used to promote full employment, price stability, and economic growth. Teaching strategies include teacher presentations, cooperative learning, discussion groups, and simulations.

**Sociology A (05020292)**

*1.0 Credit; Unweighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 11, 12*

This course introduces students to the study of how social forces influence human behavior in groups and individually. Topics include social problems such as drug abuse, racism, sexism, and crime. Approaches to resolving social problems are also considered such as the juvenile and adult criminal justice systems, capital punishment, gun control, censorship, and affirmative action. Issues such as euthanasia, abortion, and genetic research are evaluated for the ethical problems they raise. In addition, the social culture of Radnor High School is analyzed and surveys conducted. Films, newspapers, guest speakers (such as police, judges, etc.) and field trips (such as to a prison and city school) are used.

**Advanced Placement Art History (05990730)**

*1.0 Credit; Weighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 10, 11, 12*

Art history is a humanities course which explores history, culture and civilization through art. It's a course for students who want to understand art and its historical context. Students will examine the major forms of visual art expression from early man to the present and from a variety of cultures. Students learn how society has influenced art, and how art has influenced our understanding of history. Psychology, religion, and economics are explored in relation to history and art. This is a good course for students who plan to travel in the future, as it provides an understanding of art and culture around the world. Students electing this course may receive college credit or placement in the humanities by taking the Advanced Placement Art History exam. There is no prerequisite for this course, but students should be prepared to read and write at a college level. This is an academic course, not a studio course and requires no artistic ability.

## SKILL DEVELOPMENT COURSES

While these courses may be selected by any student as an elective, in some cases placement into these courses may be driven by student achievement on standardized tests, teacher recommendations, and IEP goals. For students who meet certain criteria, placement into these courses is mandatory. Additionally, all courses below also have specific exit criteria based on performance of the skills addressed in the courses.

### **Essential Study Skills (05141511)**

*0.5 Credit; Unweighted*

*Length: Year; Format: Meets on cycle days*

*Teacher recommendation required; open to all students.*

This course introduces students to the basic concepts related to brain-based learning and memory theory and subsequently puts these concepts into practice through the use of research-based content area reading and study strategies. Throughout the course students will work to better understand themselves as learners and adopt study skills, reading strategies, prepare for standardized and teacher created tests, improve time management skills, create goals with actions plans, and organizational methods to maximize their academic and personal success.

### **Essential Comprehension Strategies (05141451)**

*0.5 Credit; Unweighted*

*Length: Year; Format: Meets on Cycle Days*

*Teacher Recommendation required*

This course will address strategic reading skills for students who struggle in the area of comprehension. Strategies and skills which will enhance the reading of fiction and non-fiction text will be taught and can be applied across the high school curriculum.

### **Focused Reading & Writing 9/10 (05141581)**

### **Focused Reading & Writing 11/12 (05141582)**

*2.0 Credits; Unweighted*

*Length: Year; Format: Meets daily*

*Teacher recommendation required;*

*Note: This course counts for English graduation credit*

This is a double period split course that focuses on both the English Language Arts (ELA) standards for high school students and a remedial program that focuses on providing intensive, differentiated instruction in the areas of reading and writing. A variety of instructional activities, materials, and computerized activities are used. Students work at their own reading level, which is determined by a pretest and then proceed through lessons at their own pace.

### **Essentials of Writing (05141512)**

*0.5 Credit; Unweighted*

*Length: Year; Format: Meets on cycle days or everyday*

*Teacher recommendation required; open to all students.*

This class is recommended for students who need additional instruction and guided practice in the area of writing. The focus addresses the six domains of writing including: overall development, organization, content, sentence structure, word choice, and mechanics.

### **Academic Success Center (05141502)**

*0.5 Credit; not included in GPA*

*Length: Year; Format: Meets on cycle days*

*Graded: Pass/Fail for those students assigned to Center*

*All students may access the center for help.*

*This course counts as an elective credit.*

Students have the opportunity to improve writing, find a quiet place to take a test, receive help with a homework assignment, organize a presentation, study for an exam or work on IEP goals in the Academic Success Center.

### **Essential Life Strategies (05141514)**

*0.5 Credit; Unweighted*

*Length: Year; Format: Meets on cycle days*

*Teacher recommendation required; open to all students.*

This course utilizes a researched based, systematic curriculum that promotes an intrinsic interest in learning and encourages cooperation among students called Positive Action. Direct instruction is implored by teaching and reinforcing the intuitive philosophy that you feel good about yourself when you do positive actions. The principle Thoughts-Actions-Feelings Circle illustrates how this works in life: thoughts lead to actions and those actions lead to feelings about ourselves, which in turn lead to more thoughts. Positive Action is organized into six units by grade level. Units include self-concept, positive actions for your body and mind, managing yourself responsibly, treating others the way you like to be treated, telling yourself the truth, and improving yourself continually.

### **Effective Communication Strategies (05141516)**

*0.5 Credit; Unweighted*

*Length: Year; Format: Meets on cycle days*

*Teacher recommendation required.*

The central focus of this class is to develop age appropriate social skills and instruct students on communicating effectively. Students will receive direct instruction in social development, resolving confrontational situations in a constructive manner, engaging others in conversation, and problem solving. Students will receive support in expanding areas of interest, managing time, prioritizing, and goal setting. Communication and awareness of self and others are key areas which will be focused on and expanded appropriately as the course progresses. Placement in this class will be determined by a student's IEP and/or teacher recommendation.

**9/12 English (05141607)**

1.0 Credit; Unweighted

Length: Year; Format: Meets everyday

Teacher recommendation required

Note: This course counts for English graduation credit

This course provides differentiated instruction in the areas of fiction and nonfiction, writing, film analysis, vocabulary and communication skills. Students read and analyze short stories, poetry, novels, essays, social commentary, historic speeches, and current editorial selections. Guided writing activities are designed to improve students writing skills, while longer pieces will strengthen proficiency in composition.

**9/12 Math (05141613)**

1.0 Credit; Unweighted

Length: Year; Format: Meets everyday

Teacher recommendation required

Note: This course counts for Math graduation credit

This course provides students with differentiated instruction in the content areas of Algebra 1, Geometry, and Algebra 2. Activities, lessons, and direct instruction are adapted to individual student's math content ability. Through the investigation of meaningful problems individually or in cooperative groups, while using an individualized technology program, students learn foundations of mathematics. Students will prepare for success in future mathematics courses by building content knowledge to meet mathematic standards. Students are given opportunities to review basic math skills, continue to close learning gaps, and practice proficiency skills for Keystone Examination.

**Essential Math Skills (05141513)**

0.5 Credit; Unweighted

Length: Year; Format: Meets on cycle days

Teacher recommendation required; open to all students.

This course serves as a supplement of instruction for Introductory Algebra through Geometry. Additional skill remediation and instruction on basic computational and application strategies are supplemental to the curriculum.

**Essentials of Algebra I (05141508)**

0.5 Credit; Unweighted

Length: Year; Format: Meets on cycle days

This course is offered as a supplement to Algebra I CP and Algebra I A. Students are provided additional instruction and guided practice to mirror curriculum introduced in content Algebra courses. Students will also receive additional remediation and instruction on basic mathematics.

**Essentials of Algebra II/III (05141507)**

0.5 Credit; Unweighted

Length: Year; Format: Meets on cycle days

This course is offered as a supplement to Algebra II CP, Algebra II A and Algebra III CP. Students are provided additional instruction and guided practice to mirror curriculum introduced in content Algebra II/III courses. Students will also receive additional remediation and instruction on basic mathematics through introductory Algebra computation and application skills.

**Essentials of Geometry (05141503)**

0.5 Credit; Unweighted

Length: Year; Format: Meets on cycle days

This course is offered as a supplement to Geometry CP and Geometry A. Students are provided additional instruction and guided practice to mirror curriculum introduced in content Geometry CP and Geometry A courses. Students will also receive additional remediation and instruction on basic mathematics and Algebraic computation and application skills.

**KEYSTONE COURSES****Keystone Mathematics (05141509)**

0.5 Credit; Unweighted

Length: Year; Format: Alternate Day

Grades: 9, 10, 11

Placement Criteria: Non-proficient score on Keystone Exam and/or C- or below in Algebra 1 course as teacher recommends

This course will focus on the state standards in Algebra 1. Included topics are number systems and representation of numbers, rules of exponents, basic number theory, linear equations and inequalities, systems of linear equations and inequalities, functions and relations, interpretation of data, scatterplots, basic probability and measurement of central tendencies.

**Keystone Biology (05141510)**

0.5 Credit; Unweighted

Length: Year; Format: Alternate Day

Grades: 9, 10, 11

Placement Criteria: Non-proficient score on Keystone Exam.

This Keystone biology Course will be a course for those students that need to take and pass the Biology Keystone Exam. There will be thorough review of the eligible anchors in this course. These topics will include Cells and Processes (Basic and Biological Principles, Chemical Basis for Life, Bioenergetics, Homeostasis and Transport) and Continuity and Unity of Life (Cell Growth and Reproduction, Genetics, Theory of Evolution, and Ecology).

**Keystone Literature (05141517)**

0.5 Credit; Unweighted

Length: Year; Format: Alternate Day

Grades: 9, 10, 11

Placement Criteria: Non-proficient score on Keystone Exam

The Keystone Literature Course will be a course for those students that need to take and pass the Literature Keystone Exam. There will be a thorough review of the eligible anchors. Topics include: Fiction and Nonfiction texts, concentrating on vocabulary, reading for meaning, and analyzing and interpreting fiction and nonfiction.

## TECHNOLOGY EDUCATION DEPARTMENT

### COMPUTER AND PHOTOGRAPHY COURSES

#### **Principles of Photography (05151205)**

*0.5 Credit; Unweighted*

*Length: Semester; Format: Meets Daily*

*Grades: 10, 11, 12*

This course offers students hands-on opportunities to learn the fundamentals of both black and white and digital photography, while exploring opportunities in the field of photography. Students become familiar with photographic equipment and conventions while learning how to compose a good photograph.

#### **Digital Photography (05151207)**

*0.5 Credit; Unweighted*

*Length: Semester; Format: Meets Daily*

*Grades: 11, 12*

*Prerequisite: Principles of Photography*

This course is a continuation of the Principles of Photography course where students will work strictly in digital format to create and manipulate original photographs. Students will learn how to operate a Digital SLR to compose photographs. Graphics editing software will be used to enhance photographs. Through a variety of projects students will have the opportunity to work in a studio.

#### **Introduction to Computer Science H (ICS) (05151265)**

*1.0 Credit; Weighted*

*Length: Year-Long; Format: Meets Daily*

*Grade(s): 9, 10, 11, 12*

*Prerequisite(s): None*

Students work in teams to create simple apps for mobile devices using MIT App Inventor®. Students explore the impact of computing in society and the application of computing across career paths and build skills and awareness in digital citizenship and cyber security. Students model, simulate, and analyze data about themselves and their interests. They also transfer the understanding of programming gained in App Inventor to learn introductory elements of text-based programming in Python® to create strategy games. **ICS will be a prerequisite for AP Computer Science A beginning in the 2018-2019 school year. This is a PLTW + AP Pathway course. For more information of the PLTW+AP pathway, please see page 12.**

#### **Communications Technology (05151201)**

*1.0 Credit; Unweighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 9, 10, 11, 12*

This course offers students an opportunity to learn and apply technologies used in the communication process. Areas of study include black and white photography, digital photography, telecommunications, video production, electronics, screen printing, desktop publishing, and Web page design.

#### **Web Page Design (05151203)**

*0.5 Credit; Unweighted*

*Length: Semester; Format: Meets Daily*

*Grade(s): 10, 11, 12*

This hands-on course familiarizes students with the computer languages and concepts used to develop web pages. Students are introduced to the fundamentals of the World Wide Web home page design using the Hypertext Markup Language (HTML) and a simple HTML editor. Building on Basic HTML tagging, students explore advanced and complex scripting and design concepts possible for use on the World Wide Web. Finally, a class Web page is developed using newly-acquired skills and techniques.

#### **Computer Graphics (05151204)**

*0.5 Credit; Unweighted*

*Length: Semester; Format: Meets Daily*

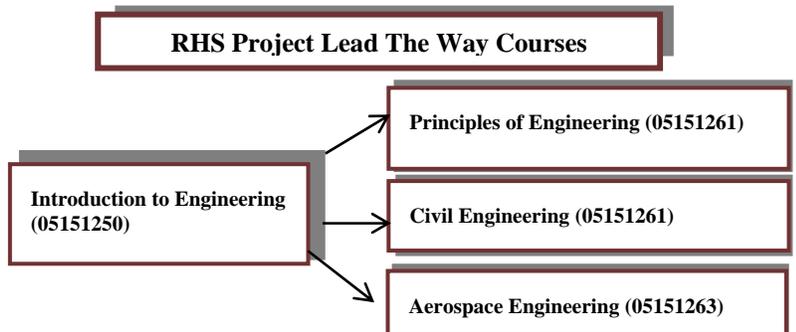
*Grade(s): 9, 10, 11, 12*

This course is designed around the use and manipulation of digital images and computer animation. Through a variety of activities, students apply the design techniques learned in class to practical applications. Computer programming experience is not needed for this course.

### ENGINEERING COURSES

Project Lead the Way is a four year sequence of courses which, when combined with traditional mathematics and science courses in high school, introduces students to the scope, rigor and discipline of engineering prior to entering college. For additional information, please visit [www.rtsd.org/Domain/166](http://www.rtsd.org/Domain/166). Students who wish to experience Project Lead the Way courses throughout high school are recommended to follow the sequence: Introduction to Engineering, Principles of Engineering, Civil Engineering, and Aerospace Engineering.

**Note: Students who do not necessarily meet the prerequisites here may petition a Technology Education teacher for permission to take the classes here.**



#### **Introduction to Engineering & Design H (IED) (05151250)**

*1.0 Credit; Weighted*

*Length: Year; Format: Meets Daily*

*Grades: 9, 10, 11, 12*

*Prerequisite(s): Algebra 1 (completed or currently enrolled)*

In this course, students use 3D solid modeling design software to help them design solutions to solve 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. **This is a PLTW + AP Pathway course. For more information of the PLTW+AP pathway, please see page 12.**

### **Principles of Engineering H (POE) (05151261)**

*1.0 Credit; Weighted*

*Length: Year; Format: Meets Daily*

*Grades: 10, 11, 12*

*Prerequisite(s): Geometry, Intro to Engineering Design H (1250)*

This survey course of engineering exposes students to some of the major concepts they'll encounter in a postsecondary engineering course of study. Students have an opportunity to investigate engineering and high-tech careers and to develop skills and understanding of course concepts. Students employ engineering and scientific concepts in the solution of engineering design problems. They develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges. Students also learn how to document their work and communicate their solutions to peers and members of the professional community. **This is a PLTW + AP Pathway course. For more information of the PLTW+AP pathway, please see page 12.**

### **Civil Engineering & Architecture H (CEA) (05151262)**

*1.0 Credit; Weighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 10, 11, 12*

*Prerequisite: Introduction to Engineering Design H (1250)*

The major focus of this course is completing long-term projects that involve the development of property sites. As students learn about various aspects of civil engineering and architecture, they apply what they learn to the design and development of a property. The course provides teachers and students freedom to develop the property as a simulation or for students to model the experiences that civil engineers and architects face. Students work in teams, exploring hands-on activities and projects to learn the characteristics of civil engineering and architecture. In addition, students use 3D design software to help them design solutions to solve major course projects. Students learn about documenting their project, solving problems and communicating their solutions to their peers and members of the professional community of civil engineering and architecture. **This is a PLTW + AP Pathway course. For more information of the PLTW+AP pathway, please see page 12.**

### **Aerospace Engineering H (AE) (05151263)**

*1.0 Credit; Weighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 10, 11, 12*

*Prerequisite: Introduction to Engineering Design H (1250)*

The major focus of this course is to expose students to the world of aeronautics, flight and engineering through the fields of aeronautics, aerospace engineering and related areas of study. Lessons engage students in engineering design problems related to aerospace information systems, astronautics, rocketry, propulsion, the physics of space science, space life sciences, the biology of space science, principles of aeronautics, structures and materials, and systems engineering. Students work in teams utilizing hands-on activities, projects and problems and are exposed to various situations faced by aerospace engineers. In addition, students use 3D design software to help design solutions to proposed problems. Students design intelligent vehicles to learn about documenting their project, solving problems and communicating their solutions to their peers and members of the professional community. **This is a PLTW + AP Pathway course. For more information of the PLTW+AP pathway, please see page 12.**

## THEATER ARTS

### **American Musical Theater (05160943)**

**0.5 Credit; Unweighted**

**Length: Semester; Format: Meets Daily**

**Grade(s): 9, 10, 11, 12**

**Prerequisites: None**

**Repeat the Course: Yes**

All levels of singing experience welcome! "Think of musical comedy – the two most glorious words in the English language!" – Julian Marsh, from *42nd Street*. America is the birthplace of the musical, and this course will be focused on musical theatre; its development; its reflection of American history as it unfolds; its unique style of storytelling and character; and the many diverse qualities that make it uniquely **American Musical Theatre**. Students will analyze librettos and lyrics; listen to musical scores; and view clips and videos of performances. The core of the course is in the preparation and rehearsal for the culminating assessment, the Radnor Actors Workshop Musical Theatre Cabaret. Each student will have a song to prepare, research, and perform in the Cabaret as a solo, and there will be at least two ensemble numbers for the Cabaret. Utilizing technology, students will record their own performances of their songs. By the end of the course, students will have a deeper understanding and appreciation for the Broadway Musical, and have significant performance experience and feedback.

**Please note- Singing is an expectation of this course - ALL levels of experience welcome.**

### **Public Speaking (05010945)**

**0.5 Credit; Unweighted**

**Length: Semester; Format: Meets Daily**

**Grades: 9, 10, 11, 12**

**Prerequisites: None**

**Repeat the Course: No**

Welcoming all students, **Public Speaking** is perfect for the student who wishes to pursue a career that will, or might, involve public speaking. Those students who might be considering careers in government, politics, business, medicine, law, research, journalism, teaching, etc. should consider taking this course, especially if they have had little or no experience on stage. **Students who have stage fright are especially welcome to take this course, and learn to work through their anxiety in a safe, welcoming, and supportive environment.** In this course, students will study the elements of a strong public presentation. Students will engage in mock professional interviews to help prepare them for college interviews, as well as workforce interviews. Taking a stage acting approach to speech and oratory, students will build on their vocal production skills, as well as construct a compelling speech. Students will also engage in debates. Students will present video recorded journalistic newscasts, as well as audio recorded newscasts (radio). The course culminates in a community performance of talks in the TED style.

### **Theatre Acting (05160950) (formerly Theatre Arts)**

**0.5 Credit; Unweighted**

**Length: Semester; Format: Meets Daily**

**Grade(s): 9, 10, 11, 12**

**Prerequisites: None**

**Repeat the Course: Yes**

This course welcomes all students in grades 9-12 who wish to learn and experience more about being an actor. Enriching the basic concepts, students will experience many aspects of theatre within the course. Students who have stage fright are especially welcome to take this course and learn to work through their anxiety in a safe, welcoming, and supportive environment. Utilizing theatrical exercises and games, students will discover and develop full awareness of the tools actors use for acting: Voice, Body, Face, Mind, and Imagination. Culminates in a community performance of scenes and/or monologues.

### **Advanced Acting H (05160946) (formerly Theatre Arts II H)**

**1.0 Credit; Weighted; Honors credit**

**Length: Year; Format: Meets Daily**

**or**

**0.5 Credit, Unweighted, non-Honors credit (05160942)**

**Length: Semester; Format: Meets Daily**

**Grades: 10-12 (9th grade considered, only with recommendation, résumé, and experience)**

**Repeat the Course: Yes**

**Prerequisites: Teacher Approval**

Advanced Acting is a course for the advanced student actor who wishes to begin building a portfolio of their performances. Students will be evaluated on in class and culminating performances in many forms. Students will learn through masterclass format performances of their peers. Students will be expected to utilize correct theatre vocabulary, and be able to intellectually analyze and create characters, plots, and storylines. Students are expected to memorize materials. Students will design sets, costumes, and blocking, and students will direct scenes. Students will create their own monologues, scenes, and plays, as well as create more complex and productive improvisations in the long form. Students are expected to audition for the Radnor Actors Workshop performances, but do not necessarily have to participate onstage; All students, however, will be expected to assist the performances in some way. Professionalism and self-discipline are absolutely required of members of this elite class. This course is open to students in grades 10-12. 9th grade students with recommendation, résumé, and experience will be considered.

### **Technical Theatre (05160947)**

**0.5 Credit; Unweighted**

**Length: Semester; Format: Meets Daily**

**Grades: 9-12**

**Prerequisites: None**

**Repeat the Course: Yes**

Technical Theatre will touch on all aspects of technical theatre, with guest speakers and artists bringing tech gear to interact with and learn about. Students will design sets, creating scaled miniature models based upon the needs of a given play or musical. Lighting, sound, costume, and prop design will also be considered for plays and musicals. Students in the Radnor Tech Crew will also have the opportunity to build sets, hang lights, and design sound for all school events, including the Radnor Actors Workshop productions, school musical, school concerts, and other events, in the Auditorium and Black Box areas. Tech crew will aid organization and maintenance of the Auditorium, Black Box, Theatre Room, and Set Shop areas of the school. Tech crew may also run technical elements for school events, concerts, and assemblies. For extracurricular activities, such as Radnor Actors Workshop, Tech Crew will participate in an aspect of each show - Sound, Lighting, Set Construction, Painting, Costumes, Props, and/or Backstage Running Crew. NOTE: Students should be able to lift up to 40 lbs, and must be able to follow strict safety expectations and procedures. Students must be willing to put in some time outside of school hours.

### **Interested in more classes that involve elements of Theatre Arts?**

**If so, take a look at:**

**Advanced Textile Arts II** which involves costume design for the Fall play and Spring Musical.

**Behind the Scenes Workshop** which is a new art course that will be involved with set design.

## TV STUDIO PRODUCTION AND BROADCAST JOURNALISM

### **Video Production and Broadcast Journalism (05990952)**

*0.5 Credit; Unweighted*

*Length: Semester; Format: Meets Daily*

*Grade(s): 9, 10, 11, 12*

*Prerequisites: None*

This course welcomes all students in grades 9-12 who have an interest in film, screenplay writing, acting for the camera, and broadcast journalism. This course will utilize the TV Studio here at RHS to its full extent. Students will produce numerous works on film, and spend time exploring each role of the process - Actor, technician, writer, director, and designer. Students will be expected to create original films, out (on location), and then editing/mastering the film in studio. In cooperation with the theater classes and RAD-TV, the class will then begin to produce segments of film within the realm of journalism and documentary.

### **Video Production and Broadcast Journalism II**

*Grades: 10-12; Prerequisites: Video Production & Broadcast Journalism*

*1.0 Credit; Unweighted (05990954)*

*Length: Year; Format: Meets Daily*

*or*

*0.5 Credit; Unweighted (05990956)*

*Length: Semester; Format: Meets Daily*

*Repeat the Course: Yes*

Video Production and Broadcast Journalism II students are responsible for the morning show that airs daily. These students use skills learned in Video Production and Broadcast Journalism I to produce segments for the morning show. In addition, students in Video Production and Broadcast Journalism II learn broadcasting methods using the same video, audio, and broadcasting equipment used in the television field. Broadcasting the show involves the student to play roles such as audio technician, on-air talent, camera operator, floor managers, teleprompter controllers, technical directors, and directors. Students will work on advanced, long term projects such as, but not limited to, college entry videos, large scale montages, academic department promotional videos, community field reports, and after school major recordings such as plays, concerts, athletic events, and fundraisers. Time will be required after school. This course can be taken multiple times for credit.

## RHS World Language Courses

### WORLD LANGUAGES

The goal of the World Languages department is to help develop students into active members of a global society through the study of world languages and cultures. RTSD provides a comprehensive program through which students can achieve fluency in the target language and gain an indispensable communication skill needed in an interdependent world. This study will heighten students' knowledge and appreciation of the personal and professional advantage of being multilingual. To attain greater benefit from the world language program, students are advised to begin their language study as early as possible and to continue in a language through their senior year. Students also have the opportunity to study more than one language.

Students who have begun their study of a foreign language in the middle school and wish to continue to advanced levels will take level 2 in ninth grade (student may not repeat level one if they have received a grade of B- or above). Students in honors classes are selected from both the middle school and the high school on the basis of outstanding ability and high motivation and must have an A.

**Note: Please be aware that language courses or levels may need to be combined or cancelled due to lack of enrollment.**

### CHINESE COURSES

#### Chinese Language



Chinese I A  
(05050540)

#### **Chinese (Mandarin) I A (05050540)**

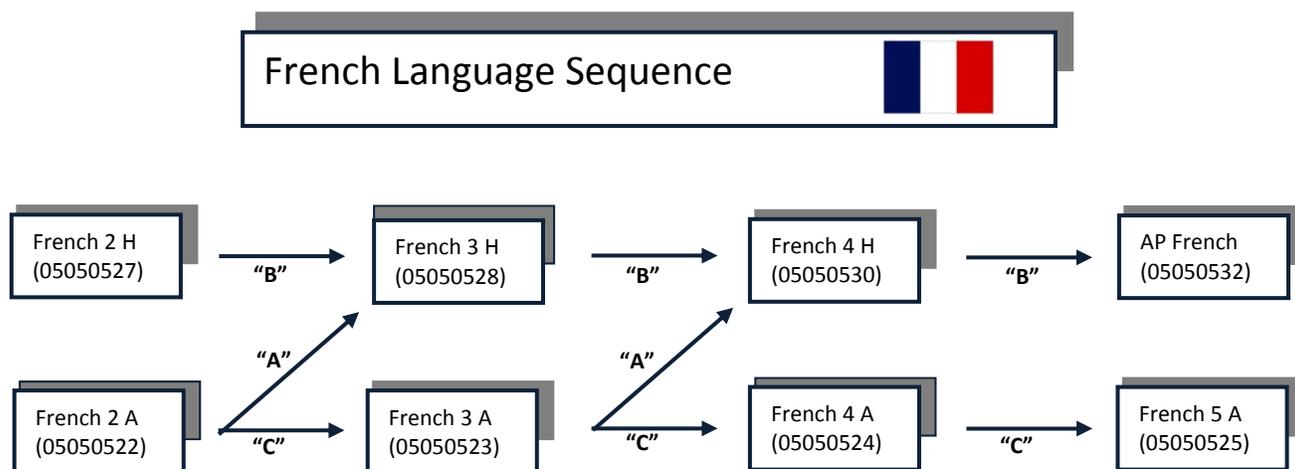
*1.0 Credit; Unweighted*

*Grades: 9, 10, 11, 12*

*Length: Year; Format: Meets Daily*

This course introduces the Mandarin Chinese language and culture to college bound students. It is a course that proceeds at a moderate pace. The course will introduce students to the language through interactive activities such as class discussions, storytelling, readings of specially designed texts, and games. Emphasis will be placed on intensive and repeated exposure to the Mandarin Chinese language as it is used in a variety of functional, everyday contexts, so that students will acquire a solid foundation of basic grammar, pronunciation, and vocabulary. Additionally, students will be taught to read and write using the phonetic pinyin spelling system and will be gradually introduced to a core set of Chinese characters, which they will learn to recognize and write as well. Cultural competency will be developed through extra readings, discussions, and supplemental activities relating to a variety of cultural products and practices. In order to maximize student exposure to the language, Mandarin will be spoken as much as possible.

## FRENCH COURSES



### **French 2 H (05050527)**

*1.0 Credit; Weighted*

*Grades 9, 10, 11, 12*

*Length: Year; Format: Meets Daily*

*Prerequisite(s): French 1 (0521) with a "A" and teacher recommendation*

The program for French 2 H lays the groundwork for the College Board's requirements for the Advanced Placement French language and culture exam offered in level 5AP. Students will strengthen communication skills in interpretive, interpersonal and presentational modalities by studying grammatical structures. The course will also enhance students' knowledge of French-speaking cultures and perspectives related to diverse themes. The pace of this class is accelerated and students choosing to take this class must assume the responsibility for independent work and review at home on a daily basis. This class is conducted 90% of the time in French.

### **French 2 A (05050522)**

*1.0 Credit; Unweighted*

*Grades 9, 10, 11, 12*

*Length: Year; Format: Meets Daily*

*Prerequisite(s): French 1(0521) with a "C" or above*

This course builds on the skills acquired in French 1. Everyday topics are still the focus of the class, but the students' vocabulary is expanded and their grammar refined so that they are able to express their opinions and describe their experiences in a more precise manner. Students are exposed to video scenes taken from daily life events, recorded conversations, and different forms of interactive activities. The course proceeds at a moderate pace and requires review of class work and homework assignments. By the end of this course students are able to function in a variety of contexts including discussions related to hobbies, school, travel in France, dining out, past experiences, and future plans. Assessments are based on a variety of activities including short compositions, oral presentations and skits, which demonstrate the students' written and oral progress in the language.

### **French 3 H (05050528)**

*1.0 Credit; Weighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 10, 11, 12*

*Prerequisite(s): French 2 H (0527) with a "B" or above or French 2A with an "A", teacher recommendation, extensive summer work and a test before the start of the school year.*

The program for French 3H continues to lay the groundwork for the College Board's requirements for the Advanced Placement French language and culture exam offered in level 5 AP.

Students will strengthen communication skills in interpretive, interpersonal and presentational modalities by deepening the study of grammatical structures covered in previous levels. The course will also enhance students' knowledge of French speaking cultures and perspectives related to diverse themes. The pace of this class is accelerated and students choosing to take this class must assume the responsibility for independent work and review at home on a daily basis. This class is conducted mostly in French.

**French 3 A (05050523)**

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Grade(s): 10, 11, 12

Prerequisite(s): French 2 (0522) with a "C" or above

This course is intended for students seeking to further develop their linguistic skills in the French language. Students will enhance their skills in reading, writing, listening and speaking the language through a wide range of activities and with the aid of multiple resources including video, music, computer software, audio recordings, and various texts. Students' confidence and ability to express themselves in the target language will improve dramatically in this course as they expand their vocabulary and gain experience using more complex grammatical and linguistic structures. At this level, students interact frequently with one another and are called upon to simulate a wide range of everyday encounters with their peers. In order to reinforce the material covered in class, students should anticipate homework assignments. Assessments may include oral and written tests and quizzes, skits, dialogues, short essays and class presentations.

**French 4 H (05050530)**

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Grade(s): 10, 11, 12

Prerequisite(s): French 3H (0528) with a "B" or above or French 3 (0523) with an "A", teacher recommendation, extensive summer work and a test before the start of the school year.

The program for French 4H continues to prepare students for the College Board's requirements for the Advanced Placement French language and culture exam offered in level 5 AP. Students will strengthen communication skills in interpretive, interpersonal and presentational modalities by mastering a variety of grammatical structures. The course will also enhance students' knowledge of French speaking cultures and perspectives related to diverse themes, including highlights of French history from the megalithic period to the present. The pace of this class is accelerated and students choosing to take this class must assume the responsibility for independent work and review at home on a daily basis. This class is conducted entirely in French except for grammar explanation.

**French 4 A (05050524)**

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Grade(s): 11, 12

Prerequisite(s): French 3 (0523) with a "C" or above.

This course is intended for students seeking to further develop their linguistic skills and gain a deeper understanding of various aspects of French culture. Students learn to express themselves on a more advanced level, not only recounting or predicting personal experiences, but also making inquiries, offering opinion and insight in hypothetical terms on various topics of cultural interest. Students explore plot development, discuss relevant themes, examine historical context and analyze characters in French films. Students hone their comprehension skills using authentic short stories, fables, poems, songs and advertisements from the target culture. Students are required to participate daily in class in French. Assessments may include oral and written tests and quizzes, skits, projects, essays and class presentations.

**French 5 A (05050525)**

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Grade(s): 12

Prerequisite(s): French 4(0524) with a "C" or above

French 5 is a conversation class for college bound students who are committed to further developing their oral proficiency while exploring topics relevant to today's society. Students research, discuss, analyze and debate numerous issues of interest which may include art, cuisine, politics, tourism, science, sports, technology, education, and fashion using French newspapers, magazines, films, poetry and music. The class is conducted 90% of the time in French and students are expected to contribute to class discussions on a daily basis. Assessments include frequent oral reports, oral and written quizzes and tests, skits, simulations, and essays.

**Advanced Placement French Language and Culture (05050532)**

1.0 Credit; Weighted

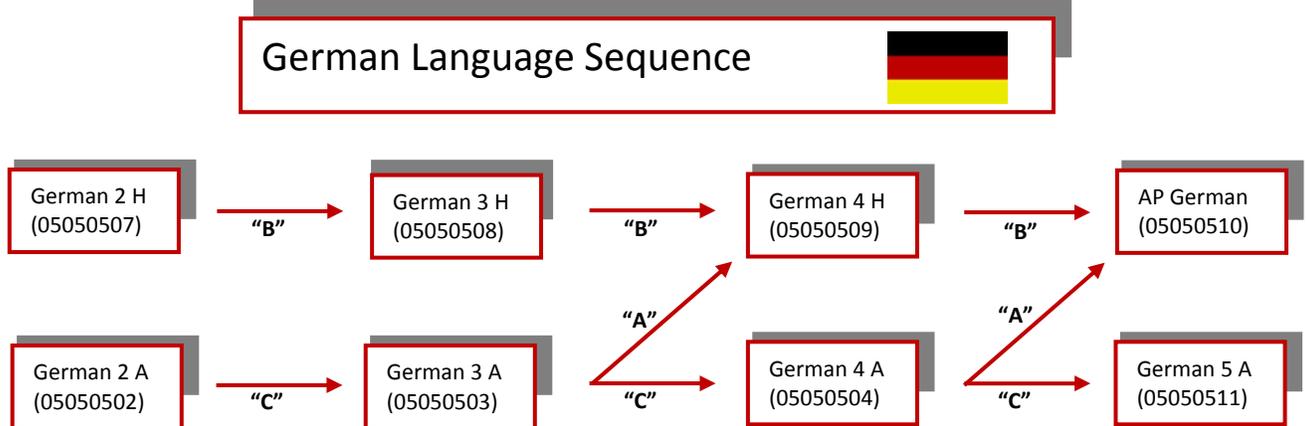
Length: Year; Format: Meets Daily

Grade(s): 11, 12

Prerequisite(s): French 4H (0530) with a "B" or above and teacher recommendation or French 4 (0524) with an "A", teacher recommendation, extensive summer work and a test before the start of the school year.

This course is the culmination of the French AP program and is designed to prepare students for the AP French Language and Culture Exam. The AP course focuses on Interpersonal, Interpretive and Presentational modes of communication emphasizing cultural awareness within six thematic units. These themes are: 1) global challenges, 2) science and technology, 3) contemporary life, 4) personal and public identities, 5) family and communities and 6) beauty and aesthetics. Students will acquire idiomatic expressions, expand their vocabulary, and refine their grammatical skills with the use of authentic French media sources. This class is conducted entirely in French. Students enrolled in this course are expected to take the AP exam in May. (S)

## GERMAN COURSES



### German 2 A (05050502)

1.0 Credit; Unweighted  
 Length: Year; Format: Meets Daily  
 Grades: 9, 10, 11, 12  
 Prerequisite(s): RMS German with a "C" or above and teacher recommendation.

This course continues to build on the topics and grammar acquired in German I at a moderate pace. There will be new units on travel and vacationing, weather, life in the city and in the country, daily and weekend activities. Students will be held responsible to actively acquire new vocabulary related to the topics discussed in class. A video series will further expose the students to the new vocabulary, the country of Germany and its customs. Students will need to show the ability to recognize time indications and communicate effectively in the present, past and future tense. Because the topic of travel and the knowledge of the German states and cities are interconnected, a presentation of an imaginary trip to Germany will be required of all students in the target language. Assessments will further include traditional tests and quizzes, oral presentations and skits.

### German 2 H (05050507)

1.0 Credit; Weighted  
 Length: Year; Format: Meets Daily  
 Grades: 9, 10, 11, 12  
 Prerequisite(s): RMS German with a B or better and teacher recommendation.

This course continues to build on the topics and grammar acquired in German I at an in-depth and accelerated pace. Students will be held responsible for actively acquiring new vocabulary related to topics discussed in class with increasing grammatical accuracy. Each student will be responsible for one power point presentation a year as well as several skits. Communicative proficiency with grammatical accuracy remains the primary goal with listening comprehension exercises and online sources added to enhance instruction. Other assessments will include oral testing and traditional tests and quizzes.

### German 3 A (05050503)

1.0 Credit; Unweighted  
 Length: Year; Format: Meets Daily  
 Grade(s): 10, 11, 12  
 Prerequisite(s): German 2 (0502) with "C" or above and teacher recommendation.

Continuing with an emphasis on communication, students will move away from patterning exercises and onto open-ended language construction. The third level of the text will be used during the first semester. The text and its ancillary materials cover more age appropriate topics such as environmental issues, military vs. alternative civilian service, youth hostels, alcohol use and driving. Grammar will be taught as an adjunct to the goal of communicative proficiency. Speaking skills and the acquisition of vocabulary remain the focal point. During the second semester, students will read three fairy tales and each student will be required to participate in the enactment of a Grimm's fairy tale. Assessments will include traditional tests and quizzes, posters, skits and power point presentations.

### German 3 H (05050508)

1.0 Credit; Weighted  
 Length: Year; Format: Meets Daily  
 Grade(s): 10, 11, 12  
 Prerequisite(s): German 2H with "B" or above and teacher recommendation.

Continuing with an emphasis on communication, students in German 3H move away from patterning exercises and onto open-ended language construction. During the first semester, most instruction will be thematically based, covering train travel, family relationships, healthy lifestyle choices and job interviewing. Students will complete units on two other German speaking countries – Austria and Switzerland – as well. More advanced grammatical concepts will be intertwined with communicative proficiency. During the second semester, students will complete a Grimm's fairy tale unit, read detective stories and begin the online German web site series "Jojo sucht das Glück."

**German 4 H (05050509)***1.0 Credit; Weighted**Length: Year; Format: Meets Daily**Grade(s): 11, 12**Prerequisite(s): German 3H with a "B" or above and teacher Recommendation or German 3A with an "A", teacher recommendation, and extensive summer work.*

This course is designed for students interested in a combined language and literature course. It begins with an overview of German history from the year 9 to 1933. Students will engage in discussions about the major historical events that helped shape modern day Germany. Each student will complete an individual project, on the topic of their choice, covering the years 1933 –1945. All students taking this course should be prepared to do on-line research about this time period and present a five minute talk to the class in German. Students will begin their study of German literature with a series of short stories. Several relatively difficult units on German grammar will also be covered throughout the year. This class will prepare students to enter the Advanced Placement German course.

**German 4 A (05050504)***1.0 Credit; Unweighted**Length: Year; Format: Meets Daily**Grade(s): 11, 12**Prerequisite(s): German 3A with a "C" or above and teacher recommendation.*

This course continues with an emphasis on communication. Through a variety of speaking units, students will incorporate the language they have learned with the goal of being proficient enough to travel to a German speaking country. The course serves to enhance speaking proficiency using authentic materials, but also reviews German grammar learned in previous years. Other units include poetry, history, detective stories, current events, art and film.

**German 5 A (05050511)***1.0 Credit; Unweighted**Length: Year; Format: Meets Daily**Grade(s): 11, 12**Prerequisite(s): German 4A with a "C" or above and teacher recommendation.*

German 5 strengthens the conversational skills for college bound students through the exploration of topics relevant to today's German speaking society. In class, students discuss, analyze, debate and research numerous issues of interest which include the Berlin Wall, music, art, food, politics, tourism, famous Germans and their contributions, and holidays. Where applicable, students compare and contrast their new insights of the German speaking world with their own culture. For resources the class uses German language newspapers, magazines, TV programs and films, as well as modern music. The class is conducted 90% of the time in German and students are expected to contribute to class discussions regularly. Assessments include oral reports, oral and written quizzes and tests, and skits.

**Advanced Placement German Language and Culture (05050510)***1.0 Credit; Weighted**Length: Year; Format: Meets Daily**Grade(s): 11, 12**Prerequisite(s): German 4H with "B" or above and teacher recommendation. German 4A with an "A", a teacher recommendation, and extensive summer work.*

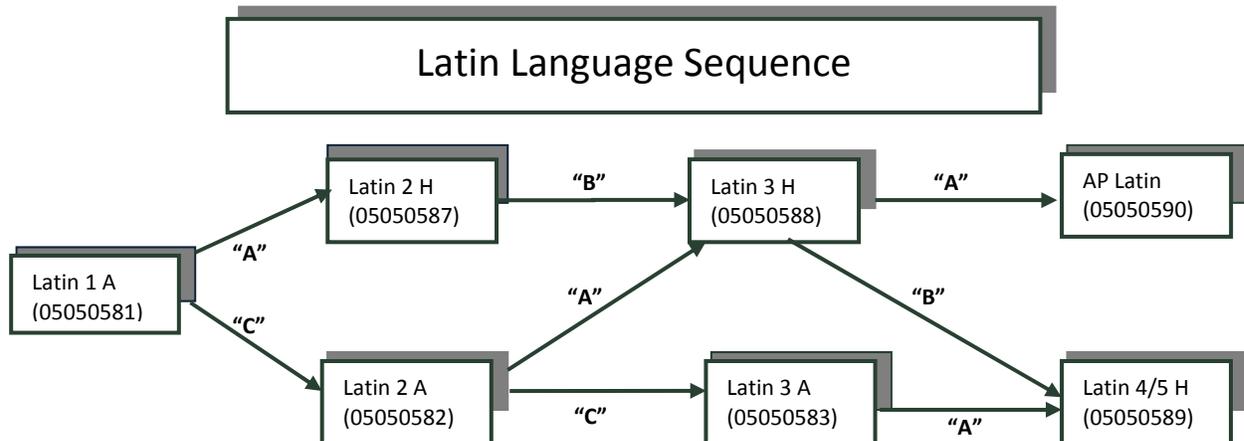
This course is comprised of six thematic units which will serve to prepare students for the revised German Language and Culture Exam. The six units are 1) global challenges, 2) science and technology, 3) contemporary life, 4) personal and public identities, 5) family and communities, and 6) beauty and aesthetics. The primary goal of the course is communicative, but grammar structures will be reviewed within each thematic unit. Each unit will incorporate the following six skills: interpersonal spoken, interpersonal writing, audio and visual interpretive, written and print interpretive and presentational spoken and written. All materials from the class will be authentic and German will be used exclusively in the classroom.

## LATIN COURSES

Since the study of Latin covers a unique area of language, history, culture and literature, this division of the World Language Department sets its sights on different goals. The basic and most important difference between the modern languages and the classical language of Latin is that the former are present day means of communication and are taught as such. Therefore, recognizing this variance, the goals of the program are summarized as follows:

1. Students should be aware of the sounds and structure of the language, as well as its patterns of thought. He/she should learn of the special influence of Latin on the Romance languages.
2. Students should be able to recognize the basic stylistic differences in literature and know why each style is appropriate for its subject matter and time period.
3. Students should be able to recognize certain authors and their influence in the classical period as well as later periods.
4. In conjunction with the above goals, students are directed to follow the cultural and chronological development of the Mediterranean World and learn how it influenced the modern countries of the Mediterranean area.
5. Students should be aware of word derivations in English and Romance Languages as well as literary allusions from classical mythology and history.

Latin offers two tracks of study –Advanced and Honors. The Honors level attempts to challenge students who have a facility to learn a language. Students in honors courses move through the material at an accelerated pace and cover more in-depth topics of grammar, translation, and culture. They are expected to have a firm foundation in and an understanding of English grammar prior to taking the course. The goal of the Honors courses is to read, discuss, and analyze actual unedited Latin authors at an earlier point in the students’ high school careers. The Advanced classes cover similar material with more detailed explanation of basic points of grammar, translation, and culture. They spend more time reading edited versions of Latin history and culture and acquiring a basic knowledge of the ancient Roman world.



### **Latin 1 A (05050581)**

*1.0 Credit; Unweighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 9, 10, 11, 12*

*Prerequisite(s): Language Teacher Recommendation*

This course is intended to introduce the students to the structure and syntax of the Latin Language, and to train the students to examine the parallels between Latin and English syntax, structure, and vocabulary. The students will study basic communication skills by using learner centered instruction, collaboration, and appreciation of language from the Classical period to the present. Students will be expected to read and comprehend elementary Latin passages as well as learn Latin vocabulary and English derivatives. The students are also expected to do self-directed research in order to produce projects involving the domestic culture of the ancient Romans.

### **Latin 2 H (05050587)**

*1.0 Credit; Weighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 9, 10, 11, 12*

*Prerequisite(s): RMS Latin with an "A" or above. Latin 1H with "B" or above and teacher recommendation*

Latin II H students continue to learn the basic grammar of Latin and advance through more complex and refined aspects of the language at an accelerated pace. They will use the second volume of the series, The Oxford Latin Course Part II, as their basic text. The stories in the text will center on Rome at the end of the Republic and will expose the students to Roman government, architecture, and the ancient Romans’ lifestyles. In addition to the textbook work, the students are expected to research several topics on either history or culture during the year. Assessments will be made through tests, projects, quizzes and homework. The major goal of this course is to provide the student with the basic skills necessary to read more fully developed Latin stories so that they may continue their study either at the high school or in a college or university.

**Latin 2 A (05050582)**

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Grade(s): 9, 10, 11, 12

Prerequisite(s): Completion of Latin 1 with a "C" grade or above

This course continues the instruction of the structure and syntax of the Latin language. Emphasis is on the Latin of the Classical period. Students will be expected to read and comprehend demanding Latin passages as well as learn Latin vocabulary and English derivatives. The students are also expected to do self-directed research in order to produce projects involving the culture of the Ancient Romans.

**Latin 3 H (05050588)**

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Grade(s): 10, 11, 12

Prerequisite(s): Latin 2H with "B" or above and teacher recommendation, or Latin 2A with "A" or above, and teacher recommendation.

Latin 3 H students will complete their study of Latin grammar and begin to read Latin literature. They will use the third volume of the series, *The Oxford Latin Course Part III* as their basic text. In this year the stories revolve around the main character of Horace, the poet, and his success during the Augustan Age. Some poems by Horace are presented to the student for translation and analysis. In addition to the textbook work, the students are expected to research several topics on either history or culture during the year. Assessments will be made through tests, projects, quizzes and homework. The major goal of this course is to provide the student with the skills necessary to translate, interpret, and analyze actual Latin. After completing this year the student will be prepared to read other famous authors either at the high school or college level.

**Latin 3 A (05050583)**

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Grade(s): 10, 11, 12

Prerequisite(s): Completion of Latin 2A with a "C" average or above

This course accommodates the dedicated and involved Latin student in the further study of the Latin language. The curriculum includes advanced grammar and vocabulary, more challenging readings and an introduction to the elements of linguistic style. This course will prepare the student to achieve Latin reading, comprehension and writing skills at the college level. The students will complete both daily and long-term assignments that will utilize advanced level cognitive, auditory, and decoding abilities. The students will also be expected to generate research projects or papers connecting the culture of the ancient world to the present.

**Latin 4/5 H (05050593)**

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Grade(s) 10, 11, 12

Prerequisites: Latin 3H with "B" or above and teacher recommendation. Latin 3A with "A" and teacher recommendation.

*Latin 4/5 H* has a curriculum which includes famous authors of the gold and Silver Ages in Latin literature. The course will involve reading translating, understanding, and analyzing Latin in the original texts of Caesar, Horace, Catullus, Eutropius, Augustus, Ovid, Cicero, Plinius Minor and others. This course requires that students be highly motivated and conscientious students. Assessment of student skill will be made through homework, exams, research, projects, and analytical interpretation.

**AP Latin (05050590)**

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Grade(s) 10, 11, 12

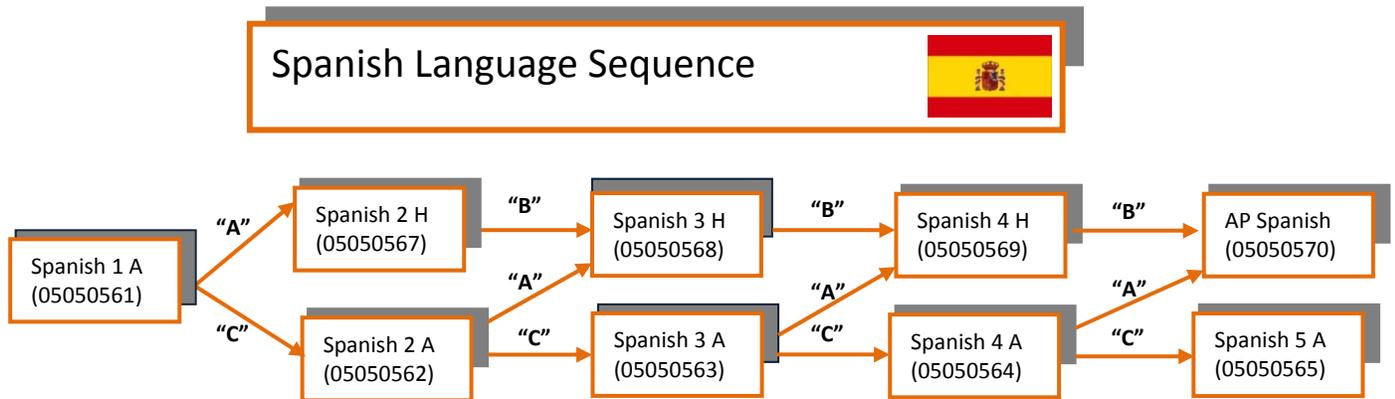
Prerequisites: Latin 3H/4H/5H with "B" or above and teacher recommendation

AP Latin offers the curriculum which adheres closely to the *AP Latin Course Description* and curriculum prescribed by the College Board. The students will read selections from the *Aeneid*, the famous Roman epic poem written by Vergil in the 1<sup>st</sup> century BC, and selections from Julius Caesar's battle commentaries in ancient France, Germany and Britain, called *The Gallic War*. These texts will allow students to encounter some of the important people, events, and literary genres of Roman times, focusing on the famous periods of the late Republic and the early Principate. Vergil's *Aeneid*, arguably the most influential work of Latin literature, is both a model of Latin poetic style and a profound meditation on the meaning of Roman history and civilization. Caesar's *Gallic War*, for generations a standard school text, is rightly admired both for its pure and straightforward Latinity and for its historical interest, as it engages with controversial issues of war and peace, empire, ethnicity, leadership, and the roles and purposes of historiography. English readings from Vergil's *Aeneid* and Caesar's *Gallic War* are also required elements of the course. Of course, the AP Latin curriculum demands highly motivated and conscientious students. Students who successfully complete the course are able to read, understand, translate, and analyze Latin poetry and prose. Assessments will include homework, exams, sight translations, research projects, recitations, and analytical and interpretative essays.

*The students will be prepared to take the AP Latin Examination in May.*

## SPANISH COURSES

The Spanish department offers two tracks at Radnor High School, advanced and honors. The honors track prepares students for the College Board’s Advanced Placement at the end of level 5. Students completing this course sequence may receive college credit. Students should only choose this track if they are highly motivated and talented in the study of the Spanish language. The advanced track also offers courses through level 5. It prepares students to continue studying the language in college. This track proceeds at a more moderate pace, with more practice and drill in the classroom. Students should choose the track they want to follow based on their ability and academic goals.



### Spanish 1 A (05050561)

*1.0 Credit; Unweighted*

*Length: Year; Format: Meets Daily*

*Grade(s): 9, 10, 11, 12*

*Prerequisite(s): None*

This course introduces Spanish language and culture to college bound students. It is a course that proceeds at a moderate pace and requires daily review of homework. Students are guided through the interconnected goals of Communication, Cultures, Connections, Comparisons, and Communities as they develop their language skills. At the completion of this course, students are able to function in written and oral form in a variety of areas, such as expressing likes and dislikes, and describing their school, families, and friends.

### Spanish 2 H (05050567)

*1.0 Credit; Weighted*

*Length: Year; Format: Meets Daily*

*Grades 9, 10, 11, 12*

*Prerequisite(s): RMS Spanish with an "A" or above, Spanish 1A with an "A" or above, and teacher recommendation*

This accelerated course is designed for the highly motivated and linguistically talented student who wishes to pursue at an accelerated pace the study of the Spanish language. The course proceeds primarily in Spanish and requires intensive oral and written practice. Students will be expected to make short presentations and write compositions showing evidence of rich vocabulary and correct grammar in the present, past and future. Students will be able to compare and contrast both orally and in written form the cultural heritage of Costa Rica, Argentina, Puerto Rico, and México. During the fourth quarter students will read Mexican legends and compose their own legend. Assessments will include traditional tests and quizzes, oral presentations and compositions.

### Spanish 2 A (05050562)

*1.0 Credit; Unweighted*

*Length: Year; Format: Meets Daily*

*Grades: 9, 10, 11, 12*

*Prerequisite(s): RMS Spanish with "C" or above. RHS Spanish 1A with "C" or above and teacher recommendation.*

This course is appropriate for students planning to attend college. It is a challenging course, in which students are guided through the interconnected goals of Communication, Cultures, Connections, Comparisons and Communities, as they develop their language skills. It proceeds at a moderate pace that requires daily review at home. At the conclusion of this course, students will be able to communicate about a variety of topics such as daily routine, past experiences, sports, health, travel, shopping, and leisure activities. They will be expected to be able to write short compositions and make brief presentations.

### Spanish 3 H (05050568)

*1.0 Credit; Weighted*

*Length: Year; Format: Meets Daily*

*Grades: 10, 11, 12*

*Prerequisite(s): Spanish 2H with "B" or above and teacher recommendation. Spanish 2A with an "A", teacher recommendation, extensive summer work, and a test before the start of the school year.*

This course is intended for college-bound students who are committed to and enthusiastic about language learning, and want a more in-depth, challenging experience. The course proceeds primarily in Spanish and requires intensive practice and oral expression. The course follows the book *Realidades 3*. Other readings, movies and online sources related to the units studied will be included. Communication and meaningful context in language are key concepts of the course. Students will continue to improve communication skills in interpretive, interpersonal and presentational modes. Students will continue to develop their writing skills with personal and analytical essays, commenting on some historical events and artistic works. The pace of the course is accelerated and requires independent review of topics.

**Spanish 3 A (05050563)**

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Grades: 9, 10, 11, 12

Prerequisite(s): Spanish 2A with "C" or above and teacher recommendation

This course is appropriate for students preparing for college. The course proceeds mostly in Spanish and will involve daily review and practice at home. Students will review previously introduced grammar and vocabulary and will master additional vocabulary and new grammatical structures. In this course, students will acquire knowledge of the culture and civilization of Spain, through readings, videos and Internet activities. At the conclusion of the course, students will be able to give oral presentations on a variety of topics and will engage in basic conversation on topics of personal interest. They will be expected to write compositions on a variety of prompts related to the history, and culture of Spain.

**Spanish 4 H (05050569)**

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Grades: 10, 11, 12

Prerequisite(s): Spanish 3H with "B" or above and teacher recommendation or Spanish 3A with "A" and teacher recommendation, extensive summer work, and a test before the start of the school year.

This course continues to prepare students for the College Board's requirements for the Advanced Placement Spanish language and culture exam offered in level 5 AP. Students will strengthen communication skills in interpretive, interpersonal and presentational modalities by mastering a variety of grammatical structures. The course will also enhance students' knowledge of Spanish speaking cultures and perspectives related to diverse themes, including highlights of Latin American history and geography. The pace of this class is accelerated and students choosing to take this class must assume the responsibility for independent work and review at home on a daily basis. This class is conducted entirely in Spanish.

**Spanish 4 A (05050564)**

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Grades: 10, 11, 12

Prerequisite(s): Spanish 3A (0563) with "C" or above and teacher recommendation

This course is appropriate for students preparing for college. It is a challenging later intermediate level course in which students will continue to expand their skills in the primary areas of modern language study: reading, writing, speaking and listening. The course proceeds primarily in Spanish and will involve daily review and practice at home. Students will review previously introduced grammar and vocabulary and will master additional vocabulary and new grammatical structures. In this course, students will acquire knowledge of the culture and civilization of Latin America. Students will read Latin American legends. At the conclusion of the course, students will be able to give oral presentations on a variety of topics. They will be expected to write compositions on a variety of prompts related to the history, literature and culture of Latin America. The course is supplemented by movies related to the topics being studied.

**Spanish 5 A (05050565)**

1.0 Credit; Unweighted

Length: Year; Format: Meets Daily

Grades: 11, 12

Prerequisite(s): Spanish 4A with "C" or above and teacher recommendation

This course is appropriate for students preparing for college. It is a challenging culminating course in which students will continue to expand and refine their skills in the primary areas of modern language study: reading, writing, speaking and listening. The course proceeds primarily in Spanish and will involve daily review and practice at home. Students will review previously introduced grammar and vocabulary and will learn additional vocabulary and new grammatical structures. In this course, students will study the culture and civilization of Mexico through readings, videos and Internet activities. Students will continue to explore representative works of Spanish and Latin American literature. They will further refine their skills at giving oral presentations on a variety of topics. They will be expected to speak in Spanish and write compositions and essays on a variety of prompts related to the literature and culture of the Spanish-speaking world. At the conclusion of the course, students should be able to continue their language studies at the college level.

**Advanced Placement Spanish Language and Culture (05050570)**

1.0 Credit; Weighted

Length: Year; Format: Meets Daily

Grades: 11, 12

Prerequisite(s): Spanish 4H with "B" or above and teacher recommendation or Spanish 4A with an "A", teacher recommendation, and extensive summer work, and a test before the start of the school year.

This course is offered in a total immersion environment for academically outstanding students that are self-motivated and independent learners that enjoy studying the Spanish Language. The course is the equivalent of a university level course and therefore places rigorous demands on students and proceeds at an accelerated pace. This course focuses on Interpersonal, Interpretive and Presentational modes of communication emphasizing cultural awareness within six thematic units. These themes are: 1) global challenges, 2) science and technology, 3) contemporary life, 4) personal and public identities, 5) family and communities and 6) beauty and aesthetics. Students will acquire idiomatic expressions, expand their vocabulary, and refine their grammatical skills with the use of authentic media sources in Spanish. This class is conducted entirely in Spanish. Students enrolled in this course are expected to take the AP exam in May.

## Works Cited

“About College in High School.” *The Dietrich School of Arts and Sciences College in High School*,

University of Pittsburgh, 6 Dec. 2016. Accessed 6 Dec. 2016.

*PLTW*. Project Lead the Way, Inc., 2016. Accessed 6 Dec. 2016.

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