

**SPRINGFIELD HIGH SCHOOL**

**2023-2024 SCHOOL YEAR**

**ACADEMIC PROGRAMMING GUIDE**

**&**

**COMPREHENSIVE COURSE CATALOG**



Springfield High School  
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Springfield, PA 19064  
610-938-6100

[www.ssdcougars.org/schools/springfield-high-school](http://www.ssdcougars.org/schools/springfield-high-school)

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## ACADEMIC PROGRAMMING GUIDELINES

### Academic Planning

Springfield High School is committed to preparing students for life after high school. Many of our graduates further their education by pursuing a post-secondary education at two- and four-year colleges and universities. Others enter military service, trade or technical schools or the work force, maybe even with certifications they have received from DCTS programs. Many of our graduates further their education and/or training in some manner, which is why we recommend students develop their academic programming around a sequence of courses that will maximize the potential to pursue rigorous and challenging post-secondary learning and career opportunities. A student's academic programming begins in 9<sup>th</sup> and 10<sup>th</sup> grade where the focus is on building a strong foundation in their academic coursework. Students then begin to focus on college and career areas of interest in their 11<sup>th</sup> and 12<sup>th</sup> grade years by continuing with academic core classes and exploring special area classes most suited to their interests and career aspirations. To guide students through this decision-making process, SHS utilizes an *academy* model to align courses toward specific college and career interests. Information about the academy model programming, as well as information on course alignment, can be found at [www.ssdcougars.org/academy](http://www.ssdcougars.org/academy).

### Considerations for the Course Request Process

The course request and scheduling process is extremely important and plays a vital role in preparing students for their post-secondary endeavors. Course request selection and scheduling involve careful thought and planning, and is a collaborative effort between students and parents, counselors, teachers, and administrators. Counselors are available to students and families at any time throughout the school year. To arrange a meeting, call 610-938-6266 or email between the hours of 7:30 a.m. to 3:00 p.m. to schedule appointments during the school year. The High School Guidance Counselors and office personnel are:

| Counselor          | Student Name Range          | Phone        | Email  |
|--------------------|-----------------------------|--------------|--|
| Lisa Noll          | Counseling Office Secretary | 610-938-6266 | <a href="mailto:lisa.noll@ssdcougars.org">lisa.noll@ssdcougars.org</a>                   |
| Kelly Pedrotty     | Aa-De                       | 610-938-6269 | <a href="mailto:kelly.pedrotty@ssdcougars.org">kelly.pedrotty@ssdcougars.org</a>         |
| Hilary Campbell    | Df-Sk                       | 610-938-6267 | <a href="mailto:hilary.campbell@ssdcougars.org">hilary.campbell@ssdcougars.org</a>       |
| Ivy Harris         | Kf-Ph                       | 610-938-6271 | <a href="mailto:ivy.harris@ssdcougars.org">ivy.harris@ssdcougars.org</a>                 |
| Jessica Houser     | Pi-Zz                       | 610-938-6268 | <a href="mailto:jessica.houser@ssdcougars.org">jessica.houser@ssdcougars.org</a>         |
| Kendra Campbell    | College & Career            | 610-938-6074 | <a href="mailto:kendra.campbell@ssdcougars.org">kendra.campbell@ssdcougars.org</a>       |
| Christine Sulpizio | College & Career Secretary  | 619-938-6265 | <a href="mailto:christine.sulpizio@ssdcougars.org">christine.sulpizio@ssdcougars.org</a> |

Springfield High School takes pride in offering a variety of courses across several departments and disciplines. Students can pursue college preparatory and more rigorous honors and advanced placement courses while exploring and experiencing many courses in the arts and technology related fields. Students are encouraged to take full advantage of these options. Throughout the course request and scheduling process, students should carefully read the descriptions and expectations of courses in which they wish to enroll. Additionally, students should, in conjunction with a counselor, make sure the courses of interest align with their comprehensive academic plan.

Choosing the ideal course is one of the most significant tasks a student completes each year. Courses should be selected with these questions in mind:

- Will this course allow me to meet graduation requirements?
- Will this course help me to meet college entrance requirements?
- Will this course help me develop a skill to become employable after high school?
- Will this course introduce me to a new subject or experience?
- Is this course appropriate for my ability? Will it be a challenge?
- Do I have the prerequisite for this course?

**Note:** Requirements for graduation are on page 12. Students must be sure they have all required courses each year. Every effort will be made to schedule all students with seven (7) credits each school year.

### ***Considerations when completing the course request process:***

#### **Preparing for the Course Request Process**

- Students should review their course transcripts and/or refer to their end-of-year report cards each year in high school to keep track of courses for which they have received credit.
  - HAC → Grades → Report and Transcript tabs
- Before making any course requests, be sure to review transcripts and most recent report cards so as not to
  - Request courses for which credit has been earned,
  - Request courses in which the student is currently enrolled,
  - Request courses necessary to meet graduation requirements,
  - Review prerequisites of courses to ensure the proper prerequisites have been, or will be, met.

#### **Course Sequencing and Prerequisite Coursework**

- Course sequencing must be adhered to when planning your program of study.
  - It is important to review prerequisite course before requesting a course.
  - Students are also recommended for core classes that fulfill graduation requirements.
- Prerequisites for courses should be carefully considered and adhered to when planning a program of study. Questions regarding appropriate placement related to prerequisites and qualifications should be directed to the student's current teacher or a guidance counselor.
  - Most course descriptions, where appropriate, contain performance, or percentage, based pre-requisites. Several require teacher recommendation. Please keep in mind that these percentages are the initial screener in determining if a student has demonstrated the academic rigor to perform at or above current performance levels in more rigorous courses.
  - Where appropriate, performance requirements above and beyond College Preparatory courses are identified. Please consider these requirements when making requests.
  - Before students complete the course request process, teachers will submit recommendations based on demonstrated academic ability and performance.
  - In some instances, a student does not meet the course pre-requisites or display the recommended standards of academic performance, and as such does not receive a recommendation from the teacher for the more rigorous course. If a student still desires to take the course under these circumstances, the student and parent must complete a Course Recommendation Waiver Form available through the guidance counselor.

## Course Offerings

- Course offerings from year to year are determined not only by the number of student requests, but also by the number of students who can be successfully rostered into those courses. The standard for making these determinations is that a course may not be offered if fewer than twelve (12) students can successfully be rostered into the course.
- Students selecting rigorous academic course work, including **Advanced Placement (AP) and Honors** courses, are reminded of the commitment made by the High School Administration and Board of School Directors to allocate staffing and resources to offer AP and Honors courses. Students are expected to honor their commitment to take these challenging courses. A full commitment should be considered carefully because withdrawing from an Honors or AP will have a significant impact on the college application and college acceptance process. Teachers submit recommendations for Honors and AP courses based on demonstrated student ability and performance. Counselors will guide students through the selection and commitment process to ensure the greatest level of confidence in the decision to pursue these courses.

***Additional Reminder:** Some AP courses are specialized and sought after by a smaller number of students. As a result, a course may not be offered if there are not enough requests or if fewer than 12 students can be successfully rostered into the course.*

## The Master Schedule and Fulfilling Student Requests

- Students may choose from a variety of courses and every effort is made to fulfill these requests. The development process of a master schedule considers many factors when determining which courses will be offered: availability of staff, the number of students requesting a particular course, unique combinations of course requests, and school resources are among several factors that influence the course offerings. With all these factors, the possibility exists where student requests may not be available to build a complete schedule. The SHS guidance counselors, in conjunction with the administrative team, will work diligently and methodically to provide rich and varied academic experiences.

## Acceleration and Course Exemption

Periodically, students wish to accelerate through a course sequence to advance to the next level. The guidelines for these opportunities are as follows:

1. A request to accelerate through a course by exam is to be initiated by parent and student in writing via email to the principal. The request must clearly state the reason or rationale for accelerating. Exemption by exam must be requested no later than March 1 of the current school year for the coming school year. This is to allow for ample time to review academic performance data and allow the student ample time to prepare for the exam(s). Permission to accelerate through a course and gain exemption by exam is granted at the principal's discretion.
2. Any costs associated with this process are to be funded by the student and/or parents, which may include the costs of assembling materials, purchase of additional materials, and administering and scoring the exams.
3. The student must take the district designed Quarterly Assessments, or an approved alternative exam, for the course and achieve a score of 85% or better **on each** Quarterly Assessment or the approved alternate exam. Quarterly Assessments in and of themselves are not cumulative exams

and may only cover a portion of the course content. These examinations need to be administered and scored at least four (4) weeks before the start of the school year or course.

4. The scheduling of the examination dates will be arranged by the HS Principal or his/her designee and the corresponding department representative who will score the exam.
5. No grade or credit will be awarded for the accelerated course. In other words, the course will not count for accumulated credit toward graduation requirements and the course and grade will not appear on the official transcript as a graded course.
6. If the criteria in Step 3 are met, the course will be listed on the transcript as "Course by Exemption" and will be awarded a passing mark of "P".

### **Guidelines for Changing Scheduled Courses**

Student schedules will be reviewed and revised by counselors and students. Schedules will be available to students at least three (3) weeks before the start of the school year.

Students requiring or requesting a schedule change must do so by accessing the [Student Schedule Conflict Report Form](#). This form will be the primary means by which counselors will review and make schedule changes. If this electronic form is not accessible, contact the Guidance Office at 610-938-6266 or email the HS Principal.

Parents/guardians and students should know that counselors may not check or reply to emails and phone messages during summer break. However, they do frequently monitor the course change request form and may possibly reply and make changes before the start of the school year. With that in mind, all course request changes must be made using the on-line form. This system has proven to be very efficient and effective.

It is not necessary or recommended that an email and/or phone message be left in addition to the on-line request. This creates redundant work for the counselors and may slow the process of making changes which impacts all students.

#### **Initial Drop/Add Period**

Students may submit course change requests up to ten (10) days before the start of a course. Change requests will only be granted based on several factors and the possibility exists that the request may not be honored. The student must present a logical and defensible rationale for the change request. Students are reminded that schedules are built to maximize earned credits, schedule students for a full school day, and strengthen transcripts. Students may periodically be placed in a course or courses that they did not request. Counselors or administrators may make these decisions based on course request themes, prior course requests, academy alignment or simply course availability.

Students recommended for and meeting the prerequisite academic standards to be enrolled in Advanced Placement courses must notify **building Administration on or before the 2<sup>nd</sup> Friday in July** if they no longer wish to remain in the AP course. Students enrolled in AP courses after this date will be maintained on the AP class list and must complete the course absent of any extenuating circumstances.

#### **Procedures for Course Withdrawals**

Periodically students request to withdraw from a course after the initial add/drop period (see details above). Students will be encouraged to remain in classes a minimum of ten (10) full school days to allow for ample time to gain a thorough understanding of what content the courses cover, work expectations, and the benefit the course will have on a student's academic transcript. If, at that time, the student wishes to withdraw, a written request must be submitted to the counselor and

principal explicitly detailing a reasonable and defensible rationale for the withdraw request. It is also in the best interest of the student to ensure that they are meeting with expectation as detailed in 1(b) (1-4) below before submitting a withdraw request.

When these situations arise, the following steps must be taken prior to an administrator's consideration of a course withdraw:

1. Once the teacher and counselor have received and reviewed the withdraw request, the following will occur:
  - a. The counselor will issue the student and the parent the Course Withdraw Procedure Form to ensure they are aware of the request to drop the class unless the request was initiated by the parent
  - b. The counselor will arrange a meeting with the student and the teacher to review the request and determine if the student is:
    1. Attending regularly and actively engaging in classwork
    2. Completing in-class work and HW assignments
    3. Maintaining an organized notebook and planner
    4. Exhibiting good study habits
    5. Cognizant of the current academic performance and progress
    6. Has demonstrated a genuine effort to address and remedy poor academic performance
  - c. If an effort has not been made to adequately address the concerns, the teacher, counselor, and student will develop a plan of action that must include at least a minimum of 5 documented before/after school sessions with the teacher or tutor over a 3-week period.
  - d. The teacher must contact the parent to discuss the situation:
    1. The parent will be asked to share information about home study habits and efforts that have, or could be, made at home to address the issue
    2. The teacher will share observations from classroom behavior and work ethic of the student and provide information with regards to instruction & assessment strategies, and interventions they have made to assist the student
  - e. If all of these steps have been followed, the student is still not making adequate academic progress, and the drop request is still being proposed, then a meeting with the counselor and administrator must be arranged to review the situation. Once all information is reviewed, the counselor and administrator will arrange a meeting with the student, parent and teacher to present their recommendation. If the recommendation is to remain in the course and decision of the student and parent/guardian after this process is to move forward and withdraw from the course, a withdrawal code "W" will appear on the students transcripts based on the final recommendation. The student will not be awarded partial credit and will not be issued a numerical grade for any completed work.  
\*\*\* Note: Additional measures will be taken for seniors and will include contacting potential colleges or one for which acceptance has been granted.

### Promotion Requirements

To be promoted to the 11<sup>th</sup> grade, students must have earned a minimum of 11 credits by the end of the 10th grade. Six (6) of these credits must be in the core academic areas of LA, SS, Math, and Science. Students who do not meet the promotion requirement will remain registered in 10<sup>th</sup> grade.



### Repeating Courses and Summer School

If a student fails a core course, they have the option to repeat the course the following school year or attend summer school. Counselors will assess these situations and make a recommendation in the student's best interest academically. Repeating courses can be beneficial, especially with courses that build on prior knowledge. There are occasions where repeating a course conflicts with the scheduling other grade level and graduation requirements. In these cases, the student is encouraged to attend Summer School. Please contact the Guidance Office for specifics regarding qualifications for summer school, grading procedures, available courses, dates, and tuition.

Failing any course may impede or jeopardize a student graduating within four (4) years. Students and parents/guardians are strongly encouraged to make necessary and appropriate arrangements in the event of a course failure.

### Keystone Remediation

Students who do not demonstrate proficiency on each of Keystone Biology, Algebra, and Literature Exams will take part in a Keystone Remediation program the school year following their first test administration. Students will be placed in a remediation class for each course and these classes are one semester in length. Students will then retest in that subject area in the winter or spring wave of Keystone testing.

### Weighted Courses

A student can be enrolled in College Preparatory, Honors or Advanced Placement courses. Due to the higher academic rigor of Honors and AP courses, a weight is assigned to these courses when calculating a student's GPA. College Prep courses carry a weight of 1.00, Honors a weight of 1.125 and AP a weight of 1.25.

### Grading Scales and GPA Calculation

Springfield High School uses a percentage-based grading scale. Courses on report cards cannot exceed 100%. Final weighted GPA can exceed 100% when course weights are factored into the calculation.

All MP and Final grades will be recorded and reported as numerical values. Students can use the following method to calculate GPA:

- Determine Total Quality Points - sum of all points for each course attempted as determined by the following formula:

$$\text{Quality Points per Course} = \% \text{ Grade earned in course} \times \text{Credit} \times \text{Weighted Value}$$

$$\text{Overall GPA} = \text{Total Quality Points} / \text{Credits Attempted}$$

Students can use the chart below to convert numerical  $\pm$  100% to a corresponding value on a 4.0 Quality Points Scale.

### Springfield High School Grading Scale

| Final Grade – Numeric % | Letter Grade | Quality Points |
|-------------------------|--------------|----------------|
| 94-100 or higher        | A            | 4.00           |
| 90-93                   | A-           | 3.66           |
| 87-89                   | B+           | 3.33           |
| 84-86                   | B            | 3.00           |
| 80-83                   | B-           | 2.66           |
| 77-79                   | C+           | 2.33           |
| 74-76                   | C            | 2.00           |
| 70-73                   | C-           | 1.66           |
| 67-69                   | D+           | 1.33           |
| 64-66                   | D            | 1.00           |
| 60-63                   | D-           | 0.66           |
| 00-59                   | F            | 0.00           |

### Class Rank

Class rank is calculated at the end of the school year and is based on the overall weighted GPA. Student MP Report Cards include class rank, but this is an un-weighted calculation and is not a true indication of the student's class rank.

### Course Grade Marks and Earned Credit Procedures

#### Issuing Course Marks or Grades

##### In-Person Classes

Courses that meet during the school day and are taught by SHS teachers will issue a minimum of two (2) content-based grades per week during typical school weeks. An Interim Progress Report is generated at the end of each week, typically on Friday, and made available to students, parents, teachers, advisors, coaches, and counselors. Numerical Quarterly Marks, or grades, are issued at the end each Quarter/Marking Period (MP). Semester marks are issued for 1 credit courses and represent the average of the two (2) Quarters/MP's. A Semester mark for 0.5 credit courses is the average of the two (2) Quarters/MP's and is also the Final Mark [grade] in the course. Students may also be issued an "I" for incomplete work for extenuating circumstances.

- A mark of "I" will be converted to the last recorded numeric grade in the course, and in some instances a "0", if the student does not submit necessary coursework by the deadline established by the teacher.

##### Online Courses

Online courses offered through SHS on the Edmentum Online Learning Platform receive marks on a less frequent basis. Online courses are designed to be one (1) semester in length. These courses are overseen by an SHS teacher and not taught directly by this teacher. The teacher monitors progress and sends weekly or bi-weekly reports to students on their progress. While students do work at their own pace, they are expected to make adequate progress and complete ½ of the course in one Quarter/MP. A numerical mark [grade] will be issued at the end of each Quarter or MP and will be appear on the report card. These numeric marks and the final grade for the online course do factor into a student's GPA. Online courses do not, however, count toward a student's required credits to graduate, see page 12, and are considered elective

credits above and beyond the required graduation requirements. There are only a few exceptions to this rule, including but not limited to:

- Courses taken for credit recovery due to extenuating circumstances, e.g., medical issues or transfer students
- Courses taken as part of a student's GIEP, IEP or 504 Educational Programming,
- Courses taken for credit recovery in Summer School where the student attempted the course in a classroom with a live instructor, or
- Courses taken when the student cannot be successfully rostered into a course or course section

#### Dual Enrollment

Springfield offers dual enrollment opportunities for students through Delaware County Community College. These courses can be online, during or outside the school day, or taken on campus at DCCC. These courses do not appear on a student's grade report, on HAC, and thus do not receive Interim Progress Reports or Quarter/MP Marks. Final grade marks are issued at the end of the course. These courses are designated on an SHS transcript with the course title and final mark of "P" or "F" as reported by the DCCC instructor. They do not count for credit toward SHS graduation requirements, nor do they factor into a student's GPA. Students are issued a transcript from DCCC with the earned final letter grade mark in the course.

#### Independent Study, Work Study, Internship, and Co-Op

Students may elect to study a course or subject independently. A student must submit a written request and secure the support of a staff member who agrees to develop, oversee, and supervise the experience. Due to the nature of these requests, the courses are titled, as an example, Independent Study-Macroeconomics. These courses do appear on the student's report card and are issued Quarter, MP and Final mark of "P" or "F" at the discretion of the teacher supervising the independent study. These courses do not count for credit toward SHS graduation, nor do they factor into a student's GPA.

Students may also explore opportunities such as Work Study, Internship, and Co-Op. The tracking and recording of grade marks are the same as those for an Independent Study. Students interested in learning more about these opportunities should contact the HS Principal and Counselor.

#### **Awarding of Credit for Partial Completion of Courses**

As stated above, any student making the decision to withdraw from a course will receive a "W" on the report card and transcript and awarded no credit for work completed.

Students who are removed from courses due to mutual agreement between students, parents, and school personnel may be awarded partial credit for completed work and issued a numerical grade on the report card. Situations of this nature usually result from IEP or 504 team decisions or in the event of an extenuation circumstance.

Students who enroll in SHS during the school year will be awarded partial credit for the time spent in the course.

In situations where partial credit is awarded, the student must complete at least 75% of a weighted course to receive weighted partial credit. Any withdraw with less than 75% of the course completed will result in CP weight for the earned partial credit.

## Course Credit Designation

Courses are assigned a credit designation depending on the department, level, fulfillment of graduation requirements and/or elective credits. Use this chart to determine the designation based on the assigned code:

| Code | Designation                                   | Code | Designation                         | Code | Designation                 |
|------|---|------|-------------------------------------|------|-----------------------------|
| LA   | Language Arts                                 | SS   | Social Studies                      | SC   | Science                     |
| MA   | Mathematics                                   | WL   | World Language                      | PE   | Health & Physical Education |
| EL   | Elective - Humanities, Technologies, and Arts | PM   | Personal Finance & Money Management |      |                             |

### National Honor Society

Requirements for consideration for elections in the NHS include:

- Junior or Senior
- 95.0000 weighted Cumulative GPA or higher the summer before Junior or Senior Year
- Enrolled in 3 or more AP/Honors/College in the High School courses during the school year in which application is made (invitations are mailed in August and applications are submitted in September)

More details will be shared in the invitation/application materials.

### Delaware County Technical Schools Programs

A complete list of the courses offered by Delaware County Technical Schools is provided beginning on page 70. The Delaware County Technical Schools program is offered to 11<sup>th</sup> and 12<sup>th</sup> grade students at the Intermediate Unit Vocational Technical Schools. The training at the schools is extensive and demanding and provides a graduate with an excellent background for technical careers. The Technical Schools Program is offered as a half-day AM or PM and the school district provides transportation to and from the Technical School. To enroll, students should meet with their guidance counselor to complete the Technical Schools application. Students and their parents are encouraged to visit the Delaware County Technical Schools. Call for an appointment: Folcroft (610) 583-7620 or Aston (610) 459-3050.

### Options for Academically Talented / Gifted Students

HONORS & ADVANCED PLACEMENT COURSES - Springfield High School offers intensive studies that require extensive independent preparation and a strong commitment to meeting high demands for critical, creative, and analytical work.

|                       |  |
|-----------------------|--|
| <b>Language Arts:</b> | Honors Language Arts courses are offered at all grade levels to students interested in developing skills necessary to prepare for Advanced Placement (AP) English Language and Composition and/or AP English Literature and Composition. |
| <b>Mathematics:</b>   | The accelerated student enrolls sequentially in the honors Mathematics program which provides the necessary foundation to prepare students for enrollment in our Advanced Placement Statistics and Calculus courses.                     |

|                                    |   |
|------------------------------------|---|
| <b>Science:</b>                    | Students interested in pursuing an intensive science program requiring extensive independent learning and preparations are encouraged to participate in the Science Academy. Students enter into an accelerated science program that culminates with the completion of multiple AP level courses.   |
| <b>Social Studies:</b>             | Honors Social Studies courses are offered at all grade levels to students interested in developing skills necessary to prepare for AP American History, AP European History, AP American Government and/or AP Psychology.   |
| <b>World Language:</b>             | Students with the appropriate level of exposure to a foreign language at the middle school level will be allowed to enroll in upper-level language courses at the high school level and accelerate their progression through our course offerings.  |
| <b>Advanced Placement Courses:</b> | Springfield High School offers a wide variety of AP classes across various departments. These are rigorous, first-year college level courses whose descriptions and examinations are prepared and approved by the College Board. Through completion of the courses and the scores earned on the Advanced Placement Examinations, students may earn college credits or advanced standing in a college curriculum.<br><br>Enrollment in an Advanced Placement course requires evidence of superior skills in reading comprehension, writing, listening, logic, and problem solving. Evidence of academic success, teacher recommendations, and in some cases preliminary assignments is required for placement in these courses. The pacing and workload in Advanced Placement courses require a high level of commitment from students |

### AP Potential

College Board data indicates that hundreds of thousands of high school students have the potential to succeed in Advanced Placement courses but never take AP courses.

AP Potential is a free web-based tool used by schools to help identify students with the potential to achieve success in AP. Research indicates that PSAT scores predict performance on specific AP exams more accurately than more traditional methods.

There are many benefits to taking Advanced Placement courses while in high school. Students who take AP courses, regardless of exam score, are more likely to be successful their first year of college than students who have never taken an AP course. In addition, students who earn a 3 or higher on their AP exams are more likely to achieve success in college and graduate with a college degree. Advanced Placement courses give high school students a college course experience while they are still in high school and offer the rigor that is desired by colleges in the college admissions process. There is also the benefit of potentially earning college credit at a fraction of the cost of taking a college course in college.

Because we believe in the many benefits of the Advanced Placement program, students identified through their PSAT scores to be likely to achieve success in one or more Advanced Placement Programs will receive a letter from the College Board indicating this.

PSAT scores are only one indicator of success. Not receiving an AP Potential letter from the College Board does not mean a student will not be successful. We encourage all students to challenge themselves and take courses that will enrich their learning experience.

## AP College Credit Policy Search

Visit this website to see which AP courses and credits your college(s) of interest accept or decline.

<https://apstudents.collegeboard.org/getting-credit-placement/search-policies>

### The National Collegiate Athletic Association (NCAA)

#### Divisions I & II Initial Eligibility Requirements

| DIVISION I  | DIVISION II  |
|---|--|
| <b><u>16 Core Courses:</u></b>  | <b><u>16 Core Courses</u></b>  |
| 4 years of English.   | 3 years of English   |
| 3 years of mathematics (Algebra I or higher).   | 2 years of mathematics (Algebra I or higher)   |
| 2 years of natural/physical science (1 year of lab)   | 2 years of natural/physical science (1 year of lab)  |
| 1 year of additional English, mathematics, or natural/physical science.                                   | <b>3</b> years of additional English, mathematics, or natural/physical science                                   |
| 2 years of social science.  | 2 years of social science.   |
| 4 years of additional courses (from any area above, foreign language or comparative religion/philosophy). | <b>4</b> years of additional courses (from any area above, foreign language or comparative religion/philosophy). |

**\* Beginning August 1, 2016, NCAA Division I will require 10 core courses to be completed prior to the seventh semester (seven of the 10 must be a combination of English, math or natural or physical science that meet the distribution requirements). These 10 courses become "locked in" at the start of the seventh semester and cannot be retaken for grade improvement.**

For NCAA eligibility purposes, only NCAA designated "core courses" are used in the calculation of the NCAA GPA. This is an NCAA policy and is not related to Springfield High School Grading Policy. Be sure to look at your high school's list of NCAA-approved core courses at [www.eligibilitycenter.org](http://www.eligibilitycenter.org) to make certain that you know which of your courses will be counted toward your NCAA GPA.

Division I GPA and SAT/ACT test score requirements are based on a sliding scale determined by the NCAA and can be found at [www.eligibilitycenter.org](http://www.eligibilitycenter.org). The Division II core GPA requirement is a minimum of 2.200. Division II requires a minimum SAT score of 920 (Math & Critical Reading only) or an ACT sum score of 70. Remember, the NCAA GPA is calculated using NCAA core courses only. Please refer to [www.eligibilitycenter.org](http://www.eligibilitycenter.org) for complete and updated information.

\*\*CH Courses with this code are NCAA Eligible and Clearing House Approved  
\*\*\*CHE Courses with this code are Clearing House Equivalency for Springfield High School Only

## Compulsory Credit Graduation Requirements

In order to graduate and earn a diploma from Springfield HS, all students must meet the following requirements:

1. Successfully complete and earn credit for courses as detailed in the table below.
2. Credits within the 24 for graduation must come from courses taught by SHS teachers with a prescribed curriculum. The following courses do not meet graduation credit requirements:
  - a. Independent Study Courses
  - b. Course Audits
  - c. Online Courses [with few exceptions—see page 7]
  - d. Work Study or Internship Credits
  - e. Dual Enrollment
3. In accordance with Act 158 of the Pennsylvania Department of Education, a student must demonstrate a level of proficiency on the Keystone Algebra I, Biology, and Literature Exams to as part of the graduation requirement. Students who do not pass an exam may be scheduled into remediation courses to recover content and retake the corresponding exam to meet these requirements.

| <b>Graduation Credit Requirements</b>  |                      |
|--|----------------------|
| <b>Department</b>  | <b>Credits</b>       |
| Language Arts ( <i>Language Arts I, II, III, &amp; IV required</i> )                             | 4                    |
| Social Studies ( <i>US History &amp; US Government required</i> )                                | 3                    |
| Science ( <i>Keystone Biology and Chemistry required</i> )                                       | 3                    |
| Math ( <i>Alg I, Alg II and Geometry/Math Analysis recommended</i> )                             | 3                    |
| World Language ( <i>2 years in same language preferred</i> )                                     | 2                    |
| <b>Core Requirements</b>   | <b>15</b>            |
| HE/PE ( <i>Mandatory HE/PE in Grades 9 and 11</i> )  | 0.5                  |
| Personal Finance ( <i>640A, 640, 958A, 963, 982, 445, 450</i> )                                  | 0.25 to 1.0          |
| <b>Core, HE/PE and Finance Requirements</b>  | <b>15.75 to 16.5</b> |
| Additional Coursework  |                      |
| <b>Primary Academy</b>   | <b>3</b>             |
| Miscellaneous Courses or Secondary Academy<br>( <i>TO MEET MINIMUM GRADUATION REQUIREMENTS</i> ) | 4.5                  |
| <b>Minimum Credits Required to Graduate with SHS Diploma</b>                                     | <b><u>24</u></b>     |
| Miscellaneous Courses or Secondary Academy<br>( <i>ABOVE MINIMUM GRADUATION REQUIREMENTS</i> )   | 4                    |
| <b>Maximum Possible Earned Credits</b>   | <b>28</b>            |

## PDE Act 158 Graduation Requirements

Through Act 158 of 2018 and Act 6 of 2017, students graduating from a Pennsylvania public high school in 2023 or later will have the flexibility to meet statewide high school graduation requirements through one of five pathways that fully illustrate their college, career, and community readiness.

The [Pathways to Graduation Guide](#) has been developed to provide districts and families the necessary information and details to ensure students meet with one of several pathways to graduation. Three pathways exist to provide students the opportunity to meet these requirements. They are:

### **Keystone Proficiency and Keystone Composite Pathway**

**Keystone Proficiency** remains a pathway to high school graduation for the graduating class of 2023 and beyond. Commonwealth students will not be required to pass the Keystone Exams (Algebra I, Literature, and Biology) to graduate; however, since most students will continue to participate in the Keystone Exams for federal accountability purposes, those achieving scores of Proficient or Advanced (a minimum scaled score of 1500 or higher) in each of the three Keystone Exams demonstrate Keystone Proficiency and meet statewide requirements for high school graduation. Students not earning the minimum scaled score of 1500 may be enrolled in remediation courses and retest to try to achieve score of proficiency.

Students achieving a minimum scaled score of **less than 1500** on one or multiple attempts on a Keystone Exam may meet statewide requirements under the new Keystone Composite Pathway provided:

- No score of Below Basic was earned for any Keystone Exam
- A score of Proficient or Advanced was achieved on at least one Keystone Exam, and
- The composite score for all three Keystone Exams is 4452 or greater

If students do not have three Keystone Exam scores or do not meet the requirements for either Keystone Pathway, they may opt to retake one or more Keystone Exams or may elect to meet statewide graduation requirements under the Career & Technical Education (CTE) Concentrator Pathway, Alternative Assessment Pathway, or Evidence-Based Pathway.

### **Alternative Assessment Pathway**

See the [Pathways to Graduation Guide](#) for details.

### **Evidence-Based Pathway**

See the [Pathways to Graduation Guide](#) for details.



**Springfield High School**  
**Comprehensive Course Offerings and Course Descriptions**

**2023-2024 School Year**

This document contains all the potential course offerings for the 2023-2024 School Year. Students and parents should use this document to explore details about courses including the level, credit value, department affiliation, grade level accessibility, prerequisites, fees, and course descriptions.

Many of these courses are available for selection on HAC Course Requests – **HAC Access**. However, several courses are by teacher recommendation only.

**Course Credit Designation**

Courses are assigned a credit designation depending on the department, level, fulfillment of graduation requirements and/or elective credits. Use this chart to determine the designation based on the assigned code:

| <b>Code</b> | <b>Designation</b>                            | <b>Code</b> | <b>Designation</b>                  | <b>Code</b> | <b>Designation</b>          |
|-------------|---|-------------|-------------------------------------|-------------|-----------------------------|
| LA          | Language Arts                                 | SS          | Social Studies                      | SC          | Science                     |
| MA          | Mathematics                                   | WL          | World Language                      | PE          | Health & Physical Education |
| EL          | Elective - Humanities, Technologies, and Arts | PM          | Personal Finance & Money Management |             |                             |

**Course Level/Weight Designation:**

CP – Courses with this designation are considered College Preparatory and carry a GPA weight of 1.0.

H or Hn – Courses with this designation are considered Honors and carry a GPA weight of 1.125.

AP - Courses with this designation are considered Advanced Placement and carry a GPA weight of 1.25.

**NCAA Clearing House Designation**

\*\*CH Courses with this code are NCAA Eligible and Clearing House Approved

\*\*\*CHE Courses with this code are Clearing House Equivalency for Springfield High School Only

**SPECIAL NOTE: COURSE HIGHLIGHTED BRIGHT ORANGE ARE COURSE THAT ARE NEW OR HAVE UNDERGONE SOME LEVEL OF REVISION. PLEASE READ OVER THESE CAREFULLY.**

### English and Language Arts

The Language Arts program at Springfield High School integrates all the language arts skills—reading, writing, speaking, listening, thinking, and researching—into the curriculum and helps students apply these skills to meaningful tasks. The goal of the program is for students to achieve at high levels of performance across a variety of academic standards in the field of language arts: independent and critical reading, literary analysis and responding to literature, writing in various forms for a variety of audiences, producing compositions of high quality, speaking proficiently, and developing and implementing successful research skills. Students at all grade levels will be expected to demonstrate an awareness of and meet district and state standards in reading, writing, speaking, and listening. Technology is infused into each course in a deliberate and meaningful fashion.

Hn Language Arts (I)/Honors <sup>CH</sup> Course 110 1.0 Credit LA Grade: 9

#### *Foundations of Literature*

In Language Arts (I) Honors, students will be introduced to reading experiences from various genres of fiction and non-fiction, and they will learn the necessary skills specific to each type of reading. To enhance their understanding and appreciation of the literature, students will discover the relationship between the works and their respective time periods and cultures. In conjunction with, and in addition to the reading, students will employ the writing process and write extensively in various modes, ranging from formal literary analysis to persuasion and poetic response. The development of reading and writing skills will be assessed regularly with the goal of demonstration of mastery. Grammar and vocabulary development via the Sadlier Vocabulary Workshop program (Level E) are also a focus of this course. In Honors level classes, students must be self-motivated, possess strong writing skills, and be able to work through challenging texts independently. Students will be required to read and write more extensively and in more depth. Additionally, a greater expectation is placed on outside preparation and work to be ready for a more rigorous classroom learning environment.

*Language Arts (I) Honors requires the following additions to/variations from the College Preparatory level:*

- *A summer reading assignment for a required text.*
- *Two to three additional reading experiences.*
- *Two to three additional writing pieces or projects.*
- *Reading material with more mature subject matter and themes.*

Prerequisite Courses:

- Grade 8 English and Language Arts or equivalent

Recommended Academic Performance Levels for Teacher Recommendation:

- 84% or higher in Grade 8 ELA
- 94% or higher in Grade 8 ELA

Language Arts (I)/CP <sup>CH</sup> Course 111 1.0 Credit LA Grade: 9 Recommendation

#### *Survey of Literature*

In Language Arts (I) College Preparatory, students will be introduced to and study various genres of fiction and non-fiction, and they will learn the necessary skills specific to each type of reading. To enhance their understanding and appreciation of the literature, students will discover the relationship between the works and their respective time periods and cultures. In conjunction with and in addition to the reading, students will employ the writing process and write extensively in various modes, ranging from formal literary analysis to persuasion and poetic response. The development of reading and writing skills will be assessed regularly with the goal of demonstration of mastery. Grammar and vocabulary development via the Sadlier Vocabulary Workshop program (Level E) are also a focus of this course.

|   |            |               |           |                |
|---|------------|---------------|-----------|----------------|
| Hn Language Arts (II)/Honors <sup>CH</sup><br>The American Experience | Course 120 | 1.0 Credit LA | Grade: 10 | Recommendation |
|---|------------|---------------|-----------|----------------|

In Language Arts (II) Honors, students will be introduced to reading experiences from American writers, examining how they represent and interpret the American experience through their works. The course intends to provide students with an exposure to the social, economic, and cultural events that have helped shape and define our values and our goals as a nation. In addition to the study of literature, students will have opportunities to employ the writing process in a variety of modes. Grammar, usage, mechanics, and vocabulary via the Sadlier Vocabulary Workshop program (Level F) will be studied and developed. This course will place an emphasis in preparing students for taking the Keystone Literature Exam. Assessment methods vary and include oral, written, multi-media and group presentations. In Honors level classes, students must be self-motivated, possess strong writing skills, and be able to work through challenging texts independently. Students will be required to read and write more extensively and in more depth. Additionally, a greater expectation is placed on outside preparation and work to be ready for a more rigorous classroom learning environment.

*Language Arts (II) Honors requires the following additions to/variations from the College Preparatory level:*

- *A summer reading assignment for a required text.*
- *Two to three additional reading experiences.*
- *Two to three additional writing pieces or projects.*
- *Reading material with more mature subject matter and themes.*

Prerequisite Courses:

- Grade 9 English and Language Arts 110 or 111 or equivalent

Recommended Academic Performance Levels for Teacher Recommendation:

- 84% or higher in Course 110
- 94% or higher in Course 111

|  |            |               |           |                |
|--|------------|---------------|-----------|----------------|
| Language Arts (II)/CP <sup>CH</sup><br>The American Experience | Course 121 | 1.0 Credit LA | Grade: 10 | Recommendation |
|--|------------|---------------|-----------|----------------|

Language Arts (II) College Preparatory will examine how American writers have represented and interpreted the American experience through their works. The course intends to provide students with an exposure to the social, economic, and cultural events that have shaped and defined our values and our goals as a nation. The development of the course may be thematic or chronological as students read works by American authors. In addition to the study of literature, students will have the opportunity to employ the writing process in a variety of modes. This course will place a heavy emphasis in preparing students for taking the Keystone Literature Exam. Grammar, usage, mechanics, and vocabulary development via the Sadlier Vocabulary Workshop (Level E) will be studied and developed.

Prerequisite Courses:

- Grade 9 English and Language Arts 110 or 111 or equivalent

|  |            |               |           |  |
|--|------------|---------------|-----------|--|
| Hn Language Arts (III)/Honors <sup>CH</sup><br>Global Perspectives | Course 130 | 1.0 Credit LA | Grade: 11 |  |
|--|------------|---------------|-----------|--|

In Language Arts (III) Honors, students will build upon their 10th grade literature experiences. This course moves students from an American outlook to a global perspective. Through this global exposure to modern world literature, students explore the human condition, resulting from cultural implications, through reading experiences drawn from throughout the world, including the Middle East, Asia, Africa and Latin America. In addition to the study of literature, this course focuses on college

preparation, including an emphasis on the development of college level writing and literary analysis, MLA format, vocabulary development via the Sadlier Vocabulary Workshop program (Level G), and independent reading and writing. Assessment methods vary and include written, multi-media and group presentations. In Honors level classes, students must be self-motivated, possess strong writing skills, and be able to work through challenging texts independently. Students will be required to read and write more extensively and in more depth. Additionally, a greater expectation is placed on outside preparation and work to be ready for a more rigorous learning experiences within the classroom.

*Language Arts (III) Honors requires the following additions to/variations from the College Preparatory level:*

- *A summer reading assignment for a required text.*
- *Two to three additional reading experiences.*
- *Two to three additional writing pieces or projects.*
- *Reading material with more mature subject matter and themes.*

Prerequisite Courses:

- Grade 10 English and Language Arts 120 or 121 or equivalent

Recommended Academic Performance Levels for Teacher Recommendation:

- 84% or higher in Course 120
- 94% or higher in Course 121

|  |            |               |           |                |
|--|------------|---------------|-----------|----------------|
| Language Arts (III)/CP <sup>CH</sup><br><i>Global Perspectives</i> | Course 131 | 1.0 Credit LA | Grade: 11 | Recommendation |
|--|------------|---------------|-----------|----------------|

Language Arts (III) College Preparatory builds upon the 10th grade literature experience. This course moves students from an American outlook on the 20th century to a global perspective. Through this global exposure to modern world literature, students explore the human condition considering the cultural implications found in novels, short stories, poetry, plays, and memoirs from throughout the world, including the Middle East, Asia, Africa, and Latin America. In addition to the study of literature, students will employ the writing process in a variety of modes, including narrative, informational, and persuasive. Grammar, usage, mechanics, and vocabulary development via the Sadlier Vocabulary Workshop program (Level F) will be stressed. Assessment methods vary and include oral, written, multi-media and group presentations.

|  |            |               |           |                |
|--|------------|---------------|-----------|----------------|
| AP English Language & Composition <sup>CH</sup><br><i>Advanced Placement</i> | Course 139 | 1.0 Credit LA | Grade: 11 | Recommendation |
|--|------------|---------------|-----------|----------------|

The AP English Language and Composition course is designed to help students become skilled readers of prose written in a variety of rhetorical contexts and to become skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects, as well as the way generic conventions and the resources of language contribute to effectiveness in writing. To this end, grammar instruction is a strong component of the course. Students will have opportunities to write about a variety of subjects and to demonstrate an awareness of audience and purpose. The overarching objective is to enable students to write effectively and confidently across the curriculum and in their professional and personal lives. Another purpose of the AP English Language and Composition course is to enable students to read complex texts from many disciplines and historical periods with understanding and to write prose of sufficient richness and complexity to communicate effectively with mature readers. To reflect the increasing importance of graphics and visual images in texts published in print and electronic media, students are asked to analyze how such images both relate to written texts and serve as alternative forms of texts themselves. Vocabulary development will be addressed via the Sadlier Vocabulary Workshop program (Level G).

Prerequisite Courses:

- Grade 10 English and Language Arts 120 or 121 or equivalent

Recommended Academic Performance Levels for Teacher Recommendation:

- 90% or higher in Course 120
- 94% or higher in Course 121

|   |            |               |          |                |
|---|------------|---------------|----------|----------------|
| Hn Language Arts (IV) <sup>CH</sup>                 | Course 140 | 1.0 Credit LA | Grade 12 | Recommendation |
| <i>Epics, Classics &amp; Contemporaries /Honors</i> |            |               |          |                |

In Language Arts (IV) Honors, students will be introduced to reading experiences drawn from both classical and modern literature, along with a variety of supplementary texts. The course will center on various types of writing including argument, analysis, and evaluation. The students will engage in the writing process through critical analysis of a text, drafting an argument, and working through the revision process. Other areas of study include literary criticism, vocabulary acquisition via the Sadlier Vocabulary Workshop program (Level H), mechanical expression, and literary analysis. In Honors level classes, students must be self-motivated, possess strong writing skills, and be able to work through challenging texts independently. Students will be required to read and write more extensively and in more depth. Additionally, a greater expectation is placed on outside preparation and work to be ready for a more rigorous learning experiences within the classroom.

*Language Arts (IV) Honors requires the following additions to/variations from the College Preparatory level:*

- *A summer reading assignment for a required text.*
- *Two to three additional reading experiences.*
- *Two to three additional writing pieces or projects.*
- *Reading material with more mature subject matter and themes.*

Prerequisite Courses:

- Grade 11 English and Language Arts 130 or 131

Recommended Academic Performance Levels for Teacher Recommendation:

- 84% or higher in Course 130
- 94% or higher in Course 131

|  |            |               |          |                |
|--|------------|---------------|----------|----------------|
| CP Language Arts (IV) <sup>CH</sup>                              | Course 141 | 1.0 Credit LA | Grade 12 | Recommendation |
| <i>Epics, Classics &amp; Contemporaries /College Preparatory</i> |            |               |          |                |

In Language Arts (IV) College Preparatory, students will develop an understanding and appreciation of major works of classical and modern literature. The course will weave in a variety of supplementary texts that enhance student comprehension of core texts. The course will center on various types of writing including argument, analysis, and evaluation. The students will engage in the writing process through critical analysis of the text, drafting an argument, and working through the revision process. Other areas of study include vocabulary acquisition via the Sadlier Vocabulary Workshop program (Level G), mechanical expression, and literary analysis.

Prerequisite Courses:

- Grade 11 English and Language Arts 131

AP - English Literature & Composition<sup>CH</sup> Course 149 1.0 Credit LA Grade 12 Recommendation  
*Advanced Placement*

The purpose of this course is to give qualified students the opportunity to read, write, think, and speak about challenging works of literature in a seminar setting. The overall reading goal is to provide for the experience, interpretation, and evaluation of literature through extensive writing and discussion. We will supplement our core readings with independent readings and supplementary texts. As we read, we will look to identify common themes among the novels, plays, poems, stories, articles, and essays. Our reading and writing will be supported by work from the Sadlier Vocabulary Workshop program (Level H). The way we make learning real and lasting is through finding connections between the different texts we immerse ourselves in during class. We will not study texts in isolation; rather, we will put them in conversation with one another and use them as lenses for critically viewing each text. We will learn to use literary criticism to create meaning with texts. We will learn to apply Theory of Mind to challenging texts, grapple with issues of authorial choice as a threshold concept and practice a variety of writing approaches from analytical to argumentative. The way we use the texts of this course will help to prepare students for the AP Literature and Composition exam in May and a college level English course. This course follows the AP curriculum.

In this AP course, students will be required to read and write more extensively and, in more depth, and can expect a greater demand for homework responsibilities and independent preparation.

AP Literature and Composition requires more of the following than in the Language Arts (IV) Honors level:

- *Three summer reading books and four assessments*
- *Extensive fiction and non-fiction reading navigated using note-taking strategies*
- *Emphasis on university-level writing that recognizes writing as a process, developing a mature and sophisticated writing style*
- *Expectation of interdisciplinary learning experiences (challenging course work) to draw upon in seminar setting*
- *More homework responsibilities*
- *Love of reading and writing*
- *Willingness to speak and contribute during seminar setting*

**Prerequisite Courses:**

- Grade 11 English and Language Arts 139 or 130

**Recommended Academic Performance Levels for Teacher Recommendation:**

- 84% or higher in Course 139
- 94% or higher in Course 130

**Additional Language Arts Course Offerings**

News Media and Journalism Course 150 1.0 Credit EL Grades: 10,11,12 HAC Access

In News Media and Journalism, students will focus on the gathering and dissemination of newsworthy facts and explore multiple modes of news publications like traditional newspapers, online news publications, podcasts, and other modern news platforms. Students will study the ethics of student journalism and engage in the interview process, feature and editorial writing, audio and digital reporting, photography, editing, and publishing. A focal point of the course will center on the news gathering process and explore the biases of current news media. This analytical approach will encourage students to craft their views and share events in a responsible and meaningful manner with their school community. All students will submit quarterly articles and help with the development of ideas and topics for the editorial staff of the SPRI HIAN. All students interested in an introduction to news media and journalism should consider taking this course.

|                     |            |               |                  |            |
|---------------------|------------|---------------|------------------|------------|
| Literature and Film | Course 151 | 0.5 Credit EL | Grades: 10,11,12 | HAC Access |
|---------------------|------------|---------------|------------------|------------|

Students will use carefully selected films and relevant texts to study the language of film, focusing on artistic techniques such as the use of lighting, camera angles, music and sound, and editing. In doing so, they will also evaluate a film's aesthetic, historical, and cultural merit. Students will survey the history of American filmmaking from Thomas Edison to modern blockbusters, learn about genres and storytelling techniques, and compose reviews based on a variety of relevant criteria. The class will emphasize critical writing skills and also incorporate vocabulary and techniques from a wide range of disciplines such as photography, philosophy, and visual composition.

|                           |            |               |                  |            |
|---------------------------|------------|---------------|------------------|------------|
| Philosophy of Pop Culture | Course 152 | 0.5 Credit EL | Grades: 10,11,12 | HAC Access |
|---------------------------|------------|---------------|------------------|------------|

This course will explore the philosophical underpinnings of popular movies, television, cartoons, and novels. From *Star Wars* to *The Avengers*, *Stranger Things* to *Game of Thrones*, *The Simpsons* to the *Peanuts*, *The Hunger Games* to *Harry Potter*, students will be introduced to philosophical concepts found in modern pop culture. Ultimately, students will explore a pop culture topic of their own choosing. Students should expect to read and write as a central component of this course.

|                 |            |               |                 |            |
|-----------------|------------|---------------|-----------------|------------|
| Acting Workshop | Course 840 | 0.5 credit EL | Grades: 9,10,11 | HAC Access |
|-----------------|------------|---------------|-----------------|------------|

Students will develop self-confidence in this course, both as performers and as individuals. They will receive a general orientation to the Stanislavski "Method" of acting. Course activities include extensive work in improvisation, characterization, stage movement, monologues, and scene work. Class and teacher viewing of performances and class participation are included in the evaluation of students.

|                    |            |               |                    |            |
|--------------------|------------|---------------|--------------------|------------|
| Behind the Curtain | Course 843 | 0.5 Credit EL | Grades: 9,10,11,12 | HAC Access |
|--------------------|------------|---------------|--------------------|------------|

*An Introduction to Technical Theater*

In this course, students will explore the backstage world of theater utilizing the technical equipment found in the high school theater. Students will participate in units of study focused on theatrical spaces, scenic design, beginning set construction, lighting design, costume design, sound design, prop design, and stage management. Assessment will consist of a combination of hands-on projects, design simulations, and traditional written assessments. No prior technical experience necessary.

|                           |            |               |                  |            |
|---------------------------|------------|---------------|------------------|------------|
| AP Seminar <sup>CHE</sup> | Course 995 | 0.5 Credit EL | Grades: 10,11,12 | HAC Access |
|---------------------------|------------|---------------|------------------|------------|

AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational literary and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in research-based written essays, and design and deliver oral and visual presentations, both individually and as a part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments. AP Seminar is an interdisciplinary course; students may focus their research on topics of their choosing. NOTE WELL: AP Seminar is the first course in the AP Capstone™ program. More information about AP Capstone™ can be found at <https://apcentral.collegeboard.org/courses/ap-capstone?course=ap-capstone-diploma-program>

**Communications Course Offerings (found in the CVP Department Course Listing on HAC)**

## Social Studies

The Social Studies program at Springfield High School is designed to provide the students the opportunity to be involved in specific aspects of the social sciences that parallel their specific interest(s). The program is designed to consider the development of the intellectual capabilities of each student which will in turn lead the student to think more rationally. Coupled with this is an emphasis on the application of the many higher order thinking processes including the various skills connected with decision making, problem solving, critical and creative thinking. Students will gain necessary knowledge, intellectual and social awareness, and communicative skills to function and develop in the 21st century.

|  |            |               |          |                |
|--|------------|---------------|----------|----------------|
| Hn The Global Context <sup>CH</sup><br><i>Voices of the People</i> | Course 210 | 1.0 Credit SS | Grade: 9 | Recommendation |
|--|------------|---------------|----------|----------------|

This course is designed to expose the students to distant cultures of the world as viewed through indigenous narratives. Our units of study include an examination of the Middle East, Africa, South Asia, East Asia, and South America's own histories and how these were impacted when encountering the colonialism of the Western world. In each unit, emphasis is placed on geography, culture, brief historical context, and current issues of the region. This course exposes students to a variety of cultures, and the patterns of civilizations as they evolve. A major focus will be placed on government, geography, society, customs, religion, global current events and economics. The aim is to give students a broad understanding of the world's modern civilizations to help them participate in today's global society.

Within the Honors course students will be expected to challenge themselves to think deeply about the connections between the historical texts they encounter and global current events.

Students should expect class discussions, collaborative work, nightly assignments, simulations and direct instruction. Integrative technology is an important component to this course. Student's geographic skills will be honed with in-depth map work. Special attention will be given to the development of higher-level writing skills.

### Recommended Academic Performance Levels for Teacher Recommendation:

- 94% or higher in Grade 8 Social Studies

|   |            |               |          |                |
|---|------------|---------------|----------|----------------|
| The Global Context <sup>CH</sup><br><i>Voices of the People</i> | Course 211 | 1.0 Credit SS | Grade: 9 | Recommendation |
|---|------------|---------------|----------|----------------|

This course is designed to expose the students to distant cultures of the world as viewed through indigenous narratives. Our units of study include an examination of the Middle East, Africa, South Asia, East Asia, and South America's own histories and how these were impacted when encountering the colonialism of the Western world. In each unit, emphasis is placed on geography, culture, brief historical context, and current issues of the region. This course exposes students to a variety of cultures, and the patterns of civilizations as they evolve. A major focus will be placed on government, geography, society, customs, religion, global current events and economics. The aim is to give students a broad understanding of the world's modern civilizations to help them participate in today's global society.

Students should expect a wide variety of classroom activities, including but not limited to simulations, direct instruction, group work, computer projects, and independent assignments. Students will learn, review, and then implement basic geographic skills with unit specific map labeling. Current events are an important part of this class, and students will be expected to be aware of important global events.



|   |            |               |          |                |
|---|------------|---------------|----------|----------------|
| AP World History: Modern <sup>CH</sup><br><i>Advanced Placement</i> | Course 265 | 1.0 Credit SS | Grade: 9 | Recommendation |
|---|------------|---------------|----------|----------------|

In AP World History: Modern, students investigate significant events, individuals, developments, and processes from 1200 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change over time. The course provides six themes that students explore throughout the course to make connections among historical developments in different times and places: humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation.

Prerequisite Courses:

- Grade 8 Social Studies

Recommended Academic Performance Levels for Administrative Recommendation and Approval:

- 80% or higher probability of a score of 3 or higher on the exam as reported by College Board on the PSAT 8 Exam

|   |            |               |           |                |
|---|------------|---------------|-----------|----------------|
| Hn United States History <sup>CH</sup><br><i>1820-Present</i> | Course 220 | 1.0 Credit SS | Grade: 10 | Recommendation |
|---|------------|---------------|-----------|----------------|

This course surveys American History from the Jacksonian to the present, highlighting some of the important political and cultural contributions by Pennsylvanians along the way. Important events, themes, and people are studied with an emphasis on their relationship to one another and their meaning to the present. The course examines the beneficiaries of the American Experience as well as those who were left out. It traces the extraordinary social, technological, economic and foreign policy transformations that have made us what we are as people. Students are challenged to analyze events while using primary and secondary sources that sometimes lead to various interpretations of the evidence. Above all, students are required to think about the meaning of this nation's history in their lives. Reading, writing, discussing, and active involvement are the essential strategies used in this course. The internet also plays a vital role in accessing primary sources and varied interpretations.

The Honors course is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in United States history. Students should learn to assess historical materials – their relevance to a given interpretive problem, their reliability, and their importance, and to weigh the evidence and interpretations presented in historical scholarship.

Prerequisite Courses:

- Grade 9 The Global Context 210 Hn or 211 CP

Recommended Academic Performance Levels for Teacher Recommendation:

- 84% or higher in Course 210
- 94% or higher in Course 211

|   |            |               |           |                |
|---|------------|---------------|-----------|----------------|
| United States History/CP <sup>CH</sup><br><i>1820-Present</i> | Course 221 | 1.0 Credit SS | Grade: 10 | Recommendation |
|---|------------|---------------|-----------|----------------|

This course surveys American History from the Jacksonian period to the present, highlighting some of the important political and cultural contributions by Pennsylvanians along the way. Important events, themes, and people are studied with an emphasis on their relationship to one another and their meaning to the present. The course examines the beneficiaries of the

American Experience as well as those who were left out. It traces the extraordinary social, technological, economic and foreign policy transformations that have made us what we are as people. Students are challenged to analyze events while using primary and secondary sources that sometimes lead to various interpretations of the evidence. Above all, students are required to think about the meaning of this nation’s history in their lives. Reading, writing, discussing, and role-playing are the essential strategies used in this course. The Internet also plays a vital role in accessing primary sources and varied interpretations.

|  |            |            |           |                |
|--|------------|------------|-----------|----------------|
| <u>AP United States History</u> <sup>CH</sup><br><i>Advanced Placement</i> | Course 225 | 1.0 Credit | Grade: 10 | Recommendation |
|--|------------|------------|-----------|----------------|

The Advanced Placement program in United States History is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in United States history from early settlement to the present. This course prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. Student should learn to assess historical materials – their relevance to a given interpretive problem, their reliability, and their importance, and to weigh the evidence and interpretations presented in historical scholarship. The Internet also plays a vital role in accessing primary sources and varied interpretations for research projects. This course follows the AP curriculum.

Prerequisite Courses:

- Grade 9 The Global Context 210 Hn or 211 CP

Recommended Academic Performance Levels for Teacher Recommendation:

- 90% or higher in Course 210
- 94% or higher in Course 211

|  |            |               |           |                |
|--|------------|---------------|-----------|----------------|
| <u>Hn US Civics and Government</u> <sup>CH</sup> | Course 240 | 1.0 Credit SS | Grade: 11 | Recommendation |
|--|------------|---------------|-----------|----------------|

United States Civics and Government is designed to assist students in developing an understanding of the American political system and an appreciation for the important role that citizens play in our democratic republic. Units of study include the purpose and function of government, historical foundations and significant documents of American government, general processes of government, the interpretation and application of law, and the role of individual citizens and that of groups and organizations in our political system. Students will also draw compare and contrast the role of the federal government with that of the state of Pennsylvania. Internet research is used for simulations and problem-solving projects as well as to provide a consistent awareness of current events in Washington and Harrisburg.

*Within the Honors classes students will be expected to challenge themselves to think deeply about the connections between the historical texts they encounter and current events that are unfolding within the United States today. Students will also be expected to take engage in various independent and collaborative research and writing initiatives.*

Prerequisite Courses:

- Grade 10 United States History Context 220 Hn or 221 CP

Recommended Academic Performance Levels for Teacher Recommendation:

- 84% or higher in Course 220
- 94% or higher in Course 221

|   |            |               |           |                |
|---|------------|---------------|-----------|----------------|
| US Civics and Government/CP <sup>CH</sup> | Course 241 | 1.0 Credit SS | Grade: 11 | Recommendation |
|---|------------|---------------|-----------|----------------|

United States Civics and Government is designed to assist students in developing an understanding of the American political system and an appreciation for the important role that citizens play in our democratic republic. Units of study include the purpose and function of government and the historical foundations and significant documents of American government, the general processes of government, the interpretation and application of law, and the role of individual citizens and that of groups and organizations in our political system. Students will also compare and contrast the role of the federal government with that of the state of Pennsylvania. Internet research is used for simulations and problem-solving projects as well as to provide a consistent awareness of current events in Washington and Harrisburg.

|   |            |               |           |                |
|---|------------|---------------|-----------|----------------|
| AP US Government & Politics <sup>CH</sup> | Course 245 | 1.0 Credit SS | Grade: 11 | Recommendation |
| <i>Advanced Placement</i>                 |            |               |           |                |

The Advanced Placement American Government and Politics course is an intensive program of instruction and personal study focusing on the national level of government and politics. Students will critically examine five common areas and subjects normally covered in an introductory college political science course: the Constitution; underpinnings of Government, political parties and interest groups; institutions and policy processes of the national government; civil rights and civil liberties. The course uses web resources extensively in addition to textbook and primary source materials. Students with consistently high grades in social studies and teacher recommendations will be considered for the course. This course follows the AP curriculum.

Prerequisite Courses:

- Grade 10 United States History Context 220 Hn or 221 CP

Recommended Academic Performance Levels for Teacher Recommendation:

- 90% or higher in Course 220
- 94% or higher in Course 221

**Social Studies – Additional Course Offerings**

|                                      |            |               |                  |            |
|--------------------------------------|------------|---------------|------------------|------------|
| Civil and Criminal Law <sup>CH</sup> | Course 254 | 0.5 Credit EL | Grades: 10,11,12 | HAC Access |
|--------------------------------------|------------|---------------|------------------|------------|

The Civil and Criminal Law course offers the student an exciting hands-on experience in practical law using the Street Law Text and other Street Law materials. The major emphasis will be on practical application through student simulations, mock trials, moot court hearings, and presentations by legal experts. Students will be using the Internet to research past cases, precedents, and legal updates.

|                          |            |               |                  |            |
|--------------------------|------------|---------------|------------------|------------|
| Psychology <sup>CH</sup> | Course 255 | 0.5 Credit EL | Grades: 10,11,12 | HAC Access |
|--------------------------|------------|---------------|------------------|------------|

The primary goal of this semester course is to expose students to some of the major topics and themes of the field of psychology. The course covers the history of psychology and the four major perspectives of psychology: biological, behavioral, psychodynamic, and humanistic, as well as a study of the brain, social psychology, abnormal psychology, and research design. Students will participate in experiments and demonstrations to reinforce course concepts and as a result, gain a better understanding of the forces behind human behavior, their own and others. This course is not a prerequisite for AP Psychology but is helpful for students who want to accept the challenge of AP Psychology.

|   |            |               |               |            |
|---|------------|---------------|---------------|------------|
| Constitutional Civil Rights <sup>CH</sup> | Course 258 | 0.5 Credit EL | Grades: 11,12 | HAC Access |
|---|------------|---------------|---------------|------------|

Anyone who has ever watched a cop drama knows that criminal suspects have certain rights, including the right to remain silent and the right to an attorney. People speak their minds freely on television and on the internet knowing that they have a right to free speech. These rights, and many more, are guaranteed and protected under the United States Constitution and the Bill of Rights. In this course, we will explore these rights in real life cases and analyze the Supreme Court's role as protector and defender of the Constitution. Activities will include debates and simulations, as well as participation in an intensive moot Supreme Court hearing.

|                          |            |               |               |            |
|--------------------------|------------|---------------|---------------|------------|
| Sociology <sup>CHE</sup> | Course 261 | 0.5 Credit EL | Grades: 11,12 | HAC Access |
|--------------------------|------------|---------------|---------------|------------|

Sociology is the study of social life, social change, and the social causes and consequences of human behavior. In this one semester course, students will focus on human behavior in families, religious groups, local communities, and in the broader society. Students will examine such topics as cultural conformity, adolescent socialization, racial and ethnic relations, and gender. Class discussions based on assigned readings will be the primary activity during this course, with several short reaction papers and examinations assigned throughout the semester. Students are also required to complete a culminating research project. Students must realize that a regimen of regular study and above average ability in reading and synthesizing skills are required in order to achieve success at this level.

### **Social Studies – Advanced Placement Course Offerings**

**Note:** As a general guideline, unless otherwise specified by prerequisites, students pursuing SS AP additional course offerings should demonstrate an 84% or higher in both Language Arts and Social Studies courses to meet with the expected level of reading and writing rigor associated with SS AP level courses. Students not meeting with these general guidelines will be asked to complete a waiver form.

|                                   |            |               |               |            |
|-----------------------------------|------------|---------------|---------------|------------|
| AP European History <sup>CH</sup> | Course 235 | 1.0 Credit EL | Grades: 11,12 | HAC Access |
| <i>Advanced Placement</i>         |            |               |               |            |

This course is designed as a college level course and students are expected to take the AP test in May. The scope of the course is from the Renaissance to present day and utilizes a college level text plus a variety of primary sources. Students will be expected to complete several research projects plus participate in historic simulations and class discussions. Analysis of material to determine patterns in history is a necessity in the course, as is understanding how to write a complete persuasive historic essay. Students must become comfortable in using the internet for research and contacting other AP sites. This course follows the AP curriculum.

#### Prerequisite Courses:

- Grade 10 United States History 225 AP, 220 Hn or 221 CP
- Grade 11 US Government and Politics 245 AP, 240 Hn, or 241 CP

#### Recommended Academic Performance Levels for Teacher Recommendation:

- 90% or higher in Course 225, 220, 245, or 240
- 94% or higher in Course 221 or 241

|   |            |               |               |            |
|---|------------|---------------|---------------|------------|
| <b>AP Psychology</b> <sup>CH</sup><br><i>Advanced Placement</i> | Course 256 | 1.0 Credit EL | Grades: 11,12 | HAC Access |
|---|------------|---------------|---------------|------------|

This is a rigorous college level course. By design, the course is patterned after a typical undergraduate introductory psychology course. A college-level text is used in the course. The course covers designated topics: Scientific Foundations of Psychology; Biological Bases of Behavior; Sensation and Perception; Learning; Cognitive Psychology; Developmental Psychology; Motivation, Emotion, and Personality; Clinical Psychology; Social Psychology.

|  |            |               |                  |            |
|--|------------|---------------|------------------|------------|
| <b>AP Human Geography</b> <sup>CH</sup><br><i>Advanced Placement</i> | Course 265 | 1.0 Credit EL | Grades: 10,11,12 | HAC Access |
|--|------------|---------------|------------------|------------|

The AP Human Geography course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students learn to employ spatial concepts and landscape analysis to examine human socioeconomic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and application.

|  |            |               |               |            |
|--|------------|---------------|---------------|------------|
| <b>AP Economics/Micro and Macro</b> <sup>CH</sup><br><i>Advanced Placement</i> | Course 982 | 1.0 Credit EL | Grades: 11,12 | HAC Access |
|--|------------|---------------|---------------|------------|

**COURSE REVISION: Course will cover both Micro- and Macroeconomics**

AP Macroeconomics & Microeconomics is a college-level course that introduces students to the principles that apply to an economic system, as well as the functions of individual economic decision-makers. The course places particular emphasis on the study of national income and price-level determination. It also develops students' familiarity with the operation of product and factor markets, distributions of income, market failure, and the role of government in promoting greater efficiency and equity in the economy. Lastly, it will develop students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts. Students will be prepared to sit for both the AP Macro- and Microeconomics Exams.

Prerequisite Course:

- Algebra II 430 Hn or 431 CP

Recommended Academic Performance Levels for Teacher Recommendation:

- Successful completion of 430 or 431

## Science

The Science program at Springfield High School is designed to allow the student the option of becoming involved in specific aspects of the Sciences that parallel her/his specific interest. From Biology to Advanced Placement (AP) Environmental Science, the Science curriculum is flexible enough to account for individual needs. The program is designed to consider the development of the intellectual capabilities of each student which will in turn, lead the student to become an articulate and rational thinker. Coupled with this, is an emphasis on the application of higher order thinking processes including the skills connected with decision making, problem solving, and critical and creative thinking. The students will gain the necessary knowledge, intellectual and social awareness, and communicative skills to function and succeed in the 21st century.

|                          |            |               |              |                |
|--------------------------|------------|---------------|--------------|----------------|
| Hn Biology <sup>CH</sup> | Course 305 | 1.0 Credit SC | Grades: 9,10 | Recommendation |
|--------------------------|------------|---------------|--------------|----------------|

Honors Biology is a rigorous and challenging course designed to explore the characteristics of life. Course content includes the scientific method characteristics of living things, cell structure, function and transport, cellular reproduction, biochemistry, cell energetics, genetics, DNA, ecology, and evolution. Students will be introduced to some of the techniques, equipment, and information used by biologists. In addition to in class lecture and lab activities, independent supplemental reading and enrichment activities will be assigned and completed outside of the classroom. Students will sit for their Keystone Biology Exam during this course.

### Prerequisite Course:

- Grade 8 Science

### Recommended Academic Performance Levels for Teacher Recommendation:

- 96% or higher in Grade 8 Science

|                          |            |               |              |                |
|--------------------------|------------|---------------|--------------|----------------|
| Biology/CP <sup>CH</sup> | Course 311 | 1.0 Credit SC | Grades: 9,10 | Recommendation |
|--------------------------|------------|---------------|--------------|----------------|

Biology is a course designed to explore the characteristics of life. Course content includes the scientific method, characteristics of living things, cell structure and function, cellular reproduction, biochemistry, photosynthesis, cellular respiration, genetics, DNA, ecology, and evolution. Students will be introduced to some of the techniques, equipment, and information used by biologists. Students will complete several labs and inquiry-based activities to reinforce the concepts and develop their technical writing skills. Current biological issues will also be explored. *Students will take the Keystone Biology Exam in this course.*

|                            |            |               |              |                |
|----------------------------|------------|---------------|--------------|----------------|
| Hn Chemistry <sup>CH</sup> | Course 320 | 1.0 Credit SC | Grades: 9,10 | Recommendation |
|----------------------------|------------|---------------|--------------|----------------|

This honors science course is recommended for math and science students as evidenced by the prerequisites above. The major areas of study are atomic structure and mole concept, chemical bonding, kinetic molecular theory, solutions, chemical reactions, reaction rates, acid/base chemistry, oxidation/reduction chemistry, and dynamic equilibrium. Students will develop skills in making observations, analyzing data, drawing conclusions, and problem solving. This course is recommended for students planning professional careers in science and medicine. This course will have a summer assignment.

### Prerequisite Course:

- Grade 8 Science and/or Biology 305 Hn or 311 CP
- Grade 8 Geometry

### Recommended Academic Performance Levels for Teacher Recommendation:

- 94% or higher in Grade 8 Science and Grade 8 Geometry
- 84% or higher in Course 305
- 94% or higher in Course 311

|                            |            |               |               |                |
|----------------------------|------------|---------------|---------------|----------------|
| Chemistry/CP <sup>CH</sup> | Course 321 | 1.0 Credit SC | Grades: 10,11 | Recommendation |
|----------------------------|------------|---------------|---------------|----------------|

Chemistry is a laboratory course which emphasizes five major areas of study: atomic structure and mole concept, chemical bonding and chemical formulas, principles of chemical reactions, kinetic molecular theory, solutions and acid/base. Students will develop skills in making observations, analyzing data, drawing conclusions, and problem solving. The course involves use of calculators, simulations on the computer, and using the computer to produce lab reports.

Prerequisite Course:

- Successful completion of Biology 311 CP

|                          |            |               |               |                |
|--------------------------|------------|---------------|---------------|----------------|
| Hn Physics <sup>CH</sup> | Course 330 | 1.0 Credit SC | Grades: 11,12 | Recommendation |
|--------------------------|------------|---------------|---------------|----------------|

This course focuses on understanding the basics laws of mechanics: motion, forces, momentum, energy, torque, rotation, and electricity. Skills of algebra, geometry, and trigonometry will be integrated freely and extensively in the course, both in the formulation of physical laws and in the solutions of problems. Students are expected to manipulate algebraic expressions involving multiple variables and should have an understanding of basic trigonometric functions. The student will be required to conduct experiments and compile data into lab reports. In addition, students in the honors physics course will be expected to:

- Compile 12-15 formal lab reports throughout the course,
- Conduct independent and group research
- 

This course is ideal for students who have a career interest in the sciences, math, or engineering.

Prerequisite Course:

- Chemistry 320 Hn or 321 CP
- Geometry Math Analysis 420 Hn or 421 CP

Recommended Academic Performance Levels for Teacher Recommendation:

- 90% or higher in Course 420
- 94% or higher in Course 421

|                          |            |               |               |                |
|--------------------------|------------|---------------|---------------|----------------|
| Physics/CP <sup>CH</sup> | Course 331 | 1.0 Credit SC | Grades: 11,12 | Recommendation |
|--------------------------|------------|---------------|---------------|----------------|

Students are expected to use mathematics to quantitatively discuss the concepts of physics, as well as be able to solve problems. This course will focus on the laws of mechanics, including motion, forces, momentum, energy, thermodynamics, torque, rotation, and electricity. Students taking the course will improve their problem-solving skills and learn to compile laboratory data into a lab report. Throughout the course, students will use lab equipment and computer-interface software to collect data and will be required to report their findings through formal lab reports. Students are expected to use mathematics to quantitatively discuss the concepts of physics, as well as be able to solve problems.

Prerequisite Course:

- Successful completion of Chemistry 321 CP or 320 Hn
- Successful completion of Algebra II 431 CP or 430 Hn

|   |            |               |               |            |
|---|------------|---------------|---------------|------------|
| AP Physics 1 <sup>CH</sup><br><i>Advanced Placement</i> | Course 355 | 1.0 Credit SC | Grades :11,12 | HAC Access |
|---|------------|---------------|---------------|------------|

Students who have already completed Honors Physics 330 are not eligible for 354. This course is ideal for students who have a career interest in the sciences, math, or engineering. No prior physics education is required; however, this is a rigorous AP course for students who intend to pursue further honors and AP science electives. This course focuses on understanding the basic laws of mechanics and electricity: motion, forces, momentum, energy, torque, rotation. Skills of algebra, geometry, and trigonometry will be integrated freely and extensively in the course, both in the formulation of physical laws and in the solutions of problems. Students are expected to manipulate algebraic expressions involving multiple variables and should understand basic trigonometric functions. The student will be required to conduct experiments and compile data into lab reports. This course follows the AP curriculum and will prepare students for the AP Physics 1 exam.

Prerequisite Course:

- Geometry/Math Analysis 420 Hn or 421 CP
- Pre-Calculus 458 Hn or 459 CP

Recommended Academic Performance Levels:

- 94% or higher in Course 421 | Course 459
- 90% or higher in Course 420 | Course 458

**Science – Additional Course Offerings**

|  |            |               |                  |            |
|--|------------|---------------|------------------|------------|
| Applied Concepts of Chemistry <sup>CH</sup><br><b>NEW COURSE</b> | Course 325 | 0.5 Credit EL | Grades: 10,11,12 | HAC Access |
|--|------------|---------------|------------------|------------|

This is a laboratory-based course designed to explore and apply concepts of chemistry that are not covered comprehensively in CP or Hn Chemistry. The concepts include redox reactions, electrochemistry, reaction rates and equilibrium, dissociation constants (acids and bases) and titrations, and kinetics. At least 1 lab experiment will accompany each concept. This course is recommended for students interested in learning more challenging concepts in chemistry.

Prerequisite Course:

- Chemistry 321 CP or 320 Hn

Recommended Academic Performance Levels:

- 74% or higher in Course 320
- 84% or higher in Course 321

|  |            |               |                  |            |
|--|------------|---------------|------------------|------------|
| Natural Disasters <sup>CH</sup><br><b>NEW COURSE: REPLACING PLANET EARTH</b> | Course 360 | 0.5 Credit EL | Grades: 10,11,12 | HAC Access |
|--|------------|---------------|------------------|------------|

This course is a survey of the Earth sciences of geology, meteorology, and oceanography in the context of natural disasters. The course is intended for students interested in the Earth sciences and how they relate to human activity. This course will utilize a variety of case studies and lab experiences to help students understand the causes and impacts of natural disasters. Students will be expected to work with data, complete basic calculations, and interpret visual representations of data such as graphs and maps.

**This course replaces Planet Earth. The topics and concepts are very similar. Students who completed Planet Earth are eligible for this class because the content is different and not repetitive.**



Hn Human Anatomy & Physiology<sup>CH</sup> Course 366A 0.5 Credit EL Grades: 11,12 HAC Access

### REVISED COURSE: Course Description and Weight

This course is a study of both human anatomy and physiology with an integral laboratory component. This course is designed to prepare students who are considering entering the medical, nursing, or allied health fields and as such is of a rigorous content level. The course will offer a survey of important anatomical terms (and is vocabulary extensive) as well as an overview of the body's major organ systems. Several of the systems will be reviewed in detail. Additionally, we will view several surgeries during this course. Students will have the opportunity to gain insight into various career options and the studies required for them.

#### Prerequisite Course:

- Biology 311 CP or 305 Hn
- Chemistry 321 CP or 320 Hn

#### Recommended Academic Performance Levels for Teacher Recommendation:

- 80% or higher in Courses 311, 305, 321, 320
- Score of Proficient or Advanced on Keystone Biology Exam

Genetics<sup>CH</sup> Course 368 0.5 Credit EL Grades: 11,12 HAC Access

This course provides a study of genetics, most specifically human genetics. This course will specifically cover the biochemistry of DNA and chromosomes, human genetics, genetic diseases and disorders and genetic technologies. The course will include laboratory exercises, statistical analysis, and long-term projects.

#### Prerequisite Course:

- Biology 311 CP or 305 Hn

#### Recommended Academic Performance Levels for Teacher Recommendation:

- 80% or higher in Course 311 or 305
- Score of Proficient or Advanced on Keystone Biology Exam

Zoology<sup>CH</sup> Course 369 0.5 Credit EL Grades: 11,12 HAC Access

This course provides an introductory study of all members of the animal kingdom. This course is designed to cover evolution as it applies to the animal kingdom and the taxonomy of the animal kingdom. The course will survey the animal kingdom from the simple invertebrates through mammals. The course will include lab work and cooperative projects.

#### Prerequisite Course:

- Biology 311 CP or 305 Hn

#### Recommended Academic Performance Levels for Teacher Recommendation:

- 80% or higher in Course 311 or 305
- Score of Proficient or Advanced on Keystone Biology Exam

Meteorology<sup>CH</sup> Course 373 0.5 Credit EL Grades: 10,11,12 HAC Access

**REVISION – CREDIT VALUE FROM 1 TO 0.5**

This course is a study of the earth's atmosphere and weather-related phenomena. Major principles of meteorology will be addressed by long-term study of real time data sources from the Internet. The students will study the structure of the atmosphere, basic meteorological principles, weather maps and severe weather systems.

Exploring the Cosmos<sup>CH</sup> Course 374 0.5 Credit EL Grades: 10,11,12 HAC Access

This course introduces the field of astronomy designed to provide an overview of the subject, including basic physical concepts involving planets, stars, galaxies, and cosmological distances. The course is designed to emphasize conceptual understanding and an appreciation for the discovery process. Besides project-based classroom work, students will complete an observational experience as well as a current event presentation to the class.

Prerequisite Course:

- Successful completion of Algebra I 411

Forensic Science<sup>CH</sup> Course 379 0.5 Credit EL Grades: 10,11,12 HAC Access

This course will cover updated techniques, practices and procedures used in forensic science. Students will participate in forensic analysis and the proper procedures for collection and preservation of evidence at crime scenes. Students will investigate new technologies used by forensic scientists. Discussions of the role probability plays in interpreting the significance of scientifically evaluated evidence will be incorporated in this course. Students will study actual cases to see the role of forensic science in criminal investigations.

Prerequisite Course:

- Biology 311 CP or 305 Hn

Recommended Academic Performance Levels for Teacher Recommendation:

- 80% or higher in Course 311 or 305

Hn The Great Diseases<sup>CH</sup> Course 380 0.5 Credit EL Grades: 11,12 HAC Access

**REVISED COURSE: Course Weight**

Engaging students in the biomedical sciences while they are still in high school is a critical first step toward educating a scientifically literate citizenry. The Great Diseases course is a highly-engaging, inquiry-based curriculum that focuses on biomedical research in the context of four "great diseases" that challenge global health – infectious, neurological, metabolic and cancer. This course uses case-study and innovative, and life-relevant content to improve science engagement and health literacy. The Great Diseases curriculum, in partnership with the Tufts University School of Medicine, presents complex global health issues in ways that are both innovative and personally relevant to high school students. This course is designed for students who successfully completed biology and chemistry.

Prerequisite Course:

- Biology 311 CP or 305 Hn
- Chemistry 321 CP or 320 Hn

Recommended Academic Performance Levels for Teacher Recommendation:

- 80% or higher in Courses 311, 305, 321, 320
- Score of Proficient or Advanced on Keystone Biology Exam

## Science – Advanced Placement Course Offerings

|   |              |               |               |            |
|---|--------------|---------------|---------------|------------|
| AP Biology <sup>CH</sup><br><i>Advanced Placement</i> | Course 350BI | 1.5 Credit EL | Grades: 11,12 | HAC Access |
|---|--------------|---------------|---------------|------------|

This course is designed to be the equivalent of a first-year college course in Biology and has been developed according to the new guidelines of the College Board. In-depth topics of study include molecular genetics and evolution, cell structure and energy transformation, population ecology, plants, and animals. The required lab component of the course includes investigations and technologies in areas such as recombinant DNA technology, aquatic productivity, botany and biochemistry, and comparative vertebrate dissections, will help students improve written and oral communication skills. This course follows the AP curriculum. This course will have a summer assignment.

### Prerequisite Course:

- Biology 311 CP or 305 Hn
- Chemistry 321 CP or 320 Hn

### Recommended Academic Performance Levels for Teacher Recommendation:

- 84% or higher in Course 305 and Course 320
- 94% or higher in Course 311 and Course 321

|   |              |               |               |            |
|---|--------------|---------------|---------------|------------|
| AP Chemistry <sup>CH</sup><br><i>Advanced Placement</i> | Course 351CH | 1.5 Credit EL | Grades: 11,12 | HAC Access |
|---|--------------|---------------|---------------|------------|

This course is designed to be the equivalent of a first-year college course. In AP Chemistry students will master fundamental principles of chemistry and develop competence in problem solving. The areas of study include a highly rigorous treatment of the structure of matter, the status of matter, chemical reactions, and descriptive chemistry. There is also a strong laboratory component for the course. This course will have a summer assignment.

### Prerequisite Course:

- Chemistry 321 CP or 320 Hn
- Algebra II 430 Hn, Geometry/Math Analysis 420 Hn, or Pre-Calculus 458 Hn

### Recommended Academic Performance Levels for Teacher Recommendation:

- 94% or higher in Course 305 and Course 320
- 84% to 93% in Course 320 and Course 321 [Teacher Recommendation]
- 90% or higher in Course 430 | Course 420 | Course 458

|  |            |               |           |            |
|--|------------|---------------|-----------|------------|
| AP Physics C: Mechanics <sup>CH</sup><br><i>Advanced Placement</i> | Course 352 | 1.0 Credit EL | Grade: 12 | HAC Access |
|--|------------|---------------|-----------|------------|

An advanced mechanics course offered to students who already completed a semester of physics (honors preferred). Taking AP Calculus concurrently, or in the past is also recommended. The course will take a calculus-based approach to exploring the topics covered in introductory physics including kinematics, dynamics, work & energy, momentum, rotation, gravitation, and oscillations.

### Prerequisite Course:

- Advanced Placement Physics 1 355, or
- Physics 330 Hn

- Advanced Placement Calculus AB 460 or BC 461 [Completion or concurrent enrollment]

Recommended Academic Performance Levels for Teacher Recommendation:

- 84% or higher in Course 355
- 94% or higher in Course 330
- 84% to 93% in Course 330 [Teacher Recommendation]
- Concurrent Enrollment or Successful Completion of Course 460 or Course 461

|                            |            |               |               |            |
|----------------------------|------------|---------------|---------------|------------|
| AP Physics 2 <sup>CH</sup> | Course 356 | 1.0 Credit EL | Grades: 11,12 | HAC Access |
| <i>Advanced Placement</i>  |            |               |               |            |

This is an AP physics course serving as an algebra-based survey of classical mechanics, electricity & magnetism, thermodynamics, fluids, waves, optics, & nuclear physics. Skills of algebra, geometry, and trigonometry will be integrated freely and extensively in the course, both in the formulation of physical laws and in the solutions of problems. Students are expected to manipulate algebraic expressions involving multiple variables and should understand basic trigonometric functions. The student will be required to conduct experiments and compile data into lab reports. This course follows the AP curriculum and will prepare students for the AP Physics 2 exam.

Prerequisite Course:

- Advanced Placement Physics 1 355, or
- Physics 330 Hn
- Pre-Calculus 458 Hn

Recommended Academic Performance Levels for Teacher Recommendation:

- 94% or higher in Course 355 or Course 330
- 84% to 93% in Course 355 or Course 330 [Teacher Recommendation]
- 90% or higher in Course 458

|  |            |               |               |            |
|--|------------|---------------|---------------|------------|
| AP Environmental Science <sup>CH</sup> | Course 362 | 1.0 Credit EL | Grades: 11,12 | HAC Access |
| <i>Advanced Placement</i>              |            |               |               |            |

Prerequisite: Teacher recommendation along with recommended standards of academic performance as follows:  
 Grade of 94% or higher in 305/306, 311, 320 or 321  
 Grade of 84-93% in 305, 306, 311, 320 or 321 requires teacher recommendation

This course will provide scientific principles, concepts, and methodologies required to understand the interrelationship of the natural world, to identify and analyze environmental problems, to evaluate risks associated with these problems and to examine alternative solutions. This class includes a strong lab component. Topics include energy flow, the biosphere, the human population, renewable and nonrenewable resources, environmental quality, and global change. This course follows the AP curriculum. This course will have a summer assignment.

Prerequisite Course:

- Biology 311 CP or 305 Hn
- Chemistry 321 CP or 320 Hn

Recommended Academic Performance Levels for Teacher Recommendation:

- 94% or higher in Courses 311, 305, 321, or 320
- 84% to 93% in Course 305, Course 311, Course 320, or Course 321 [Teacher Recommendation]

**DCCC Course # ESS 102 Introduction to Astronomy or ESS 103 Introduction to Astronomy Laboratory (Optional)**

This college-level course is designed to introduce students to the science of astronomy, its history, and its importance as an influence on our view of humankind. Students will conduct astronomical observations using software, telescopes, and star charts to study objects in the night sky. Practical observational activities are designed to foster a conceptual understanding of how objects from great distances are studied from the earth. This is a rigorous textbook driven course intended for non-science majors to satisfy one of their college science credit requirements. This is a College Academic Learning Goal (CALG) designated course for Scientific Inquiry through DCCC.

This course is designed to introduce students to the science of astronomy, its history, and its importance as an influence on our view of humankind. The course is intended for non-science majors. Upon successful completion of this course, students should be able to: describe the night sky, trace the history of astronomy, describe the important properties of stars, describe the general characteristics of the solar system, discuss the discovery and nature of the Milky Way Galaxy and different types of galaxies, and discuss the possibility of life existing elsewhere in the universe.

Prerequisites:

- Satisfactory score on the Accuplacer exam or SAT
- 75% or higher in Course 321 or Course 431

## Mathematics

The Springfield High School Mathematics department offers programs that will provide students with mathematics courses appropriate to their future goals. From Algebra I to Advanced Placement (AP) Calculus, the mathematics curriculum has offerings to meet each student's specific needs. All courses are designed to prepare students to use mathematics effectively in today's world. The critical skills of problem-solving, logical reasoning and decision-making are incorporated and developed in all courses. Recognizing the importance of technology in today's world, the department emphasizes the use of technology in all courses in order to enable students to develop superior skills in this area.

|                              |            |               |          |                |
|------------------------------|------------|---------------|----------|----------------|
| Algebra I / CP <sup>CH</sup> | Course 411 | 1.0 Credit MA | Grade: 9 | Recommendation |
|------------------------------|------------|---------------|----------|----------------|

The goal of this course is to develop algebraic skills and concepts and to enhance problem solving ability that every student needs to succeed in college, technical school, or the working world. A secure foundation in basic mathematical skills, fractions, and decimals is essential for success. Topics covered in this course include number theory, polynomial expressions and equations, products and factors of polynomials, coordinate graphing, graphing linear equations, determining, and analyzing the slope of lines, probability, and radical and rational expressions. Algebra skills and concepts needed to solve equations, inequalities and systems of equations will be developed. Algebraic problem-solving techniques will be employed to solve relevant applications. Graphing calculator technology will be introduced. All topics in this course will prepare students for successful completion of the Algebra I Keystone exam. A TI Graphing Calculator is recommended.

### Prerequisite Course:

- Successful completion of Math 8, Pre-Algebra or the equivalent

|                             |            |               |              |
|-----------------------------|------------|---------------|--------------|
| Hn Algebra II <sup>CH</sup> | Course 430 | 1.0 Credit MA | Grades: 9,10 |
|-----------------------------|------------|---------------|--------------|

The fast-paced nature of the honors level course relies on students possessing strong, independent work habits. Students will experience a fast-paced, challenging investigation of many topics including transformations of linear, quadratic, and polynomial functions, modeling with linear, quadratic, polynomial, exponential, and logarithmic functions, solving linear and non-linear systems, operations with polynomial functions, exploring radical functions, and working with sequences and series. Graphing calculator technology will accompany students throughout the course. Topics will be covered in more depth than in 431Algebra II/CP. All topics covered in this course will prepare students for successful completion of the Keystone Algebra Exam.

### Prerequisite Course:

- Geometry at ETR
- Algebra I 411 CP

### Recommended Academic Performance Levels for Teacher Recommendation:

- 94% or higher in Geometry at ETR
- 96% or higher in Course 411 or Algebra I at ETR

|                              |            |               |                 |
|------------------------------|------------|---------------|-----------------|
| Algebra II /CP <sup>CH</sup> | Course 431 | 1.0 Credit MA | Grades: 9,10,11 |
|------------------------------|------------|---------------|-----------------|

Algebra II is a demanding course designed to challenge the student through a more thorough investigation of many topics, including transformations of linear, quadratic, and polynomial functions, modeling with linear, quadratic, polynomial, exponential, and logarithmic functions, solving linear and non-linear systems, operations with polynomial functions, exploring radical functions, working with sequences, and investigating probability. Graphing calculator technology will accompany

students throughout the course. Graphing calculator technology is a course requirement. All topics covered in this course will prepare students for successful completion of the Keystone Algebra Exam.

Prerequisite Course:

- Geometry at ETR
- Algebra I 411 CP

Recommended Academic Performance Levels for Teacher Recommendation:

- < 83% in Geometry at ETR
- 84% to 95% in Course 411

|   |            |               |                  |
|---|------------|---------------|------------------|
| Hn Geometry   Math Analysis <sup>CH</sup> | Course 420 | 1.0 Credit MA | Grades: 10,11,12 |
|---|------------|---------------|------------------|

This course is recommended for those students who have completed Honors Algebra II or who have completed Algebra II in high school and are looking for a rigorous course. Students are expected to have a solid understanding of algebraic processes. This course provides a well-rounded mathematical experience that exposes students to a variety of rigorous topics across multiple disciplines. Among these, students will explore advanced quantitative concepts connected to algebraic and graphical representations, learn to describe the relationships between variables in linear, quadratic, and exponential models, and empower them to manipulate and analyze advanced mathematical expressions. A survey of data analysis follows including investigations of relationships between two variables, probability calculations, parameter estimation, measures of center, and scrutiny of data collection methods. The course culminates with a thorough investigation of Geometry - including, but not limited to properties of polygons, triangles, quadrilaterals, circles, perpendicular and parallel lines, bisectors, congruence transformations, similarity transformations, perimeters, areas, and volumes. Successful completion of the class will leave the students well prepared for advanced pre-calculus and/or statistics coursework.

Prerequisite Course:

- Algebra II 430 Hn or 431 CP

Recommended Academic Performance Levels for Teacher Recommendation:

- 84% or higher in Course 430
- 94% or higher in Course 431

|  |            |               |                  |
|--|------------|---------------|------------------|
| Geometry   Math Analysis <sup>CH</sup> | Course 421 | 1.0 Credit MA | Grades: 10,11,12 |
|--|------------|---------------|------------------|

This course provides a well-rounded mathematical experience that exposes students to a variety of rigorous topics across multiple disciplines. Among these, students will explore advanced quantitative concepts connected to algebraic and graphical representations, learn to describe the relationships between variables in linear, quadratic, and exponential models, and empower them to manipulate and analyze advanced mathematical expressions. A survey of data analysis follows including investigations of relationships between two variables, probability calculations, parameter estimation, measures of center, and scrutiny of data collection methods. The course culminates with a thorough investigation of Geometry - including, but not limited to properties of polygons, triangles, quadrilaterals, circles, perpendicular and parallel lines, bisectors, congruence transformations, similarity transformations, perimeters, areas, and volumes. Successful completion of the class will leave the students well prepared for advanced pre-calculus and/or statistics coursework.

Prerequisite Course:

- Successful completion of Algebra II 430 Hn or 431 CP

**NOTE: Students entering Honors Pre-Calculus from CP Geometry and/or CP Algebra II will be required to meet with the Honors Pre-Calculus teacher and complete summer work before enrolling in the class.**

This course is recommended for mathematics students who have completed Honors Algebra II and Honors Geometry. In this course students will have daily experience with graphing calculator technology in the investigation of such topics as functions and models, trigonometric functions and their inverses, trigonometric identities, explicit and recursive formulas of sequences, Pascal's Triangle and the Binomial Theorem, ellipses and hyperbolas, and the logic of solving inequalities.

Due to the nature of this Honors course, in-depth discussions, proofs, and extension of certain topics and additional projects and/or assignments will be evident throughout the course. Upon successful completion of this course, students will be prepared to take AP Calculus.

Prerequisite Course:

- Algebra II 430 Hn or 431 CP [Grade 9 with completion of Geometry in Grade 8 at ETR]
- Geometry | Math Analysis 420 Hn or 421 CP at SHS

Recommended Academic Performance Levels for Teacher Recommendation:

- 84% or higher in Course 430 or Course 420
- 94% or higher in Course 431 or Course 421

This course is recommended for those math students who have completed CP Algebra II and CP Geometry. In this course students will have daily experience with graphing calculator technology in the investigation of such topics as functions and models, trigonometric functions and their inverses, and trigonometric identities.

Prerequisite Course:

- Algebra II 430 Hn or 431 CP [Grade 9 with completion of Geometry in Grade 8 at ETR]
- Geometry | Math Analysis 420 Hn or 421 CP at SHS

Recommended Academic Performance Levels for Teacher Recommendation:

- 74% or higher in Course 421

This course is recommended for those students who have completed Honors Pre-Calc who seek exposure to calculus in a non-AP environment. In this course students will continue their daily experience with graphing calculator technology. Class time will be split between an initial deep review of Pre-Calculus topics and an introduction to Differential Calculus concepts. Pre-Calculus review topics will include polynomials, the Fundamental Theorem of Algebra, imaginary numbers, polar coordinates, unit circle trigonometry and trigonometric identities, and proofs with trigonometric identities. Calculus topics will include limits and continuity, derivatives, applications of derivatives, chain rule, and mean value theorem.

Prerequisite Course:

- Hn Pre-Calculus 458
- CP Pre-Calculus 459

Recommended Academic Performance Levels for Teacher Recommendation:

- 84% to 93% in Course 458
- 94% or higher in Course 459



This course is designed to meet the mathematical and research needs of students who plan to enter such fields as economics, business, education, psychology, sociology, biology, and medicine, as well as science and mathematics. It is considered excellent preparation for usual college courses offered in these fields. The topics covered in the course include measurement scales, sampling techniques, study design, measures of center and dispersion, probability, estimation of confidence intervals, normal, binomial, geometric, and Poisson distributions, sampling distributions, hypothesis testing, linear regression, chi-square tests of independence and goodness of fit, one-way analysis of variance, and tests of homogeneity of variance.

Hn Probability and Statistics is an interest driven course or a possible 4<sup>th</sup> credit math option for students who wish to pursue a non-Calculus based math class. For students moving from Geometry or Pre-Calculus to Hn Prob and Stat, please use the following performance levels as a guide when deciding between Hn Prob and Stat and higher level Calculus based courses:

**Prerequisite Course:**

- Algebra II 430 Hn or 431 CP
- Geometry | Math Analysis 420 Hn or 421 CP

**Recommended Academic Performance Levels for Teacher Recommendation:**

- < 74% in Course 420 or Course 459
- < 84% in Course 421 or Course 458

**Mathematics – Advanced Placement Course Offerings**

This is a rigorous, time-consuming, advanced placement course, which introduces the major concepts and tools for collecting, analyzing, and drawing conclusions from data. The topics for AP Statistics are divided into four major themes: exploratory analysis, planning a study, probability, and statistical inference. This course follows the AP curriculum. Students engaged in the college admission process should understand that prospective colleges want to see high school students enrolled in AP mathematics courses as evidence that the student is taking a challenging, rigorous course load.

**Prerequisite:** It is recommended that students achieve the following performance levels:

- 84% or higher in Honors Mathematics classes in grades 9-11
- 94% or higher in CP Mathematics classes in grades 9-11

**Advanced Placement Calculus AB and BC**

|                        |                  |                   |
|------------------------|------------------|-------------------|
| Topic A                | Topic B          | Topic C           |
| Review of Pre-Calculus | Calculus I (101) | Calculus II (201) |

|   |            |                     |               |            |
|---|------------|---------------------|---------------|------------|
| <b>AP Calculus AB<sup>CH</sup></b><br><i>Advanced Placement</i> | Course 460 | 1.0 Credit MA or EL | Grades: 11,12 | HAC Access |
|---|------------|---------------------|---------------|------------|

This rigorous advanced placement course follows the College Board Advanced Placement (AP) Curriculum Framework.

Students engaged in the college admission process should understand that prospective colleges want to see high school students enrolled in AP mathematics courses as evidence that the student is taking a challenging, rigorous course load.

This Advanced Placement course will include the study of two fundamental problems of Calculus:

- 1) finding the slope of the tangent to a curve which is determined by the derivative, and
- 2) finding the area of a region under a curve, or the volume within a curved surface of revolution, which is determined by the definite integral.

The focus of study will include strategies for differentiation and integration of various functions (algebraic, trigonometric, and transcendental). Optimization techniques will be used to determine the maximum and minimum values of a data set and/or rate of change for a given data set.

Prerequisite Course:

- Hn Differential Calculus 442
- Hn Pre-Calculus 458

Recommended Academic Performance Levels for Teacher Recommendation:

- 84% or higher in Course 442 or Course 458

|   |            |                     |               |            |
|---|------------|---------------------|---------------|------------|
| <b>AP Calculus BC<sup>CH</sup></b><br><i>Advanced Placement</i> | Course 461 | 1.0 Credit MA or EL | Grades: 11,12 | HAC Access |
|---|------------|---------------------|---------------|------------|

This rigorous advanced placement course follows the College Board Advanced Placement (AP) Curriculum Framework.

This Advanced Placement course will include the study of two fundamental problems of Calculus:

- 1) finding the slope of the tangent to a curve which is determined by the derivative, and
- 2) finding the area of a region under a curve, or the volume within a curved surface of revolution, which is determined by the definite integral.

The focus of study will include strategies for differentiation and integration of various functions (algebraic, trigonometric, and transcendental). Optimization techniques will be used to determine the maximum and minimum values of a data set and/or rate of change for a given data set. The AP Calculus BC course is more rigorous and covers all the concepts and procedures of Calculus AB plus the additional content tested on the BC exam including more advanced integration techniques, work with sequences and series, Taylor polynomials, and calculus techniques applied to parametric, polar and vector functions.

Prerequisite Course:

- Hn Differential Calculus 442
- Hn Pre-Calculus 458

Recommended Academic Performance Levels for Teacher Recommendation:

- 94% or higher in Course 442 or Course 458

## World Language

The need for all learners to become competent in their ability to communicate with people of other countries is increasingly apparent due to instantaneous worldwide communication networks and an economy that is globally interconnected. Proficiency in languages other than one's own is a definite asset to the workplace, and for personal enrichment, especially when traveling. The World Language Department offers first and second level courses in Spanish, German, American Sign Language, along with higher levels of Spanish and German. Latin is offered as a one level elective course. With each additional year of study, students improve their linguistic fluency and grammatical accuracy, and continue to gain insight into the culture and literature of the language they are studying.

|                         |            |               |              |            |
|-------------------------|------------|---------------|--------------|------------|
| Spanish I <sup>CH</sup> | Course 521 | 1.0 Credit WL | Grades: 9,10 | HAC Access |
|-------------------------|------------|---------------|--------------|------------|

The purpose of this course is to begin to develop fundamental speaking, listening comprehension, reading, and writing skills. Students will gain a knowledge of and sensitivity towards the culture of the Spanish-speaking peoples of the world. Activities in this course will help the student master basic vocabulary, use questions and answers, develop listening comprehension skills, read elementary selections, and study the customs of Spanish-speaking countries. Audio selections, videos, and on-line resources will aid in furthering competency. Spanish I is intended for students who have never taken Spanish or for those who have had a minimal exposure. Students successfully completing the ETR Spanish I program should enroll in Spanish II.

|                          |            |               |                 |            |
|--------------------------|------------|---------------|-----------------|------------|
| Spanish II <sup>CH</sup> | Course 522 | 1.0 Credit WL | Grades: 9,10,11 | HAC Access |
|--------------------------|------------|---------------|-----------------|------------|

This course is intended for students who have successfully completed Spanish I. In order to continue the development of basic speaking, listening, reading, and writing skills, students will learn to use the vocabulary appropriate to their level in meaningful spoken and written sentences and brief conversations. Through the reading of a short novel and cultural readings from the textbook, discussions, and projects, students will be better able to understand some of the cultural aspects of the various Spanish-speaking peoples. On-line resources, videos, and an audio program are integral parts of this course.

Prerequisite: Successful completion of Course 521

|                           |            |                     |                  |            |
|---------------------------|------------|---------------------|------------------|------------|
| Spanish III <sup>CH</sup> | Course 523 | 1.0 Credit WL or EL | Grades: 10,11,12 | HAC Access |
|---------------------------|------------|---------------------|------------------|------------|

The purpose of this course is to enable Spanish students to increase proficiency in conversation and writing. A continued development of fundamental vocabulary, listening comprehension, reading, and writing skills will be stressed. Students will read short stories and cultural selections in Spanish. Special projects will be assigned to promote speaking and writing proficiency. On-line resources and an audio program are integral parts of the course.

Prerequisite: Successful completion of Course 522

|                                 |            |               |               |            |
|---------------------------------|------------|---------------|---------------|------------|
| Honors Spanish IV <sup>CH</sup> | Course 525 | 1.0 Credit EL | Grades: 11,12 | HAC Access |
|---------------------------------|------------|---------------|---------------|------------|

In this course students will work on continuing to develop advanced listening, reading, speaking, and writing skills, with an emphasis on both oral and written communication skills. Gaining fluency in the language using cultural readings, situational vocabulary, and more advanced structures will continue to be the primary focus of the course. Students will create multi-media projects and write extensively. A variety of teaching techniques and materials will be used, on-line resources, audio recordings, and video resources will aid in furthering competency in listening comprehension, speaking and cultural awareness.

Prerequisite Course:

- Spanish III 523

Recommended Academic Performance Levels for Teacher Recommendation:

- 84% or higher in Course 523

|                                   |            |               |           |            |
|-----------------------------------|------------|---------------|-----------|------------|
| AP Spanish Language <sup>CH</sup> | Course 526 | 1.0 Credit EL | Grade: 12 | HAC Access |
| <i>Advanced Placement</i>         |            |               |           |            |

The Advanced Placement Spanish course is an intensive course of instruction that follows the AP Spanish Language curriculum and continues to develop all four communication skills. Using vocabulary enrichment, varied reading materials, and discussion on a variety of topics, students will be able to communicate more effectively in written and spoken Spanish. Audio and video tapes, as well as on-line resources will aid in furthering competency in listening comprehension, speaking, and cultural awareness. Students must take the Advanced Placement Exam to earn the AP grade weight.

Prerequisite Course:

- Spanish III 525

Recommended Academic Performance Levels for Teacher Recommendation:

- 84% or higher in Course 525

**Adjustments to German course offerings and learning experiences for 2023-2024 School Year:**

German I will not be offered at SHS for the 2023-2024 School Year.

German II will be offered in one of two ways depending on student interest and schedule constraints:

Scenario 1 – Students will take German II online for Semester 1 and in-person Semester 2.

Scenario 2 – Students will take German II in-person in a two-period block Semester 2.

German III will be offered in a two-period block Semester 2.

German IV will be offered in a two-period block Semester 2.

|                         |            |               |                 |            |
|-------------------------|------------|---------------|-----------------|------------|
| German II <sup>CH</sup> | Course 532 | 1.0 Credit WL | Grades: 9,10,11 | HAC Access |
|-------------------------|------------|---------------|-----------------|------------|

Students will continue to develop their communicative proficiency through storytelling, role-playing, readings, and interacting with the teacher and their classmates, as well as through use of a strongly integrated audio, video, and software program. Grammar and vocabulary will be expanded as students cover topics such as giving directions, shopping for gifts,

talking about past vacations, and food and physical activities as they relate to health. Students will exchange letters with e-pals in German speaking countries in order to more personally expand their understanding of the culture.

Prerequisite: Successful completion of German I at ETR

|                          |            |               |               |            |
|--------------------------|------------|---------------|---------------|------------|
| German III <sup>CH</sup> | Course 533 | 1.0 Credit WL | Grades: 10,11 | HAC Access |
|--------------------------|------------|---------------|---------------|------------|

***It is strongly recommended that German II was completed with a minimum grade of 84% to be successful in this course.***

Students will continue to develop their communicative proficiency through storytelling, role-playing, and interacting with the teacher and their classmates, as well as through use of a strongly integrated audio, video, and software program. Emphasis will be placed on practicing real-life situations one might encounter on a trip to a German speaking nation. Students will read traditional folk and fairy tales, as well as more contemporary stories. An additional video series will help students hone their listening and speaking skills and gain an ever-growing awareness of the culture and customs of the people.

Prerequisite: Successful completion of German II 532

|                         |            |               |               |            |
|-------------------------|------------|---------------|---------------|------------|
| German IV <sup>CH</sup> | Course 534 | 1.0 Credit EL | Grades: 11,12 | HAC Access |
|-------------------------|------------|---------------|---------------|------------|

Prerequisite Course:

- German III 533

Recommended Academic Performance Levels for Teacher Recommendation:

- 84% or higher in Course 533

|                     |            |                     |                    |            |
|---------------------|------------|---------------------|--------------------|------------|
| Latin <sup>CH</sup> | Course 561 | 1.0 Credit WL or EL | Grades: 9,10,11,12 | HAC Access |
|---------------------|------------|---------------------|--------------------|------------|

This course is intended to introduce the students to the structure and syntax of the Latin language, and to examine the parallels between Latin and English syntax, structure, and vocabulary. This course will enable students to translate and compose introductory Latin. Students will be guided through the reading of elementary passages, as well as in the preparation of projects. Latin is the foundational language of the sciences, medicine, and law; students pursuing these fields after high school should consider Latin a prerequisite. This course will also benefit students taking the SAT and ACT.

|  |            |               |              |            |
|--|------------|---------------|--------------|------------|
| American Sign Language I <sup>CH</sup> | Course 570 | 1.0 Credit WL | Grades: 9,10 | HAC Access |
|--|------------|---------------|--------------|------------|

The purpose of this course is to begin to develop basic ASL skills. Students are taught basic grammar, vocabulary, fingerspelling, numbers and cultural information related to the Deaf Community. Videos and on-line resources will aid in furthering competency. ASL 1 is intended for students who have never taken ASL or for those who had a minimal exposure.

|   |            |               |               |            |
|---|------------|---------------|---------------|------------|
| American Sign Language II <sup>CH</sup> | Course 572 | 1.0 Credit WL | Grades: 10,11 | HAC Access |
|---|------------|---------------|---------------|------------|

This course is designed as a continuation course for students who successfully completed ASL 1 and is designed to continue development of ASL expressive and receptive skills, grammar, vocabulary, fingerspelling, cultural awareness and related terminology. Videos and on-line resources will aid in furthering competency.

Prerequisite: Successful completion of ASL I 570

### Administrative Technology Education: Business, Finance, and Accounting

The Business and Administrative Technology Department at Springfield High School is designed to provide students the option of becoming involved in specific aspects of the business and technology world that parallels their personal and career interests. Students can develop the knowledge and skills needed to succeed in business and to function more efficiently in the technologically driven 21st Century. The program develops lifelong learning skills that foster flexible career paths and confidence in adapting to a workplace that demands constant retooling.

|                            |            |               |                 |            |
|----------------------------|------------|---------------|-----------------|------------|
| Introduction to Web Design | Course 630 | 0.5 Credit EL | Grades: 9,10,11 | HAC Access |
|----------------------------|------------|---------------|-----------------|------------|

This course assumes no previous experience in web design. Students learn to identify the components and characteristics of high-quality sites and how to create them. The class covers file structure and organization, basic graphic editing as well as color and design strategies. We also explore some creative and fun features including animation, sound, and interaction. The class culminates with the creation of an all-inclusive web site displaying all their work in this class.

|                            |            |               |                 |            |
|----------------------------|------------|---------------|-----------------|------------|
| Elements of Graphic Design | Course 650 | 0.5 Credit EL | Grades: 9,10,11 | HAC Access |
|----------------------------|------------|---------------|-----------------|------------|

This course explores graphic communication through the understanding of the elements and principles of design as well as the design process from idea development through the final execution of a document. Professionals use the concepts explored in this course in the following commercial based disciplines: advertising, graphic design, web design, illustration, broadcast design, photography and game design and many others. Software training includes use of Adobe Illustrator and Photoshop.

|                                |            |               |                  |            |
|--------------------------------|------------|---------------|------------------|------------|
| Applications of Graphic Design | Course 651 | 0.5 Credit EL | Grades: 10,11,12 | HAC Access |
|--------------------------------|------------|---------------|------------------|------------|

This course effectively pairs the basics of graphic design with real world projects and applications. Through a project-based production approach, students learn to research and analyze all components of the design process and set the stage for independent design projects. Students are exposed to more advanced digital techniques using Adobe Illustrator and Photoshop including but not limited to image manipulation through masking and layers, multiple selection methods, saving and exporting, scanning, retouching, pen tool, and cutting-edge techniques used in industry today.

Prerequisite: Successful completion of Elements of Graphic Design 650

|                       |             |               |              |            |
|-----------------------|-------------|---------------|--------------|------------|
| Computer Applications | Course 904A | 0.5 Credit EL | Grades: 9,10 | HAC Access |
|-----------------------|-------------|---------------|--------------|------------|

Computer Applications is designed to develop microcomputer skills using Microsoft Office applications. Software programs covered in the course include word processing, database development, spreadsheets, and presentation development. Specifically, students can apply their skills to school assignments for their academic courses in Microsoft Office Word, Excel, PowerPoint, and Access.

|                                      |            |               |               |            |
|--------------------------------------|------------|---------------|---------------|------------|
| Fundamentals of Computer Programming | Course 945 | 0.5 Credit EL | Grades: 10,11 | HAC Access |
|--------------------------------------|------------|---------------|---------------|------------|

This course is designed to build foundational skills in programming to prepare students for AP Computer Science A. Students will learn to design and implement computer programs that solve relevant, real-world problems. This course will emphasize problem-solving and the development of algorithms. The use of hands-on experiences and examples for students to apply programming tools and solve complex problems will be utilized as students learn Java programming language.

Prerequisite Course:

- Algebra II 430 Hn or 431 CP

Recommended Academic Performance Levels for Teacher Recommendation:

- 84% or higher in Course 430 or Course 431

|               |            |               |                    |            |
|---------------|------------|---------------|--------------------|------------|
| IT Essentials | Course 950 | 0.5 Credit EL | Grades: 9,10,11,12 | HAC Access |
|---------------|------------|---------------|--------------------|------------|

This class is for those individuals who have a serious interest in computers and technology and are considering a career in IT. This class will focus on troubleshooting hardware/software issues throughout the building while working in conjunction with the High School and District Tech Departments. When students are not troubleshooting or assisting others in the building, they will work towards Dell Certification status.

|                         |            |               |                    |            |
|-------------------------|------------|---------------|--------------------|------------|
| IT and Computer Support | Course 951 | 0.5 Credit EL | Grades: 9,10,11,12 | HAC Access |
|-------------------------|------------|---------------|--------------------|------------|

Students need career readiness skills. Schools need additional technical support. This course provides students with the opportunity to develop their technical skills and customer service abilities by participating in a student-run help desk. Students will work in teams to provide support and assistance to fellow classmates and faculty with a variety of computer and technology-related issues.

Prerequisite: Successful completion of IT Essentials 950 or Teacher Recommendation/Approval

|                          |             |               |               |            |
|--------------------------|-------------|---------------|---------------|------------|
| Introduction to Business | Course 955A | 0.5 Credit EL | Grades: 10,11 | HAC Access |
|--------------------------|-------------|---------------|---------------|------------|

In this course we will explore the knowledge and skills needed to open, operate and run a business. We will learn how basic economics can affect business planning. We will understand social responsibility as it relates to economics and business creation. We will understand how to use the tools necessary to market, manage and operate a business in today's economy. This half year course serves as a survey of different aspects of the business world.

|                          |            |               |               |            |
|--------------------------|------------|---------------|---------------|------------|
| Marketing <sup>CHE</sup> | Course 956 | 1.0 Credit EL | Grades: 11,12 | HAC Access |
|--------------------------|------------|---------------|---------------|------------|

In this course we will be able to understand how to complete the process of marketing a product or service, starting with recognizing consumer needs. We will examine every aspect of the marketing mix (Product, Price, Promotion and Distribution). Students will be able to identify target markets and determine the potential of those markets. Students will be able to determine the types and levels of competition. Students will be able to analyze the marketing mix for a specific product or service to construct and present a comprehensive marketing plan.

|                                 |             |               |               |            |
|---------------------------------|-------------|---------------|---------------|------------|
| Money Management <sup>CHE</sup> | Course 958A | 0.5 Credit EL | Grades: 11,12 | HAC Access |
|---------------------------------|-------------|---------------|---------------|------------|

In this course we will explore the banking and credit system. We will understand how taxes and wages can affect our lives. We will understand how to properly manage our money by creating buying plans, setting limits, and maintaining a personal budget. We will understand how to use all the tools to live a financially responsible life.

*This course fulfills the Personal Finance & Money Management credit requirement.*

|                             |            |               |                  |            |
|-----------------------------|------------|---------------|------------------|------------|
| Accounting I <sup>CHE</sup> | Course 963 | 1.0 Credit EL | Grades: 10,11,12 | HAC Access |
|-----------------------------|------------|---------------|------------------|------------|

In this course we will be able to complete the full accounting cycles for a proprietorship and a merchandising business. We will be able to use the recorded data in order to generate financial statements such as income statements and balance sheets. Students will be able to use those statements to analyze the success or failure of the businesses. Accounting is a full year elective course filled with college level material that will give you a leg up, if you plan on majoring in business or plan on starting your own business.

*This course fulfills the Personal Finance & Money Management credit requirement.*

|                                   |            |               |               |            |
|-----------------------------------|------------|---------------|---------------|------------|
| Honors Business II <sup>CHE</sup> | Course 965 | 0.5 Credit EL | Grades: 11,12 | HAC Access |
|-----------------------------------|------------|---------------|---------------|------------|

This course continues our exploration of business, different fields of study within business and careers possible for young people with an understanding of business. In addition to the textbook, students discuss real business issues and current events directly related to business the economy and consumers. To add a little more fun to the class, students buy and sell stocks in the online Simulated Stock Market game where the winners walk away with small prizes and big bragging rights.

|   |            |                     |               |            |
|---|------------|---------------------|---------------|------------|
| AP Computer Science (A) <sup>CHE</sup><br><i>Advanced Placement</i> | Course 980 | 1.0 Credit EL or MA | Grades: 11,12 | HAC Access |
|---|------------|---------------------|---------------|------------|

This advanced placement course is offered to those students with excellent problem-solving ability and a keen interest in computer science as a career. The focus of this course is to provide students with a conceptual background in computer science. The major emphasis is on programming methodology, algorithm design, and object-oriented programming in the Java language. This course prepares a student for advanced placement in a college computer science program by means of the Advanced Placement Exam. All students enrolled in AP courses are required to take the College Board's Advanced Placement Exam.

Prerequisite Course:

- Algebra II 430 Hn or 431 CP

Recommended Academic Performance Levels for Teacher Recommendation:

- 84% or higher in Course 430 or Course 431



*Advanced Placement*

Computer Science Principles is a course that exposes students to the core concepts of computer science. Students will gain a broad base of knowledge and skill from a framework encompassing the big ideas of computing, creativity, abstraction, data and information, algorithms, programming, the internet, and global impact. Students also learn computer programming with an emphasis on problem-solving and logic development using computational tools in data analysis. Most projects are open-ended, and students will be working individually and collaboratively in pairs. Students create projects requiring written reflection reports and narration of design specification.

Prerequisite Course:

- Algebra II 430 Hn or 431 CP

Recommended Academic Performance Levels for Teacher Recommendation:

- 84% or higher in Course 430 or Course 431

## Applied Engineering and Innovative Technologies

Principles of Engineering & Construction Course 700 0.5 Credit EL Grades: 9,10,11,12 HAC Access

Are you interested in the fields of Engineering, Architecture or Robotics but it seems too intimidating? This course is designed to introduce and expose students to the possibilities of each of these STEM related fields. The Engineering Design Process will help guide the project-based learning in our fully functioning design lab, giving students hands-on experience in each field. Creativity in design will be emphasized and students will be exposed to industry standard equipment and software like 3D printers, laser engraver, AutoCAD, Revit, Google SketchUp, 3D Modeling and Robotics. This course is the foundation for exploring and developing your technical skills.

### NEW COURSE – REPLACES INDUSTRIAL MATERIALS I

Creative Product Design & Manufacturing Course 708 0.5 Credit EL Grades: 9,10,11 HAC Access

**Materials Fee: \$25**

This class is an entry level exploration of the processing of a variety of materials. Through Engineering Design, an emphasis is placed on the processes by which a product (or project) is developed as students use the various techniques of materials processing. Students will also learn the safe and proper use of hand tools and machinery. Materials utilized will focus on woods, plastics, metals, and implementing others when possible. Students will be tasked, individually and collaboratively, to solve a variety of design challenges through the creation of a functional (specified) (innovative) product. This course is a project-based, hands-on learning experience that will allow students to engage their minds in problem-solving. Design challenges may include designing and producing functional home products and designing and creating prototypes in response to a real-life problem-solving scenario.

### NEW COURSE – REPLACES INDUSTRIAL MATERIALS II

Design Thinking: Innovation & Creation Course 709 0.5 Credit EL Grades: 10,11,12 HAC Access

**Materials Fee: \$25**

This course is designed for students to research advanced concepts and product development individually and collaboratively in the field of materials processing as relates to prototype design. In addition to the safe and proper use of hand tools and machinery, students may also utilize and apply CNC Machining, laser engraving, and 3D printing techniques to their projects. Students will select topics and projects that utilize and expand upon acquired skills and concepts from the required level 1 course listed above. As students research, envision, create, test, and refine prototypes to solve real-world problem scenarios, an emphasis will be placed on advanced level projects, project design, problem solving, precise and accurate measuring techniques, and safety. Teamwork is also stressed in this course as students may work cooperatively when solving design problems. Using design thinking and the engineering design process, this course will be cognitively and kinesthetically engaging.

Prerequisite: Successful completion of 701A or 708

Architectural Design<sup>CHE</sup> Course 710 1.0 Credit EL Grades: 10,11,12 HAC Access

**Materials Fee: \$35**

In this course, students will focus on Architectural and Engineering Design concepts. Students will 3D model their “Dream House” using Revit, AutoCAD and Google SketchUp to bring theory to reality, as students construct their ¼ inch scale balsa wood model. Industry standard software and equipment will allow students to build a home from the ground up. From the

floor plan configurations, traffic flow patterns, electrical plans, all the way to elevation drawings, landscape design, site plans and renderings. Technical sketches will allow practice in measurement and accuracy of their drawings. Models and Technical Sketches will be put on display and judged at the annual Celebration of the Arts.

Engineering: Structural Design                      Course 715                      0.5 Credit EL                      Grades: 9,10,11,12                      HAC Access  
**Materials Fee: \$35**

This course offers students opportunities to explore pre-engineering and design concepts. The Engineering Design Process, Design Challenges and Engineering Notebooks will aid students in documenting their work and developing many iterations of their designs, through both models and prototypes. The project-based curriculum will expose students to different fields of study in Engineering. Areas of study include technical drawing by hand and AutoCAD, 3D modeling/printing, structural bridge design, electronics and the ethics of the engineering profession. This class would be beneficial for students who have a general interest in engineering but want to gain a deeper understanding of the various opportunities in the field so they can make more informed decisions regarding their future academic and career plans.

Prerequisite:      Successful completion of 700.

Robotics<sup>CHE</sup>    Course 716                      0.5 Credit EL                      Grades: 10,11,12                      HAC Access  
**Materials Fee: \$35**

This course offers students opportunities to explore pre-engineering concepts in robotics. Using Lego Mindstormer EV3s and VEX Virtual Reality Robots, students will develop computational thinking skills and will transition from block coding to Python programming. Design briefs and challenges are used to describe real life situations and to provide an authentic learning experience. VEXcode VR and engaging robotics-based activities will be used to learn about project flow, loops, conditionals, algorithms, and more. Learning coding will help students develop 21st-century job skills. Most of today's professional math and science fields have a computational component. Additionally, skills such as the ability to analyze and solve unstructured problems and to work with new information are extremely valuable in today's knowledge economy. This course will help students become creators, not just consumers, of technology.

**NEW COURSE**  
Survey of Building Trades                      Course 718                      0.5 Credit EL                      Grades: 11,12                      HAC Access  
**Materials Fee: \$50**

Students will have the opportunity to explore several skilled trades including carpentry, plumbing, electrical, and more. This course is designed to serve students who wish to understand more about skilled trades and careers. Through modified construction projects, students will gain experience, knowledge, skills and understanding. Theory in the classroom will be applied through hands-on application, helping to strengthen student problem solving and critical thinking skills necessary for career preparation.

## Art

|                            |            |               |                 |            |
|----------------------------|------------|---------------|-----------------|------------|
| Studio Art                 | Course 801 | 0.5 Credit EL | Grades: 9,10,11 | HAC Access |
| <b>Materials Fee: \$10</b> |            |               |                 |            |

Studio Art provides the opportunity for beginning art students as well as more advanced students to experiment with concepts, methods, and materials in the following areas: design, drawing, printmaking, painting and 3-D design. By studying the contributions of artists past and present and participating in studio work and critiques, students will gain a more critical appreciation of the value of art. Students will use the Internet as a research tool for art historical information. Students will be required to enter at least one piece of their artwork in the Celebration of the Arts exhibit. Students are required to supply an artist's sketchbook.

|                            |            |               |                  |            |
|----------------------------|------------|---------------|------------------|------------|
| Drawing and Design         | Course 803 | 0.5 Credit EL | Grades: 10,11,12 | HAC Access |
| <b>Materials Fee: \$10</b> |            |               |                  |            |

Focusing on building drawing and observation skills, exploring personal expression and creative problem-solving; this course allows you to grow your skills as an artist. Because we work with students who have varying skill levels/experience, the goal of this course is to take you where you are and grow your individual skills over the semester - even if you have no experience, you can expect success. You will be challenged to stretch your preconceived ideas of what you can do as an artist and to explore the fine art world of drawing & design. Using historical and contemporary artists as inspiration, you will create a series of drawings and paintings that hone your competence with a variety of drawing & design tools and techniques. By participating in self, peer and group critiques and learning to give actionable feedback, you will develop your ability to look at your own artwork in a deeper manner and allow you to write and speak clearly and thoughtfully about others' art. Art school representatives visit throughout the year to discuss career options and college planning. Open Studio sessions are available after school twice a week for advanced instruction opportunities. All students participate in the Celebration of the Arts exhibit. Students are required to supply an artist's sketchbook for the class.

|                            |            |               |                 |            |
|----------------------------|------------|---------------|-----------------|------------|
| Painting and Drawing       | Course 805 | 0.5 Credit EL | Grades: 9,10,11 | HAC Access |
| <b>Materials Fee: \$10</b> |            |               |                 |            |

Painting and Drawing students learn how to grow their skills as fine artists; honing drawing techniques in pencil, charcoal, pastel, and pen and ink as well as growing their observational skills. Students regularly participate in self, peer, and group critiques. The course provides opportunities for exploring career opportunities in art; familiarization with significant periods in art history; opportunities to exhibit work in local, regional and national competitions; and the opportunity to work from life and imagination. By learning to reach beyond imagined limitations, students explore, develop their craft and grow their observation, painting and drawing skills. Through their artwork, students responsibly utilize online reference materials, using the Internet as a tool for art historical research and familiarizing themselves with contemporary artists. Students are required to supply an artist's sketchbook and are required to enter at least one piece of their artwork in the Celebration of the Arts exhibit.

|                            |            |               |                 |            |
|----------------------------|------------|---------------|-----------------|------------|
| Functional Ceramics        | Course 811 | 0.5 Credit EL | Grades: 9,10,11 | HAC Access |
| <b>Materials Fee: \$20</b> |            |               |                 |            |

This course offers students the opportunity to create beautiful and unique ceramic pieces that can be used in their everyday lives. Students will do research, design, and create unique, well crafted, functional ceramic pieces. Students will engage in self, peer, and group critiques. Students learn a wide range of ceramic tools and building techniques through hands-on

learning. Students are required to enter at least one piece of their artwork in the Celebration of the Arts exhibit. Be prepared to get your hands dirty and find out why clay is one of the oldest building materials!

Sculptural Ceramics Course 813 0.5 Credit EL Grades: 9,10,11 HAC Access  
**Materials Fee: \$20**

This course offers students the opportunity to create beautiful and unique ceramic pieces that communicate their ideas, concepts, and emotions in a dynamic, 3-dimensional form like no other course can offer. Students will do research, design, and create dynamic, well crafted, original sculptures using clay. Students will engage in self, peer, and group critiques, and learn a wide range of ceramic tools and sculpting techniques through hands-on learning. Students are required to enter at least one piece of their artwork in the Celebration of the Arts exhibit. Clay sculptures have been made for thousands of years, come join to make sculptures that have never been made before!

Tile Making: Impression and Expression Course 815 0.5 Credit EL Grades: 10,11 HAC Access  
**Materials Fee: \$20**

This course offers students the opportunity to create beautiful and unique Ceramic Tile pieces that can be used to create an image, tell a story, or symbolize a deeper idea or concept. Students will do research, design, and create dynamic, well-crafted artwork using Ceramic Tiles. Students will engage in self, peer, and group critiques, and learn a wide range of ceramic tools and Tile Making techniques through hands-on learning. Students are required to enter at least one piece of their artwork in the Celebration of the Arts exhibit. Ceramic tiles are used all across the globe for decorative and functional purposes, come find out why!

Primitive Ceramics: Course 817 0.5 Credit EL Grades: 10,11,12 HAC Access  
Earth, Air, Fire and Water  
**Materials Fee: \$20**

We go seriously old school in Primitive Ceramics. By experimenting with primitive techniques including creating your own clay bodies (meaning we will walk to the creek and dig up and process our own clay), burnishing, smoke-firing, traditional and horsehair raku, and alternative finishes (we often use fire as a tool in this course). The results are often unpredictable and always beautiful. Focusing on independent research and design; students meet indigenous people's both historic and contemporary and their hand-constructed ceramic techniques. Students will work in a professional ceramic studio and actively participate in this unique artistic community. The Internet is used as a research tool. Using a digital portfolio, students will document their progress and problem-solving strategies. Students are required to enter at least one piece in the Celebration of the Arts exhibit.

Sculpture Course 819 0.5 Credit EL Grades: 10,11,12 HAC Access  
**Materials Fee: \$20**

This course offers students the opportunity to create beautiful and unique sculptures using a wide variety of materials, other than clay, that communicate a deeper idea, tell a story, in a dynamic, 3-dimensional form. Students will do research, design, and create original, well-crafted Sculptures. Students will engage in self, peer, and group critiques, and learn a wide range of tools and building techniques through hands-on learning. Students are required to enter at least one piece of their artwork in the Celebration of the Arts exhibit. Sculptures are and have a big part of every culture across the globe for thousands of years, come take your place in history!

|                            |            |               |                    |            |
|----------------------------|------------|---------------|--------------------|------------|
| Digital Art & Animation    | Course 820 | 0.5 Credit EL | Grades: 9,10,11,12 | HAC Access |
| <b>Materials Fee: \$15</b> |            |               |                    |            |

Drawing technology and digital art have changed drastically to fit the speed of the 21st century artist and this course will give students the opportunity and training needed to push their creative potential without limitations. Digital Sketchbook's curriculum allows students the opportunity to create dynamic, thought-provoking images using current professional tools such as the Wacom's Mobile Studio Pro pen and touch interface, Autodesk's Sketchbook Pro "user friendly" drawing and painting software, and Sketchup's 3D modeling capabilities. Tools that will allow art to be created directly on a computer screen with speed and precision. Wacom and Sketchbook pro are considered the creative industry's standard digital art software and hardware combination that is used by creative professionals around the world in 2D/3D animation studios, visual effects departments, comics, and photography. Companies such as Pixar, Disney, Ford, Blue Sky, Dreamworks, BMW, and countless other industries utilize these tools in some capacity. Students will draw, compose images correctly, explore animation techniques, manipulate perspective tools, create in a 3D space, develop narrative drawings such as comics and children's book illustrations, and modify their own drawings instantly just as the leading professionals.

- Time management of deadlines, utilizing on screen note taking with Microsoft OneNote, creative problem solving, managing a digital workflow are also a dedicated part of the curriculum.

Resources:

<http://www.wacom.com/en-us/products/pen-computers/wacom-mobilestudio-pro>

<https://www.sketchbook.com/?locale=en>

<https://www.sketchup.com/>

|                             |            |               |                  |            |
|-----------------------------|------------|---------------|------------------|------------|
| Special Effects Photography | Course 824 | 0.5 Credit EL | Grades: 10,11,12 | HAC Access |
| <b>Materials Fee: \$25</b>  |            |               |                  |            |

Special Effects allows students to experiment with specialized photography techniques not taught in the Digital or Portrait Photography courses. Techniques such as Bokeh, Double Exposure, Long Exposure, Composite, and High Dynamic Range photography. Students will have the opportunity to use Canon DSLR cameras with a variety of detachable lens at their disposal. Along with photographing with professional grade equipment students will work directly on screen with Wacom Mobile Studio Pro 13 tablet computers while editing in the industry standard digital imagery editing suites Adobe Photoshop and Lightroom.

- Time management of deadlines, utilizing on screen note taking with Microsoft OneNote, creative problem solving, managing a digital workflow are also a dedicated part of the curriculum.
- Students may sign out equipment from the photography department while enrolled in the course.
- Please visit Mr. Mann's class page for information and examples of photography projects.
- Similar to all art courses student work will be proudly displayed at Celebration of the Arts.
- This course utilizes Google Classroom and other Google applications

Resources:

<http://www.wacom.com/en-us/products/pen-computers/wacom-mobilestudio-pro>

<https://lightroom.adobe.com/>

|                            |            |               |                  |            |
|----------------------------|------------|---------------|------------------|------------|
| Portrait Photography       | Course 826 | 0.5 Credit EL | Grades: 10,11,12 | HAC Access |
| <b>Materials Fee: \$25</b> |            |               |                  |            |

Portrait photography is a course designed to teach students how to take photographs of people. Students will photograph their classmates, friends, family, and themselves to practice basic techniques involving depth of field, flash photography, managing a group, candid portraits, posing, working with telephoto lens to capture athletes in live athletic events, and learn how to photograph pets for extra credit. Utilize the most basic concepts of photography even the more advanced students will take on a series of challenges that utilize their creativity and prior experiences. Students will have the opportunity to use Canon DSLR cameras with a variety of detachable lens and pivot external flashes at their disposal. Along with photographing with professional grade equipment students will work directly on screen with Wacom Mobile Studio Pro 13 tablet computers while editing in the industry standard digital imagery editing suites Adobe Photoshop and Lightroom.

- Time management of deadlines, utilizing on screen note taking with Microsoft OneNote, creative problem solving, managing a digital workflow are also a dedicated part of the curriculum.
- Students may sign out equipment from the photography department while enrolled in the course.
- Please visit Mr. Mann's class page for information and examples of photography projects.
- Similar to all art courses student work will be proudly displayed at Celebration of the Arts.
- This course utilizes Google Classroom and other Google applications

Resources:

<http://www.wacom.com/en-us/products/pen-computers/wacom-mobilestudio-pro>  
<https://lightroom.adobe.com/>

|                            |            |               |               |            |
|----------------------------|------------|---------------|---------------|------------|
| Digital Photography        | Course 827 | 0.5 Credit EL | Grades: 10,11 | HAC Access |
| <b>Materials Fee: \$25</b> |            |               |               |            |

Digital Photography is a course dedicated to the ever-changing technological advances in the world of photography and design. Students will have the opportunity to learn the benefits of digital imagery, how to manipulate their cell phone's camera, and why photography has become so popular. Macro, Still Life, Panoramic, Architectural, and Lowlight photographic techniques are the foundation of digital photography. They provide anyone with an excellent intro experience to camera and tripod techniques while providing knowledge for future course in the SHS photography program. Students will have the opportunity to use Canon DSLR cameras with a variety of detachable lens at their disposal. Along with photographing with professional grade equipment students will work directly on screen with Wacom Mobile Studio Pro 13 tablet computers while editing in the industry standard digital imagery editing suites Adobe Photoshop and Lightroom.

- Time management of deadlines, utilizing on screen note taking with Microsoft OneNote, creative problem solving, managing a digital workflow are also a dedicated part of the curriculum.
- Students may sign out equipment from the photography department while enrolled in the course.
- Please visit Mr. Mann's class page for information and examples of photography projects.
- Similar to all art courses student work will be proudly displayed at Celebration of the Arts.
- This course utilizes Google Classroom and other Google applications

Resources:

<http://www.wacom.com/en-us/products/pen-computers/wacom-mobilestudio-pro>  
<https://lightroom.adobe.com/>

## **Honors Level Courses**

|                           |            |               |               |            |
|---------------------------|------------|---------------|---------------|------------|
| Honors Art <sup>CHE</sup> | Course 807 | 1.0 Credit EL | Grades: 11,12 | HAC Access |
|---------------------------|------------|---------------|---------------|------------|

**\*\*\*Students express interest through HAC Course Request with teacher review and final approval.**

Considering a career in the arts? This class is for you. You will experience a variety of formal, technical, and expressive means available to the professional artist. Exploring career opportunities in art, you will have the opportunity to talk with art school representatives. You will highly refine your observation skills, learn to work independently as you research art historical movements and artists - and become familiar with contemporary artists. Hanging your work at Celebration of the Arts is the culmination of a year of intense work. Open Studio sessions are available for advanced instruction opportunities. Students planning to take Advanced Placement Art Senior year will use this class to begin developing the Breadth sections of their Advanced Placement Portfolio.

\*\*There is no Lab Fee for this course; students are expected to purchase the following items for the course: A large portfolio (at least 18" X 24"), an 18" X 24" drawing pad and a small sketchbook (9" x 12") are used for the purpose of required independent homework projects.

Prerequisite: Successful completion of two of the following courses: 801, 803, or 805

|                                   |             |               |               |            |
|-----------------------------------|-------------|---------------|---------------|------------|
| Honors Photography <sup>CHE</sup> | Course 829H | 1.0 Credit EL | Grades: 11,12 | HAC Access |
|-----------------------------------|-------------|---------------|---------------|------------|

*Photography, Design and Graphics*

**Materials Fee: \$65**

### **Teacher Recommendation Only**

This course is for the highly motivated photography, animation, digital illustration, and/or graphic design student who wants to perform at a college level while still in high school. This course requires independent work, goal setting, planning skills, constructive evaluation, and ongoing communication with the 2D design instructor. The 15 images created will fill the College Board Advanced Placement 2D Design Portfolio requirements while building a professional portfolio for college reviews and possible internship opportunities. The portfolio will be based on their chosen medium and personal concept. During the creation of the portfolio students will develop increased skills in various artistic methods; including comprehensive technical knowledge of their media, professional use of Adobe software, printing output methods, creative problem solving, thematic design, personal evaluation, and the creation of a "Visual Idea." The course culminates with a presentation of the student's portfolio on a visual installation called a "Wall" at Celebration of the Arts.

This course provides the opportunity for students to earn honors weight by fulfilling additional requirements outside of the school day. See director for more information.

- Students must have their own photography equipment, unless focus is non-photography driven.
- Please visit Mr. Mann's class page for information and examples of photography projects.
- Students that complete the work in this course receive a "wall" at Celebration of the Arts.
- \$90 dollar Advance Placement testing fee

Prerequisite: Successful completion of the following courses: 829, 824, 826, and 827



## **Advance Placement Courses**

|   |            |               |               |            |
|---|------------|---------------|---------------|------------|
| <b>AP 2D Design Portfolio:</b> <sup>CHE</sup><br>Photography & Design<br><b>Materials Fee: \$65</b> | Course 829 | 1.0 Credit EL | Grades: 11,12 | HAC Access |
|---|------------|---------------|---------------|------------|

### **Teacher Recommendation Only**

This course is for the highly motivated 2D design (photography, animation, character design, & graphic artist) student who wants to perform at a college level while still in high school. This will require independent work, goal setting, planning skills, and ongoing communication with the teacher. The 29 images created will fill the required “Quality,” “Concentration,” and “Breadth” sections of the College Board Advanced Placement 2D Design Portfolio. Students will strengthen their design and photographic skills, including comprehensive technical knowledge of their chosen 2D media, professional use of software such as Adobe Photoshop and Lightroom, Autodesk Sketchbook Pro, Illustrator, and/or Sketch-up. They will also explore printing output options, as well as solving creative problems via design principles. Much of the thematic design of their portfolio will be self-assigned, based on their proposed “Visual Idea”. The course culminates with presentation of the student’s portfolio on a visual installation called a “Wall” at Celebration of the Arts.

This course provides the opportunity for students to earn honors weight by fulfilling additional requirements outside of the school day. See director for more information.

- Students must have their own photography equipment, unless focus is non-photography driven.
- Please visit Mr. Mann’s class page for information and examples of photography projects.
- Students that complete the work in this course receive a “wall” at Celebration of the Arts.
- \$90 dollar Advance Placement testing fee

#### Resources:

<http://www.wacom.com/en-us/products/pen-computers/wacom-mobilestudio-pro>

<https://lightroom.adobe.com/>

<https://apcentral.collegeboard.org/courses/ap-studio-art-2-d-design?course=ap-studio-art-2-d-design>

**Prerequisite:** Successful completion of the following courses: 829, 824, 826, and 827

|   |            |               |               |
|---|------------|---------------|---------------|
| <b>AP Studio Art: Drawing</b> <sup>CHE</sup><br><i>Advanced Placement</i> | Course 831 | 1.0 Credit EL | Grades: 11,12 |
|---|------------|---------------|---------------|

### **Teacher Recommendation Only**

Are you a highly motivated student? Are you headed to art school and a career in the arts? This course allows you to perform at the college level while still in high school. AP students work all year and in-depth exploring a personal artistic theme. These works will represent the required Quality and Concentration sections in the Advanced Placement Portfolio submitted in early May. Through the intense study of the human figure, you will strengthen your drawing skills. Various media will be explored in black & white, and color based upon your thematic series. Work ranges from photo-realism to imaginative compositions; small oil stick paintings to larger-than-life drawings. You will practice and develop the ability to document and explain your thinking, creative processes, research arc, and your developing understandings of how all these areas work together towards your own personal and artistic growth. This practice will further develop your artistic voice and your ability to explain what has influenced and changed it. In addition to learning how to appreciate and evaluate your own work and

that of others, all AP students will be encouraged to stretch and explore their own work and share it with an audience through mandatory weekly Peer Critical Review sessions. All course participants will need to submit an AP portfolio in May and exhibit their work in Celebration of the Arts. Open Studio sessions are available for advanced instruction opportunities.

\*\*There is no Lab Fee for this course. Students will need to purchase the following items for the course: a large portfolio (at least 18" x 24"), an 18" X 24" sketchbook, a small sketchbook used for the purpose of required independent homework projects and any materials needed outside of what is available in the studio to complete their portfolio pieces.

Prerequisite: Successful completion of 801, 803, or 805 and 807

## Communications: Video Production & Media

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|----------------------------|------------|---------------|-----------------|------------|
| Introduction to Mass Media | Course 760 | 0.5 Credit EL | Grades: 9,10,11 | HAC Access |
|----------------------------|------------|---------------|-----------------|------------|

From the oldest cave paintings made thousands of years ago to the technologically advanced Information Age in which we currently reside, we see evidence of humans working to develop new, more sophisticated, and broader means of communication. This course will provide students with an overview of the wide range of mass communications methods used in modern society. They will examine the history and evolution of mass communication. In addition, the students will explore the current and future career paths in the field of mass communication. Students in this course will research the various forms and functions of mass communication, sample and critique content from each of those formats, discuss and evaluate the role and impact media has on our society, and will map various career paths in the field of mass communication. Students will learn how to become more discerning consumers of media, practice safe and responsible digital citizenship, and have a better understanding of how to produce and distribute their own content. This class would be beneficial for students who have a general interest in media and communications but want to gain a deeper understanding of the various opportunities in the field so they can make more informed decisions regarding their future academic and career plans. **\*\*\*Please note that this is NOT a video production class.\*\*\***

|  |            |               |                  |            |
|--|------------|---------------|------------------|------------|
| Television Production:<br>Basic Video Production | Course 770 | 0.5 Credit EL | Grades: 10,11,12 | HAC Access |
|--|------------|---------------|------------------|------------|

This course is the recommended entry-level video production course. It will cover the fundamentals of video production and will work in both the studio/multi-camera format, as well as the film-style/single-camera format. Students will develop the skills needed to function in all aspects of the Production Cycle and will learn how to produce live multi-camera segments, as well as how to use Adobe Premiere Pro for non-linear video editing. Over the course of the semester, students will work in large and small groups to produce a series of videos. As their skills develop, some projects may be produced for broadcast on our morning announcement programs or SETV.

|   |            |               |                  |            |
|---|------------|---------------|------------------|------------|
| Television Production:<br>Film-Style Production | Course 771 | 0.5 Credit EL | Grades: 10,11,12 | HAC Access |
|---|------------|---------------|------------------|------------|

Much of today's video production equipment is portable; therefore, many productions are shot on location. The course teaches students to create videos that are shot on location and edited in the studio. Emphasis is placed on the writing of treatments, scripts, and storyboards, single camera shooting, and non-linear editing techniques. Students will work in small teams and produce a series of videos including (but not limited to) a stop-motion animation, a Public Service Announcement, a music video, and a short film. Students who have taken this class will have the opportunity to participate in the recording and broadcast of special televised events such as COTA and the Dance Marathon.

**\*\*\* Students will need to provide their own 16GB or 32GB card. More details will be provided through the course syllabus.**

|                      |            |               |           |            |
|----------------------|------------|---------------|-----------|------------|
| Broadcast Journalism | Course 773 | 1.0 Credit EL | Grade: 11 | HAC Access |
|----------------------|------------|---------------|-----------|------------|

Students may request this course in HAC. However, it does require:

**Successful completion of 770 or 771 along with teacher recommendation.**

In Broadcast Journalism, students will be taught the skills of story selection, news writing and delivery, along with basic and advanced TV Production skills. The class will produce both daily announcements (The Cougar Pause), and a monthly thematic

news magazine program (The Growl) for the high school delivered via the web. In addition, students will produce a series of news reports on various subjects that will be shown in the high school, and on SETv. Students in this class will be assigned a specific job or leadership role based on their abilities and experience and will treat their time in the class like a workday in a television news studio. Students who have taken this class will have the opportunity to participate in the recording and broadcast of special televised events such as COTA and the Dance Marathon.

**\*\*\* Students will need to provide their own 16GB or 32GB card. More details will be provided through the course syllabus.**

|                              |            |               |                  |            |
|------------------------------|------------|---------------|------------------|------------|
| Documentary Video Production | Course 776 | 0.5 Credit EL | Grades: 10,11,12 | HAC Access |
|------------------------------|------------|---------------|------------------|------------|

Documentary Video Production is an advanced-level video production course that allows students to work individually on three documentary videos of increasing length. The choice of subject matter is completely the prerogative of the student. Students will work through the entire process of developing an idea, doing research, collecting interviews, storyboarding, writing, shooting, and editing. All completed videos will be considered for broadcast on SETv, and eligible for available contests. This is a perfect class for a creative, tech-savvy student who wants the opportunity to work individually and produce projects that could be used as a portfolio piece or demo reel in the future.

**\*\*\* Students will need to provide their own 16GB or 32GB card. More details will be provided through the course syllabus.**

Prerequisite: Successful completion of Course 770 or Course 771 or Course 773

|                         |            |               |           |            |
|-------------------------|------------|---------------|-----------|------------|
| Broadcast Journalism II | Course 778 | 0.5 Credit EL | Grade: 12 | HAC Access |
|-------------------------|------------|---------------|-----------|------------|

**This course available only through TEACHER RECOMMENDATION.**

|                 |            |               |                 |            |
|-----------------|------------|---------------|-----------------|------------|
| Acting Workshop | Course 840 | 0.5 Credit EL | Grades: 9,10,11 | HAC Access |
|-----------------|------------|---------------|-----------------|------------|

Students will develop self-confidence in this course, both as performers and as individuals. They will receive a general orientation to the Stanislavski "Method" of acting. Course activities include extensive work in improvisation, characterization, stage movement, monologues, and scene work. Class and teacher viewing of performances and class participation are included in the evaluation of students.

|   |            |               |                    |            |
|---|------------|---------------|--------------------|------------|
| Behind the Curtain:<br>An Introduction to Technical Theater | Course 843 | 0.5 Credit EL | Grades: 9,10,11,12 | HAC Access |
|---|------------|---------------|--------------------|------------|

In this course, students will explore the backstage world of theater utilizing the technical equipment found in the high school theater. Students will participate in units of study focused on theatrical spaces, scenic design, beginning set construction, lighting design, costume design, sound design, prop design, and stage management. Assessment will consist of a combination of hands-on projects, design simulations, and traditional written assessments. No prior technical experience necessary.

## Family and Consumer Sciences

|                                     |            |               |                 |            |
|-------------------------------------|------------|---------------|-----------------|------------|
| Fundamentals of Foods and Nutrition | Course 601 | 0.5 Credit EL | Grades: 9,10,11 | HAC Access |
|-------------------------------------|------------|---------------|-----------------|------------|

**Food and Materials Fee: \$35**

This course introduces students to the art and science of cooking. Students will learn how to prepare foods focusing on the areas of dairy, vegetable, meats and grains as well as foods from many different cultures. Students will also be participating in the original recipe competition at Celebration of the Arts. The final exam will help focus on how current food choices will affect their health today as well as in the future. Students can explore careers in the foods and nutrition industry.

|                              |            |               |                  |            |
|------------------------------|------------|---------------|------------------|------------|
| Focus on Foods and Nutrition | Course 602 | 0.5 Credit EL | Grades: 10,11,12 | HAC Access |
|------------------------------|------------|---------------|------------------|------------|

**Food and Materials Fee: \$25**

In this course, students use up-to-date technologies such as the food processor, microwave, and convection oven to prepare both familiar and new dishes. Culinary principles will be applied to foods including eggs, chicken, and Fruit. Students will prepare traditional and interesting foods such as chicken parmesan, Hungarian goulash, and baked Alaska. Using sophisticated diet analysis software, students will evaluate numerous foods as well as their overall nutritional health. Students can explore careers in the foods and nutrition industry.

|                           |            |               |               |            |
|---------------------------|------------|---------------|---------------|------------|
| Advanced Food Preparation | Course 603 | 1.0 Credit EL | Grades: 11,12 | HAC Access |
|---------------------------|------------|---------------|---------------|------------|

**Food and Materials Fee: \$35**

Advanced Food Preparation is for any student who wants to learn the tricks involved in making even a simple meal look exciting and complicated. This course includes the study of advanced cooking techniques used in the preparation of such foods as soups, sauces, gingerbread houses and much more. Home cooking projects utilize complex diet analysis software to aid in meal planning. Regional cuisines including French, Italian, Chinese, and American will be examined in detail. Test your skills by designing and creating a piece of edible art for the cake decorating competition at Celebration of the Arts.

Prerequisite:

- Successful Completion of Course 601 or Course 602

|                     |             |               |                  |            |
|---------------------|-------------|---------------|------------------|------------|
| The Science of Food | Course 605A | 0.5 Credit EL | Grades: 10,11,12 | HAC Access |
|---------------------|-------------|---------------|------------------|------------|

**Food and Materials Fee: \$35**

Travel your life span on culinary terms. How should you eat to maintain a healthy body? What foods should be consumed or avoided during pregnancy? What foods help an infant thrive? How do you feed yourself well when you are on very tight budget? How do nutritional needs change as we age? Learn the answers to these questions as well as many others such as the science behind candy making and how our environment affects our food needs and choices.

Prerequisite:

- Successful Completion of Course 601 or Course 602

|                 |            |               |                  |            |
|-----------------|------------|---------------|------------------|------------|
| Interior Design | Course 611 | 0.5 Credit EL | Grades: 10,11,12 | HAC Access |
|-----------------|------------|---------------|------------------|------------|

In this course students will study the elements of interior design and learn how to use them in various living environments. Students will design floor plans and analyze room usage and traffic patterns to determine the best ways to utilize the space and furnishings. Color schemes as well as both personal experimentation and computer will examine furniture styles, selection, and placement. Major projects include a personal home improvement project and a dream room design and presentation board.

|                   |            |               |                 |            |
|-------------------|------------|---------------|-----------------|------------|
| Child Development | Course 620 | 0.5 Credit EL | Grades: 9,10,11 | HAC Access |
|-------------------|------------|---------------|-----------------|------------|

This course deals with the development of a child and the issues s/he may face as they grow up. The influence of the family and the impact of the way basic needs are met early in life are examined. Differences between boys and girls will be observed and analyzed as well as each facet of how a child development. Developmental milestones (skills/abilities that should be achieved by a certain age) will be identified and discussed. Special relevant issues such as pregnancy, labor and childbirth, the impact of technology and the building of good self-esteem will be examined. This is a valuable course for those interested in career areas such as early childhood/elementary or secondary education, special education, day care supervision, social work, child psychology, pediatric medicine, and parenting.

|   |            |               |                  |            |
|---|------------|---------------|------------------|------------|
| Methods of Teaching:<br><i>Elementary and Secondary Education</i> | Course 625 | 0.5 Credit EL | Grades: 10,11,12 | HAC Access |
|---|------------|---------------|------------------|------------|

This course is designed for students who are considering a career in teaching or early childhood education, or simply want to learn more about the field of education. The course content will explore various aspects of teaching including lesson design elements, an overview of learning style differences and learning disabilities, learning differences between age groups and grade levels, establishing a positive learning environment, and instructional strategies including the use of technology. Students will have the opportunity to design and create hands-on projects and lessons to teach specific concepts. The course will cover Pre-K through Grade 12 teaching methods with the main focus on elementary age children to equip students with various skill sets to serve as teaching assistants in elementary classrooms or Pre-K programs.

|                                 |            |               |                  |            |
|---------------------------------|------------|---------------|------------------|------------|
| Personal Finance <sup>CHE</sup> | Course 640 | 0.5 Credit EL | Grades: 10,11,12 | HAC Access |
|---------------------------------|------------|---------------|------------------|------------|

*This course fulfills the Personal Finance or Money Management requirement.*

Life on your own will be the focus of this course. Managing your own checkbook, establishing good credit, determining costs for major life events (wedding, buying a house, having a baby) will all be examined as well as learning to handle paying monthly bills while balancing personal and family life. The psychology of relationships and higher-level communication skills are the focus while integrating all parts of financial matters during the life cycle. Practical, hands-on methods are applied for successful learning. Research strategies are developed, and curriculum directed projects are worked on in cooperative groups.

## Music

|                           |            |               |                    |            |
|---------------------------|------------|---------------|--------------------|------------|
| Digital Music Production  | Course 847 | 0.5 Credit EL | Grades: 9,10,11,12 | HAC Access |
| <b>Materials Fee: \$5</b> |            |               |                    |            |

With today's technology, anyone can create and produce music! This course will teach you the skills needed to use what is readily available to get your song "out there." You need no prior musical experience, just the love of learning in a new way and being creative. We will explore the features of GarageBand and learn about sound production, mixing tracks and beats, creating your own songs, basic recording, using FX, and creating music for video. This project-based class is designed to get students engaged in the technology used for music and to inspire them to continue to develop their skills beyond the classroom door on their way to the Grammys!

|                            |            |               |                    |            |
|----------------------------|------------|---------------|--------------------|------------|
| Guitar and Ukulele         | Course 849 | 0.5 Credit EL | Grades: 9,10,11,12 | HAC Access |
| <b>Materials Fee: \$10</b> |            |               |                    |            |

This beginner course is designed to allow students the opportunity to pick up an instrument and learn to play. Basic technique, note reading, and musical interpretation are at the center of this course. Students will learn songs and techniques for both guitar and ukulele. No prior instrumental background needed.

|                              |            |               |               |            |
|------------------------------|------------|---------------|---------------|------------|
| Introduction to Music Theory | Course 851 | 1.0 Credit EL | Grades: 10,11 | HAC Access |
|------------------------------|------------|---------------|---------------|------------|

This introductory course is designed to help understand the fundamental concepts of music. All music is created from the same elements: pitch, rhythm, time, and expression. With these elements in mind, the course takes you from basic music reading through to analyzing the chords of famous pieces of music to allow us to understand the music better.

|   |            |               |               |            |
|---|------------|---------------|---------------|------------|
| AP Music Theory CHE                         | Course 880 | 1.0 Credit EL | Grades: 11,12 | HAC Access |
| <b>OFFERED IN THE 2023-2024 SCHOOL YEAR</b> |            |               |               |            |

The goal of an AP Music Theory course is to develop a student's ability to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a score. The achievement of these goals may best be approached by initially addressing fundamental aural, analytical, and compositional skills using both listening and written exercises. Building on this foundation, the course should progress to include more creative tasks, such as the harmonization of a melody by selecting appropriate chords, composing a musical bass line to provide two-voice counterpoint, or the realization of figured-bass notation.

### Performance Ensembles

|                |            |               |                    |            |
|----------------|------------|---------------|--------------------|------------|
| Symphonic Band | Course 855 | 1.0 Credit EL | Grades: 9,10,11,12 | HAC Access |
|----------------|------------|---------------|--------------------|------------|

Symphonic Band is a performance, academic, and co-curricular ensemble open to Woodwind, Brass, and Percussion students in Grades 9 through 12. Students study and rehearse Band literature of various styles and difficulty in this class. Students refine performance technique and ensemble playing. Performances, concerts, and rehearsals outside of the school day are required. Students are encouraged to study privately on their individual instruments. As a co-curricular class, students enrolled in Symphonic Band participate in marching band at football games and parades. Participation fees are required to cover uniform and activity expenses.

|           |            |               |                    |            |
|-----------|------------|---------------|--------------------|------------|
| Orchestra | Course 857 | 1.0 Credit EL | Grades: 9,10,11,12 | HAC Access |
|-----------|------------|---------------|--------------------|------------|

Orchestra is an ensemble of performers who play stringed instruments. String players are eligible for inclusion by participation in the middle school program or by audition with the instructor. Standard orchestral literature and lighter selections are rehearsed and performed to gain an understanding of various periods and styles of music. Required concerts and performances are presented in the evenings throughout the school year. There is a uniform cleaning fee.

|               |            |               |                    |            |
|---------------|------------|---------------|--------------------|------------|
| Concert Choir | Course 860 | 1.0 Credit EL | Grades: 9,10,11,12 | HAC Access |
|---------------|------------|---------------|--------------------|------------|

Every student will be given the opportunity, encouragement, and assistance to develop the fundamental skills essential for achieving a high standard of vocal performance: good tone quality, accurate intonation, correct breathing, clear diction, and an awareness and sensitivity for artistic interpretation. Required concerts and performances are the Winter Concert, Spring Concert and one other concert each year. In addition to regular class time, every student will be required to attend evening rehearsals prior to each concert as listed on the yearly Choral Department Calendar and in the Choral Department Handbook.

|                     |            |               |                    |            |
|---------------------|------------|---------------|--------------------|------------|
| Springfield Singers | Course 861 | 1.0 Credit EL | Grades: 9,10,11,12 | HAC Access |
|---------------------|------------|---------------|--------------------|------------|

This course is available to students through ***Audition Only and Teacher Recommendation.***

The Springfield Singers is a select group whose membership is by audition only. The fundamental skills essential in achieving a high standard of vocal performance will be stressed. Emphasis will be on ear training, sight singing and application of basic music theory. A higher level of difficulty of choral literature will be learned. Required concerts and performances are listed on the yearly Choral Department Calendar and in the Choral Department Handbook (including Winter Concert, Spring Concert, Graduation). In addition to regular class time, every student will be required to attend evening rehearsals prior to each concert. There is a nominal uniform cleaning fee.



## Physical Fitness and Health Education

|                            |            |               |          |            |
|----------------------------|------------|---------------|----------|------------|
| Grade 9 Health & Wellness  | Course 035 | 0.5 Credit HE | Grade: 9 | HAC Access |
| Grade 11 Health & Wellness | Course 036 | 0.5 Credit HE | Grade: 9 | HAC Access |

This course is intended to improve each student's level of physical fitness, increase enjoyment of physical activity, and instill in students the importance of physical well-being. Students will rotate through three sessions including strength and conditioning, yoga and personal wellness, and competitive sports. All students are required to wear a regulation gym uniform and sneakers. To receive full credit, students must be prepared with a gym uniform, attend class regularly, and participate in class activities. Each session will include an online health component with topics and assignments unique to each session. Age-appropriate topics related to phases of human development will be covered concerning the social, emotional, and physical well-being of the individual.

|          |            |               |                  |            |
|----------|------------|---------------|------------------|------------|
| Live Fit | Course 042 | 0.5 Credit EL | Grades: 10,11,12 | HAC Access |
|----------|------------|---------------|------------------|------------|

Students will be able to identify the major muscles of the body, design and implement a self-created individualized fitness program. All students will receive instruction on proper exercise technique, identification of lifting stations and names of exercises, spotting and safety protocols utilized when working out, fitness terminology, fitness concepts (overload, specificity, cross training, variation), warm up/cool down activities, phases of strength training (endurance, strength, power, sport specific), plyometric exercises, agilities, flexibility, rest and sports nutrition.

|  |            |               |                  |            |
|--|------------|---------------|------------------|------------|
| Advanced Studies in Competitive Sports | Course 044 | 0.5 Credit EL | Grades: 10,11,12 | HAC Access |
|--|------------|---------------|------------------|------------|

Take your knowledge and skills of a variety of sports to the next level. This co-ed course is designed for those seeking a higher level of competition learning more about rules and regulations while at the same time maintaining fitness and skill levels. Students will learn the rules and regulations associated with school, PIAA and Youth AA related sports such as Baseball/Softball, Basketball, Soccer, and Lacrosse, and explore a variety of other sports such as Ultimate Frisbee, Frisbee Golf, Flag Football, Tennis, Badminton, Volleyball, Pickleball, etc. Interested students will have the opportunity to independently explore certifications to officiate Youth AA and PIAA sporting events while refereeing their peers on the field of competition.

## Online Course Offerings

In addition to the diverse and student-centered classroom-based learning opportunities and experiences, Springfield High School also offers students the opportunity to experience learning in an asynchronous online learning environment. Interested and approved students can choose from a variety of online learning courses not currently offered at SHS. These courses will appear on a student's schedule as being offered during the school day and students will be assigned a location where they can work. Courses will be taken for credit but do not satisfy graduation requirements as detailed on page 12 of this document. Earned online course credit(s) will be considered elective credits above and beyond the minimum 24 credits required to graduate. Numeric marks [grades] are assigned and will factor into a student's GPA. All courses carry a CP course weight. An SHS teacher will monitor student progress and maintain communication with students on weekly basis. Please see the courses listed below and inform your counselor if you are interested in pursuing this option for the upcoming school year.

| <b>Career and Technical Education Electives</b> |  |   |
|---|--|---|
| Applied Medical Terminology A/B                 | Career Explorations  | Principles of Government & Public Administration A/B          |
| Computing for College & Careers A/B             | Culinary Arts A/B  | Principles of Health Science A/B                              |
| Digital & Interactive Media A/B                 | Electronic Communication Skills                                  | Principles of Hospitality & Tourism A/B                       |
| Health Science 1 A/B                            | Entrepreneurship A/B   | Principles of Human Services A/B                              |
| Health Science 2 A/B                            | Essential Career Skills  | Principles of Information Technology A/B                      |
| Introduction to Cybersecurity                   | International Business   | Principles of Law, Public Safety, Corrections, & Security A/B |
| Introduction to Finance                         | Introduction to Android Mobile App Development                   | Principles of Manufacturing A/B                               |
| Introduction to iOS Mobile App Development      | Introduction to Criminology                                      | Principles of Transportation, Distribution, & Logistics A/B   |
| Business Information Management A/B             | Principles of Education & Training A/B                           | Professional Communications                                   |
|   |  | Sports & Entertainment Marketing                              |
| <b>Core Electives</b>                           |  |   |
| Art History & Appreciation                      | Gothic Literature  | Introduction to social media                                  |
| Introduction to Anthropology                    | Holocaust Studies  | Mythology & Folklore  |
| Introduction to Archaeology                     | Marketing, Advertising, & Sales                                  | Native American Studies: Contemporary Perspectives            |
| Introduction to Marine Biology                  | Principles of Agriculture, Food, & Natural Resources A/B         | Native American Studies: Historical Perspectives              |
| Introduction to Veterinary Science              | Principles of Arts, Audio/Video Technology, & Communications A/B | Revolutionary Ideas in Science                                |
| Introduction to Visual Arts                     | Introduction to Fashion Design                                   | Social Issues   |
| Sociology                                       | Introduction to Military Careers                                 | Structure of Writing  |
| Theater, Cinema & Film Production               | Introduction to Philosophy                                       | Women's Studies   |

## Dual Enrollment Instructions (Fall 2023)

### Online or On Campus Course and College in the High School

Thank you for your interest in Dual Enrollment at Delaware County Community College. Please follow the steps below if you are interested in College in the High School with your high school.

#### STEP 1: Application

- ➔ Complete the Delaware County Community College Dual Enrollment Application at [dccc.edu/apply](https://dccc.edu/apply).

#### STEP 2: Testing or Submitting Test Scores

If you did not upload test scores to your dual enrollment application, and you possess test scores (below), please submit a copy of your scores to Assessment Services ([assess@dccc.edu](mailto:assess@dccc.edu)). When submitting your scores, include your full name and DCCC ID# as indicate on your welcome letter. You may access your welcome letter by logging back into the application site ([dccc.edu/apply](https://dccc.edu/apply)) after 72 hours.

- SAT/PSAT EBRW: 500 or higher
- SAT/PSAT Math: 530 or higher
- ACT Reading: 18 or higher
- ACT Math: 20 or higher
- Keystone Literature: Proficient or Advanced
- Keystone Algebra I: Proficient or Advanced

*All test waivers, including test scores (above), are subject to change. Math placement may vary based on score. Please visit [dccc.edu/placement-testing](https://dccc.edu/placement-testing), for additional information including high school transcript information.*

- ➔ If you are unable to waive the placement test (based on the above), please schedule a testing session by emailing [testingcenter@dccc.edu](mailto:testingcenter@dccc.edu) or calling 610-325-2776 (your DCCC ID# is required when scheduling).
- ➔ View your test scores 24-48 business hours after completing the placement test or submitting test scores.
  - Log into delaGATE, your college portal ([delaGATE.dccc.edu](https://delaGATE.dccc.edu))
  - Select “Apps”
  - Select “Degree Works”
  - View your test scores

Students should submit their application as soon as possible. The **deadline for applying and testing or submitting qualifying test scores is September 2023**. Students should keep in mind that it may take several days for the application to process. If you need to schedule a placement test, please submit your application early and schedule for testing in advance of the September 2023, deadline.

### STEP 3: Registration

- ➔ Eligible students will be registered by a college representative by October 2023. We will be unable to register students after this deadline.
- ➔ Consult your high school if you are to pay your school directly.

If you have any questions, please contact the Admissions Office at [admiss@dccc.edu](mailto:admiss@dccc.edu). Please include your full name, DCCC ID# (if you have applied) and the name of your high school

#### **Sample DE courses aligned with SHS Career Academy Model:**

*\*Please note that course offerings may be subject to enrollment trends and professor eligibility. The following list is merely an example, not a guarantee of course offerings. Students must also meet prerequisite requirements and/or pass the Accuplacer Exams.*

#### **Engineering , Mathematics, Science, and Technology**

##### **BIO 115: Field Ecology**

Field Ecology is designed primarily for majors in biology, natural science, and related fields, yet is open to students of all majors. This course introduces students to the general principles of field ecology pertaining to terrestrial, aquatic, and marine habitats. Emphasis will be placed upon regional conservation issues, biodiversity concepts, plant and animal interactions and adaptations, effects of human disturbance on native flora and fauna, and field research techniques.

Students are expected to develop and apply skills in field research and utilizing the scientific method.

##### **DPR 234: Introduction to Computer Game Programming**

This course teaches students the concepts of programming using the C++ language and DirectX. This course will introduce students to C++ Object oriented Programming, as well as, DirectX and its components. Students will create 2D and 3D objects, program animation sequences, add sound effects to games, create a virtual game world and program a full-featured role-playing game.

##### **TCC 112: CADD Graphics**

This course provides students with the concepts and skills necessary to form the basis of object visualization and documentation inherent to the creation and conveying of technical designs and drawings. Appropriate drafting concepts and skills are developed through use of both free-hand sketching and computer-assisted drafting. Instruction in the use of CADD systems is integrated with graphic theory throughout the course. The course covers theoretical and applied drafting concepts appropriate for conveying graphical representation of objects and designs in a variety of technical environments including manufacturing and construction, as well as architectural, mechanical and civil engineering design.

##### **TDD 216: Three-Dimensional CADD**

This course provides instruction in advanced computer-aided design and drafting (CADD) techniques in addition to creation of three-dimensional drawings. Students progress from two-dimensional projection to wireframe, surface modeling, solids modeling and rendering techniques. Emphasis will be placed on maximizing a personal computer-based CADD system to develop a series of increasingly difficult drafting assignments and ending with a presentation quality final project and portfolio of completed drawings.

##### **AHM 233 Medical Terminology**

This course is designed to introduce the skills and knowledge needed to develop an understanding of the language of medicine. The mechanism of building a medical vocabulary, utilizing roots, prefixes, suffixes, and the combining forms, and the pronunciation are emphasized. A workbook/text, audiotapes, and computer software are used to give the student hands-on experience in the use of the language of medicine. \*This course is required for the EMT certificate

## **Business**

### **BUS 215: Human Resource Management**

This course presents an in-depth study of the principles of human resource management. The course presents both the theoretical and practical aspects of the broad human resource functions which managers must understand in order to develop an effective and productive workforce. Computer simulations and exercises are used to introduce students to the practical aspects of human resource management.

### **BUS 105: Introduction to Entrepreneurship**

This class is an introduction entrepreneurial class for students interested in starting their own business. The ultimate goal of the class is to improve management, leadership, accounting and overall business skills and knowledge base for our entrepreneur students.

### **HRM 100: Introduction to Hospitality**

This course introduces students to the vast lodging and food service industry. The origins and history of the modern American hotel/motel business and the enormous growth of the food industries are presented in the context of global tourism. Supervisory duties including organizational theory, resource management of the prime cost associated with these businesses, and asset control processes are introduced. Career opportunities are examined as an essential part of the course.

### **PLG 100 Introduction to Paralegal**

This course focuses on four specific areas of the paralegal profession: (1) the role of the paralegal in the legal profession, (2) the legal and ethical rules that determine unauthorized practice, (3) an understanding of the judicial system at the federal, state and local level, and (4) the various areas of law-civil and criminal with emphasis on the legal terminology associated with each area. \*Prepares students to enter into the paralegal AAS degree program

## **Arts**

### **HUM 100: Introduction to Visual Arts**

This course is designed to introduce students, through a broad overview, to the nature of art, the people who make art, the various forms art takes and to the importance of art in our everyday lives. Students consider the role of the artist in society and how that role changes historically. Issues such as aesthetics, creativity and perception, and what it means to be a visually literate patron of the arts will be explored. A thorough introduction to the visual elements and principles of design will help students to form some guidelines for analysis and criticism in such areas as drawing, painting, photography, film, video, sculpture, architecture, crafts, environmental design, theater, dance and music.

## **Humanities**

### **HUM 141: Film Language**

This course is intended to engage students in analysis of the film medium, to help them relate the art of film to their lives and their language and to stimulate their appreciation of the visible world. The course includes a brief survey of film history, a study of the subject matter and bias of the documentary film and visible forms of poetry in the art film.

### **HUM 180: Aspiration and Dissonance--A Global Interdisciplinary Study of History, Literature and Religion**

This course considers the persistent separation between humanity's greatest ideals (defined as our "aspirations") and the reality of history (defined as "dissonance") through selected historical, literary, and mystical works from all over the world. This inter-disciplinary, co-taught course is designed to make the student think about the purpose and value of these aspirations, the skepticism that results from their enduring failure, and the changes that a global education may bring to this situation.

### **HUM 205: Latin American Studies**

This course provides an overview of the Latino-American cultural heritage. Based on elements from anthropology, culture (both folk and popular), film, folklore, language and linguistics, theater and drama, and literature, the course examines various cultural traditions within Latino-American society

## **Liberal Arts**

### **ARB 101 Elementary Arabic I**

This course introduces students to Arabic alphabets, articulation of sounds, basic grammar, reading and writing. Vocabulary words for cultural and social settings are introduced. Listening and speaking are emphasized in class and laboratory settings.

### **CHI 101: Elementary Chinese**

This course introduces students to the fundamentals of Chinese Language by focusing on the development of functional competence in the four skills (listening, speaking, reading and writing), as well as Chinese cultural knowledge. Students completing this course will master Chinese pronunciation system (Hanyu Pinyin), basic Chinese Characters writing skill, basic Chinese grammar. The emphasis is placed on actual verbal communication.

### **HIS 251: History of Modern China**

This course is an introductory study of the history of China from the seventeenth century to the present. Specifically, the course seeks to analyze how China has been able to build a dynamic and growing civilization amidst rebellion, reform, and revolution. Political, economic, and social issues will be discussed to gain a greater understanding and appreciation of Chinese civilization. Three major themes in the course will deal with imperialism, nationalism, and modernization. An effort will be made to understand the political, economic, and social "self-strengthening" experiments in China within a global perspective. The final portion of the course will examine contemporary Chinese society.

### **MAT 120: Modern College Mathematics**

This course is designed to give students in the non-science fields an appreciation of and experience in using the concepts, logical reasoning and problem-solving techniques involved in various fields of mathematics. It fulfills the mathematics

elective for liberal arts, administration of justice, early childhood education, fire-science technology and general education majors at the College.

### **RUS 101: Elementary Russian**

This course introduces students to the Russian language by focusing on the development of functional competence in the four skills (listening, speaking, reading, and writing), as well as the expansion of cultural knowledge. Students completing this course will learn about the basic structure of Russian grammar and writing as well as become familiar with elementary conversational skills.

### **Additional opportunities through Delaware County Community College:**

#### **SWO 101: Introduction to Social Work and Human Services**

This is a one semester introduction to human services and the major policies and practices that are used to understand human strengths and challenges. The course explores the skills, values and knowledge based needed to effectively work as a culturally competent, human service professional in a multidisciplinary setting.

#### **Skilled Trades:**

#### **TCS 141 Construction First Aid/Safety**

Emergency first-aid and accident-prevention instruction for construction employees and managers. OSHA requirements are stressed in this course. Administrative aspects of recordkeeping requirements, rights and responsibilities, standards, safety program development and implementation are covered. Safety training includes identification and elimination of accident and health hazards, inspection techniques and administration of first-aid and CPR. \*Required for most associate's degrees and certificates in the skilled trades (construction, plumbing, electrical, etc.)

#### **WLD 100 Introduction to Welding**

Classroom instruction includes the proper selection of A.C and D.C. power sources and their applications. Oxy-fuel welding and cutting equipment and safety procedures are covered. Also discussed is proper set-up, use of GMAW and GTAW power sources and how to correctly set up and use them. All requirements and safety procedures are covered.

#### **WLD 101 Introduction to Oxy-Fuel Welding and Cutting**

Course emphasis is on fuel gases, welding, and cutting equipment. Upon successful completion of this course, students should be able to: List the major advantages and disadvantages of different fuel gases, maintain an oxy-fuel welding set, demonstrate lighting, adjusting, and extinguishing an oxy-fuel flare, and use an oxy-fuel cutting

#### **Emergency & Protective Services EMER 105: Incident Management**

This course is designed to provide the student with an overview of the Incident Command-Unified Command Structure. Additionally, a look at incident management from various perspectives such as local fire departments, industrial settings, the Oklahoma City bombing, and others will be discussed. The student will work in an interactive program to prepare for future roles and responsibilities as those charged with a management role in incident command, control or mitigation.

Moreover, the student will learn from the experiences of others, sharpening their understanding skills relative to the dimensions of emergency incident management.

## Delaware County Technical High Schools

Delaware County Technical High Schools are located at two main campuses in Aston and Folcroft. Programs are also held at seven (7) partnering hospitals. Students from the 15 area school districts have the opportunity to enhance their educational program with career and technical experiences that are directly connected to the real world. Business and Industry members review and update the career and technical education (CTE) programs offered by DCTS on a yearly basis. Apply to DCTS today by clicking here!

| Delaware County Technical School Courses |   |  |
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| 960AH<br>3.0 Credits                     | Health Occupations<br>2 Semesters                                   | This course includes anatomy and physiology, medical terminology, nutrition, medical procedures, emergency and clinical care, and health care issues. Clinical education is an integral part of the program.   |
| 960AT<br>3.0 Credits                     | Automotive Technology<br>2 Semesters                                | DCTS has the distinction of being among a small number of schools and colleges to be selected to participate in the AYES program, a partnership with General Motors, Daimler Chrysler, BMW, Honda, Hyundai, Subaru, Toyota, Mitsubishi Motors, Nissan, Volkswagen, Audi, and Mercedes Benz corporations. This program gives DCTS students a competitive edge by allowing them to work directly on new cars with technicians experienced in the field and at dealerships.   |
| 960 BM<br>2 or 3 Credits                 | Biomedical Technology &<br>Laboratory Sciences                      | Delaware County Technical High School is offering NEW PROGRAM for high school students interested in pursuing careers in pathology, biomedical engineering, genetics, medical technology, molecular and cellular biology. This program provides students with the knowledge and hands on experience necessary to be successful in medical technology and laboratory science careers. Students will use state of the art equipment to learn the principles of scientific investigation and how it is applied to agriculture, environmental health, forensics, genetic engineering, and medicine. An emphasis will be placed on DNA fingerprinting, polymerase chain reaction, microbiology, and immunology. Student leaving this program will have the strong foundation necessary to pursue post-secondary and career opportunities. |
| 960BT<br>3.0 Credits                     | Building Trades<br>2 Semesters                                      | Practical experience and classroom training prepares students enrolled in the Building Trades program to find employment in the construction field or enter a post-secondary institution. Students are taught carpentry, masonry, plumbing, roofing, drywall application, painting, and framing/finishing.   |
| 960 CFSMA<br>3.0 Credits                 | Composite Fabrication<br>And Sheet Metal<br>Assembly<br>2 Semesters | Description to come.   |
| 960CM<br>3.0 Credits                     | Cosmetology<br>2 Semesters  | The Cosmetology Program is a three-year standards-based education program. The 1250 hours required for this course are earned when a score of 80% or above is achieved for each individual unit, which includes both theoretical and hands-on training. Students learn haircutting, coloring, manicuring, facials, hairstyling, and shampoo techniques and treatments.   |
| 960CA                                    | Culinary Arts and<br>Hospitality                                    | Culinary Arts and Hospitality prepares students for success in our nation's number one employer, the food service and hospitality industry. Students are   |



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| 3.0 Credits          | 2 Semesters   | taught food preparation, dining service, inventory control, safety, sanitation, and management skills. Our students also learn food nutrition, healthy cooking, equipment identification, use of hand tools and culinary vocabulary. <i>We are the only high school Culinary Arts program in this part of Pennsylvania to be certified by the American Culinary Federation.</i>  |
| 960CN<br>3.0 Credits | Computer Network and Digital Forensics<br>2 Semesters | This course is designed to provide a broad background in electricity, the operation and application of electric circuits, and the physics of electric current flow.  |
| 960CP<br>3.0 Credits | Carpentry<br>2 Semesters                              | The Carpentry program prepares students for employment in residential home remodeling and light commercial construction industries. The curriculum covers the use of hand and power tools, blueprint reading, estimating, and scheduling of construction operations. Students are introduced to concrete form building, placing, reinforcing, and finishing.   |
| 960CR<br>3.0 Credits | Collision Repair<br>2 Semesters                       | DCTS's Collision Repair Technology course is based on an occupational analysis of the auto body field and reflects the job requirements of ICAR (Inter-Industry Conference on Auto Collision Repair) and the Automotive Collision Technology standards. Using state-of-the-art equipment, students are taught MIG welding/cutting, metal repair, corrosion protection, masking, refinishing, undercoating, unibody inspection and detailing. |
| 960<br>3.0 Credits   | Dental Technology<br>2 Semesters                      | Description to come.   |
| 960EC<br>3.0 Credits | Early Childhood Education<br>2 Semesters              | The Early Childhood Education (ECE) program prepares students to work with young children in a variety of settings that require an understanding of how children grow, learn, and develop. The curriculum is aligned with the National Child Care Association's core of 15 "Professional Abilities."   |
| 960EP<br>3.0 Credits | Emergency and Protective Services<br>2 Semesters      | The Emergency and Protective Services (EPS) program offers a comprehensive public safety education to students interested in pursuing a career or volunteering in the emergency medical, law enforcement, fire, security, industrial safety, or emergency management services.   |
| 960HV<br>3.0 Credits | Heating and Air Conditioning<br>2 Semesters           | This course prepares students to apply the technical knowledge and skills necessary to install, repair and maintain commercial, industrial, and residential heating, air conditioning and refrigeration systems. The course is taught in compliance with the standards established by the National Association for Testing Excellence (NATE) and the Air Conditioning Contractors of America (ACCA).   |
| 960IM<br>3.0 Credits | Interactive Multimedia and Design<br>2 Semesters      | Interactive Multimedia is a computer graphics program that introduces students to technology-based desktop publishing, multimedia design and production skills. Students learn the concepts of color and design and their use in computer-based graphic design. They also learn animation, sound, video, and graphics editing in the multimedia class  |

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| 960IR<br>3.0 Credits | Electrical Construction<br>Technology<br>2 Semesters                  | The Industrial and Residential Electricity program introduces students to the basic concepts of residential and commercial wiring.<br>Students install circuits, switches, conductors, circuit breakers and other electrical devices. Skills are taught in compliance with the National Electrical Code (NEC) industry standards.   |
| 960LS<br>3.0 Credits | Environmental<br>Landscape and<br>Equipment Operations<br>2 Semesters | As a member of the Landscape & Greenhouse Operations class, students learn the principles and skills that lead to successful careers in the fields of landscape design/maintenance, nursery and greenhouse production/operations, and floral arts.  |
| 960MH<br>3.0 Credits | Logistic and Inventory<br>Management<br>2 Semesters                   | Materials and Inventory Control introduces students to the distribution service industry. The course curriculum prepares students to work in distribution centers, warehouses, and supply rooms.  |
| 960WT<br>3.0 Credits | Welding Technology<br>Welder<br>2 Semesters                           | This program prepares students to apply technical knowledge and skills in gas, arc, shielded and non-shielded metal arc, brazing, flame cutting and plastic welding. Hand, semiautomatic, and automatic welding processes are also included in the instruction. Students learn safety practices and types and uses of electrodes and welding rods; properties of metals; blueprint reading; electrical principles; welding symbols and mechanical drawing; use of equipment for testing welds by ultrasonic methods and destruction and hardness testing; use of manuals and specification charts; use of portable grinders and chemical baths for surface cleaning; positioning and clamping; and welding standards established by the American Welding Society. |
| 966<br>3.0 Credits   | Honors Medical<br>Technology<br>2 Semesters                           | This course is a perfect match for the student interested in the healthcare field and would like to learn more about available options. In this program the hospital becomes the classroom. Crozer Keystone Health Systems will offer a clinical rotation through different departments. Students will work alongside medical professionals to learn the importance of communication with patients. Classroom instruction will be given on the study of body systems, anatomy, infection control, and process of illnesses and injury. Medical terminology and core patient care skills such as taking vital signs, assisting with activities of daily living, and sterile techniques will be taught. This course carries an honors weighted grade.               |